

WTWY

Street Team Outreach

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Goals

- Increase awareness & membership of WTWY gala
- Effective placement of street teams to collect email addresses and give away free tickets
- Start with freely available MTA data.

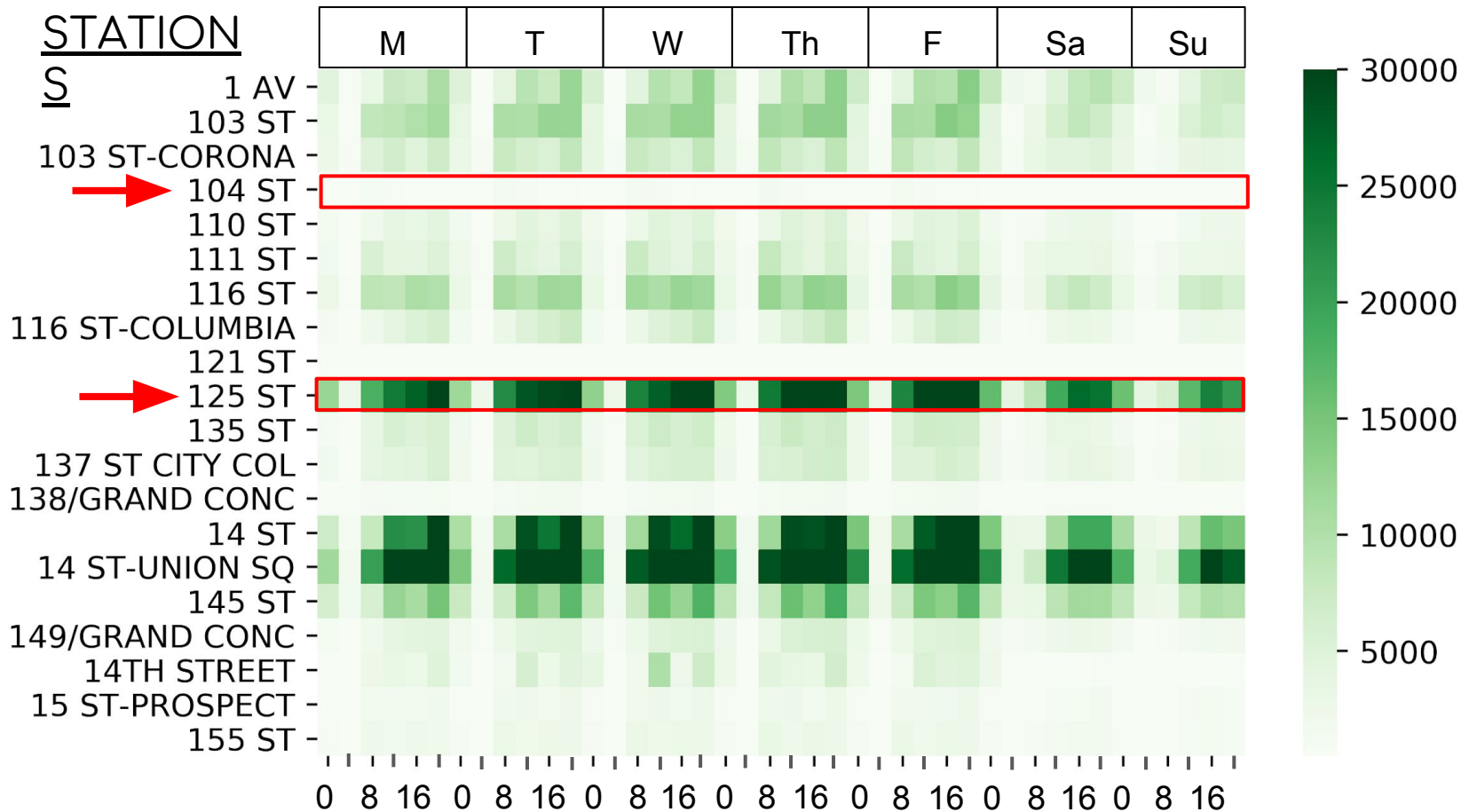
Approach

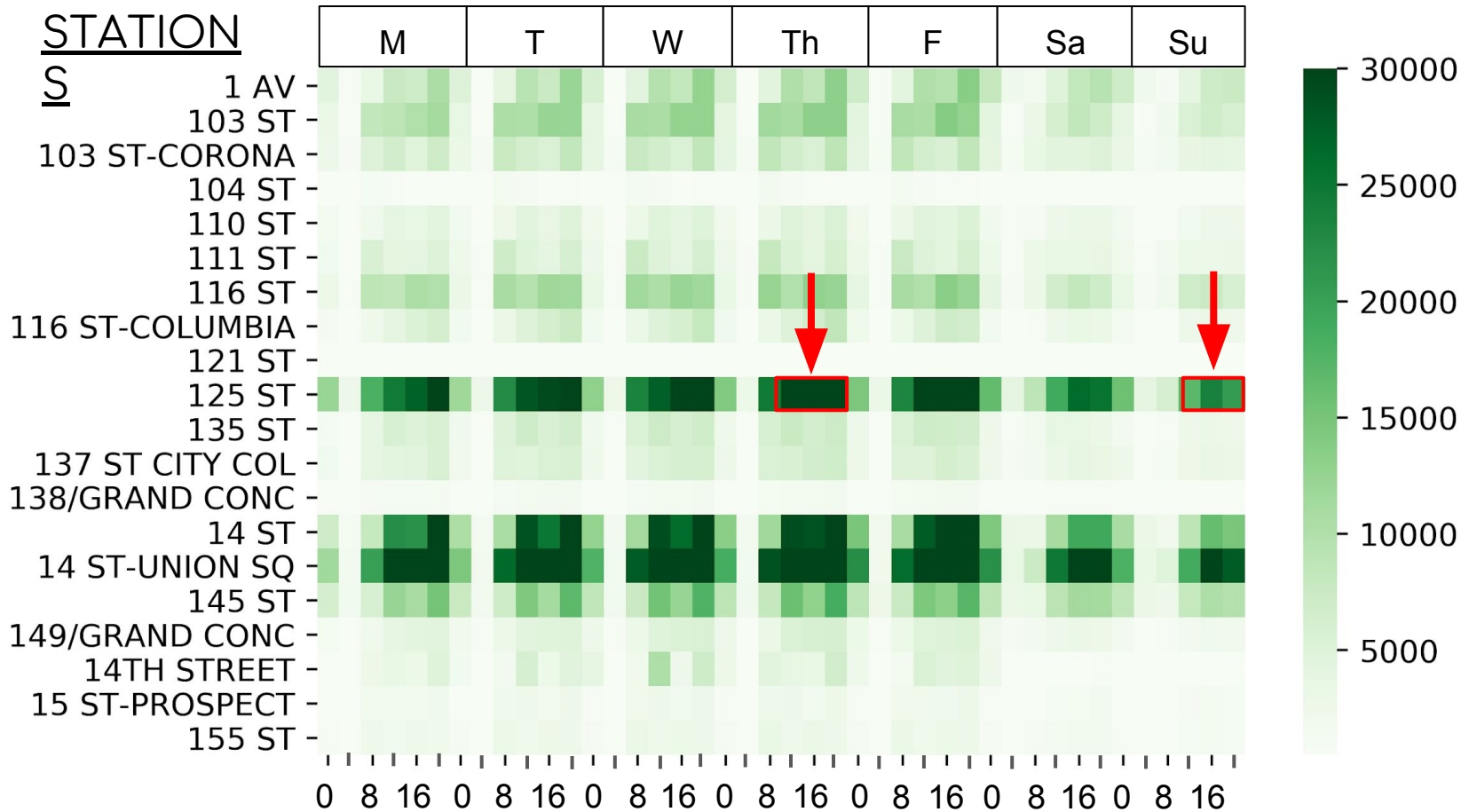
- Data collection & cleanup
 - Identify relevant data
 - Scrub irrelevant data
 - Issues:
 - Data duplicate entries for the same turnstile
 - Turnstiles would sometimes count in reverse
 - Account for random counter resets
- Visualization
 - Chose interactive visualization using Bokeh
 - Seaborn

Modeling Engagement

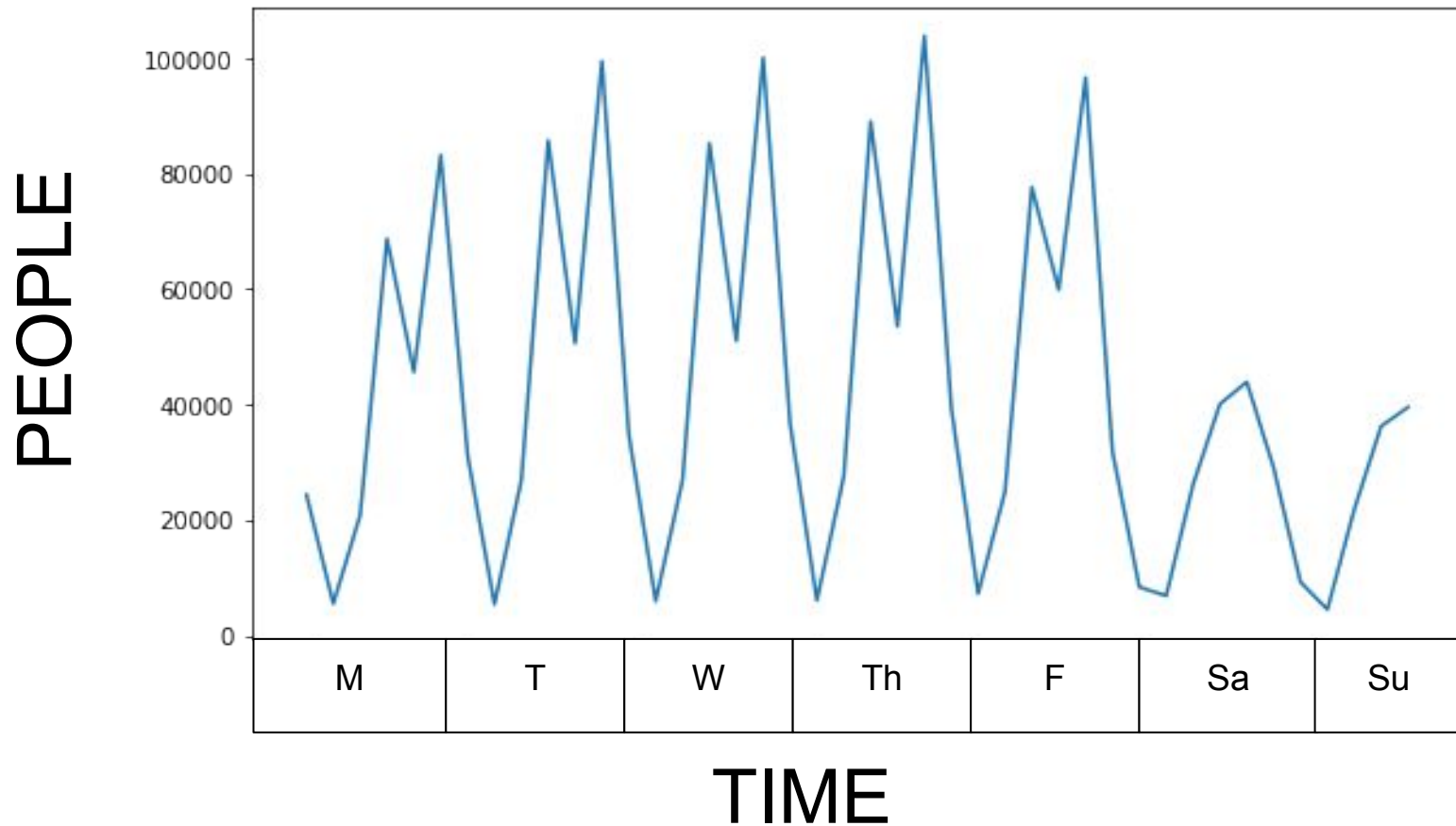


$$\text{Attendees} = \text{People}_{\text{Loc}} * \text{Engagement}_{\text{Loc}}$$



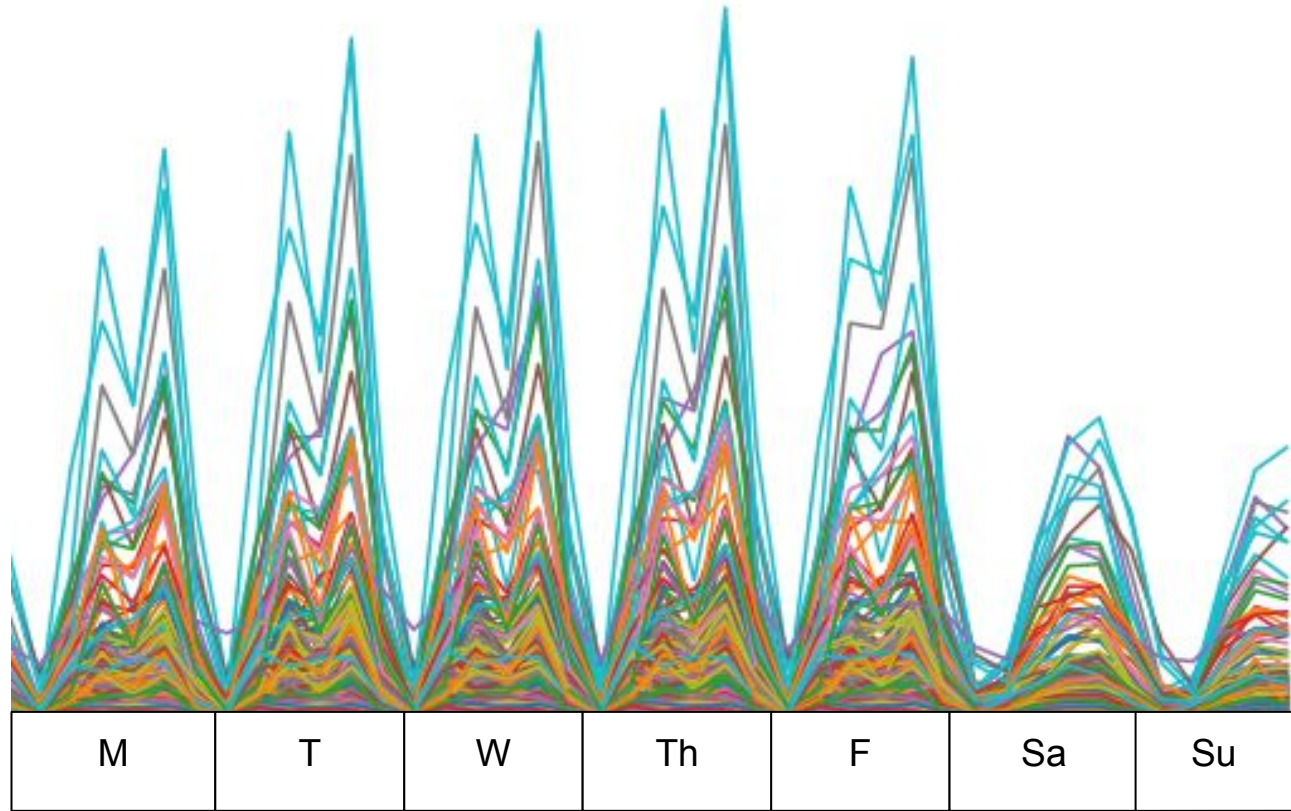


34 ST-Penn Station Time Series



34 ST-Penn Station Time Series

PEOPLE



TIME

Weekday Traffic Flow

Monday Morning

800-1200

STATION	PEOPLE
34 ST-PENN STA	68668
GRD CNTRL-42 ST	57908
34 ST-HERALD SQ	48557
TIMES SQ-42 ST	39120
42 ST-PORT AUTH	35805
FULTON ST	35309
23 ST	33879
14 ST-UNION SQ	31901
47-50 STS ROCK	28691
PATH NEW WTC	27727

Monday Afternoon

1200-1600

STATION	PEOPLE
GRD CNTRL-42 ST	46194
34 ST-PENN STA	45601
14 ST-UNION SQ	38682
34 ST-HERALD SQ	38420
23 ST	32652
FULTON ST	31356
TIMES SQ-42 ST	29586
CANAL ST	28680
125 ST	27312
86 ST	27299

Monday Evening

1600-2000

STATION	PEOPLE
34 ST-PENN STA	83173
GRD CNTRL-42 ST	77309
34 ST-HERALD SQ	65621
TIMES SQ-42 ST	53363
14 ST-UNION SQ	50113
FULTON ST	49465
23 ST	47898
42 ST-PORT AUTH	43735
CANAL ST	36502
59 ST COLUMBUS	34905

Weekend Traffic Flow

Saturday Morning

800-1200

STATION	PEOPLE
34 ST-PENN STA	26093
GRD CNTRL-42 ST	25556
14 ST-UNION SQ	24734
CANAL ST	22170
TIMES SQ-42 ST	20507
42 ST-PORT AUTH	19690
125 ST	18963
34 ST-HERALD SQ	18674
86 ST	16692
23 ST	16200

Saturday Afternoon

1200-1600

STATION	PEOPLE
14 ST-UNION SQ	41182
34 ST-PENN STA	40042
CANAL ST	35432
TIMES SQ-42 ST	32542
GRD CNTRL-42 ST	32016
34 ST-HERALD SQ	31214
42 ST-PORT AUTH	26623
125 ST	26308
FULTON ST	25110
23 ST	25053

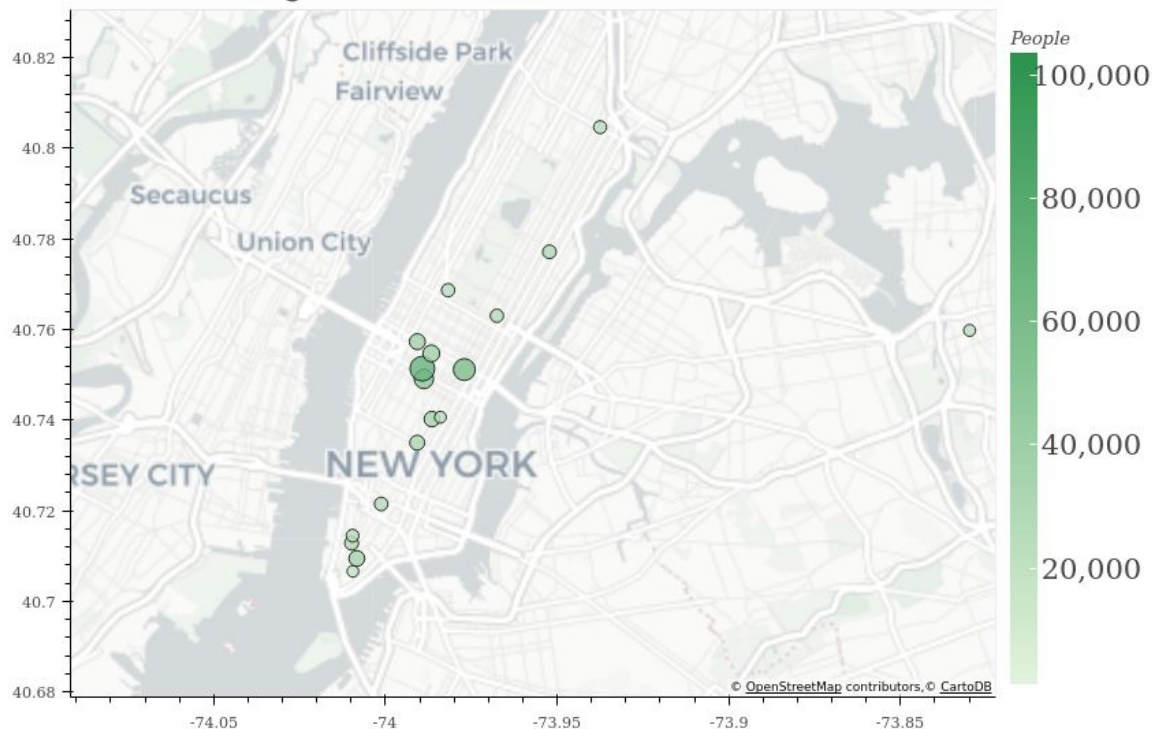
Saturday Evening

1600-2000

STATION	PEOPLE
34 ST-PENN STA	43875
TIMES SQ-42 ST	40603
14 ST-UNION SQ	36625
34 ST-HERALD SQ	36476
CANAL ST	33802
GRD CNTRL-42 ST	32087
42 ST-PORT AUTH	31137
FULTON ST	25463
125 ST	25307
86 ST	24628

Mapping the Morning Commute

Weekday 800-1200

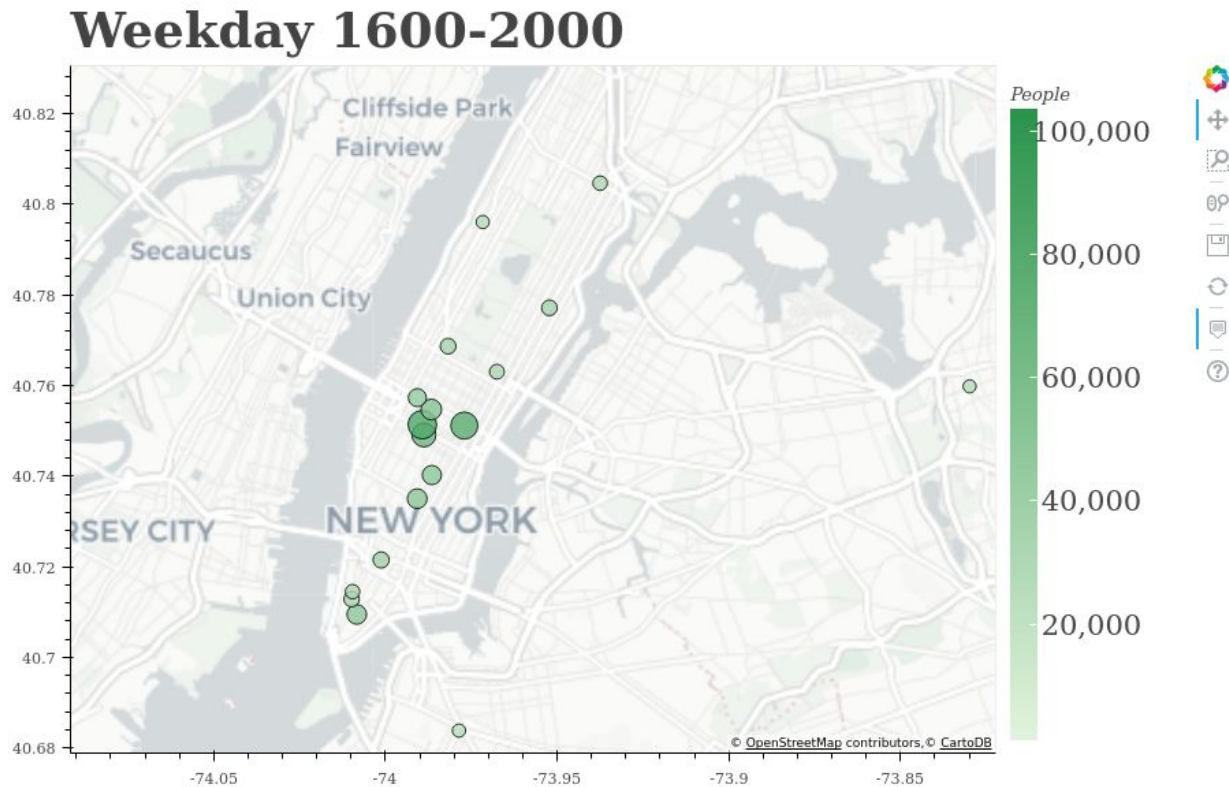


Midday Lull

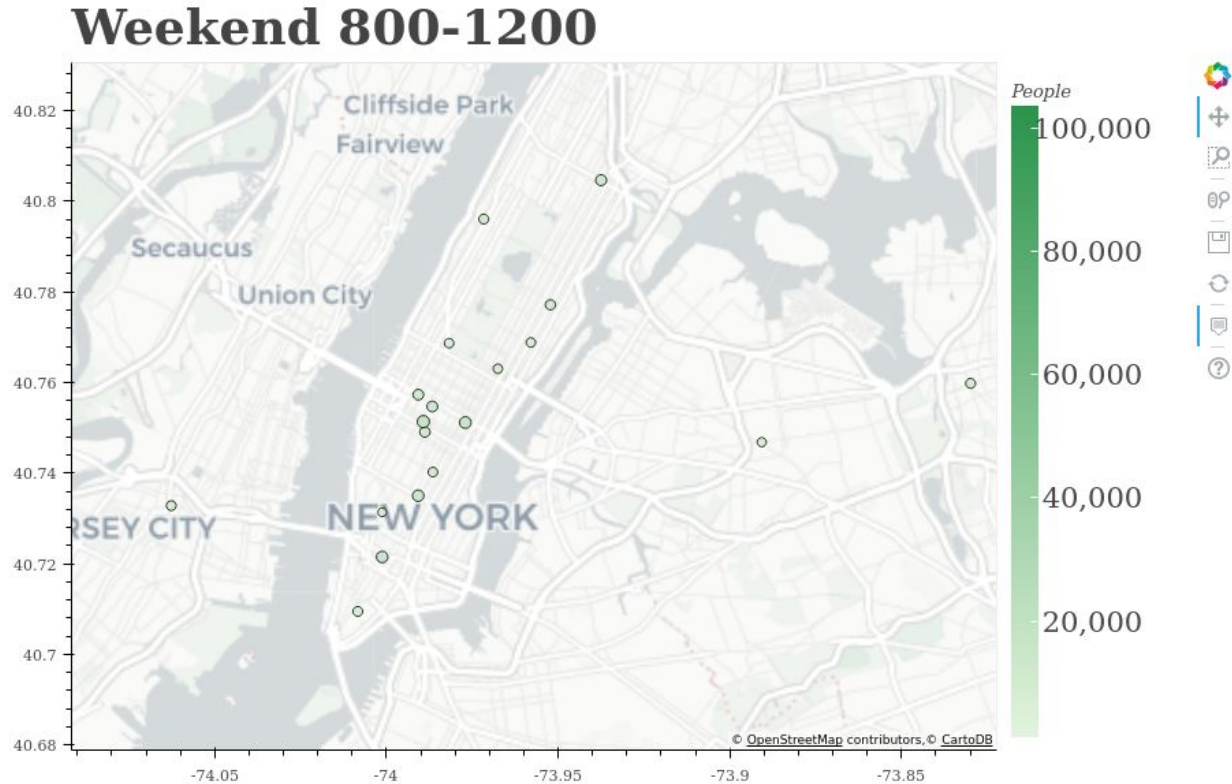
Weekday 1200-1600



Mapping the Evening Commute



Weekend Brunch Crowd



Weekend Afternoon Crowd

Weekend 1200-1600



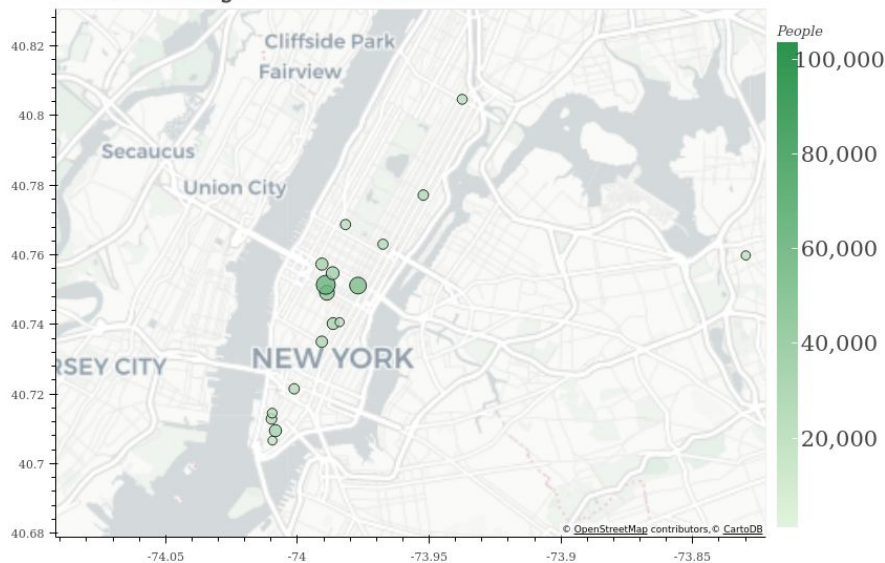
Weekend Evening

Weekend 1600-2000



Comparing Weekdays and Weekends Mornings

Weekday 800-1200

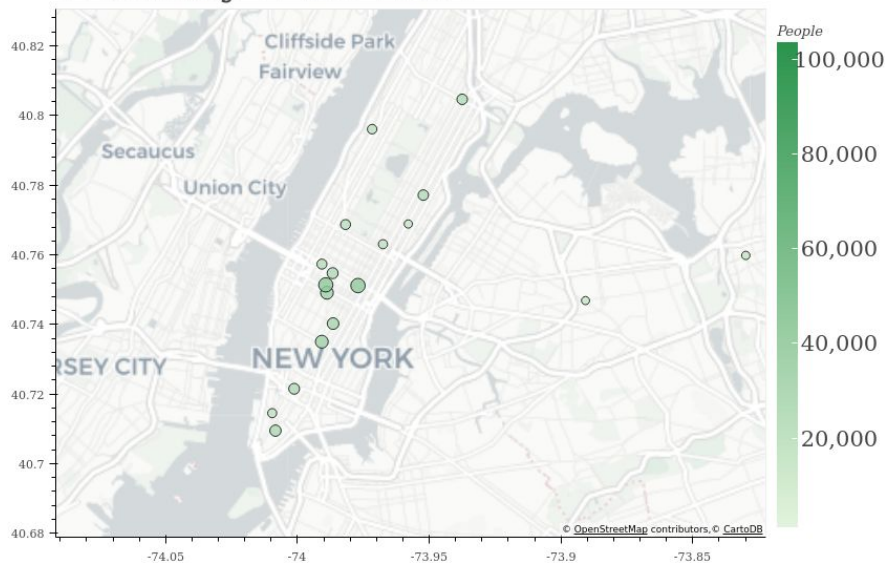


Weekend 800-1200

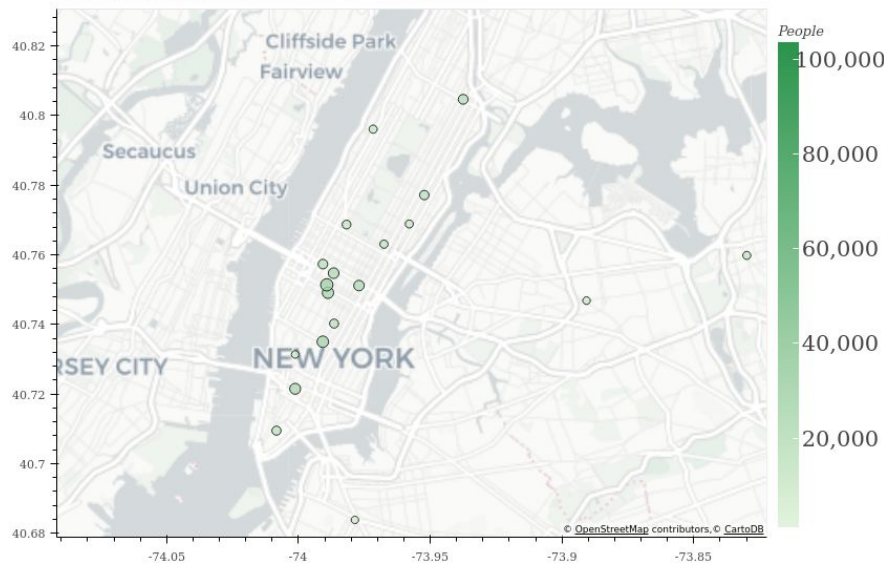


Comparing Weekdays and Weekends Midday

Weekday 1200-1600



Weekend 1200-1600



Analysis

- Stations in central Manhattan have the highest flows of people
- Best shifts are morning and evening commutes
- Weekend afternoons and evenings are a solid second choice

Next Steps: Becoming a Data Driven Organization

$$\text{Attendees} = \text{People}_{\text{Loc}} * \text{Engagement}_{\text{Loc}}$$

Signatures



MTA data



What We Want
To Know!



Extensions

- Widen outreach
 - Explore different demographics(women, affluent neighborhoods,colleges)
- Improve Bokeh plots

