

Group 5 Project Benson

Nick, Andrea, Ron, Kaushik

THE CHALLENGE

In order to optimise the deployment of voter registration teams, we have analysed MTA turnstile data for the previous 4 weeks, for a selection of subway stations that are within walking distance to the largest 15 colleges and universities in New York City.

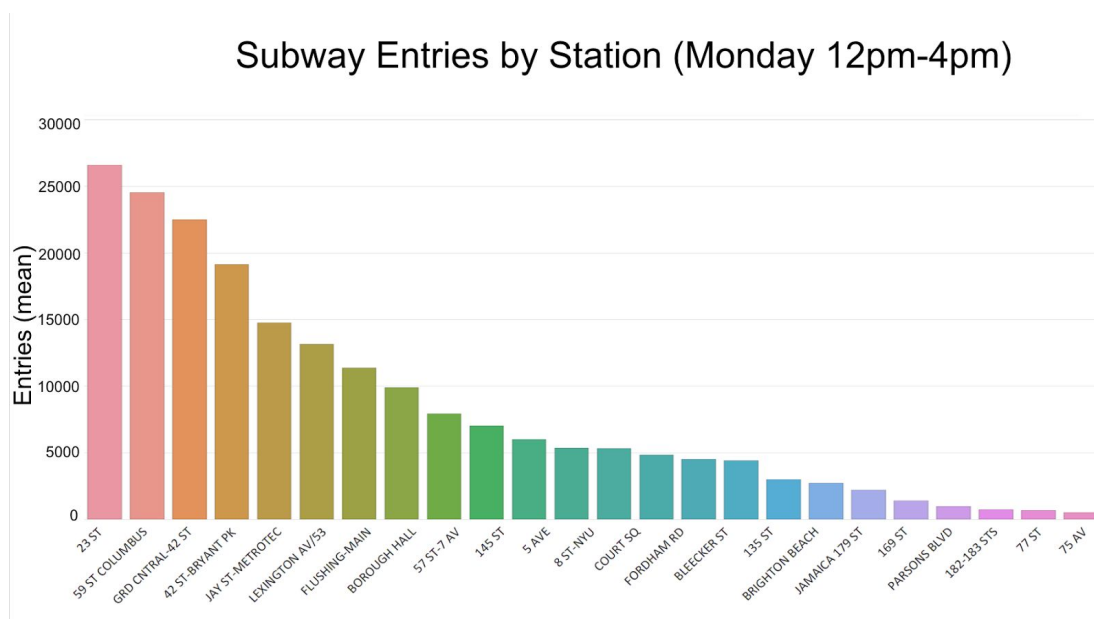
The result of our analysis is a weekly schedule that assigns 10 voter registration teams to the 10 busiest stations for the afternoon and evening hours.

THE APPROACH

As previously determined in our initial client requirements meeting with the New York Democratic Party (NYDP), there are limited resources available for this final push for registering voters before the upcoming election. Specifically, there are only 10 voter registration teams.

Working within this constraint, we selected the 3 nearest subway stations for each of the 15 largest colleges and universities, and identified the 10 busiest station (by number of entries) for the afternoon (12 PM-4PM) and evening (4 PM-8PM) hours.

The figure below shows the average subway entries by station for Monday from 12 PM-4PM.



RESULTS

The final product of our analysis are the two schedules below.

These weekly schedules cover Monday-Friday for the afternoon (12 PM-4 PM) and evening (4 PM-8 PM) hours, with each time block assigning the 10 teams to the 10 busiest stations for that time frame.

Afternoon Deployment Schedule (Monday - Friday, 12 PM - 4 PM)

Voter Registration Teams -- Afternoon Schedule

Afternoon(12 PM - 4 PM)	Voter Registration Teams	Monday	Tuesday	Wednesday	Thursday	Friday
	Team 1	59 ST COLUMBUS	GRD CNTRL-42 ST	GRD CNTRL-42 ST	GRD CNTRL-42 ST	42 ST-BRYANT PK
	Team 2	23 ST	59 ST COLUMBUS	59 ST COLUMBUS	59 ST COLUMBUS	GRD CNTRL-42 ST
	Team 3	GRD CNTRL-42 ST	23 ST	23 ST	23 ST	23 ST
	Team 4	FLUSHING-MAIN	BOROUGH HALL	W 4 ST-WASH SQ	BOROUGH HALL	59 ST COLUMBUS
	Team 5	JAY ST-METROTEC	68ST-HUNTER CO	JAY ST-METROTEC	68ST-HUNTER CO	LEXINGTON AV/53
	Team 6	BOROUGH HALL	JAY ST-METROTEC	BOROUGH HALL	JAY ST-METROTEC	JAY ST-METROTEC
	Team 7	145 ST	FLUSHING-MAIN	68ST-HUNTER CO	W 4 ST-WASH SQ	68ST-HUNTER CO
	Team 8	42 ST-BRYANT PK	W 4 ST-WASH SQ	FLUSHING-MAIN	FLUSHING-MAIN	77 ST
	Team 9	LEXINGTON AV/53	28 ST	28 ST	28 ST	FLUSHING-MAIN
	Team 10	FORDHAM RD	77 ST	77 ST	77 ST	BOROUGH HALL

Evening Deployment Schedule (Monday - Friday, 4 PM - 8 PM)

Voter Registration Teams -- Evening Schedule

Early Evening(4 PM-8 PM)	Voter Registration Teams	Monday	Tuesday	Wednesday	Thursday	Friday
	Team 1	GRD CNTRL-42 ST	GRD CNTRL-42 ST	GRD CNTRL-42 ST	GRD CNTRL-42 ST	23 ST
	Team 2	23 ST	23 ST	23 ST	23 ST	GRD CNTRL-42 ST
	Team 3	59 ST COLUMBUS	59 ST COLUMBUS	59 ST COLUMBUS	59 ST COLUMBUS	59 ST COLUMBUS
	Team 4	28 ST	BOROUGH HALL	BOROUGH HALL	BOROUGH HALL	28 ST
	Team 5	42 ST-BRYANT PK	42 ST-BRYANT PK	42 ST-BRYANT PK	42 ST-BRYANT PK	42 ST-BRYANT PK
	Team 6	LEXINGTON AV/53	LEXINGTON AV/53	LEXINGTON AV/53	LEXINGTON AV/53	LEXINGTON AV/53
	Team 7	JAY ST-METROTEC	JAY ST-METROTEC	JAY ST-METROTEC	JAY ST-METROTEC	JAY ST-METROTEC
	Team 8	W 4 ST-WASH SQ	68ST-HUNTER CO	FLUSHING-MAIN	68ST-HUNTER CO	W 4 ST-WASH SQ
	Team 9	BOROUGH HALL	W 4 ST-WASH SQ	28 ST	W 4 ST-WASH SQ	FLUSHING-MAIN
	Team 10	FLUSHING-MAIN	28 ST	W 4 ST-WASH SQ	28 ST	BOROUGH HALL

EXTENSIONS

We can extend our initial analysis to future data project engagements to further enhance our insight and understanding of voter registration among students.

Some things we have considered include the following:

- Include exit data in our analysis in order to target arriving students in the morning hours
- Weight stations by enrollment at nearby universities, in order to prevent overrepresentation of certain stations in our deployment schedule
- Account for percentage of commuter students
- Target stations near where students tend to live
- Determine where to deploy teams on weekend days