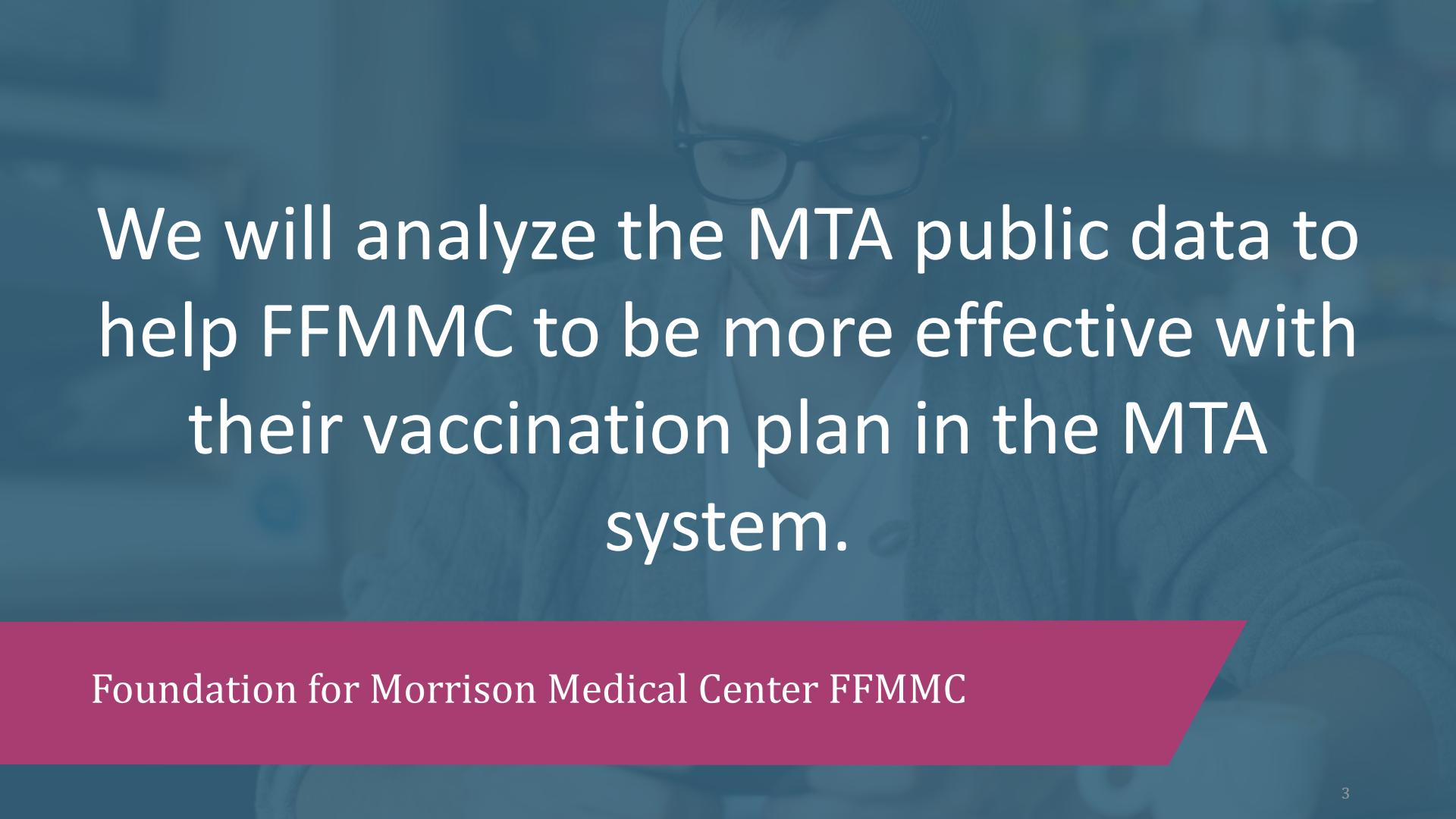
COVID-19 VACCINATION PLAN 2021

A presentation compiled by Hernan Trujillo

May 2021

Analysis purpose:

How to increase the Covid-19 vaccinated population in the more impacted socioeconomic groups in NY by the pandemic with a vaccination plan implemented in the MTA system.



We will analyze the MTA public data to help FFMMC to be more effective with their vaccination plan in the MTA system.

Foundation for Morrison Medical Center FFMMC

Currently, about 50% of the population in the US is already vaccinated, but it’s not enough…

Vaccination Plan Timeline

- June 25,000 dosis applied
- July 25,000 dosis applied
- Aug 25,000 dosis applied
- Sep 15,000 dosis applied
- Oct 10,000 dosis applied
- Nov 10,000 dosis applied
- Dec 5,000 dosis applied

Phases of the project

Step 1

Traffic analysis

Step 2

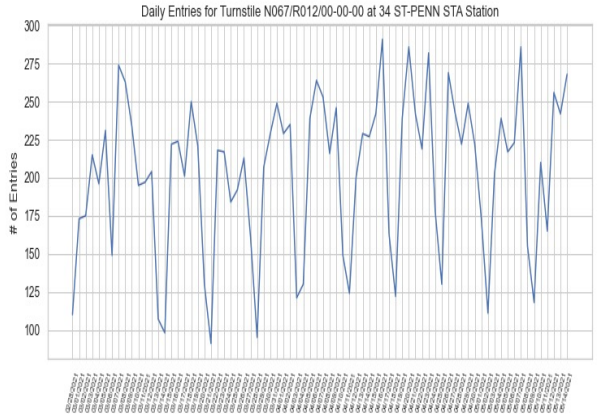
Income Analysis

Step 3

Covid Impact Analysis

Traffic Analysis

Daily entries in a specific station



We can notice an irregular behavior with the daily entries on this popular station.

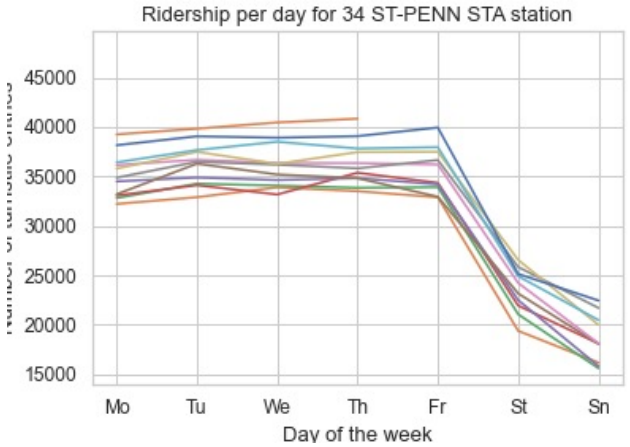
Let’s see why…

Traffic Analysis

Notice the drop during the weekends when looking at the data day by day in a weekly window.

That explain the prior graphic!

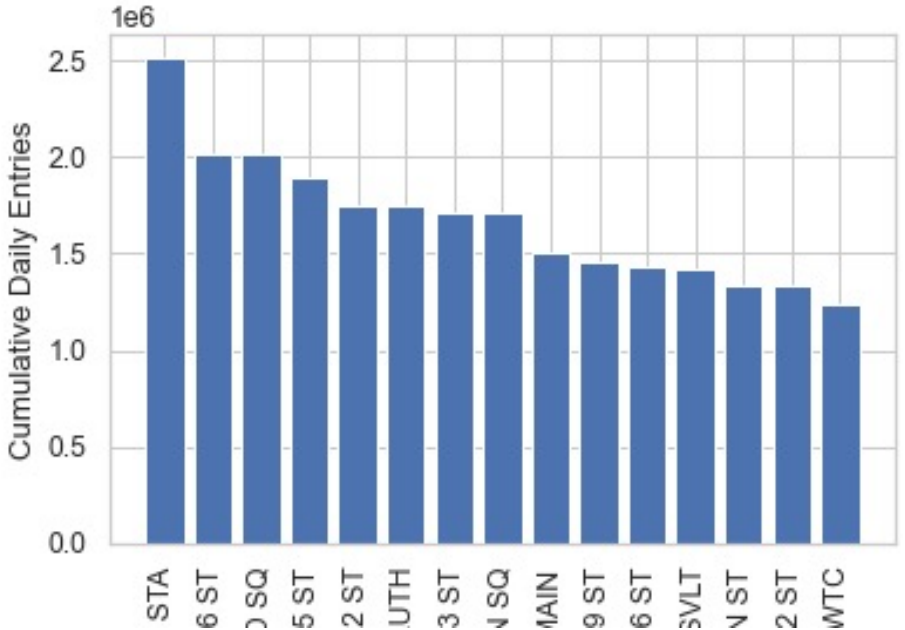
Entries in a week by day



Traffic analysis

Total entries by station

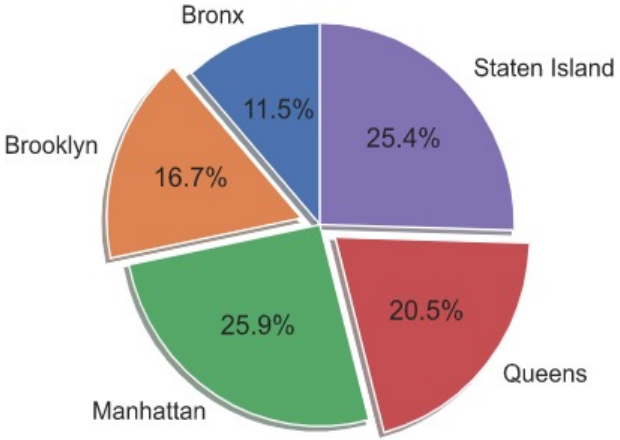
High-Traffic Stations



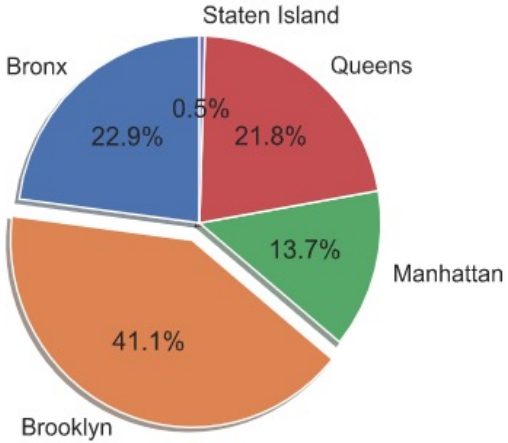
Socio-economic Analysis

Borough Correlation

Median Income by borough

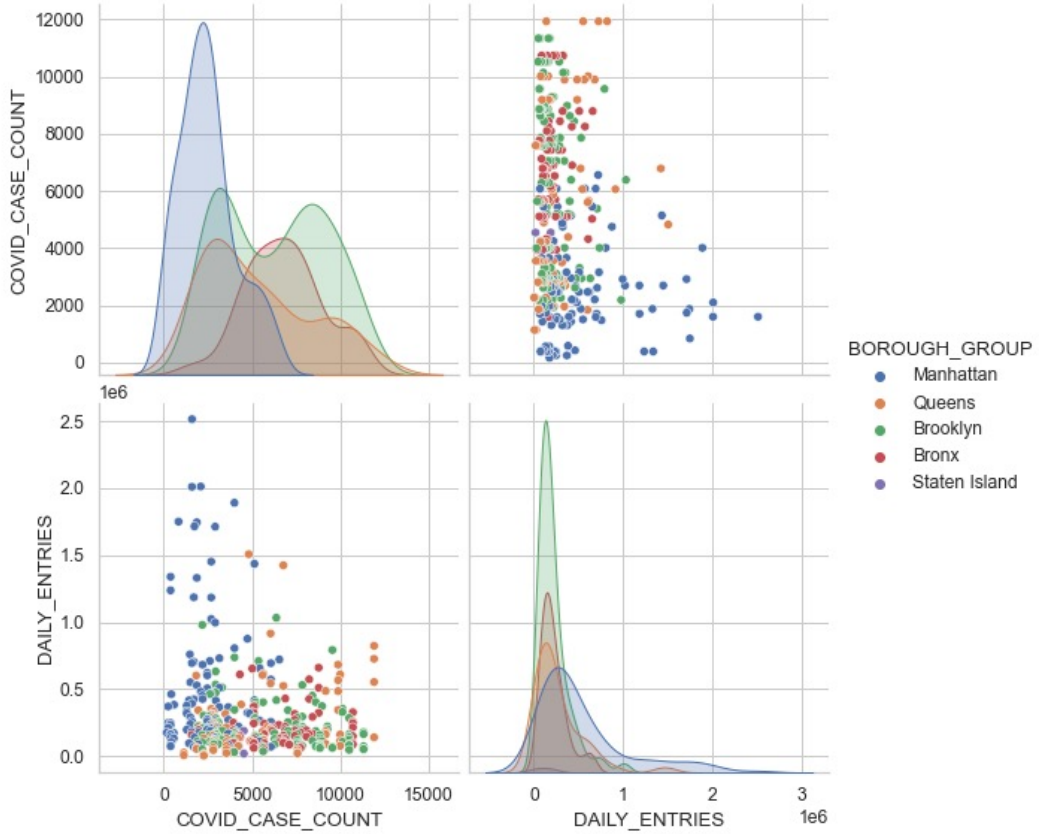


Covid Cases by borough



Correlation analysis

1. Demographic Impact
2. Socio-economic Impact
3. Transportation impact



Correlation analysis

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Header 1

Body Copy 1

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Header 2

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Header 3

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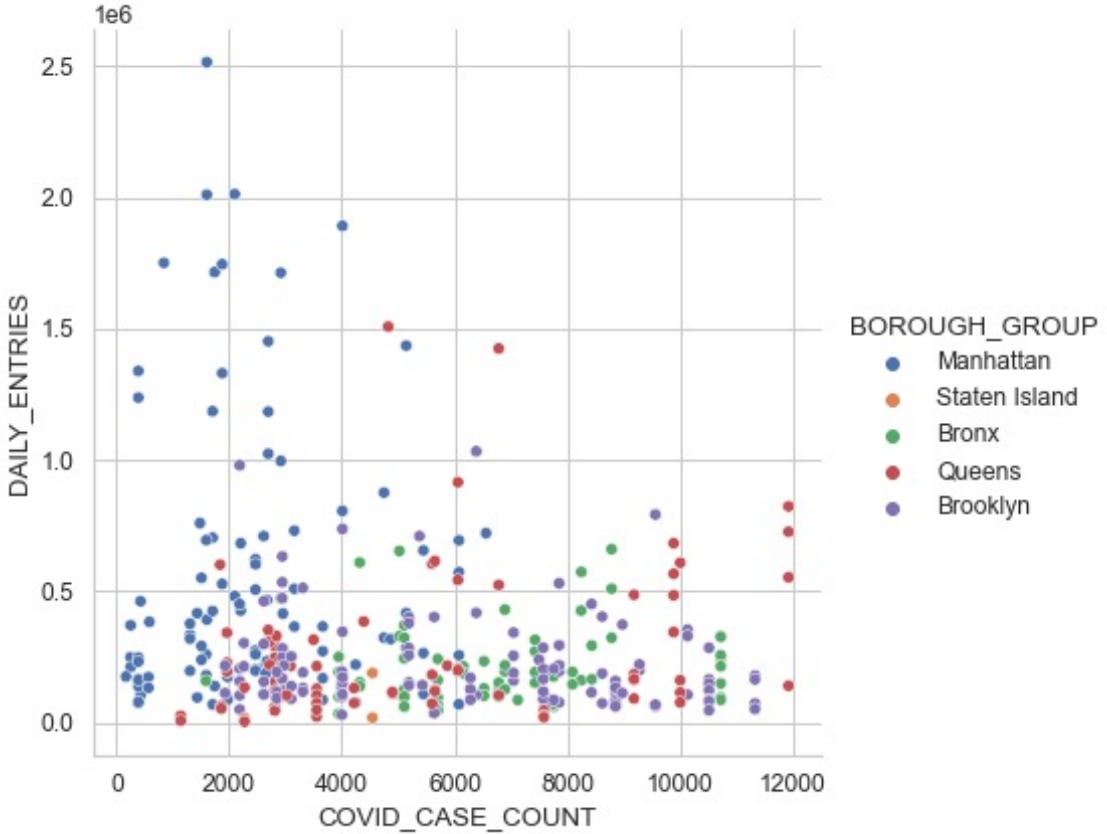

Final Recommendations

More effective Vaccination Points

Stations with high Traffic

	STATION	BOROUGH_GROUP	COVID_CASE_COUNT	DAILY_ENTRIES
61	34 ST-PENN STA	Manhattan	1602	2514983.0
109	86 ST	Manhattan	2098	2012479.0
59	34 ST-HERALD SQ	Manhattan	1602	2010364.0
9	125 ST	Manhattan	4010	1891189.0
231	GRD CNTRL-42 ST	Manhattan	840	1750697.0
68	42 ST-PORT AUTH	Manhattan	1875	1745461.0
46	23 ST	Manhattan	1741	1715344.0
14	14 ST-UNION SQ	Manhattan	2916	1712995.0
215	FLUSHING-MAIN	Queens	4823	1507715.0
84	59 ST	Manhattan	2693	1452051.0

Stations with high Covid Cases

	STATION	BOROUGH_GROUP	DAILY_ENTRIES	COVID_CASE_COUNT
2	103 ST-CORONA	Queens	726821.0	11929
5	111 ST	Queens	553744.0	11929
273	METS-WILLETS PT	Queens	140796.0	11929
254	JUNCTION BLVD	Queens	823644.0	11929
130	AVENUE N	Brooklyn	73514.0	11333
129	AVENUE M	Brooklyn	164859.0	11333
128	AVENUE J	Brooklyn	179251.0	11333
127	AVENUE I	Brooklyn	52197.0	11333
126	AVENUE H	Brooklyn	55115.0	11333
279	MOSHOLU PKWY	Bronx	256983.0	10726

We can conclude that the following 10 stations will be more effective on targeting the most impacted population by the pandemic within the low-income boroughs.
Also, it will make more financially and strategically effective the Vaccination plan

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Inspiration

Torture the data, and it will confess to anything.

— Ronald Coase, British Economist and Author.

Thanks!

Hernan Trujillo
Data Scientist Candidate

hernantru943@gmail.com