# ew York City Covid Vaccination Campaign

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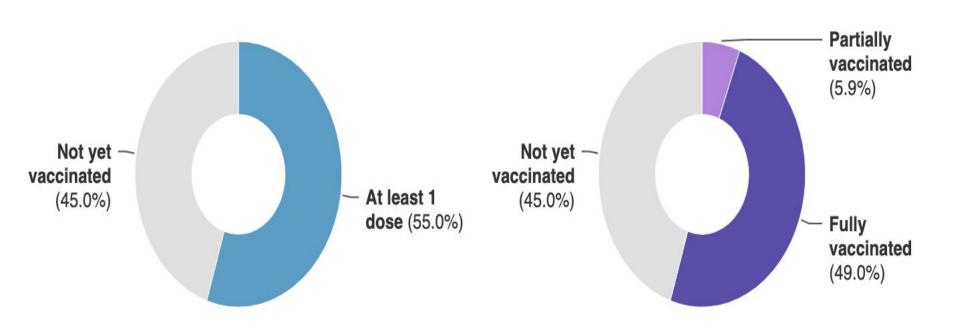


#### PRIMARY OBJECTIVE: Return NYC to pre-Covid socio-economic normalcy

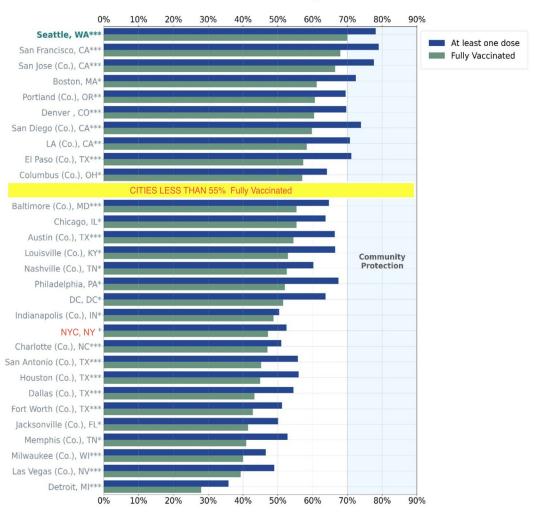
- Timely
- Orderly
- Efficiently
- SAFELY



#### **NYC Residents COVID Vaccination Rates**



#### Vaccination Rates in the 30 Largest U.S. Cities



## **NYC SUBWAY SYSTEM**

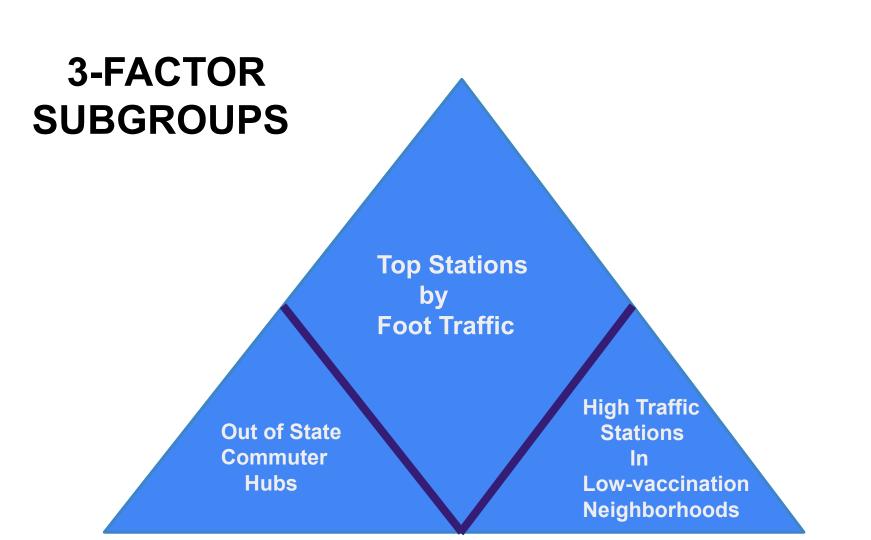
- ➤ PRE-COVID ANNUAL RIDERSHIP

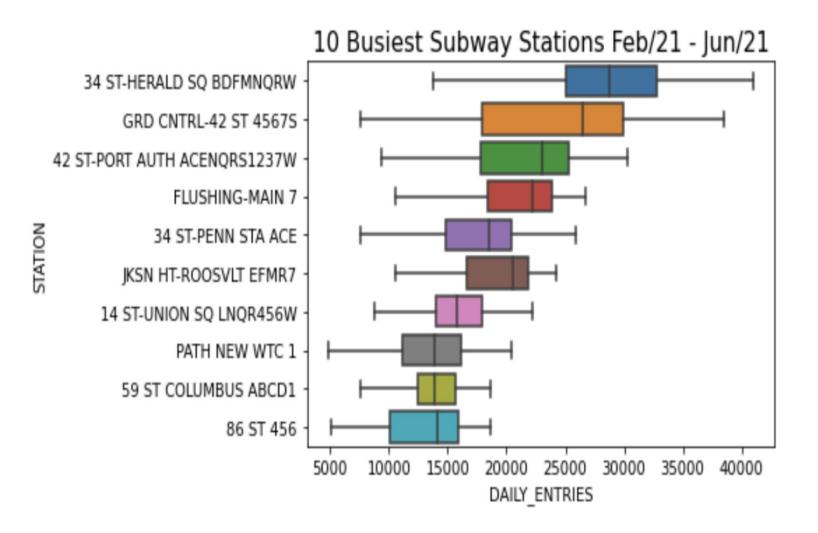
  1 BILLION
- > PRE-COVID DAILY RIDERSHIP
  4 MILLION+



#### **METHODOLOGY**

- > DATA COLLECTION: MTA Turnstile data
- ➤ DATE RANGE: February 2021 June 2021
- ➤ HOURLY TIME RANGE: 4PM 8PM
- > DATA POINTS: Turnstile Entries





### OUT OF STATE COMMUTER HUBS

STATION	REGIONS/STATE COVERAGE	COMMUTER LINE
34 St-Herald Square	New Jersey	PATH(Pt. Auth of NY/NJ) Rail Line
Grand Central 42 St	Connecticut, New York	MetroNorth Rain Line
34 St-PENN Station	Pennslyvania, Deleware	Amtrak Train Corridor
42 St-Port Authority	Northeastern Hub	Grey Hound Bus Line

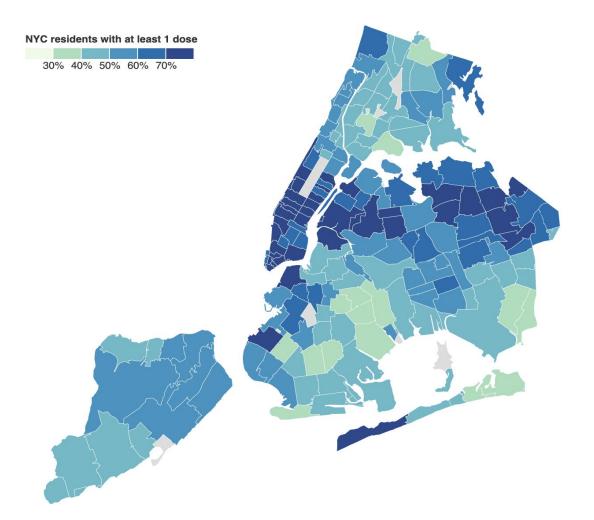


Image: Public Domain

#### LOWEST VACCINATION NEIGHBORHOODS



#### ensack New York Hudson Park Pelham **Botanical Garden** oro Bay Park Fort Lee (46) BRONX Edgewater HARLEM North Bergen 678 COLLEGE POINT MANHATTAN Union City FLUSHING ASTORIA tate Building 😜 JACKSON HEIGHTS Hoboken (9A) 278 **New York** 278 BUSHWICK 478 John F BROOKLYN Kennedy International Airport SUNSET PARK BAY RIDGE 278

# Top Station per Low Vax Neighborhoods

	NEIGHBORHOOD	STATION
G	Canarsie	Rockaway
7	Borough Park	Avenue 1
, Q	Cypress Hills/E. NY	Euclid Ave
0.	Midwood	Kings Highway
Y	Claremont/Morrisania	167 St

# FINAL RECOMMENDATIONS

**HIGH TRAFFIC** 

**STATION** 

Avenue 1

**Euclid Av** 

167 St

Kings Highway

	CITY WIDE		VAX NEIGHBORHOOD
34-St Herald Square	<b>✓</b>	<b>✓</b>	
42-St Grand Central	<b>✓</b>	<b>✓</b>	
42-St Port Authority	<b>✓</b>	<b>✓</b>	
Flushing-St Main	<b>✓</b>		
34-St Penn	<b>✓</b>	<b>✓</b>	
Rockaway Av			

**OUT OF STATE HUB** 

**HIGH TRAFFIC IN LOW** 

#### **FUTURE WORK**

- SCALE WORK IN LOW VACCINATION NEIGHBORHOODs
  - Create database that has stations by neighborhood with standardized text
- COMPARE PRE-COVID vs POST-COVID DATA
- INVESTIGATE VARIANCE IN TOP STATIONS

# **APPENDIX**

#### **SOURCES:**

MTA subway station data:

http://web.mta.info/developers/turnstile.html

- MTA data key:
  <a href="http://web.mta.info/developers/resources/nyct/turnstile/ts\_Field\_Description.tx">http://web.mta.info/developers/resources/nyct/turnstile/ts\_Field\_Description.tx</a>
- NYC Department of Health: https://www1.nyc.gov/site/doh/covid/covid-19-data-vaccines.page
- Google Maps:

#### MTA DATA KEY

```
Field Description
C/A,UNIT,SCP,STATION,LINENAME,DIVISION,DATE,TIME,DESC,ENTRIES,EXITS
        = Control Area (A002)
C/A
        = Remote Unit for a station (R051)
JNIT
SCP
        = Subunit Channel Position represents an specific address for a device (02-00-00)
STATION
        = Represents the station name the device is located at
INENAME = Represents all train lines that can be boarded at this station
          Normally lines are represented by one character. LINENAME 456NQR repersents train server for 4, 5, 6, N, Q, and R
rains.
DIVISION = Represents the Line originally the station belonged to BMT, IRT, or IND
        = Represents the date (MM-DD-YY)
DATE
        = Represents the time (hh:mm:ss) for a scheduled audit event
TIME
        = Represent the "REGULAR" scheduled audit event (Normally occurs every 4 hours)
DESC
          1. Audits may occur more that 4 hours due to planning, or troubleshooting activities.
          2. Additionally, there may be a "RECOVR AUD" entry: This refers to a missed audit that was recovered.
       = The comulative entry register value for a device
ENTRIES
```

#### Example:

EXIST

The data below shows the entry/exit register values for one turnstile at control area (A002) from 09/27/14 at 00:00 hours to

= The cumulative exit register value for a device