

Voter Registration Strategy

Allen Chen, Brendan Lafferty,
Jung-A Kim, Cianan Murphy





Reaching Up Reaching Out

The RURO organization wants to address income inequality in New York City.

For the 2020 election, RURO has a goal to increase voter participation for people in poverty.

Voter registration deadline of October 9, 2020.

We can help! Using data science: Determine where and when to send volunteers to engage with low-income population

Methodology

Identify



Census

Methodology

Identify

Locate



Census



Subway

Methodology

Identify

Locate

Time



Census



Subway



Turnstile

Methodology

Identify

Locate

Time

Engage



Census



Subway



Turnstile

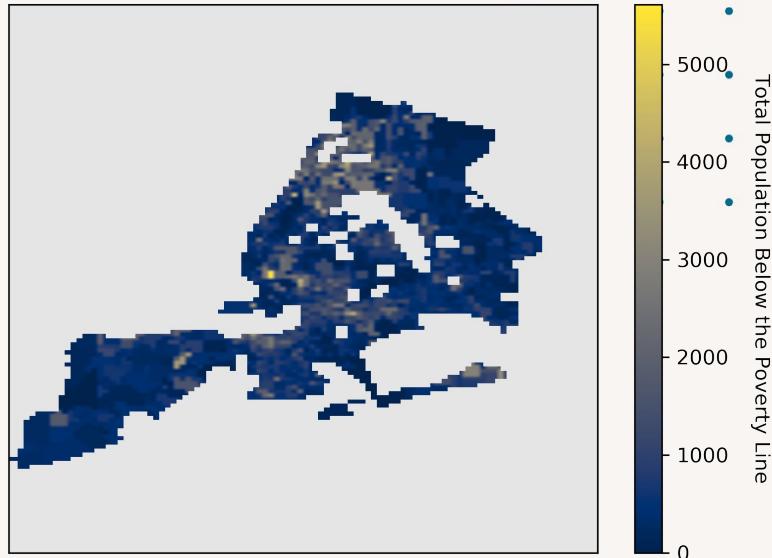


Voters

Identifying Stations in High Poverty Areas

Identified stations in communities with highest population below the poverty line:

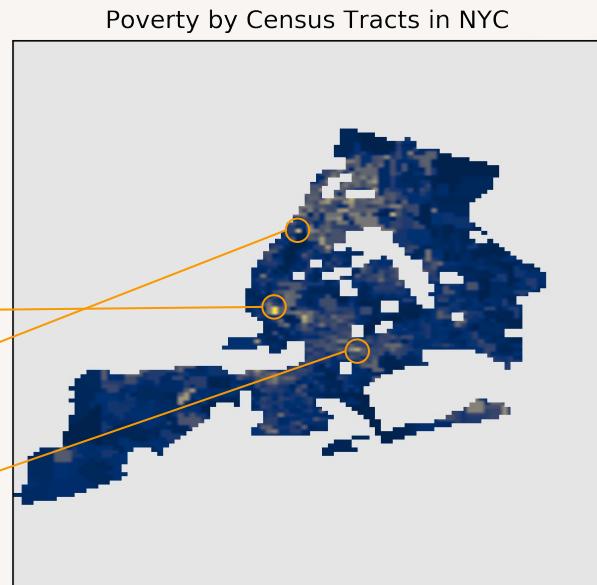
Poverty by Census Tracts in NYC



Identifying Stations in High Poverty Areas

Identified stations in communities with highest population below the poverty line:

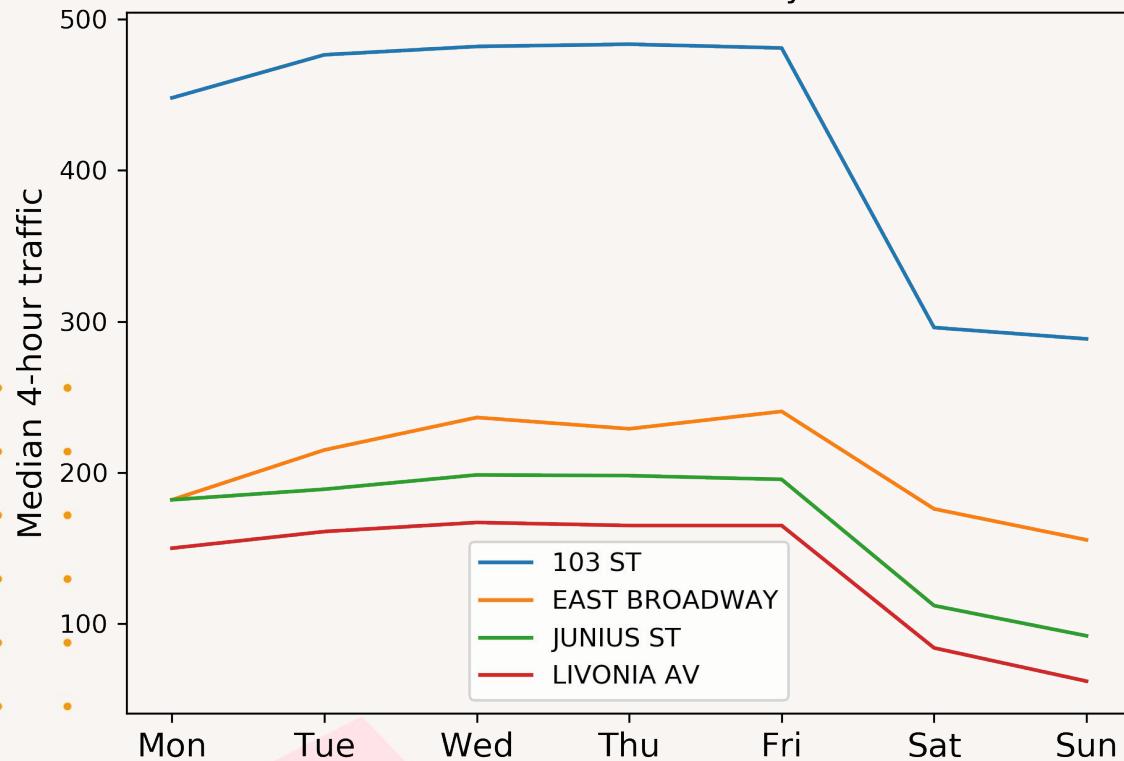
| | Station Name (lines serviced) | Total Population in poverty for attributed census tract |
|---|----------------------------------|--|
| 1 | East Broadway | 5,612 |
| 2 | 103rd St. (BC) | 4,617 |
| 3 | Livonia | 4,101 |
| 4 | Junius | |



Total Population Below the Poverty Line

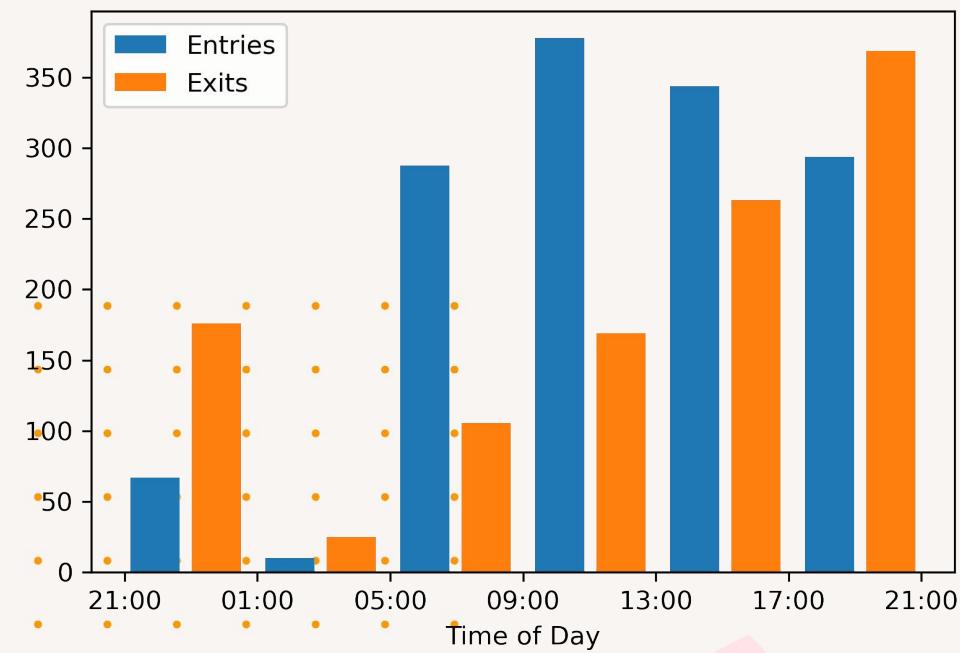
Traffic of Identified Stations

Median 4-hour traffic across days at Station

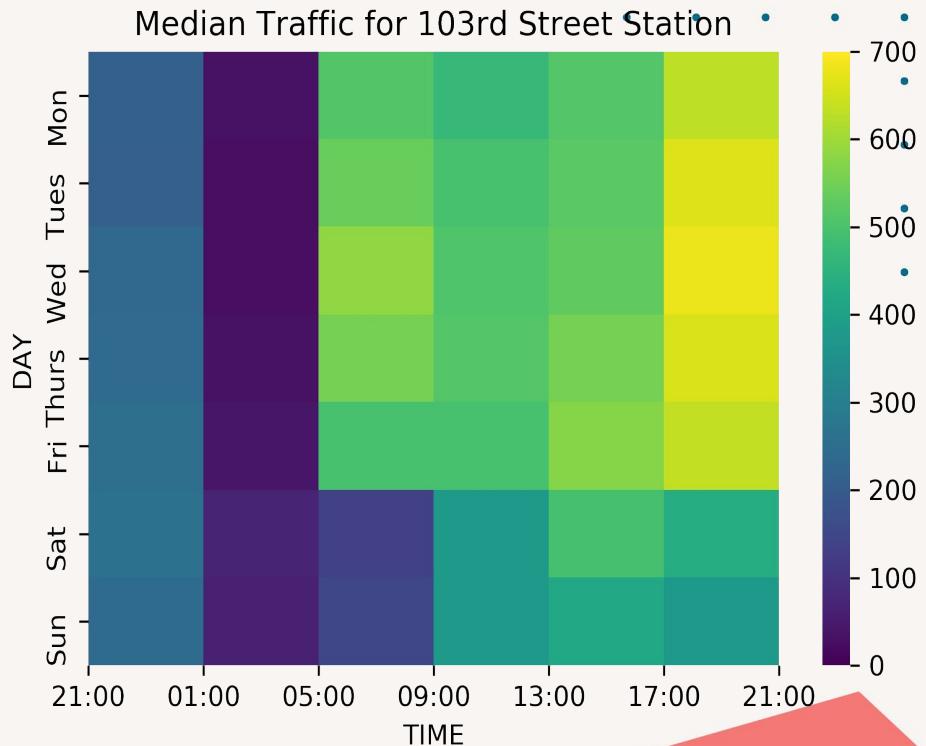


Distribution of Traffic by Day and Time

Median Entries and Exits for 103rd Street Station



Median Traffic for 103rd Street Station



Recommendation

Send a team of volunteers to these places at these times:

- 103 St: Weekdays, from 5 - 9 pm
- East Broadway: Weekdays, from 5 - 9 pm
- Livonia/Junius: Weekdays, from 7 - 9 am



Future Work

- Research how the current pandemic has changed subway traffic
 - Complete analysis for other neighborhoods and subway stations
 - Identify populations by other segments
 - Define target demographics using other census information (e.g. age, gender, income, ethnicity)
 - Connect polling data and voter registration rates
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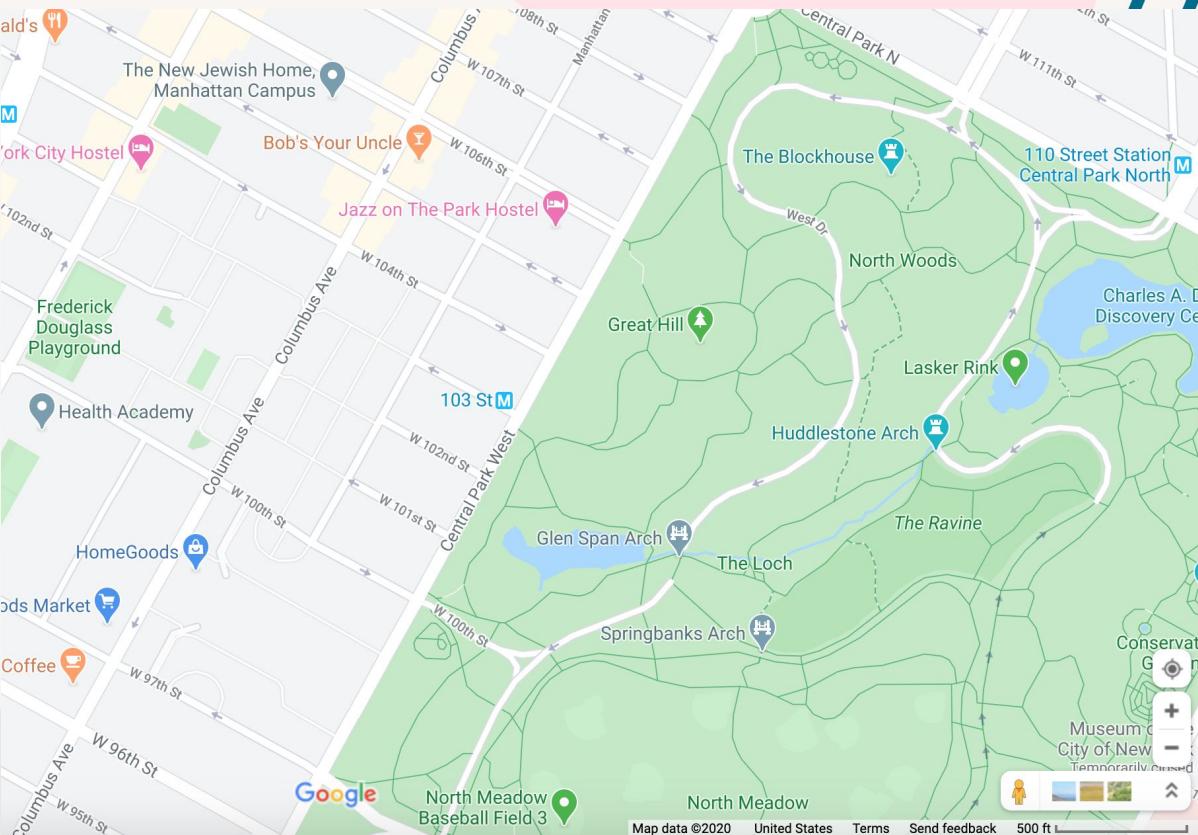
Thanks!

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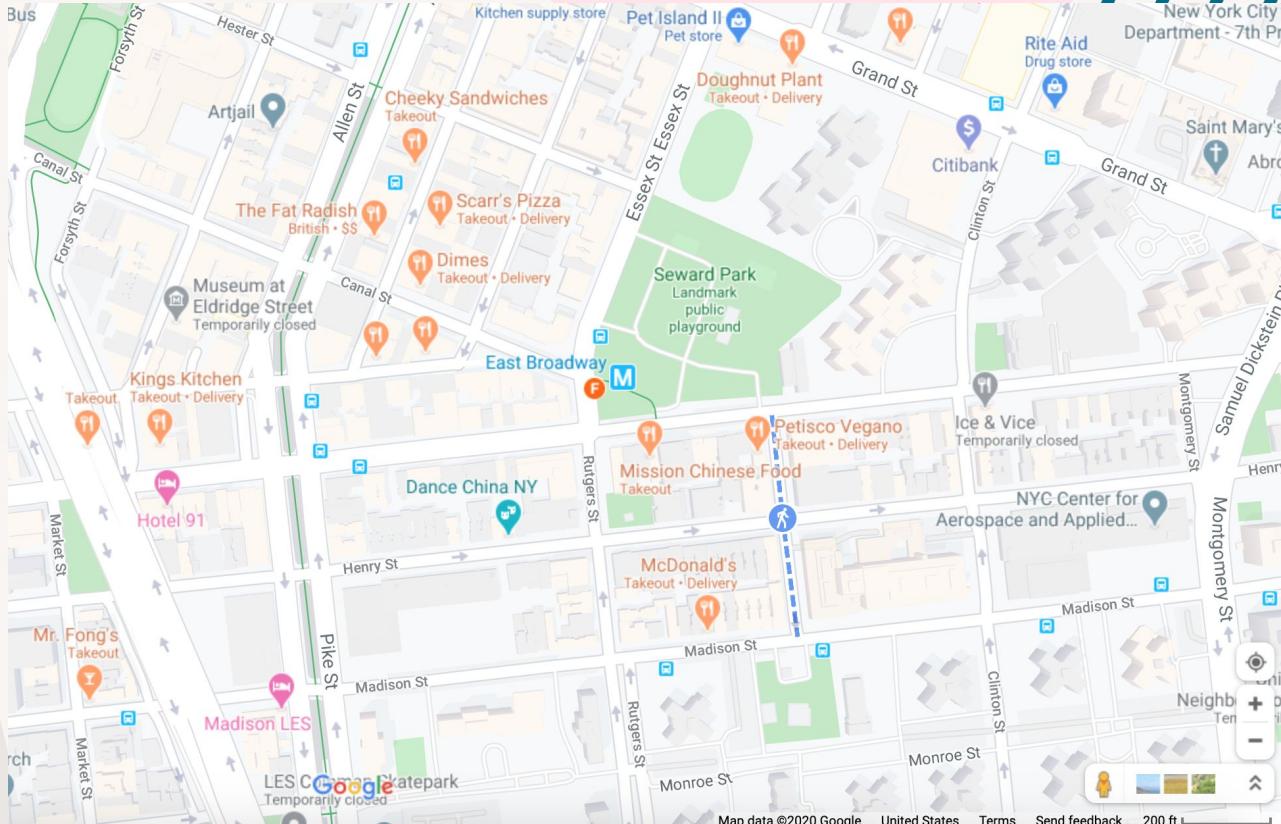
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APPENDICES

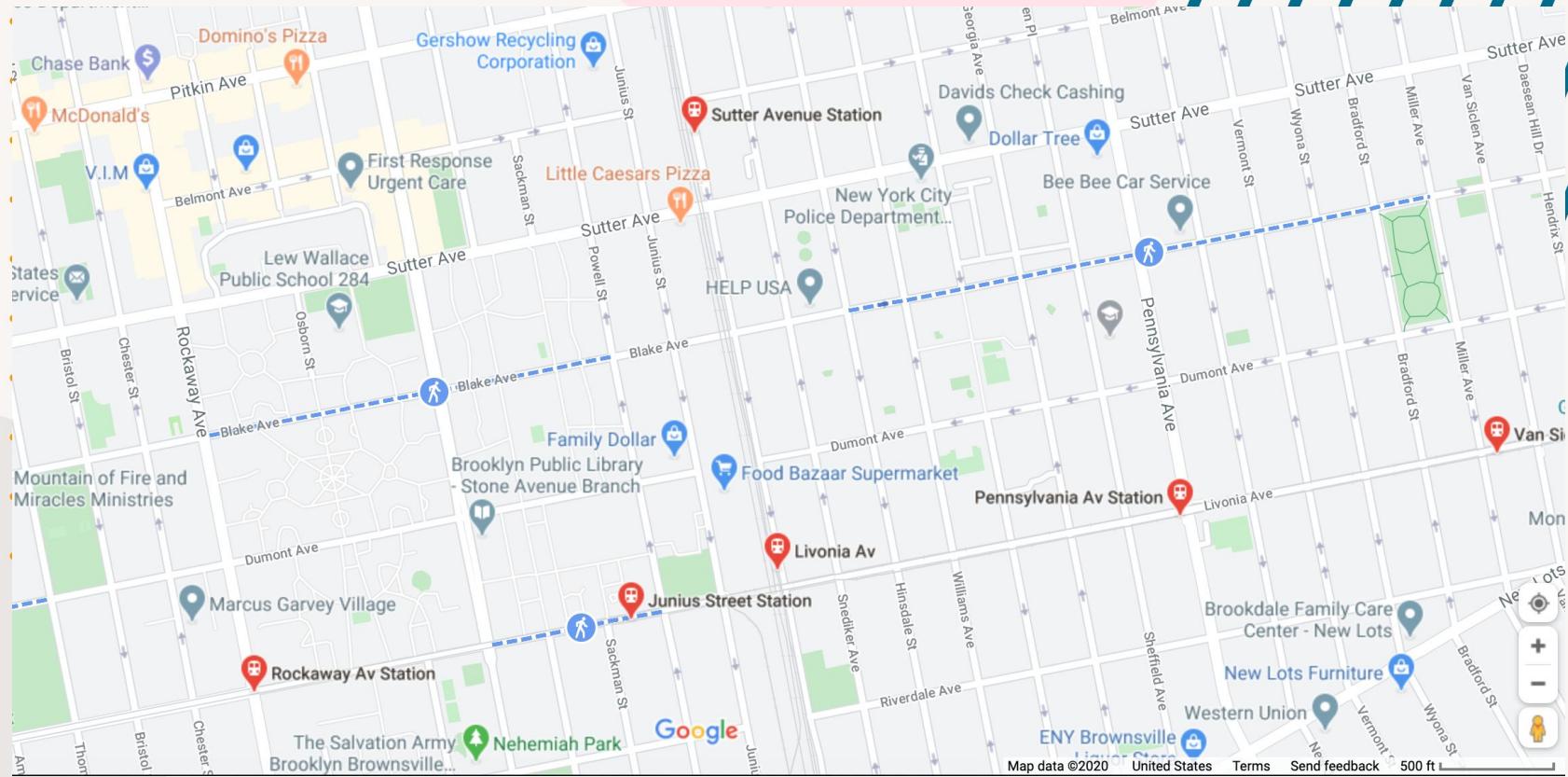




103 ST (BC)

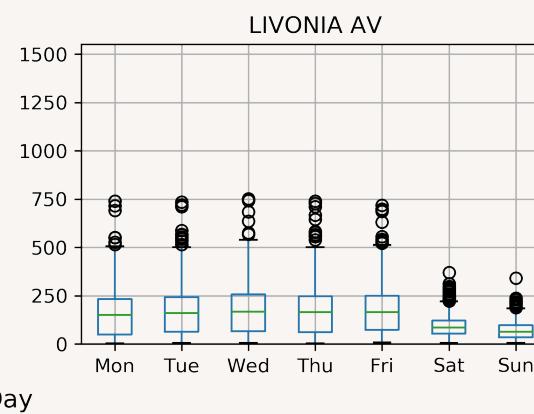
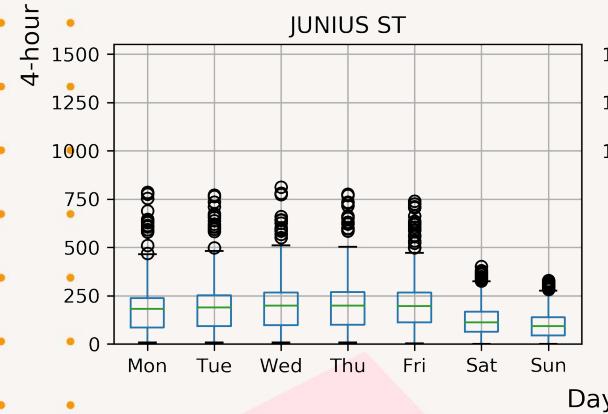
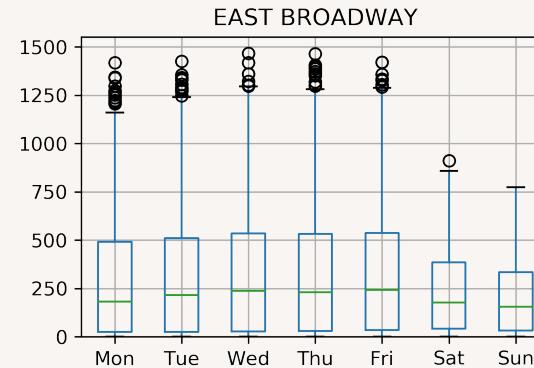
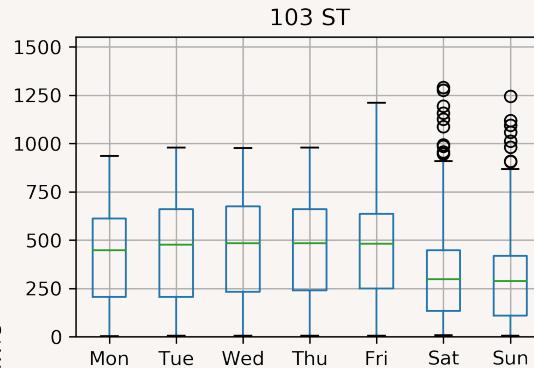


East Broadway

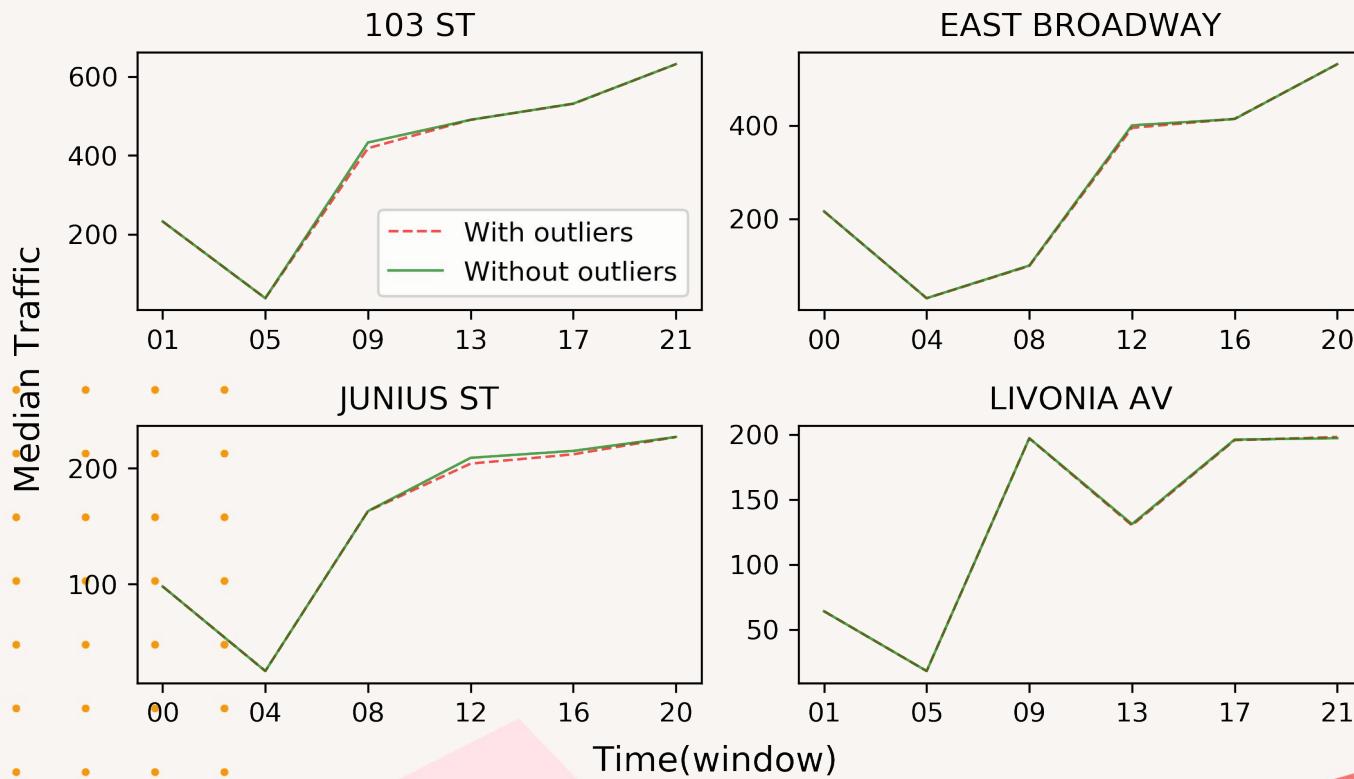


Livonia/Junius

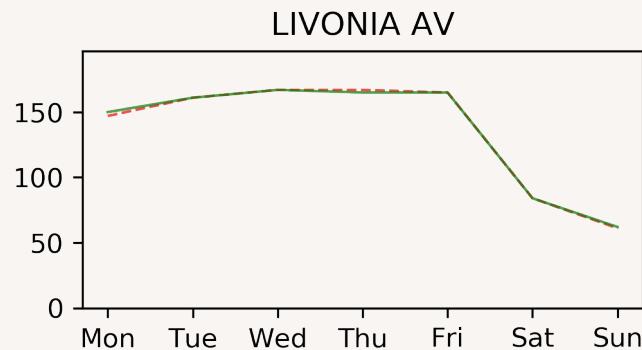
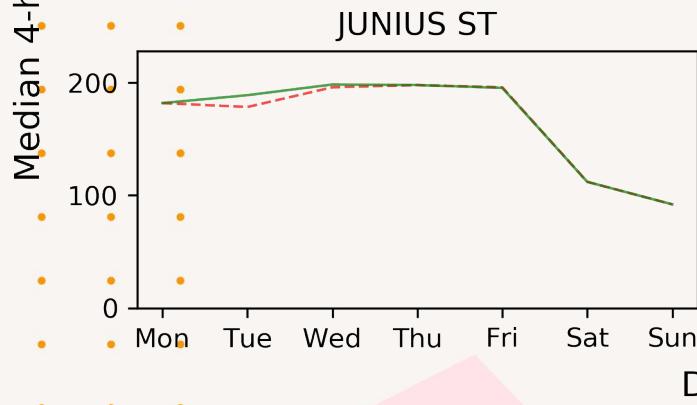
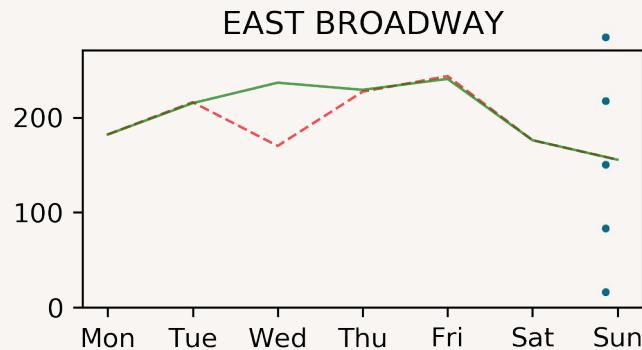
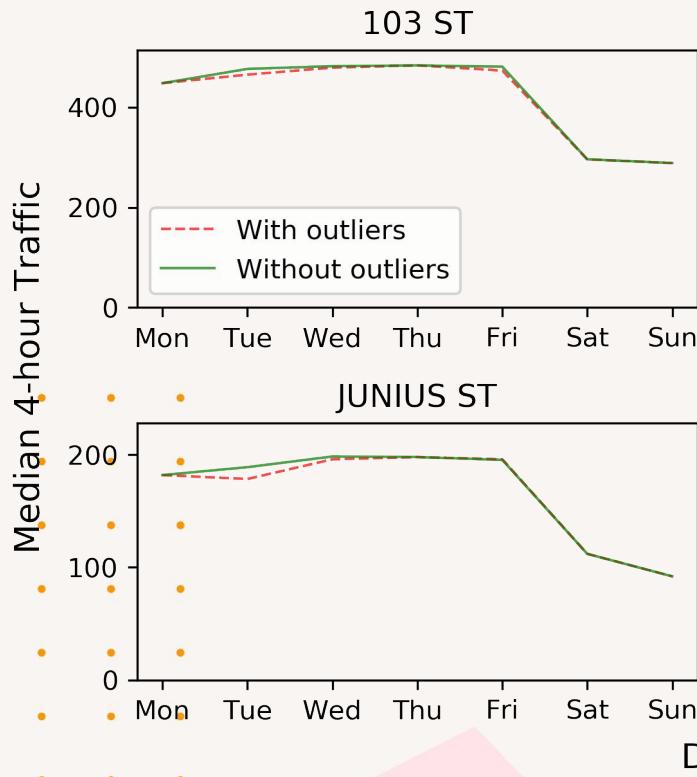
Distributions



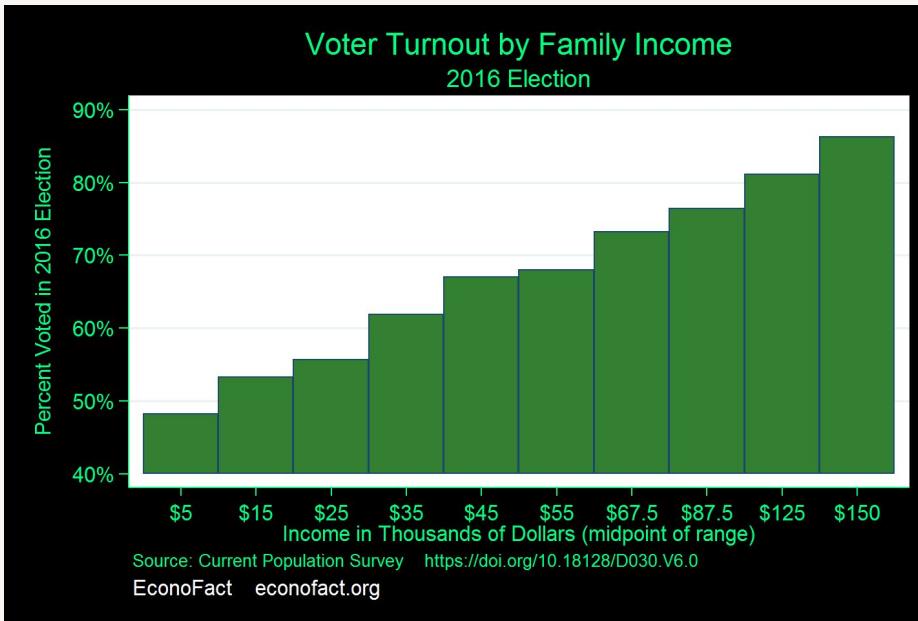
Traffic vs Time by outliers



Traffic vs Day by outliers

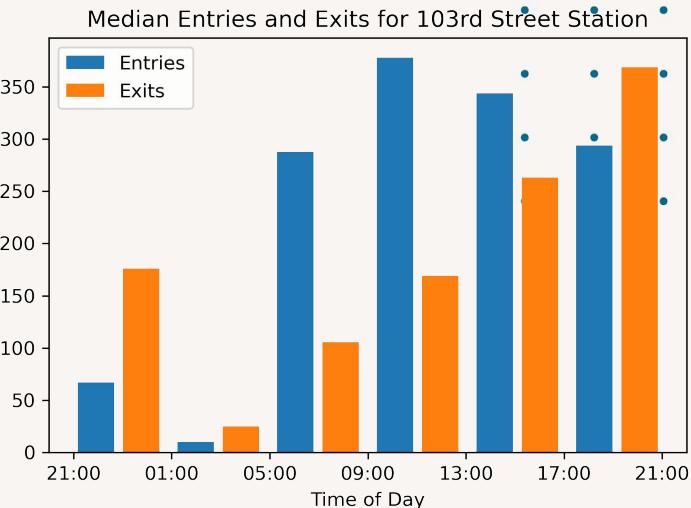
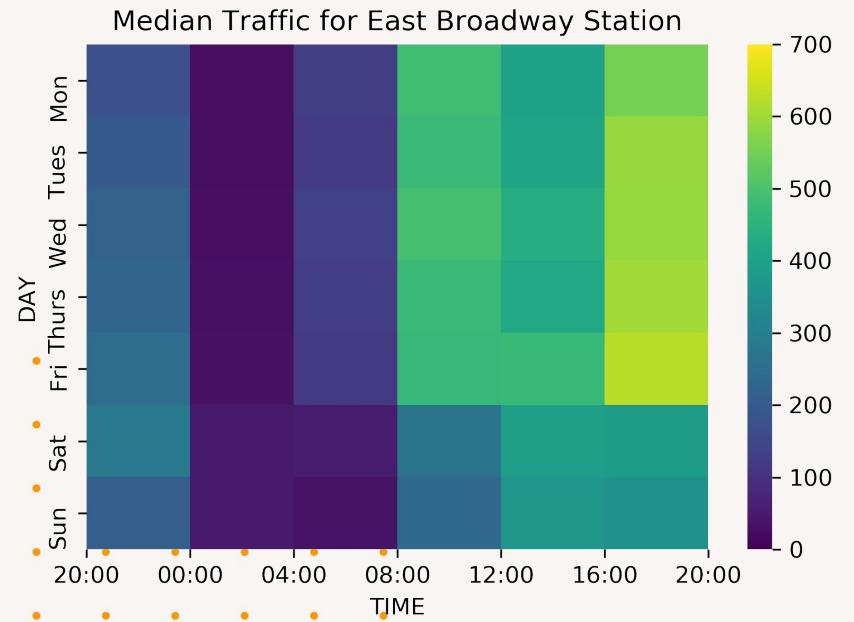


Voter turnout is lower for lower income levels

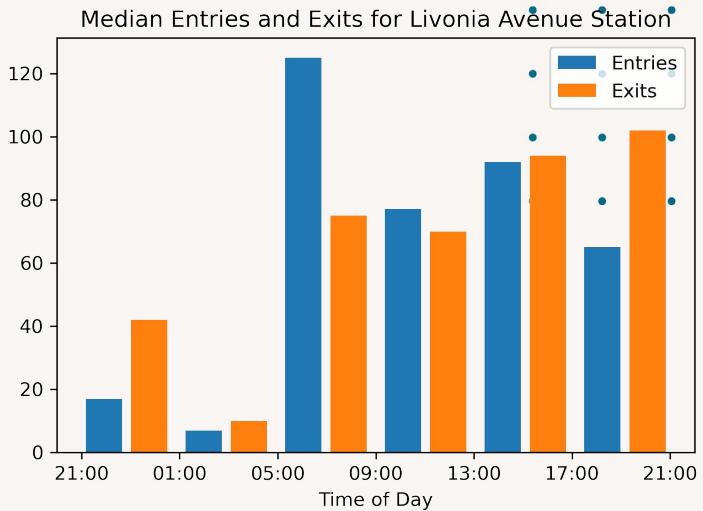
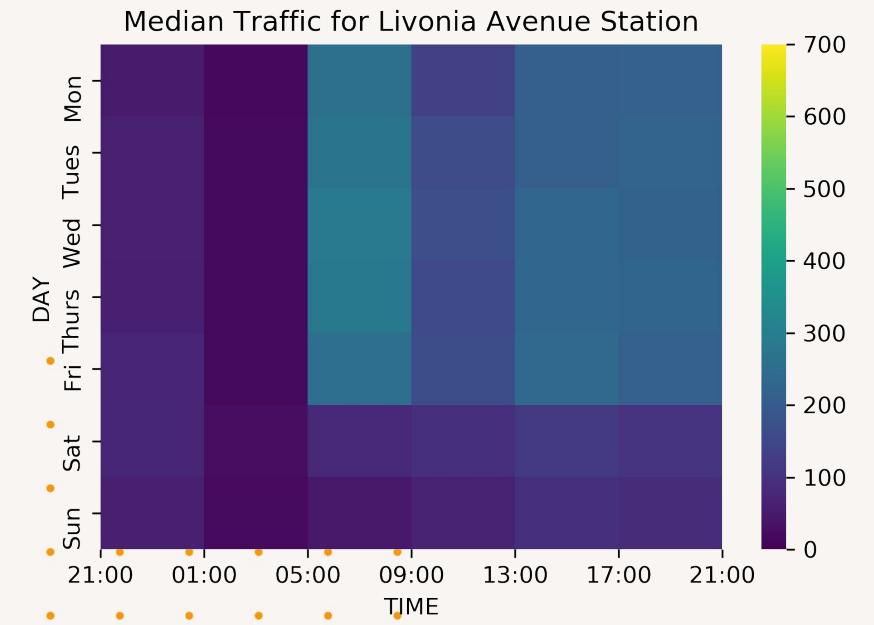


Source: <https://econofact.org/voting-and-income>

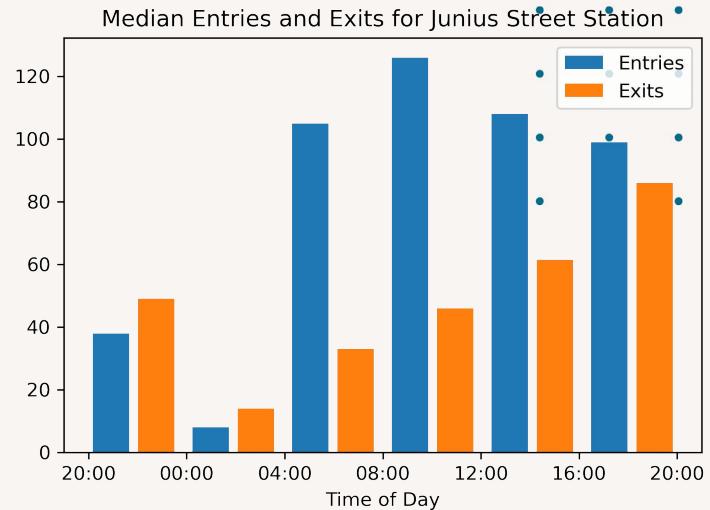
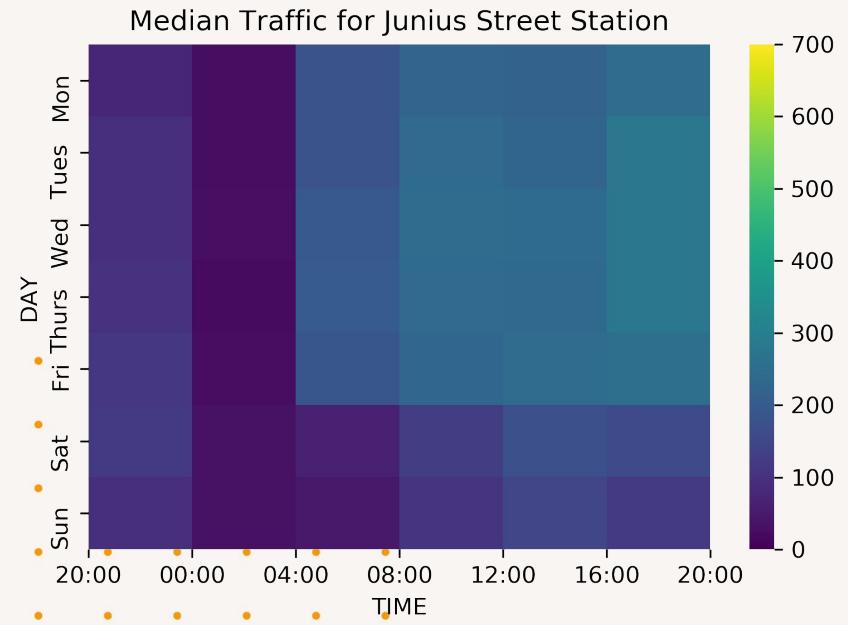
East Broadway



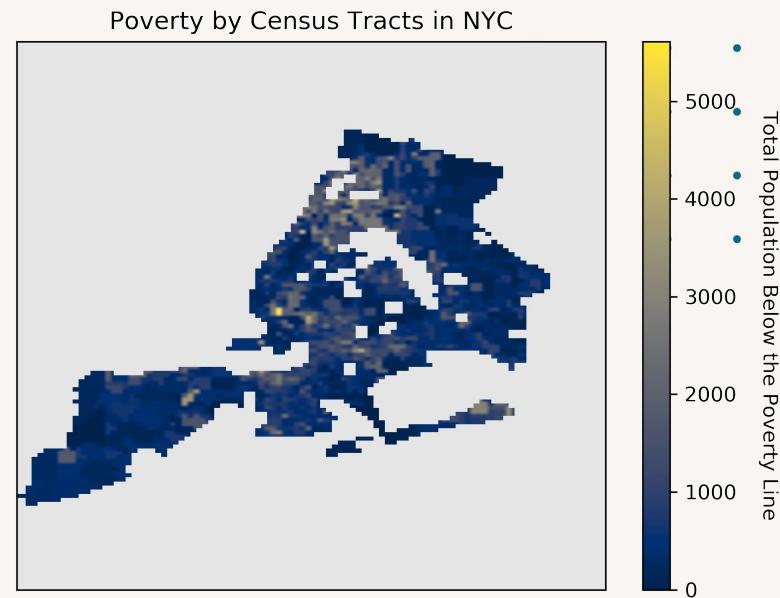
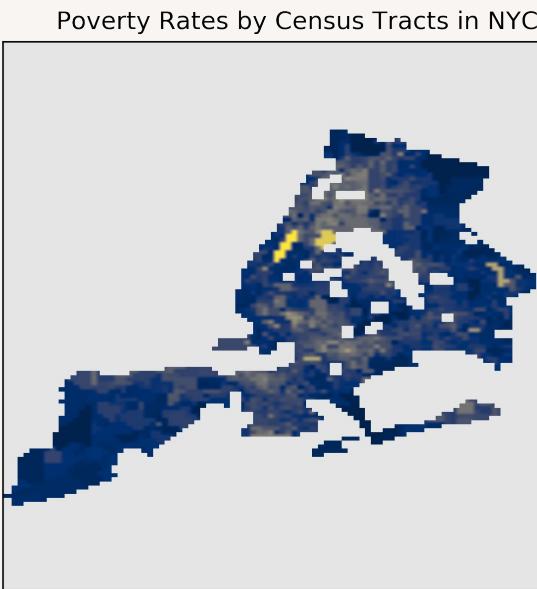
Livonia



Junius



Poverty Rate vs Total in Poverty



Case Study

Determine where and when to send
volunteers to engage with
low-income population

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