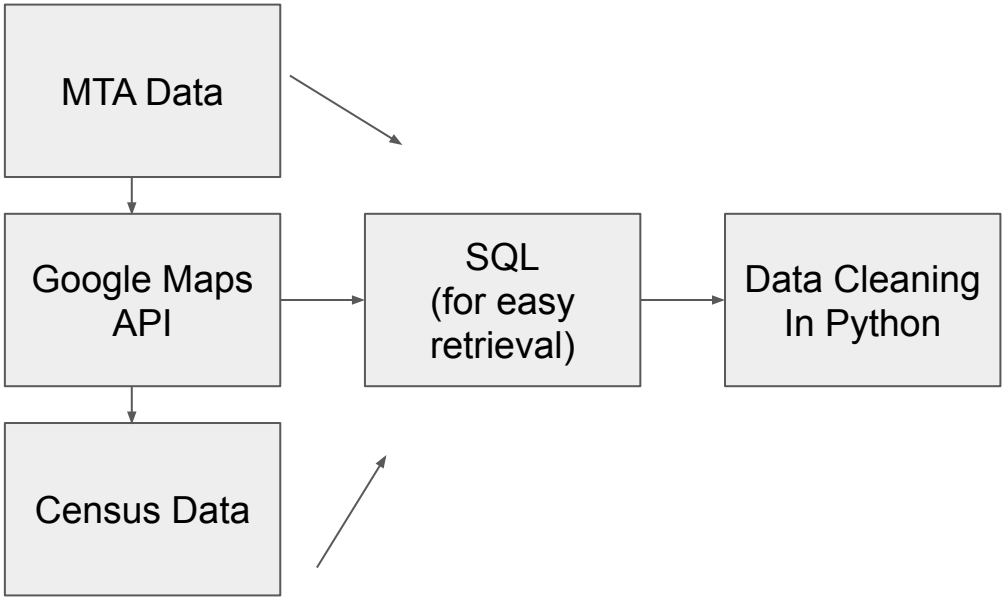
MTA and Covid

Or: who got to stay home?

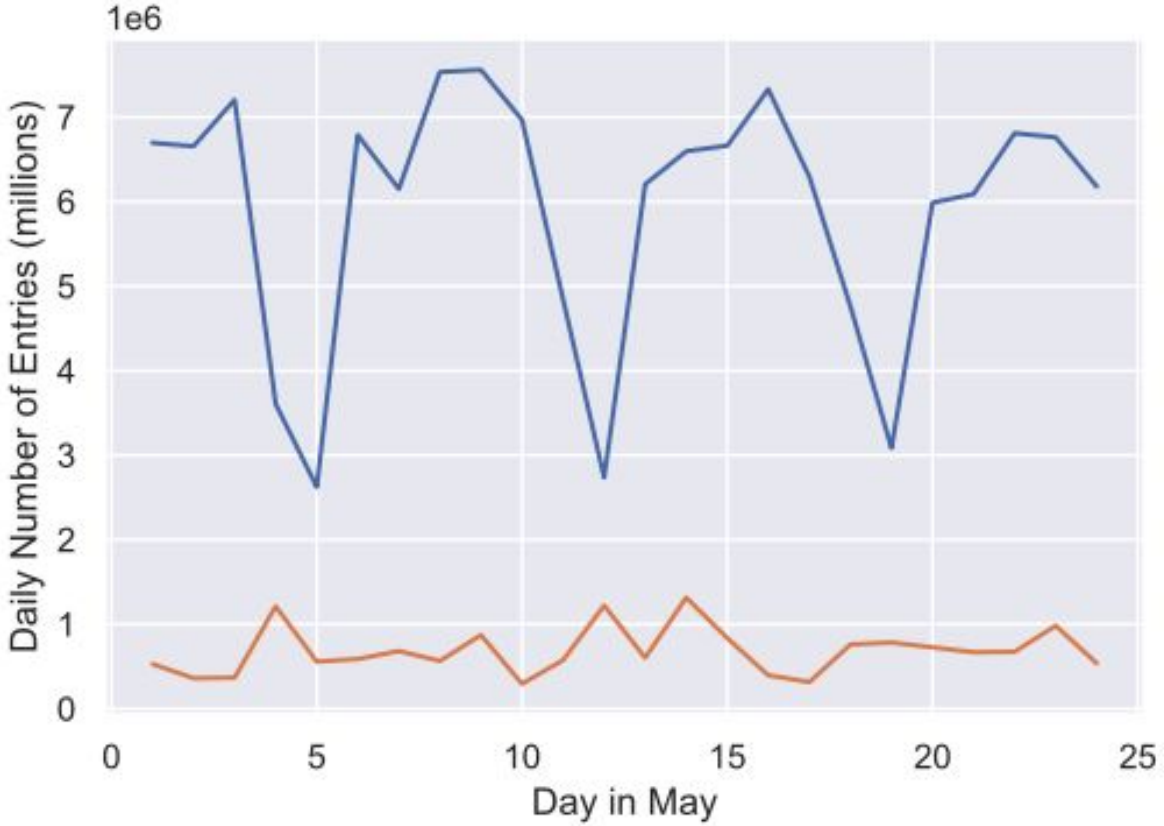
Data Sources and Workflow



Specifics:

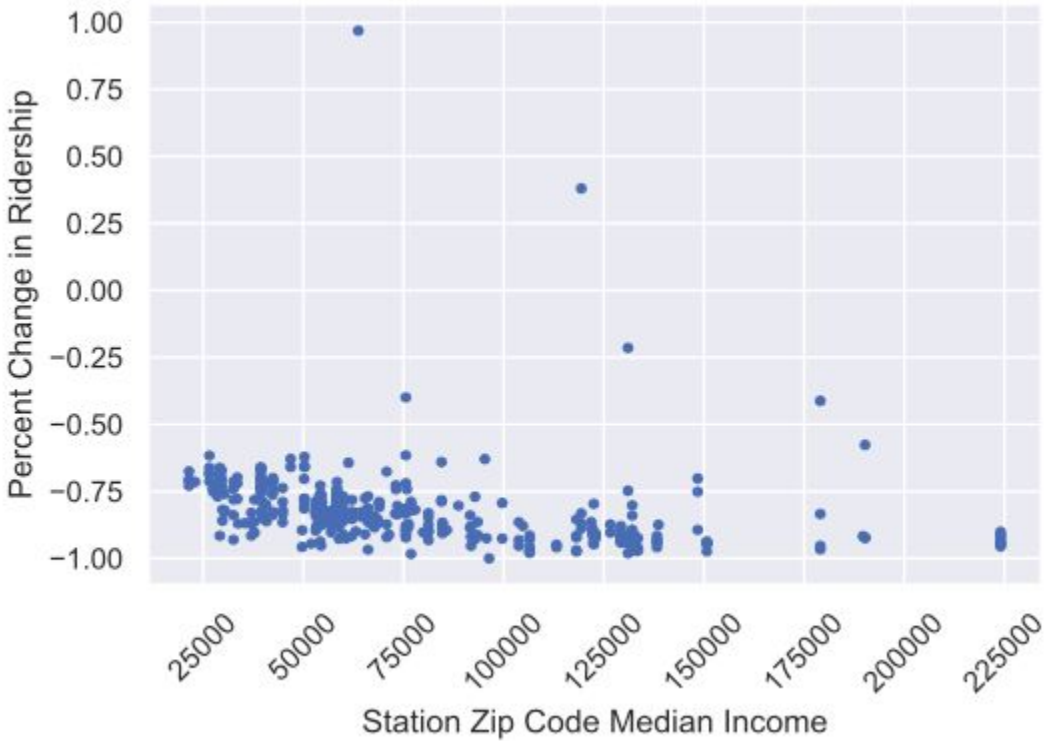
- MTA Data used are Months of May and June of 2019 and 2020
- Calls to Google Maps API via Python in order to fetch Zip Codes for each station
- Google Maps API was a massive pain- wouldn't recommend
- Income data at a Zip Code-level retrieved from data.census.com
- Income data represents median household income for each respective Zip Code

Changes in Ridership as a Whole



Question:
Does the income of an area meaningfully relate to the change in ridership during the pandemic?

Changes in Ridership in Relation to Income



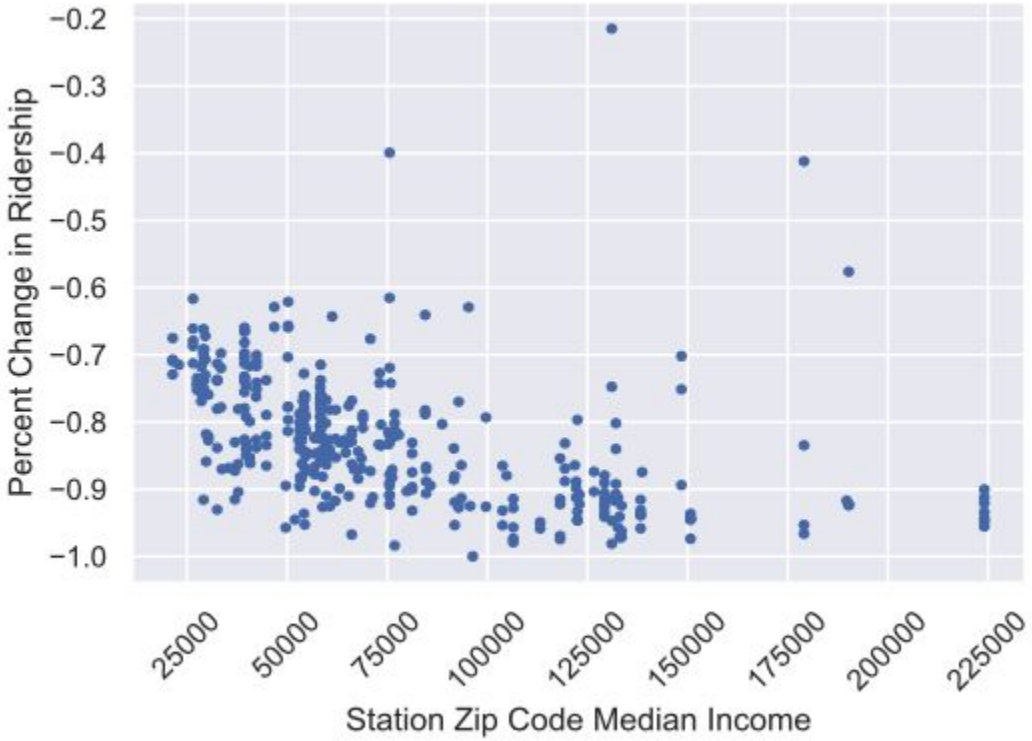
Exceptions?

STATION	DAILY_ENTRIES2019	DAILY_ENTRIES2020	Percent Change
1 AV	423829.0	834493.0	0.968938
81 ST-MUSEUM	349393.0	1303436.0	2.730573
DEKALB AV	814942.0	1124733.0	0.380139
EUCLID AV	287497.0	660318.0	1.296782

Data filtered to just those stations that saw an increase in ridership

- Dekalb as well as 81 ST-Museum of Natural history close to parks
  - 1 AV and Euclid AV not *as* much
- None are newly opened or in particularly “new” areas of city
- Frankly your guess is as good as mine

Taking a closer look...



Further areas to explore

- “Commutership”
  - Entries in the morning, exits in the afternoon
- Larger data set *might* provide more insights
  - Do these trends hold true throughout the pandemic?
    - How does this vary with time?
    - Winter vs Summer?
- Post-pandemic changes
  - Will these trends *continue* to hold true?