



MTA Turnstile Analysis

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Background

How can a health insurance company utilize commuter data to identify high-risk customers who may need adjusted health coverage during wide-spread health crises?

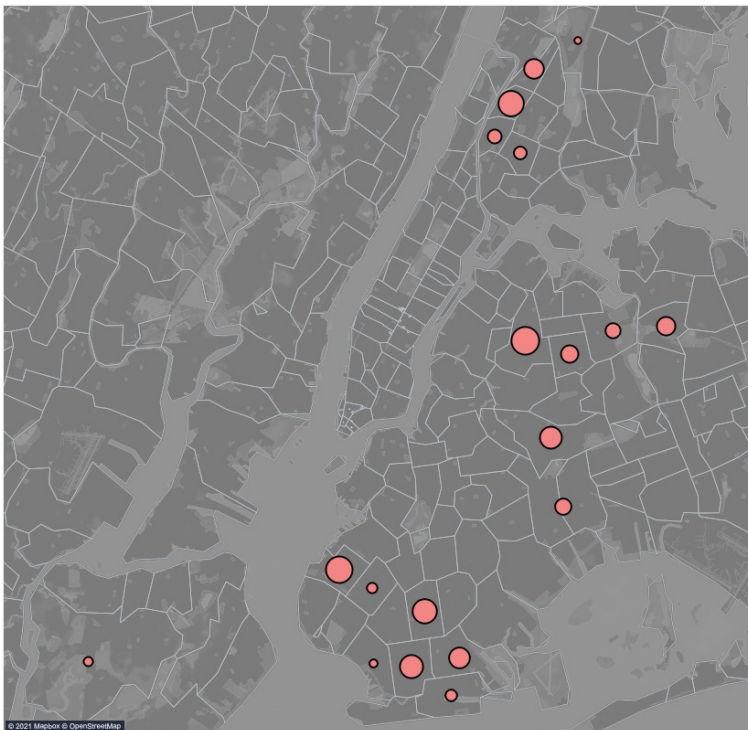




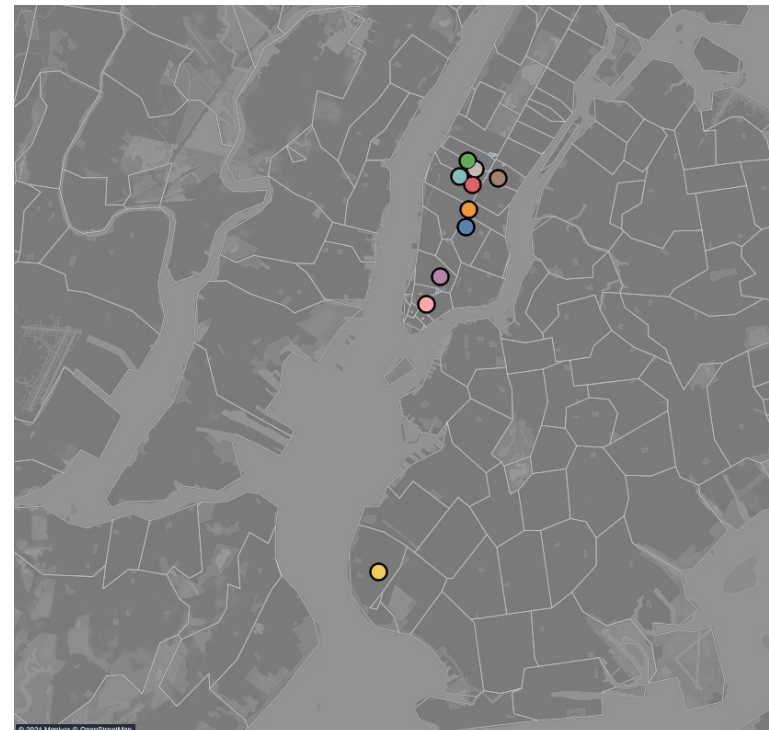
Methodology

- Analyze stations with high traffic and COVID hot spots
- Data:
 - MTA Turnstile Data:
<http://web.mta.info/developers/turnstile.html>
 - MTA Stations with geographic coordinates:
<https://hub.arcgis.com/datasets/8c547512607847789e8b7648323dc462>
 - COVID cases in NYC by zip code:
<https://github.com/nychealth/coronavirus-data/blob/master/totals/data-by-modzcta.csv>

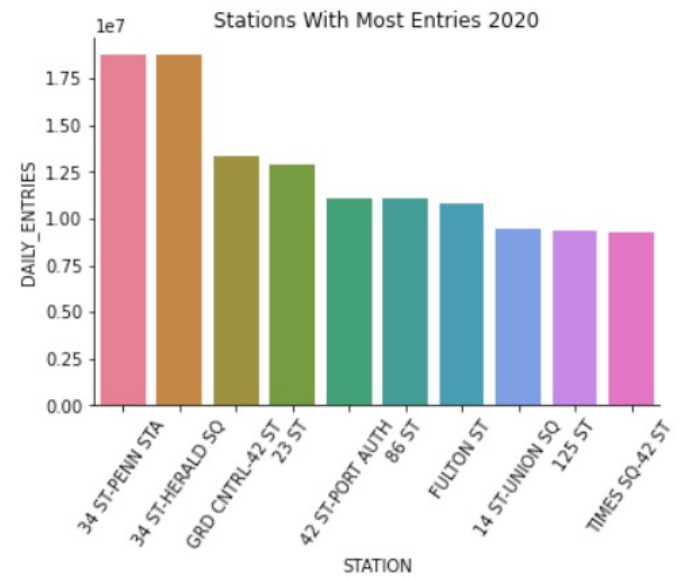
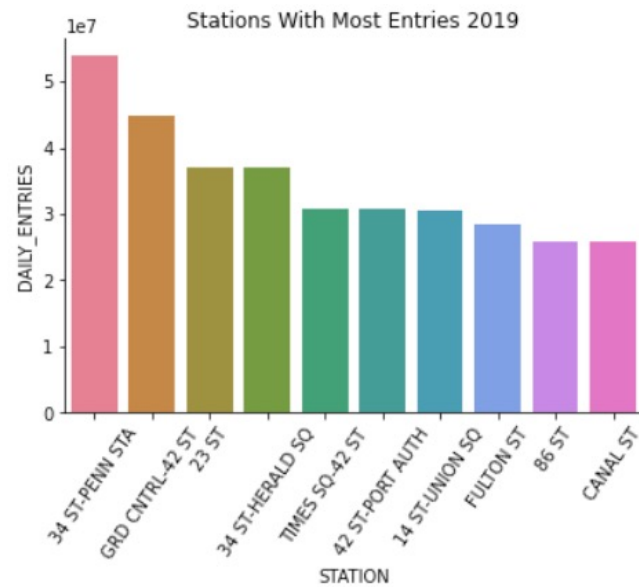
Locations with Highest COVID-19 Rates



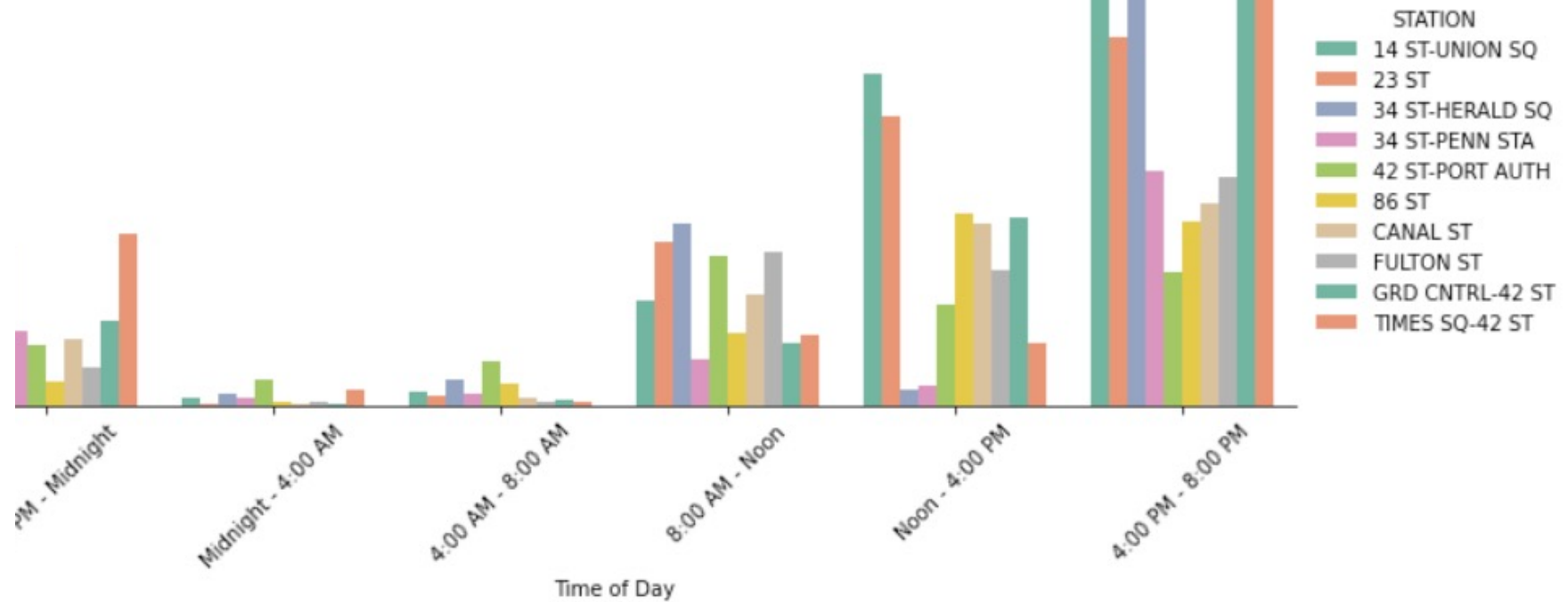
Most Populated MTA Stations



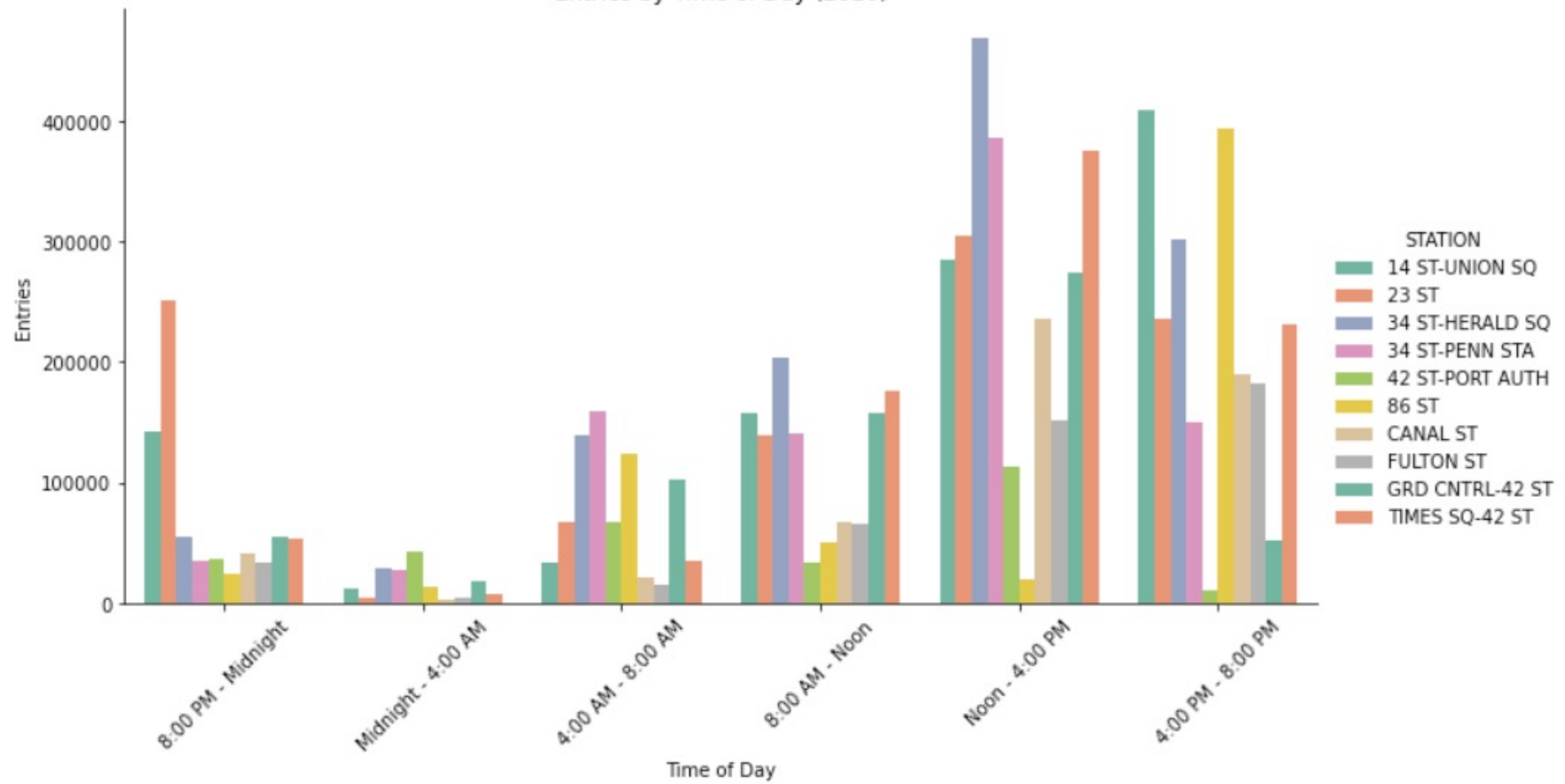
Most Populated Stations



Entries by Time of Day (2019)



Entries by Time of Day (2020)



Conclusions and Further Analysis

- Less MTA commuters overall – decreased risk for exposure in general
- Most populated stations are outside of the top 15 COVID hot spots
- A subset of people are still going into work – essential workers?
- A deeper analysis should include:
 - MTA exit data
 - Investigating average income of customers' neighborhoods

