

Work-From-Home Trends in NYC

Or: How I learned to Stop Worrying And Love the Histogram



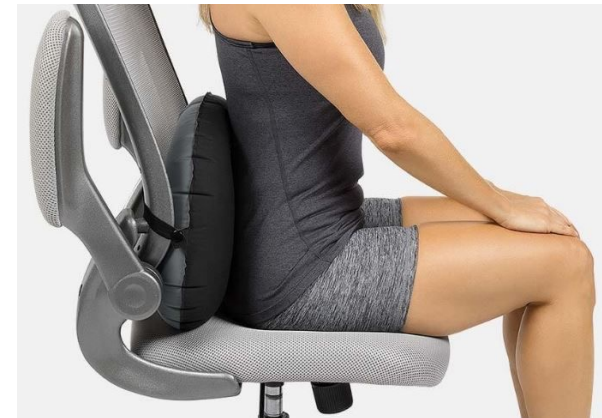
"I'm working from home."

Metis EDA Module Presentation

Andrei Levin • 6/25/21

Our Client

- Necessary Supplies For Work-From-Home Inc. (**NSFW**)
- Would like to know which NYC neighborhoods have had the largest transition to work-from-home employment as a result of the pandemic.

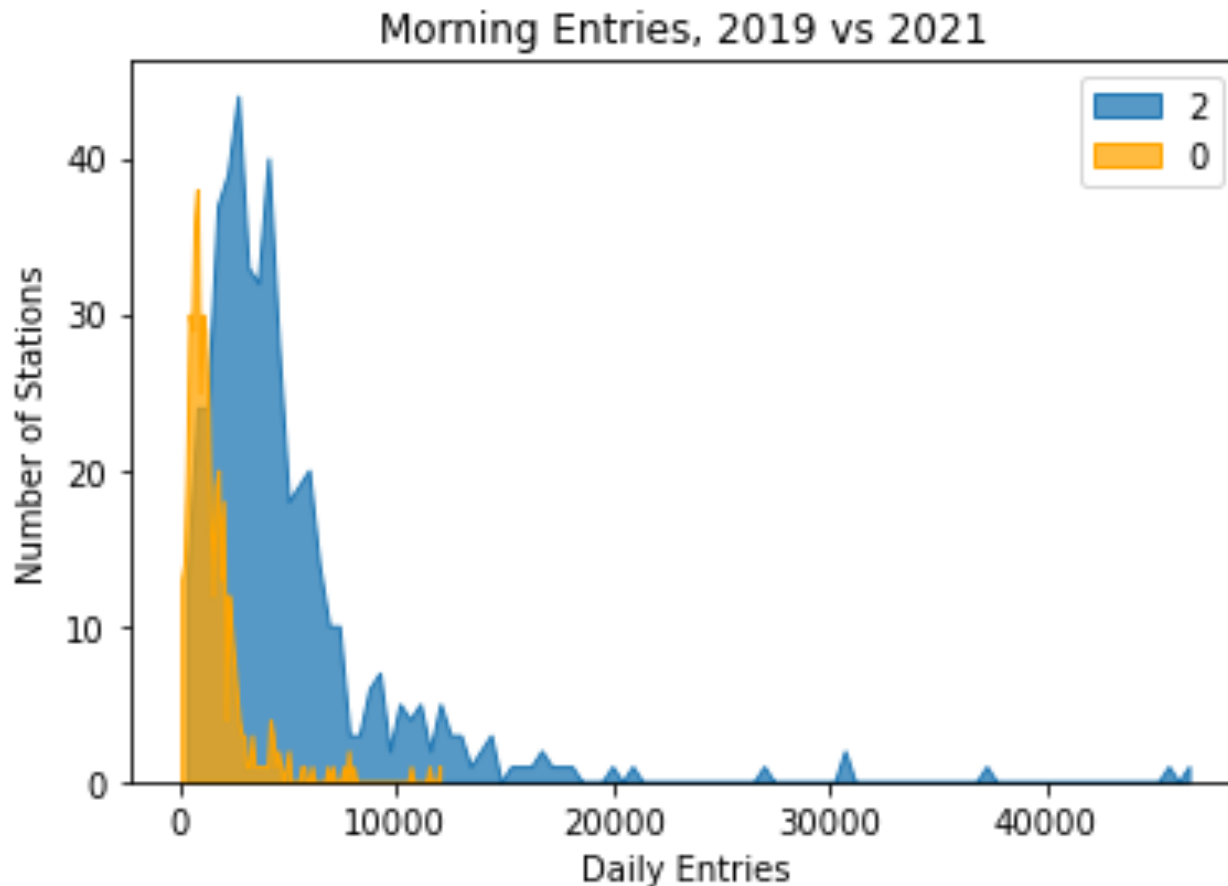


Strategy

- Aggregate April & May data for 2019 and 2021
- Count average net **weekday morning** entries per station (7am to 1pm)

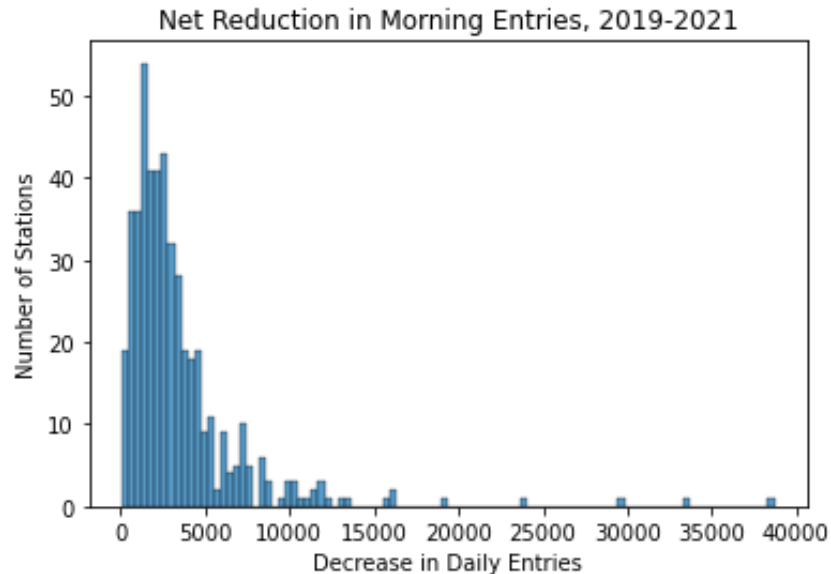
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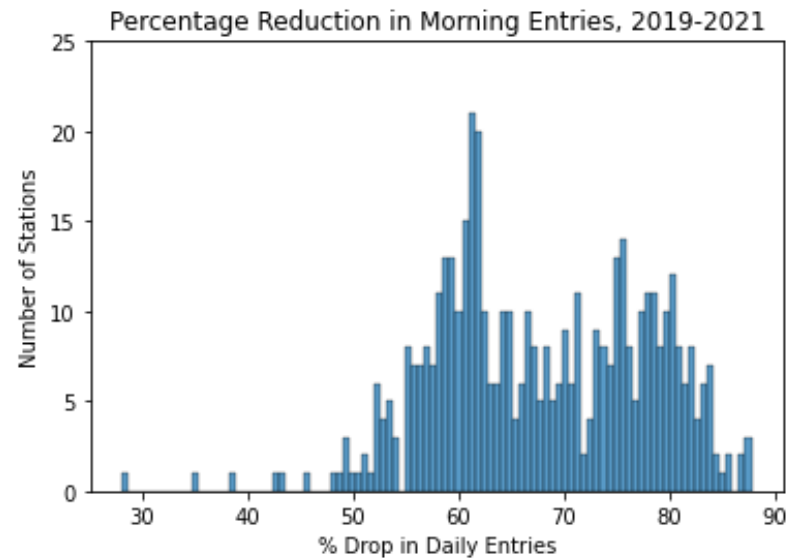


70% Total Decline from 2019 to 2021

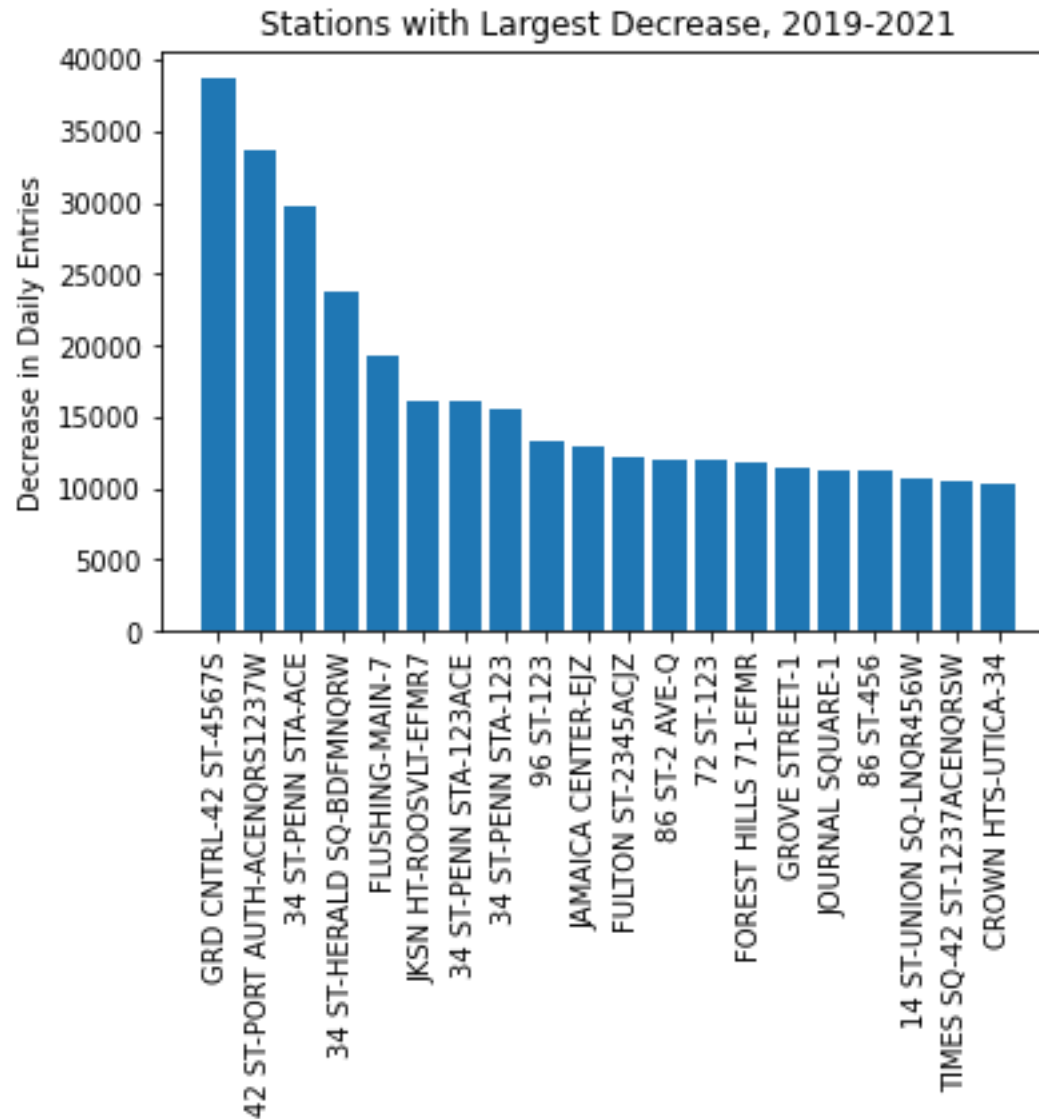
Number Decrease



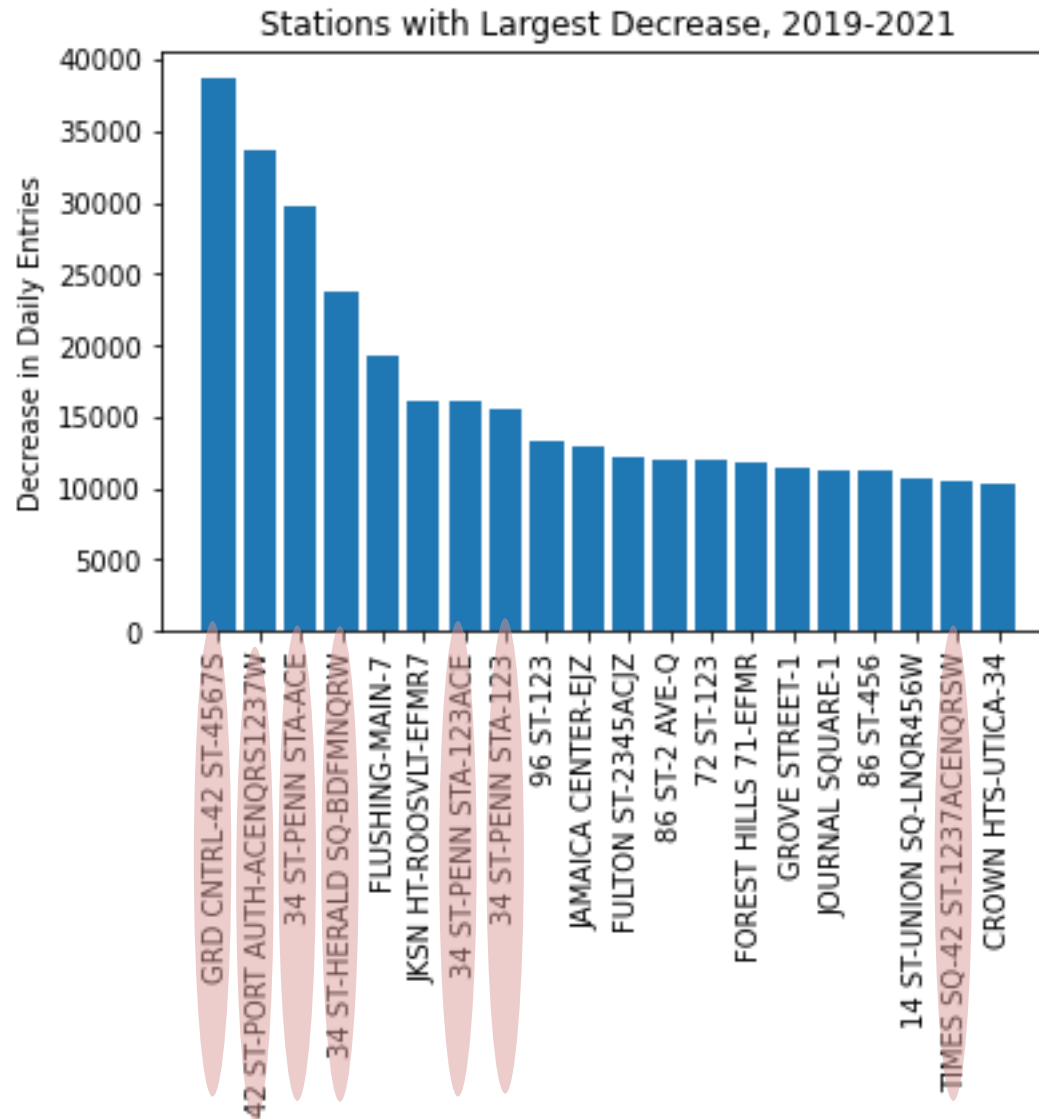
Percentage Decrease



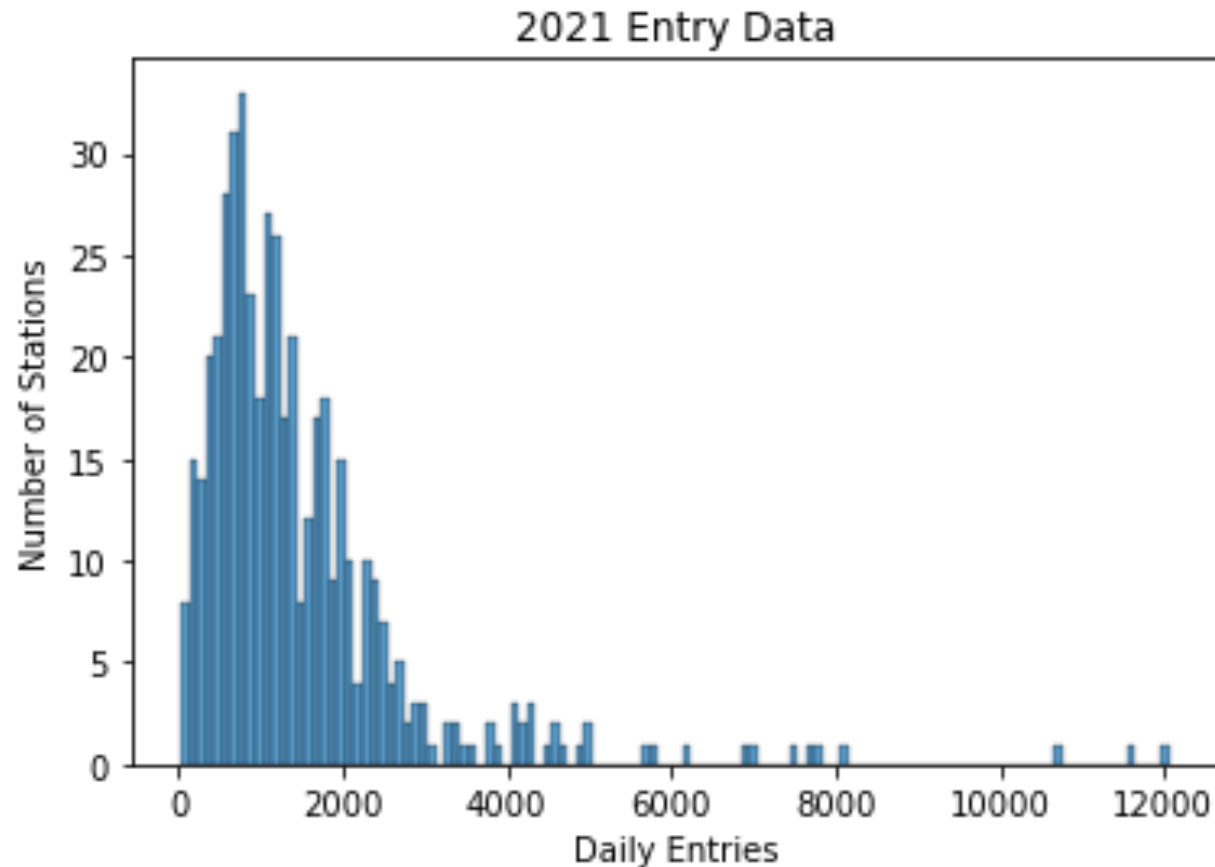
Stations with Largest Number Decrease



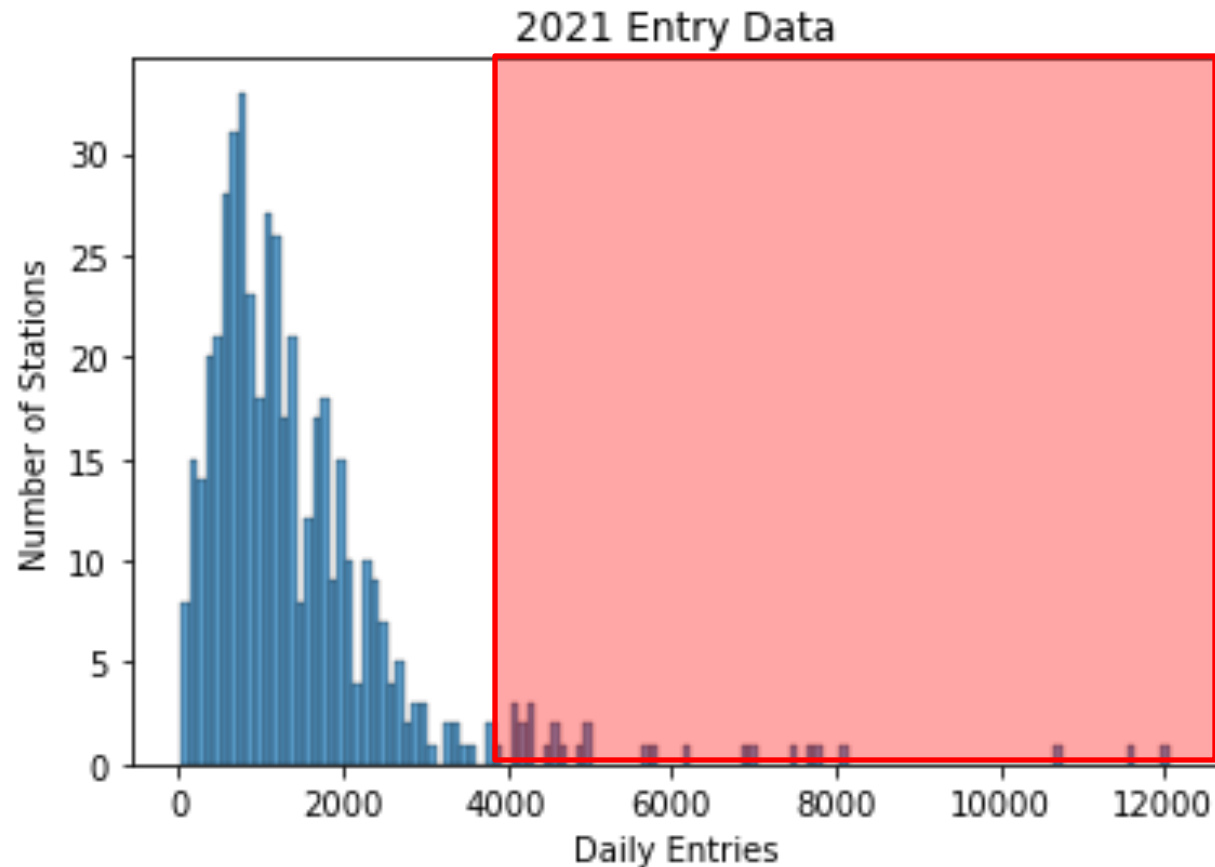
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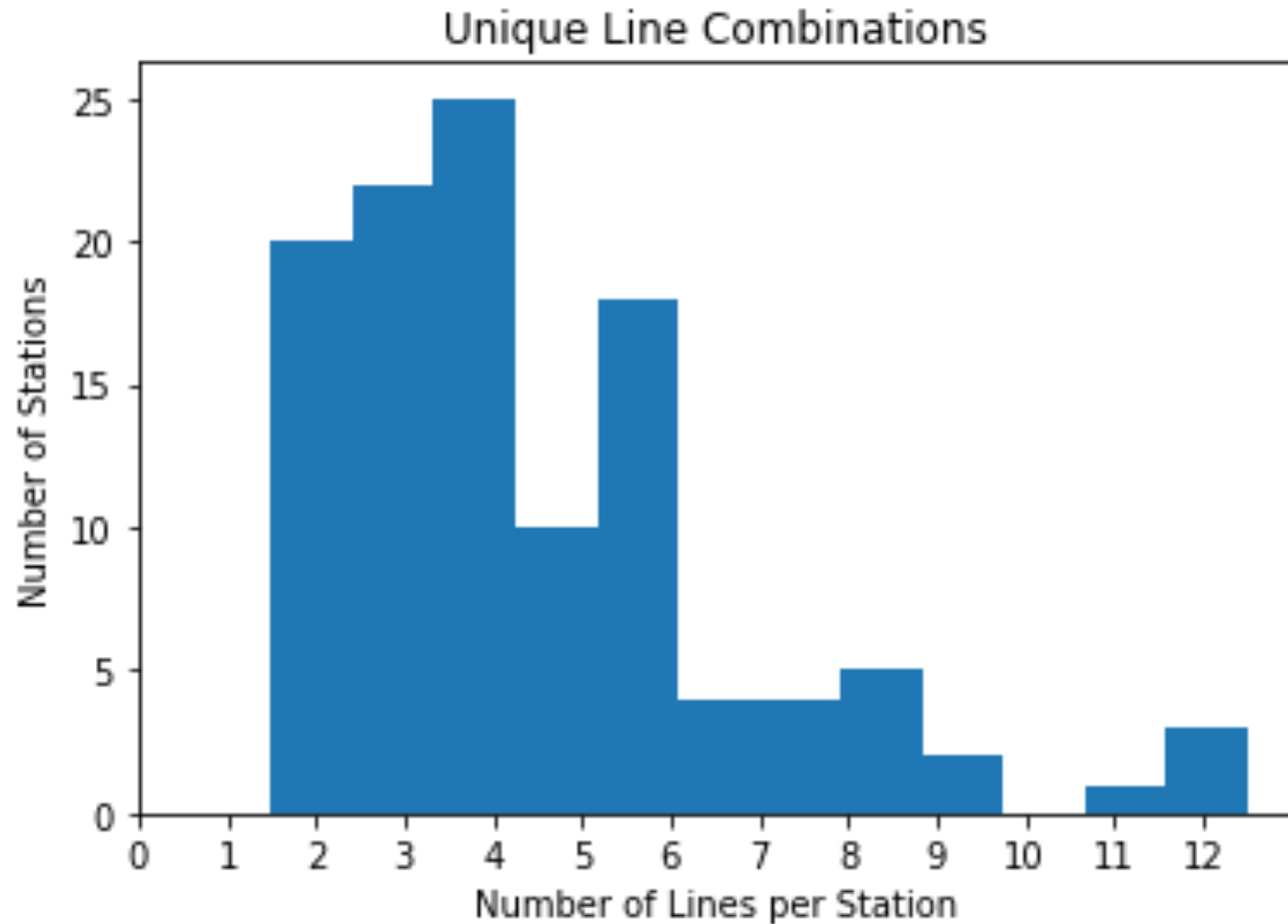
How do we Filter out Non-residential Areas?



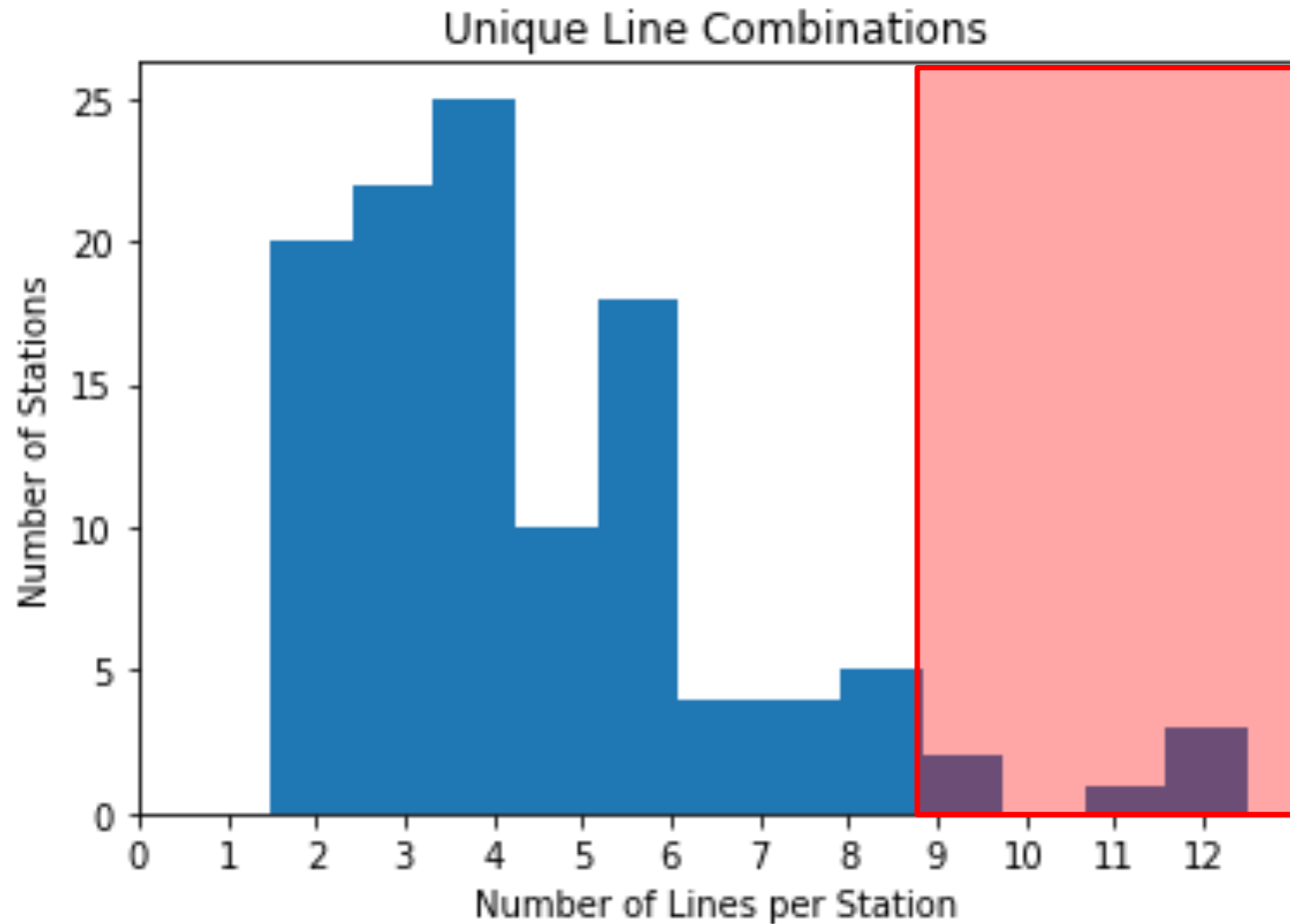
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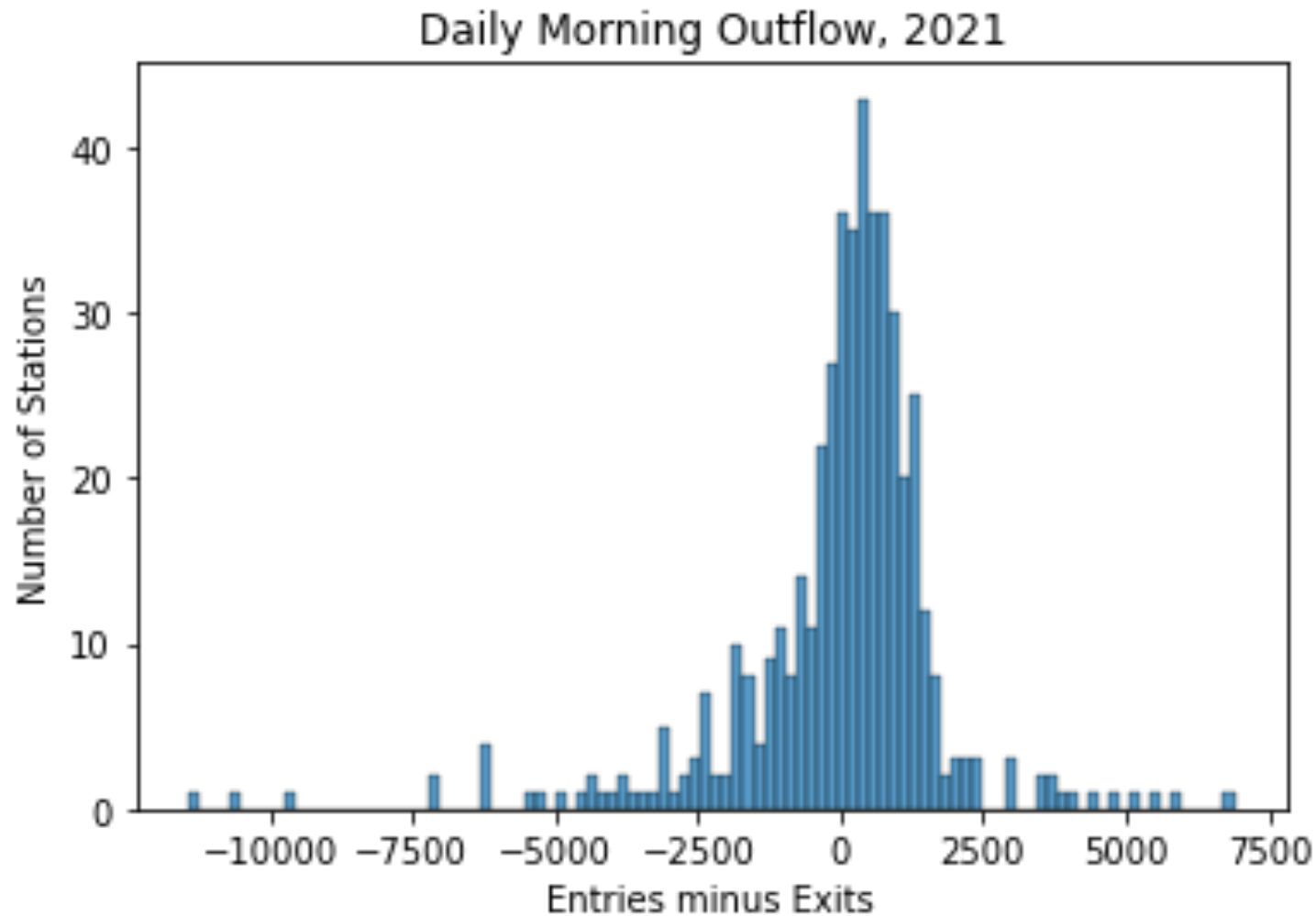
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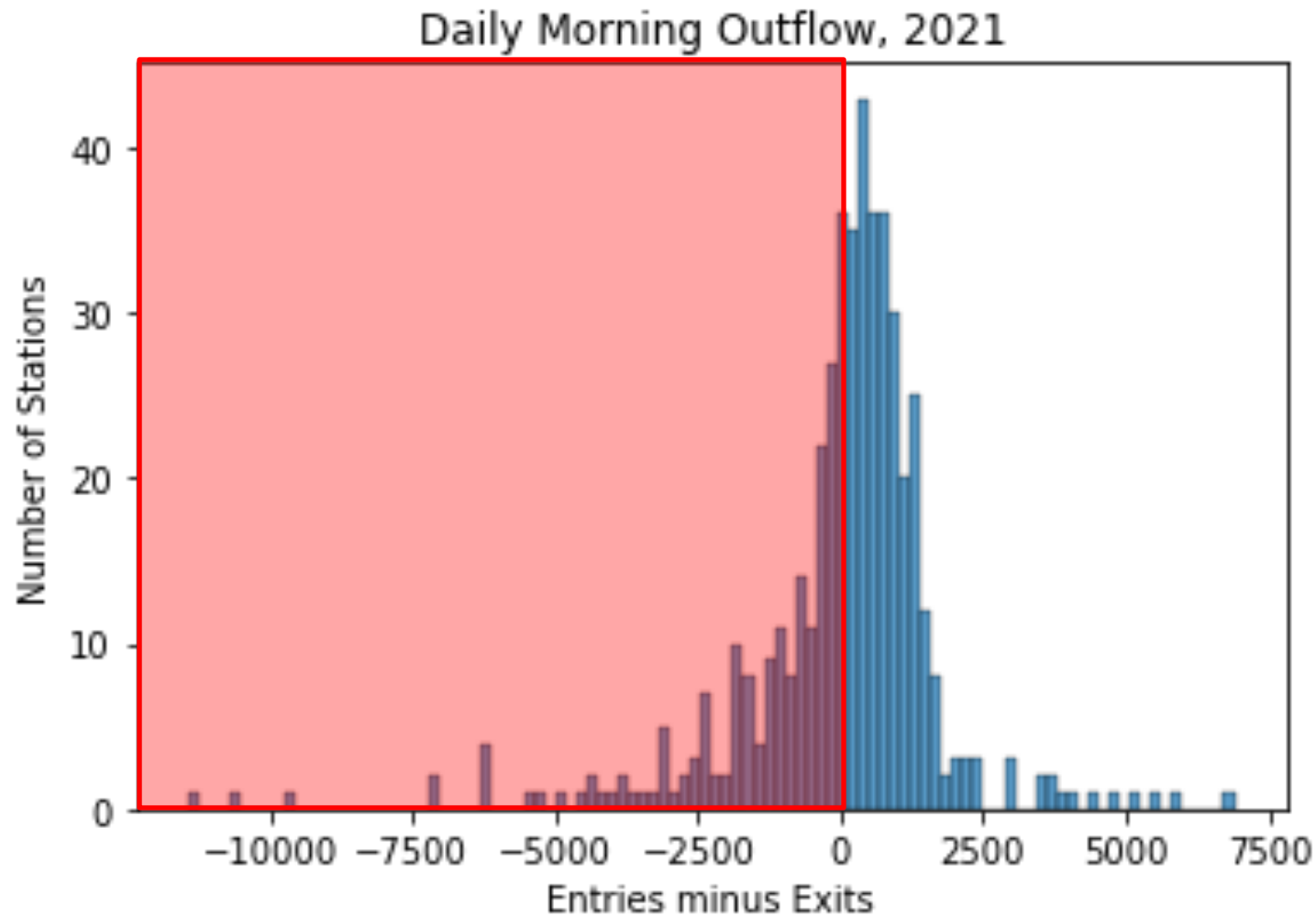
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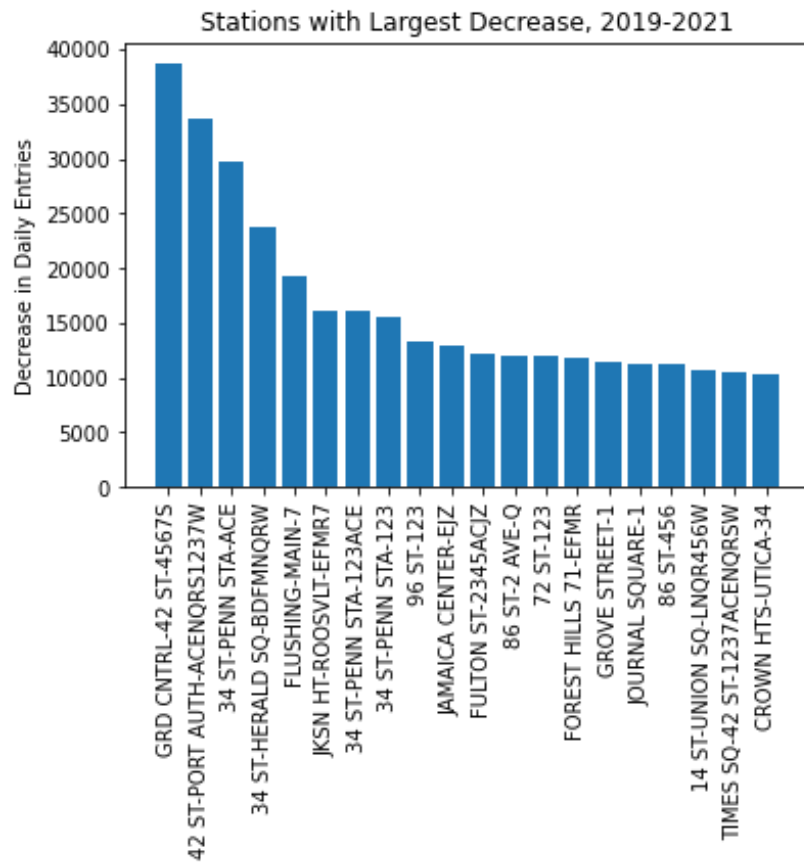


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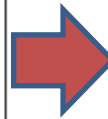
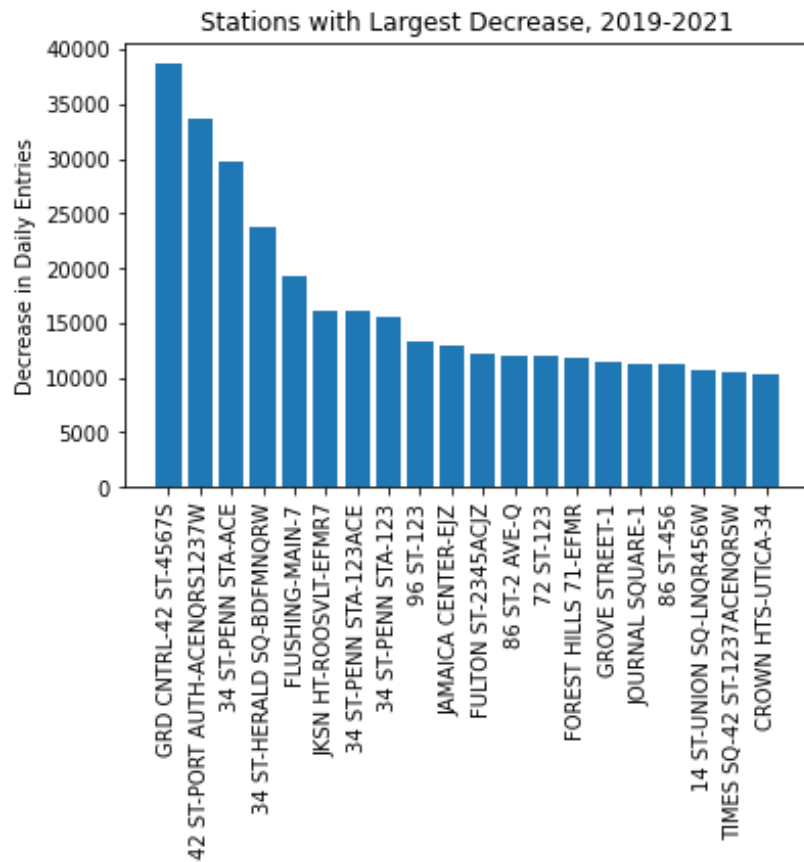
Stations with Largest Number Decrease

Before Filters Applied

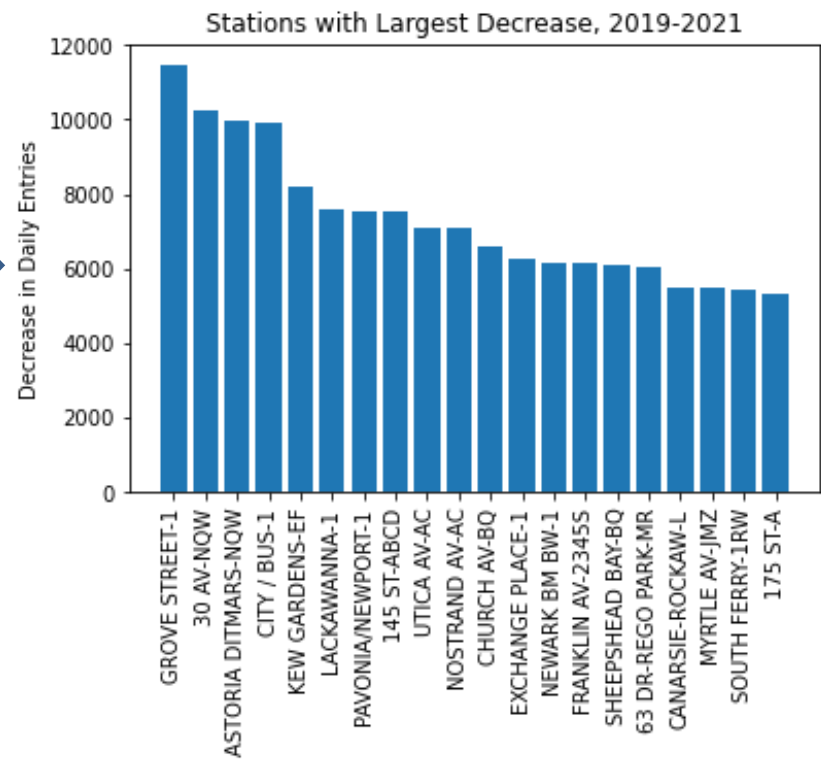


Stations with Largest Number Decrease

Before Filters Applied

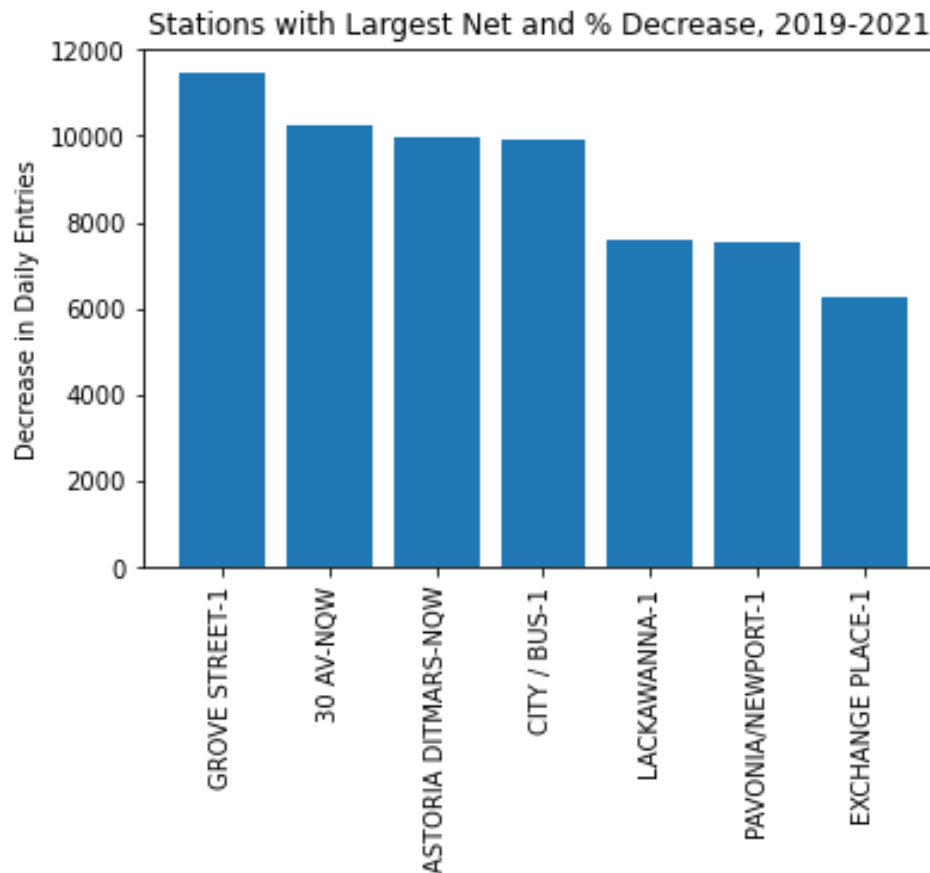


After Filters Applied



Top Candidate Stations

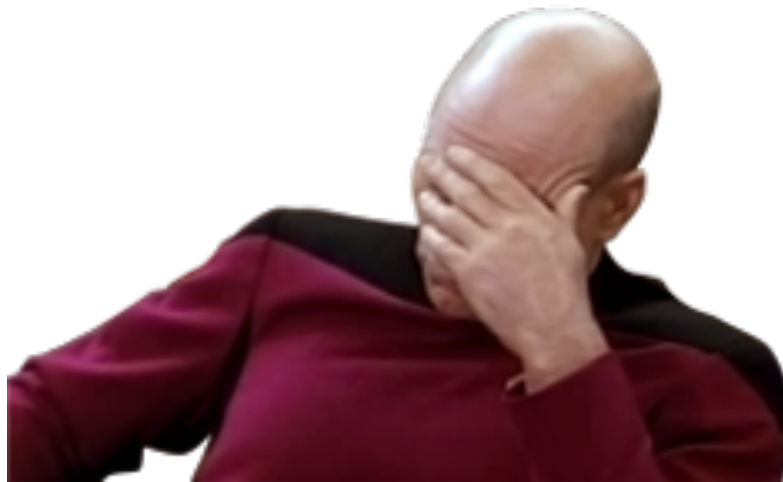
- Top 20 in ***BOTH*** Number Decrease AND Percentage Decrease
- All seven are in Astoria or Jersey City 🤔



Potential Pitfalls

How do we separate a work-from-home increases from other confounding factors?

- Unemployment
- Changes in commute modalities
(e.g. walking or biking to work)
- Changes in MTA lines and services
- Changes in local population density
- Tourism



Thank You!

