MTA Track Maintenance

1 Introduction

Motivation

Metro commuters are facing the obcetle of lines being out of service suddenly due to the lack of regular maintenance.

Goal

To schedule shut downs for maintenance where a line is in minimal use.

2 Methodology

Data

- Dates:
  - 2017 JULY
  - 2021 AUG
  - 2021 SEP
- Time
- Entries
- Line
- Station

Tools

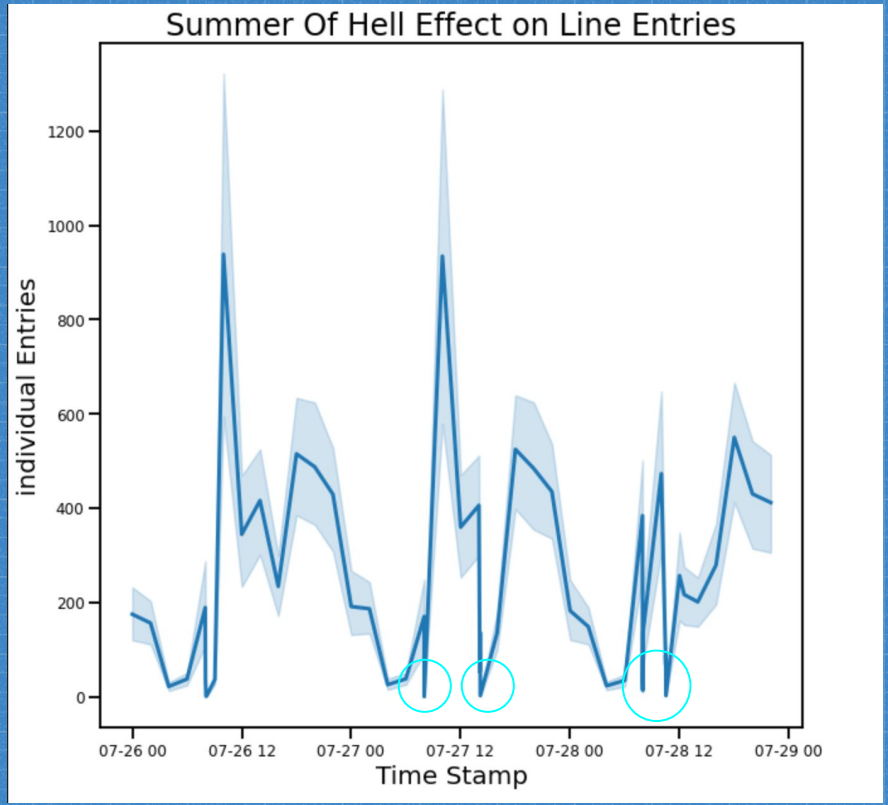
- Data manipulation:
  - Pandas
  - Datetime.
- Visualization:
  - Matplotlib
  - Seaborn

A Plot IS WORTH A THOUSAND WORDS

Here we show how entrie hit 0!

Bad for commuters

Bad for business



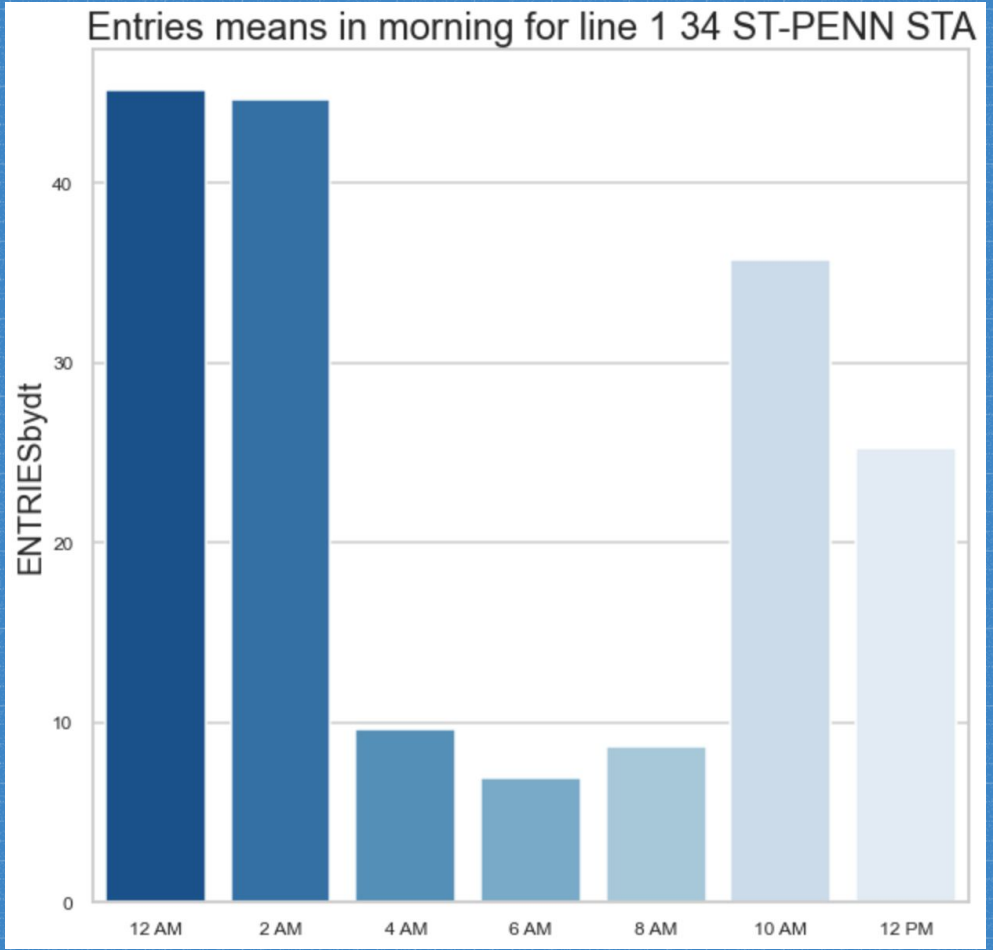
3
Results

Let’s start with the first set of slides

For the same station and line in aug and sep of 2020:

- The mean of individual entries for Sundays is the lowest.

- The means of individual entries in Sundays for morning hours:



4
Conclusions

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Findings

The MTA maintenance team should start regular maintenance for track 1 in sundays from 4 AM to 8 AM.

Future Work

- Get more data on track rails and how old they are to prioritize repairing older tracks and how regular maintenance should be for a particular track.

- Develop a maintenance schedule for all tracks.

Thanks!

ANY QUESTIONS?