EXPLORATORY DATA ANALYSIS ON NEW YORK MTA DATA (12/20/20-3/20/21)

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PRESENTED: 4/2/2021

INTRODUCTION

Project Goal:

To identify key times and stations for employees to travel on to minimize risk of covid exposure for a (disclosed) company looking to re-open in New York

Objectives:

To provide recommendations and tools to the HR department to aid the company and its employees

METHODOLOGY

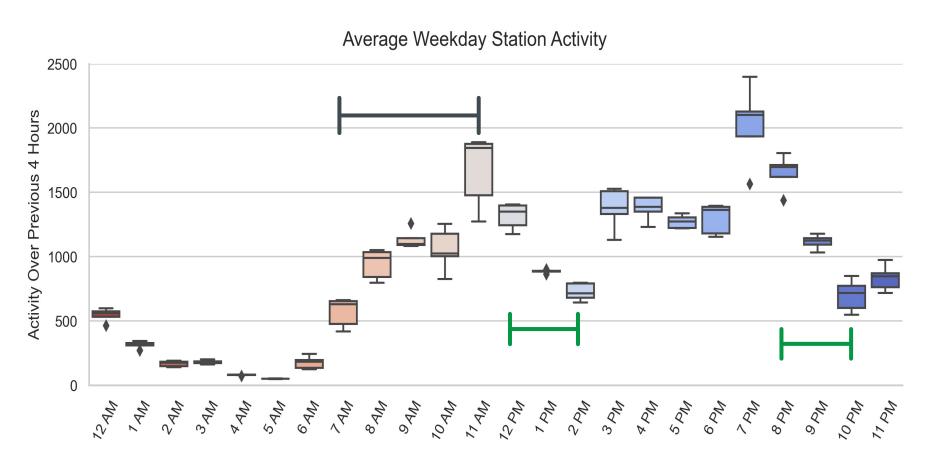
Preliminary Action

- Import MTA data from SQL
- Clean data
- Format data into a useable form

Analysis

- Weekday travel time
- Station recommendation
- HR useable tool

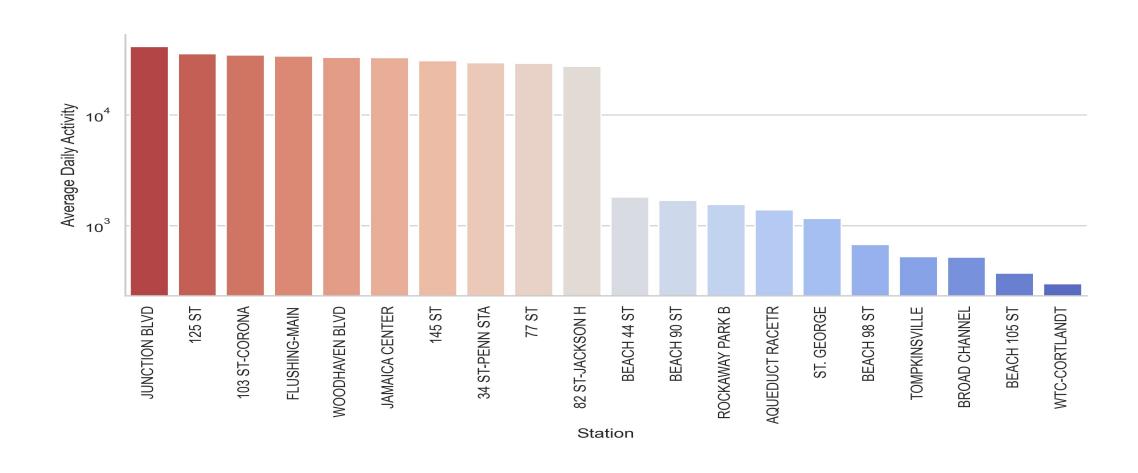
RESULTS - WEEKDAY TRAVEL TIME



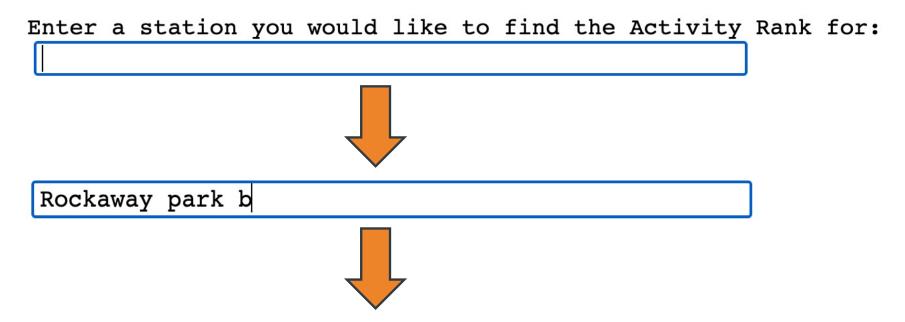
Recommendation:

- Noon 2 PM
- 8 PM 10 PM

RESULTS - STATION RECOMMENDATION



RESULTS - HR USEABLE TOOL



'The rank of ROCKAWAY PARK B out of all stations in New York is 8 out of 378. The higher the rank, the safer the station is.'

CONCLUSIONS

Travel times:

- To work between Noon and 2 PM
- From work between 8 PM and 10 PM

Travel stations:

On stations with low activity ranks if possible

FUTURE WORK

- Shift weekday travel time boxplot using estimation methods
- Integrate HR rank tool into an interactive location-based form with better string recognition
- Calculate risk-reduction from using these methods