



Project 1: MTA EDA

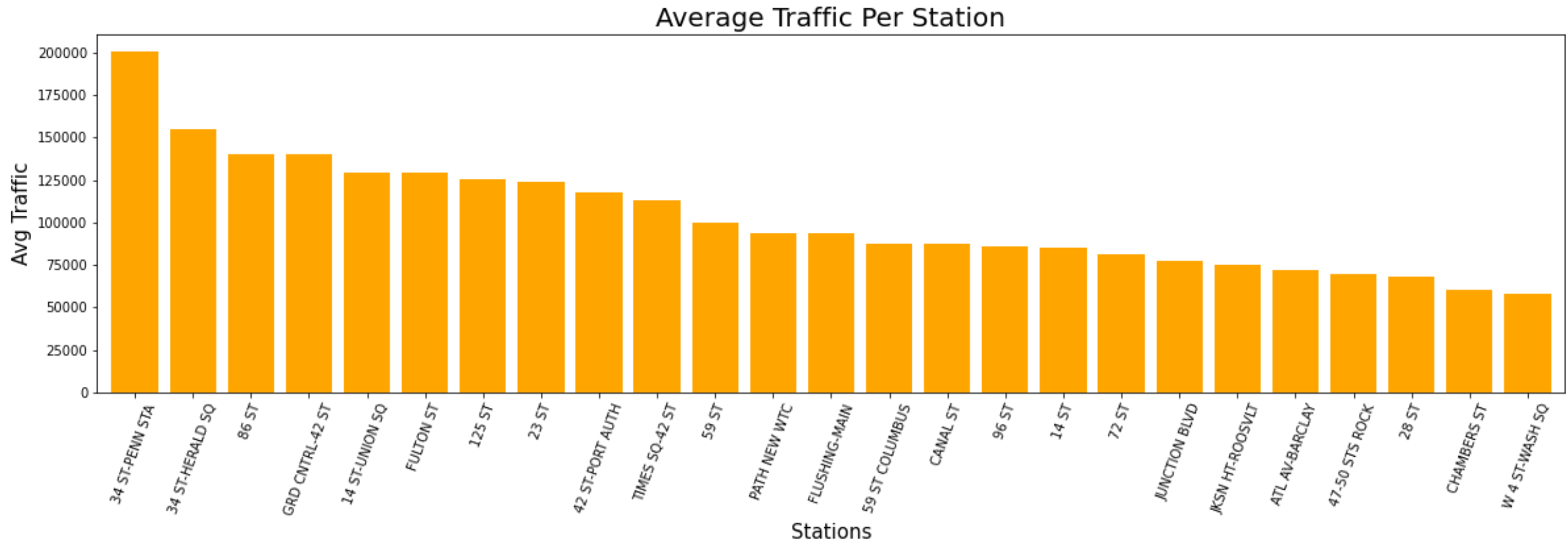
LIL' ZEUS FOOD TRUCK

Introduction

- Motivation: Provide Lil' Zeus with ideal times and locations to sell food
- Objective: find the busiest stations and the times of the day

Methodology

- Tools: Pandas, Matplotlib, datetime, sqlite3
- Data: MTA Turnstile data of 2021
- Metrics: DATE, TIME, C/A, UNIT, SCP, STATION, ENTRIES, EXITS
- New Columns: DATE_TIME, DAY_OF_WEEK, PREV_ENTRIES/EXITS, TRAFFIC



Results

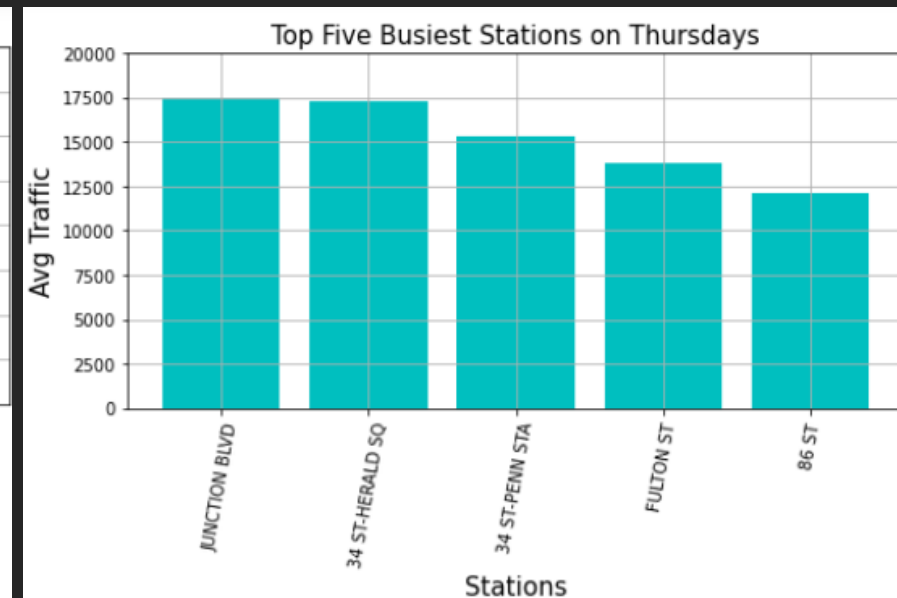
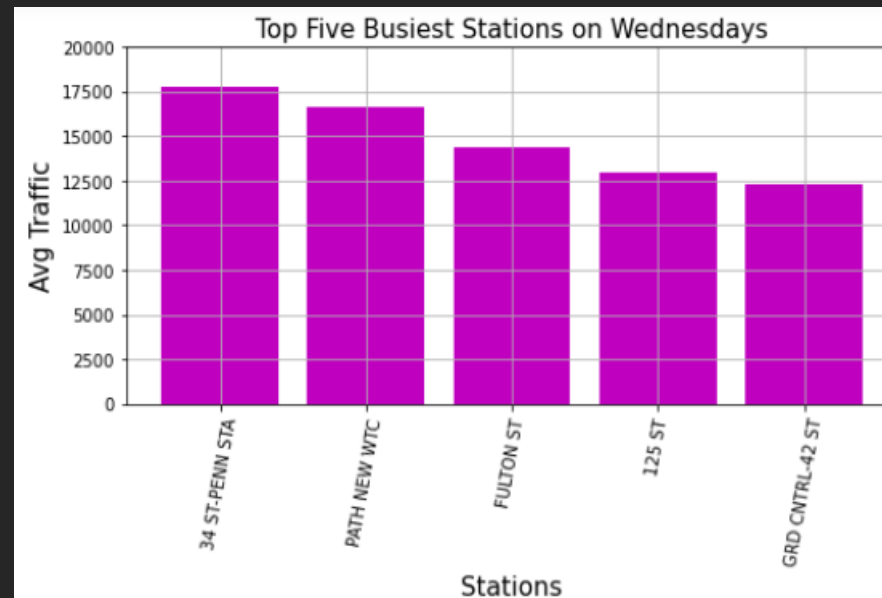
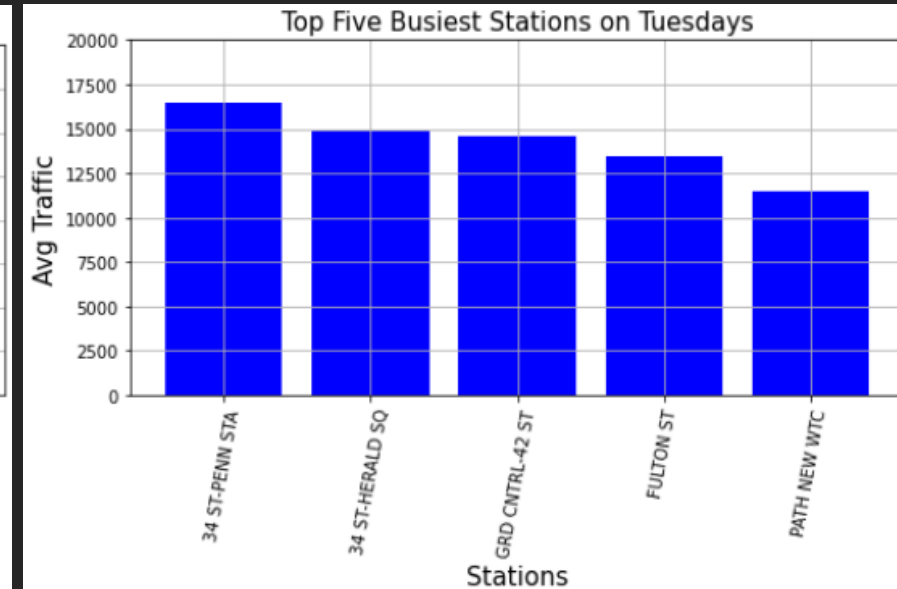
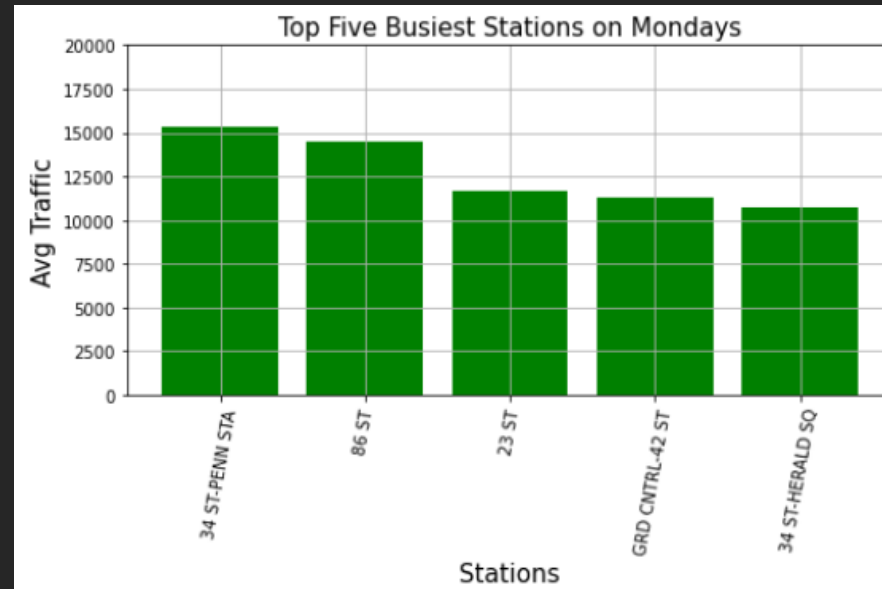
Yearly Average Traffic

- 34th St. Penn Station Busiest Year Round

Results cont.

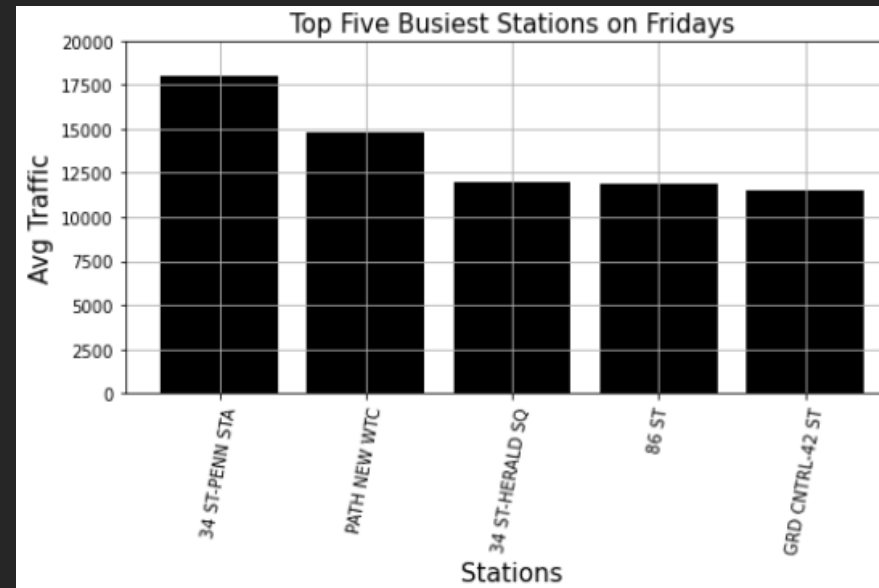
Top 5 Stations per day of the week

- 34th St. Penn Station is busiest Mon-Wed
- Junction Blvd. busiest on Thu

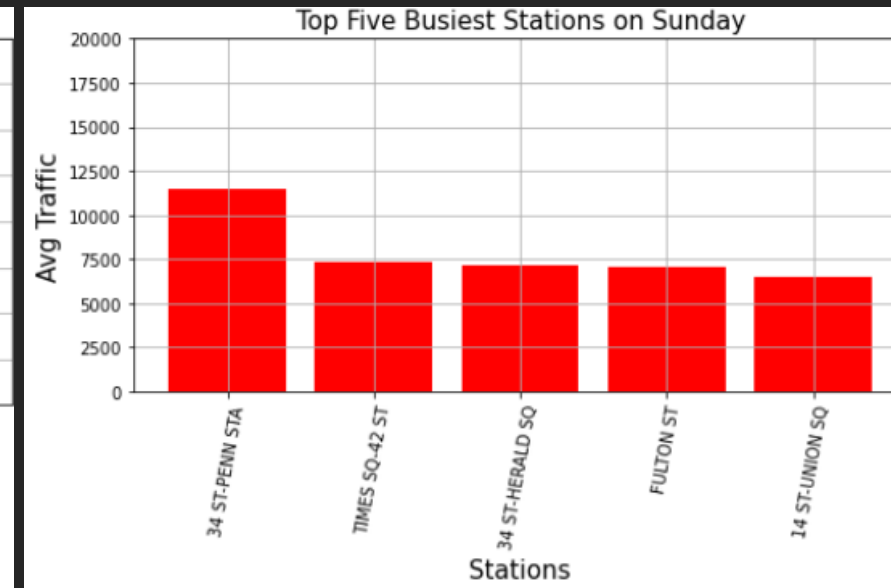
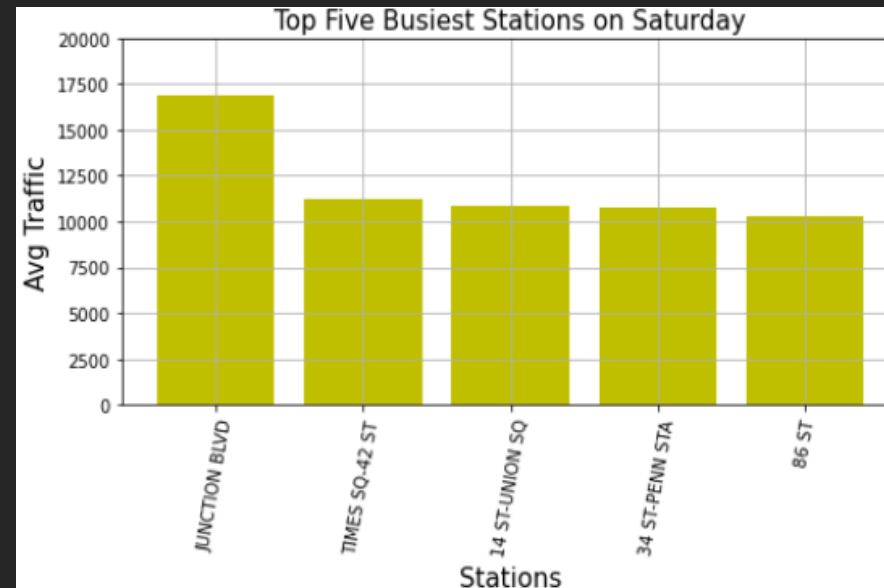


Results cont.

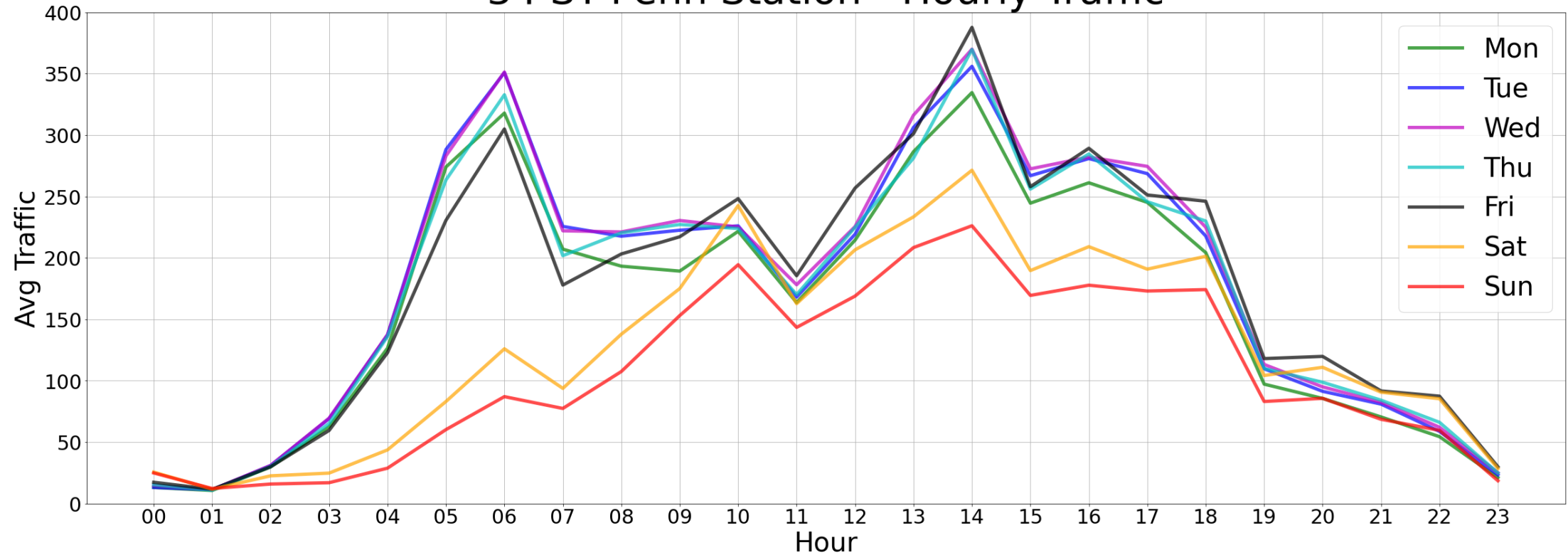
Top 5 Stations per day of the week



- 34th St. Penn Station is busiest Fri, Sun
- Junction Blvd. busiest on Sat



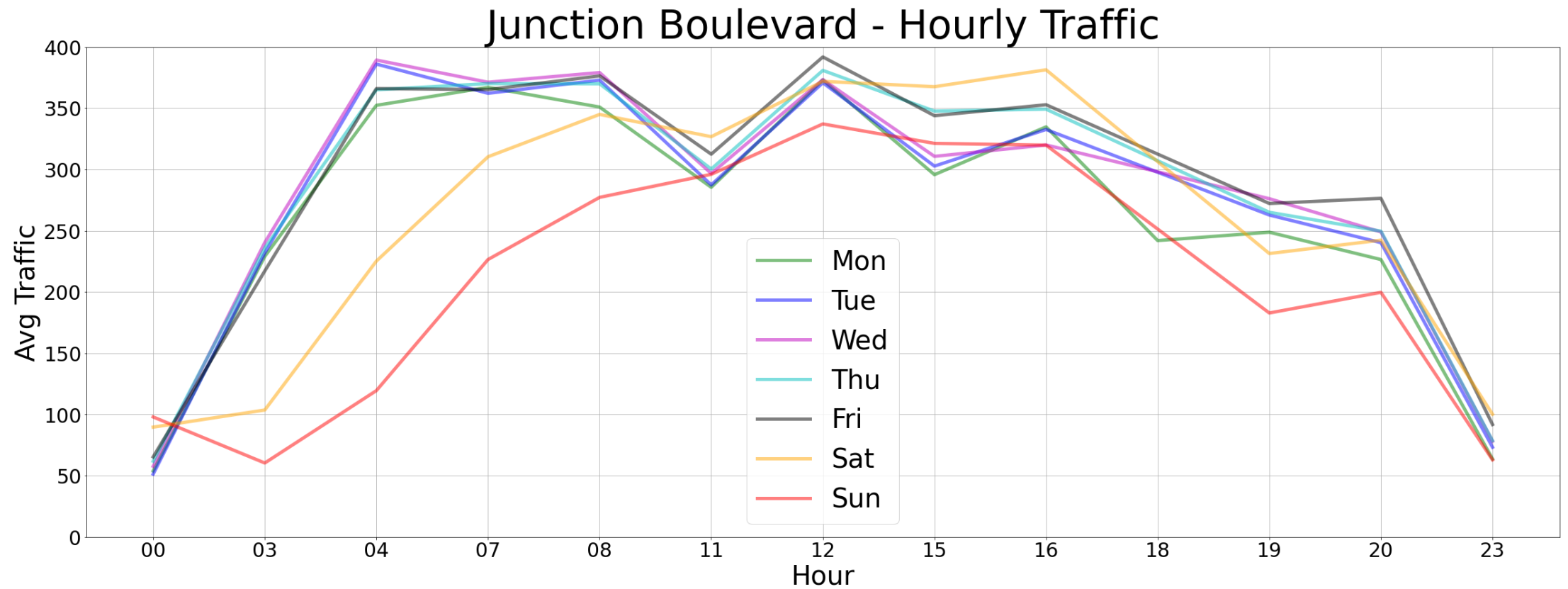
34 ST-Penn Station - Hourly Traffic



Results cont.

Average Traffic per Hour by Day of the Week

- Peak Hours of 6:00 AM and 2:00 PM
- Less busy on Weekends



Results cont.

Average Traffic per Hour by Day of the Week

- Busier all day long
- More active on the Weekend than 34th St.

Conclusion

- Position Food Truck near 34th St. Penn-STA around 5 – 7 AM & 12 – 2 PM on Weekdays.
 - People going to work, school, event venues, tourist attractions.
- Position Food Truck near Junction Blvd-STA around 7 – 8 AM, 12 PM & 4PM on Weekdays.
 - People going to the park, zoo, museum.
 - Bonus traffic 12 – 4 PM on the Weekends.

Future Work

- Seasonal (Winter, Spring, Summer and Autumn).
- Analyzed the top station from top_25 individually.
- Investigated purpose of peaks and valleys of traffic.