



EDA COURSE PROJECT  
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# OPTIMIZING WTWY STREET TEAM PLACEMENT

# WTWY GALA

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- ▶ WTWY Gala held at the beginning of summer
- ▶ Street team placed at the entrance of stations
- ▶ Goals
  - ▶ Build awareness
  - ▶ Gather email addresses



# METHODOLOGY

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- ▶ **DATA**

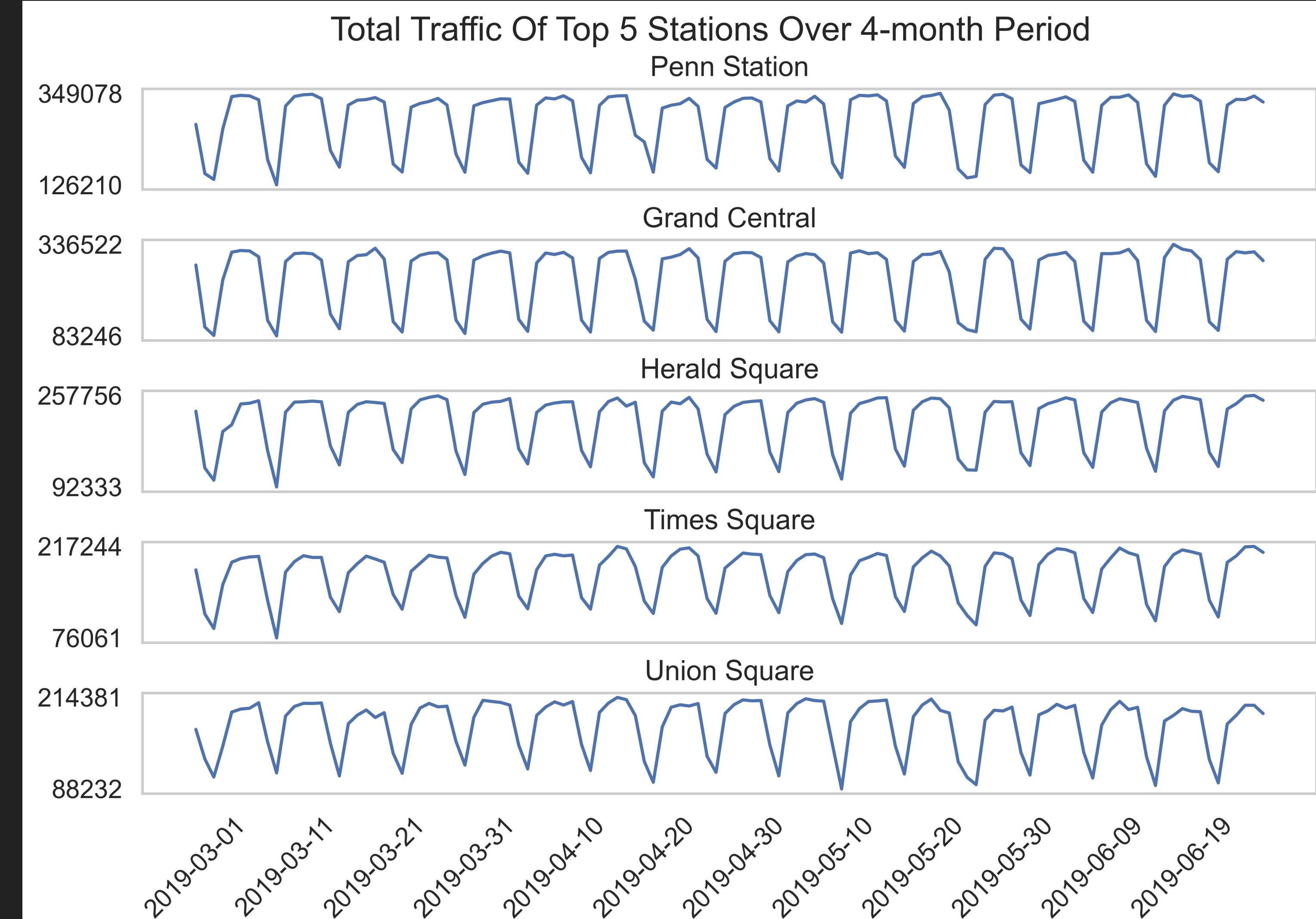
- ▶ MTA Turnstile (*March - June 2019*)

- ▶ **Metrics**

- ▶ Most trafficked stations
  - ▶ Average of traffic per day of week for top 5 stations
  - ▶ Traffic per time of day for each day of the week for top 5 stations

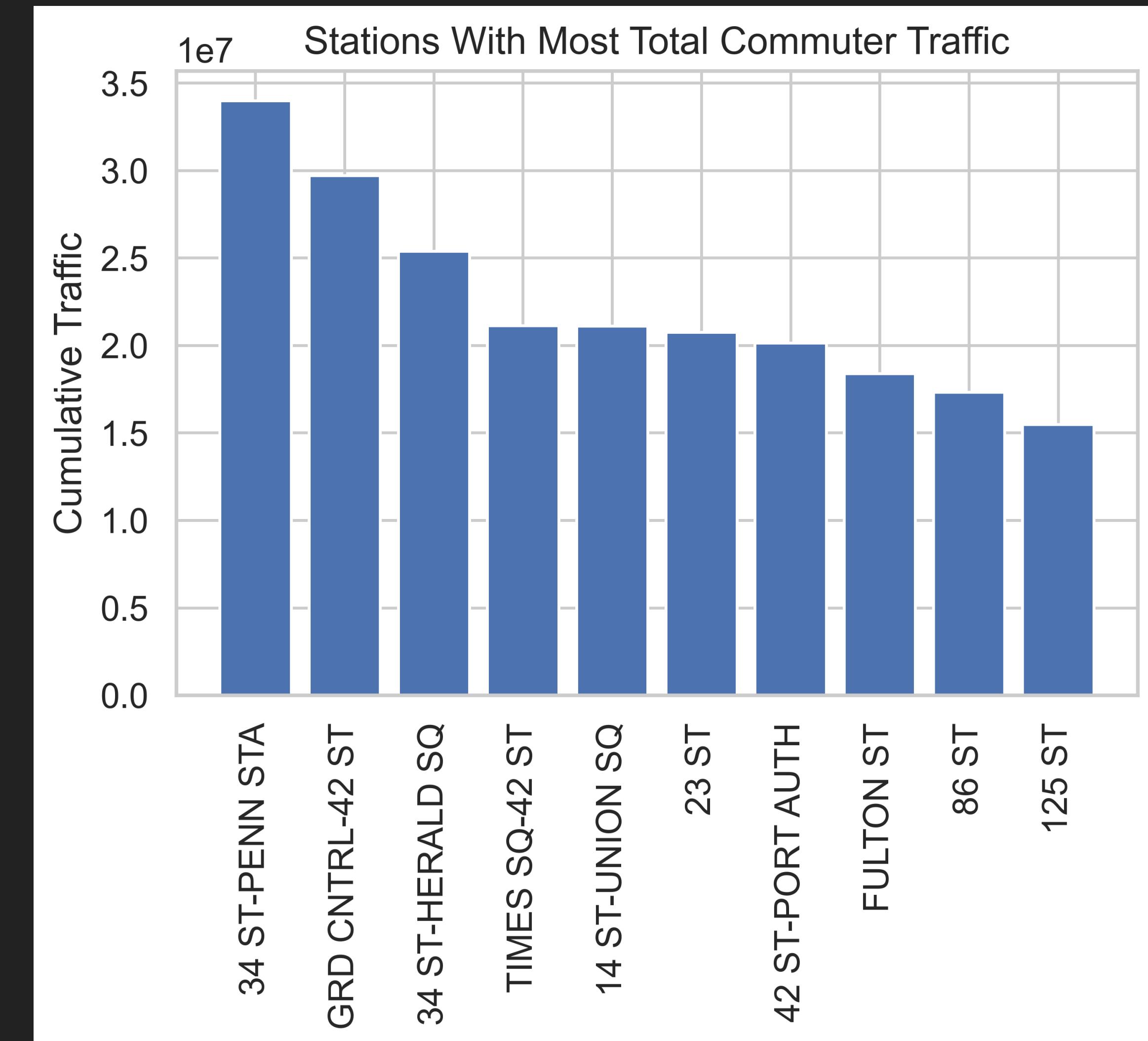
# METHODOLOGY

- ▶ Tools
- ▶ SQLite and SQLAlchemy
- ▶ Pandas and Numpy
- ▶ Matplotlib



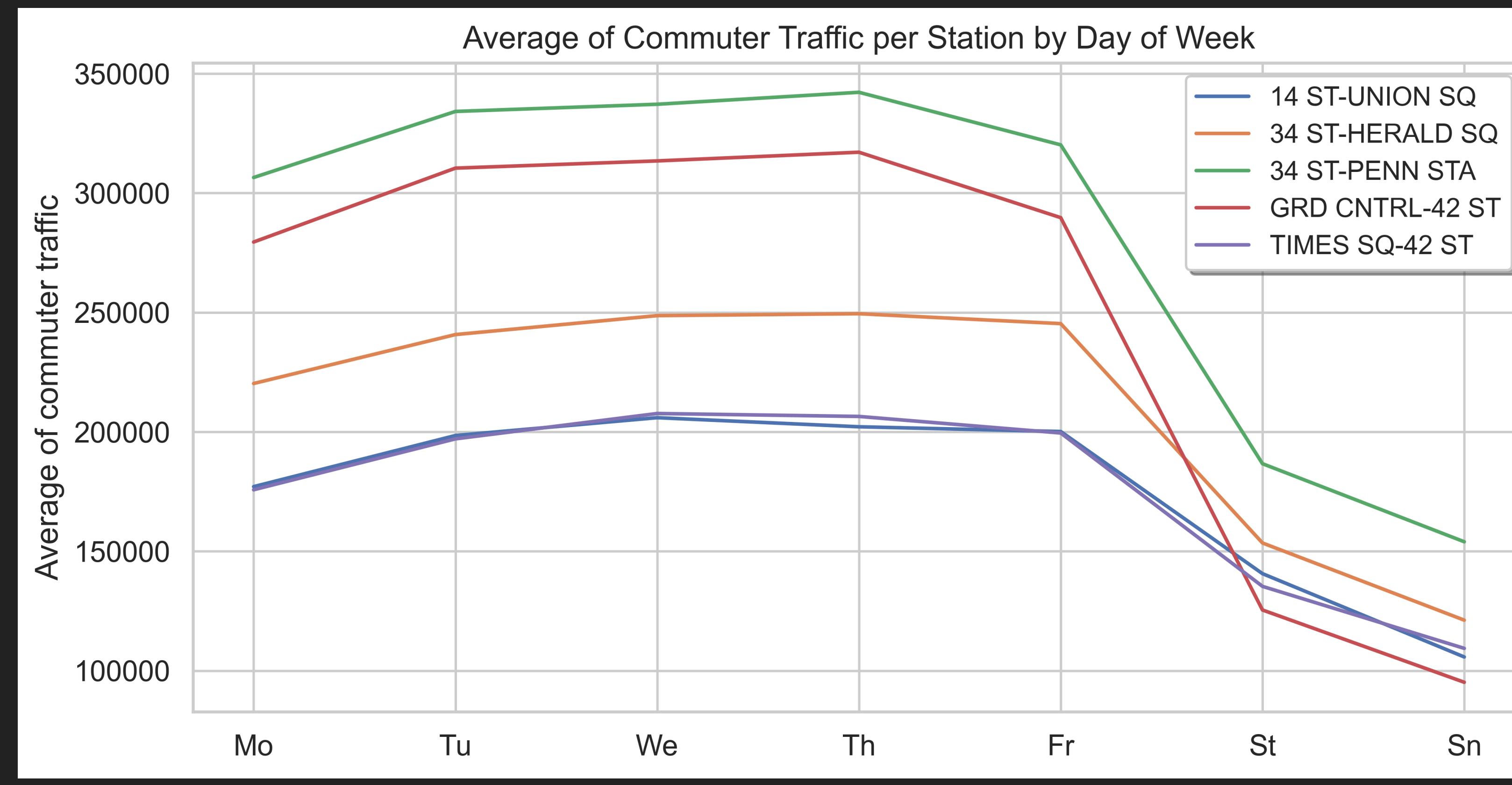
# RESULTS

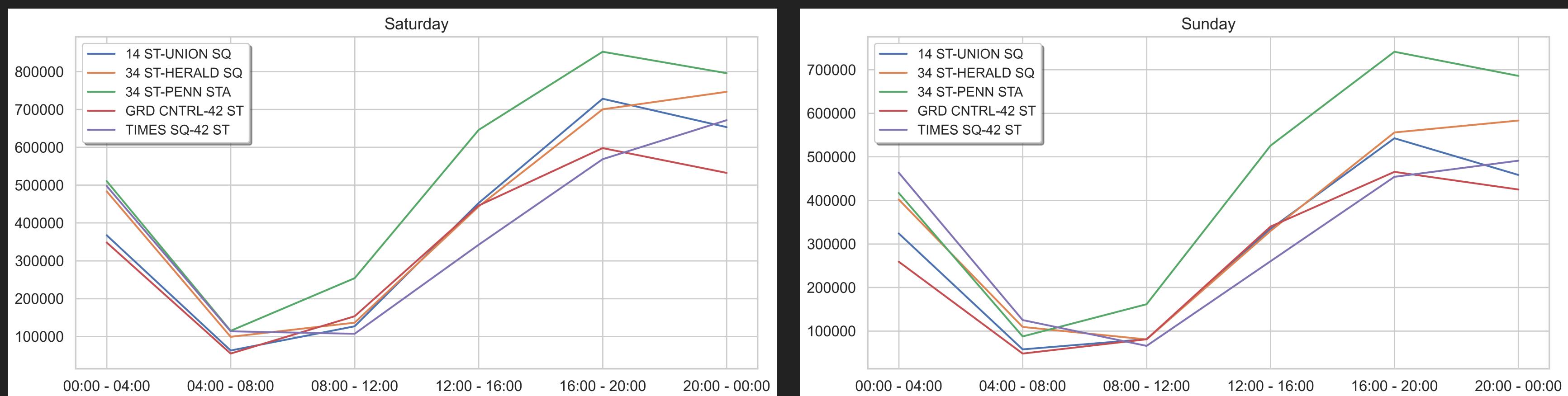
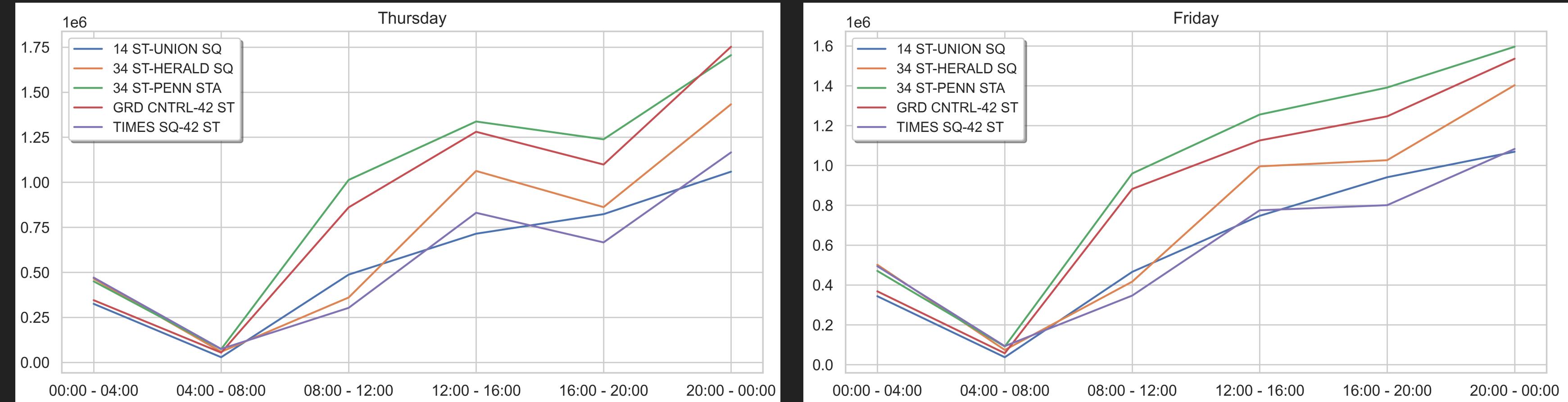
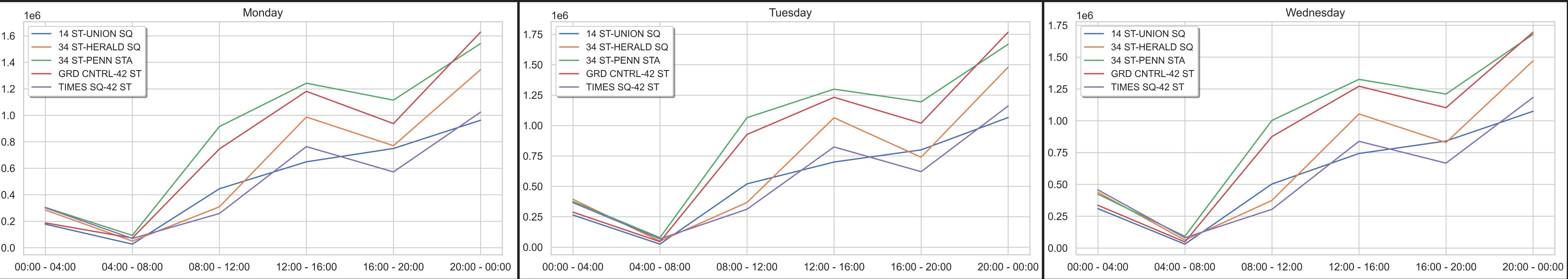
- ▶ **Top 5 Stations:**
- ▶ **Penn Station**
- ▶ **Grand Central**
- ▶ **34 ST - Herald Square**
- ▶ **Times Square - 42 ST**
- ▶ **14 ST - Union Square**



# RESULTS

- ▶ More people commute during weekdays
- ▶ Penn, Grand Central and Herald Square stations
  - ▶ Weekday commuters almost twice of the weekend





# CONCLUSION

- ▶ **Monday - Thursday**
  - ▶ Alternate between Penn Station and Grand Station
- ▶ **Friday**
  - ▶ 34 ST - Herald Square
- ▶ **Saturday**
  - ▶ 14 ST - Union Square
- ▶ **Sunday**
  - ▶ Penn Station

## TIMETABLE

Day	Time	Station
Monday	Morning (08:00 - 12:00)	Penn Station
	Afternoon (12:00 - 16:00)	Penn Station
	Evening (16:00 - 20:00)	Penn Station
Tuesday	Morning (08:00 - 12:00)	Grand Station
	Afternoon (12:00 - 16:00)	Grand Station
	Evening (16:00 - 20:00)	Grand Station
Wednesday	Morning (08:00 - 12:00)	Penn Station
	Afternoon (12:00 - 16:00)	Penn Station
	Evening (16:00 - 20:00)	Penn Station
Thursday	Morning (08:00 - 12:00)	Grand Station
	Afternoon (12:00 - 16:00)	Grand Station
	Evening (16:00 - 20:00)	Grand Station
Friday	Morning (08:00 - 12:00)	-
	Afternoon (12:00 - 16:00)	Herald Square
	Evening (16:00 - 20:00)	Herald Square
Saturday	Morning (08:00 - 12:00)	-
	Afternoon (12:00 - 16:00)	Union Square
	Evening (16:00 - 20:00)	Union Square
Sunday	Morning (08:00 - 12:00)	-
	Afternoon (12:00 - 16:00)	Penn Station
	Evening (16:00 - 20:00)	Penn Station

# FUTURE WORK

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## Target Audience

- ▶ Demographic data
  - ▶ Age
  - ▶ Female to Male ratio
  - ▶ Income
  - ▶ College zones
- ▶ Tech hubs