New York, NYU Data

Exploratory Data Analysis

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Background



- Bonomi FamilyAdmissions Center atNYU
- Which MTA station at NYU is busiest during Fall move-in week? When?
- Goal: Place student volunteers at MTA stations

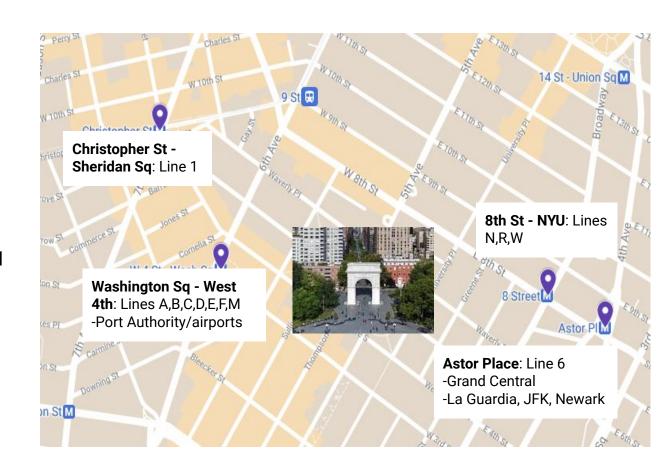
Method

Tool(s)

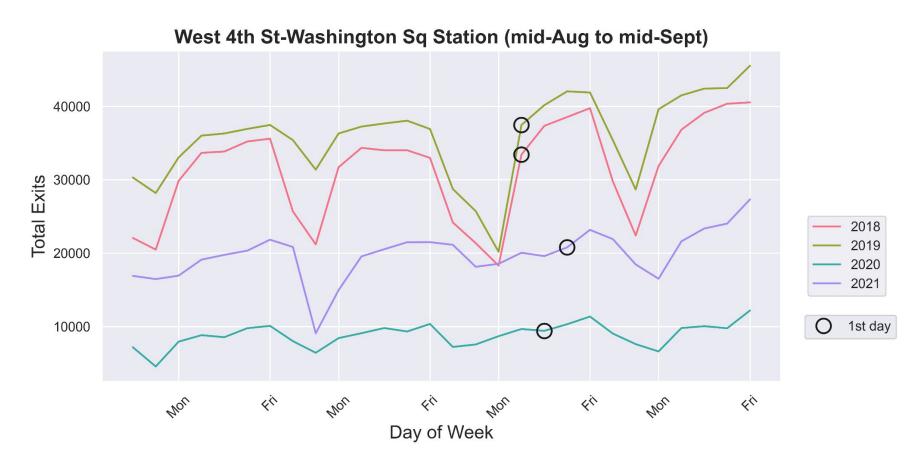
 Python: pandas, matplotlib, seaborn, SQLAlchemy

MTA Turnstile Data →

- 2018, 2019, 2020, 2021
- 1 month each year
 (mid-Aug to mid-Sept)
 - Includes move-in weekend and 1st day of class



Results: Part 1



Results: Part 2



Conclusions

Recommendations:

- Not a high demand during move-in weekend
- If fully in-person classes, then can have volunteers during 1st week of school (Tues-Fri)
 - If 20 volunteers a day:
 - 10 at West 4-Washington Sq
 - 5 at 4-8pm
 - 3 at 12-4pm
 - 2 at 8am-12pm
 - Split other 10 among 3 stations



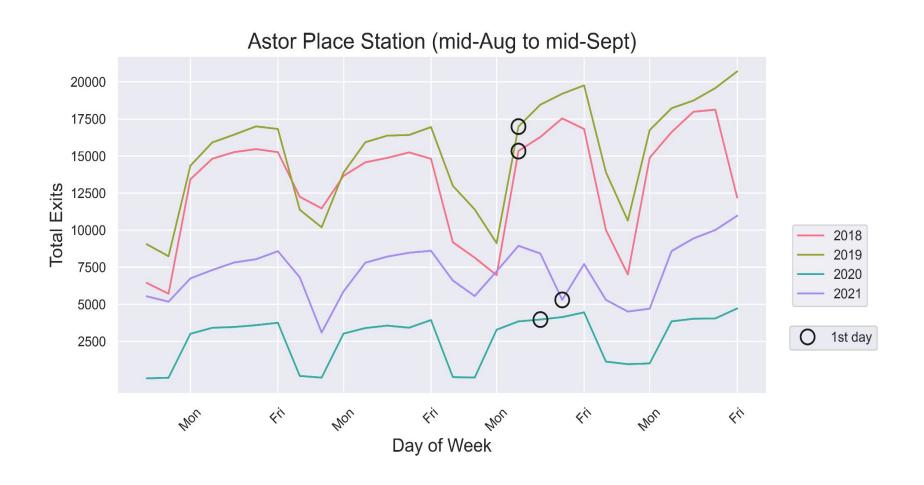


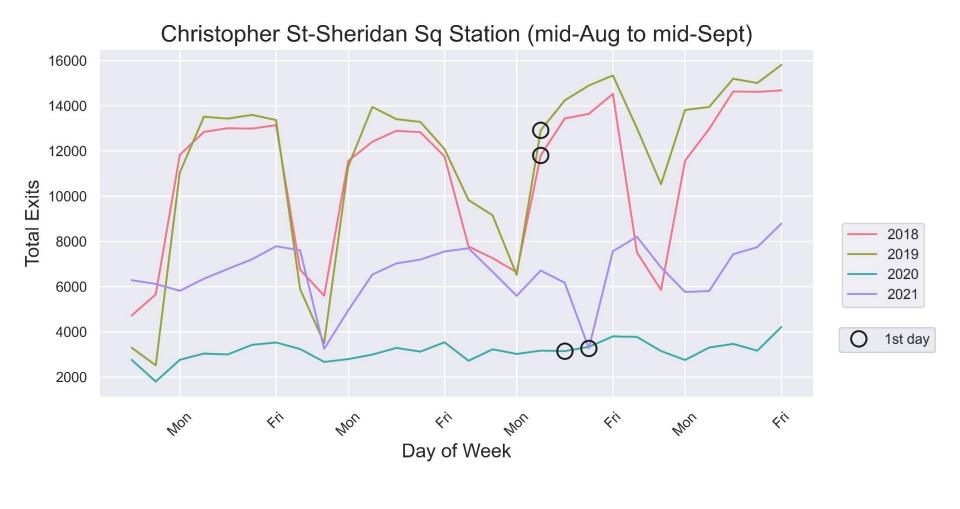
Future Work

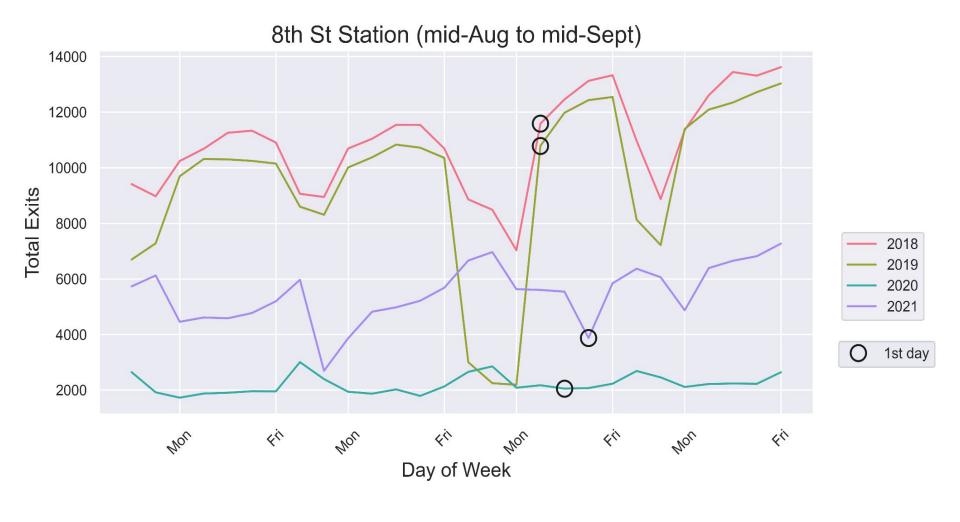
- Overestimate:
 - Non-NYU students
 - Students who are not freshmen/transfers
- Explore graph patterns:
 - Weekend dips
 - o Increases on Fridays, 4-8pm
- Other hypotheses:
 - o Walking after move-in
 - Hybrid/flex classes



Appendix







Number of Exits per Time Range by Station from 2018-2021

