Foot Traffic Pattern Shifts around NYC Metro Stations

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BACKGROUND

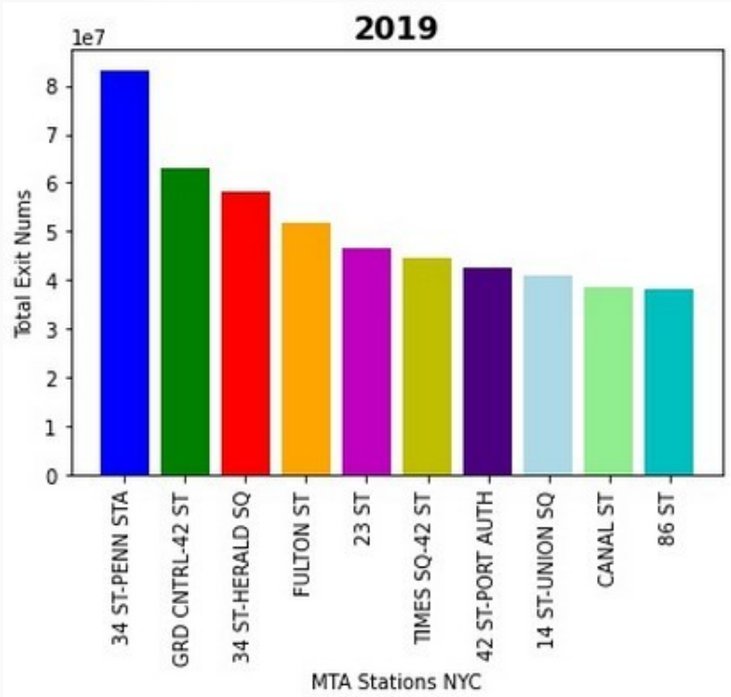
- End user: Local restaurant chain
- Relocate or shut down some branches in preparation for operating in post-pandemic period?
- Identify area(s) with altered foot traffic patterns
- Provide data report and recommendations

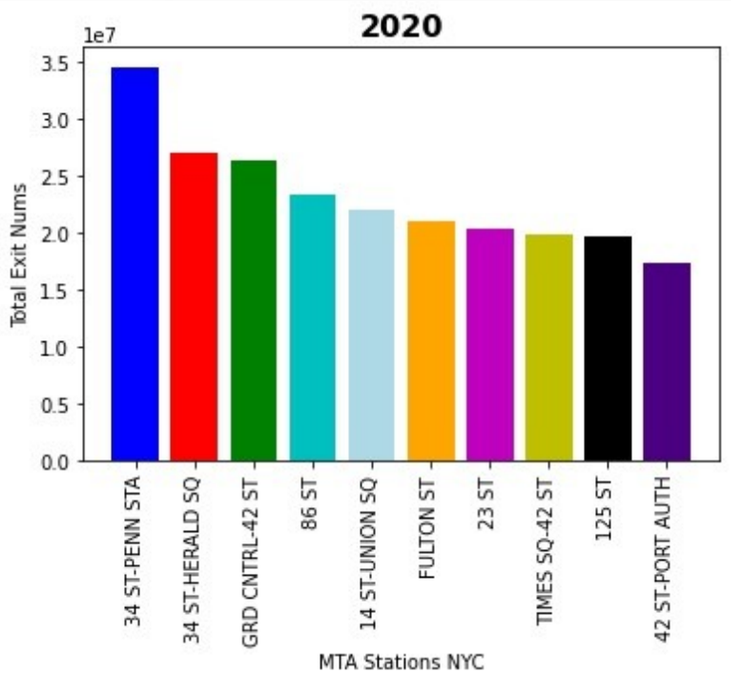
METHODOLOGY

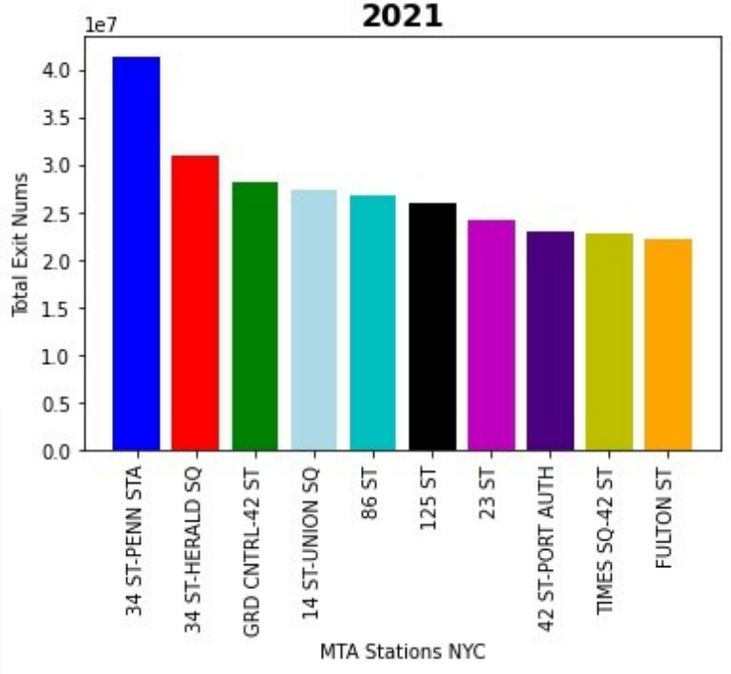
- Examine turnstile exit data at stations with top 10 highest ridership based on 2019 year data and up to date.
- Data: http://web.mta.info/developers/turnstile.html
- SQLite for initial review and exporting data.
- NumPy and Pandas for data manipulation.
- Matplotlib for plotting.

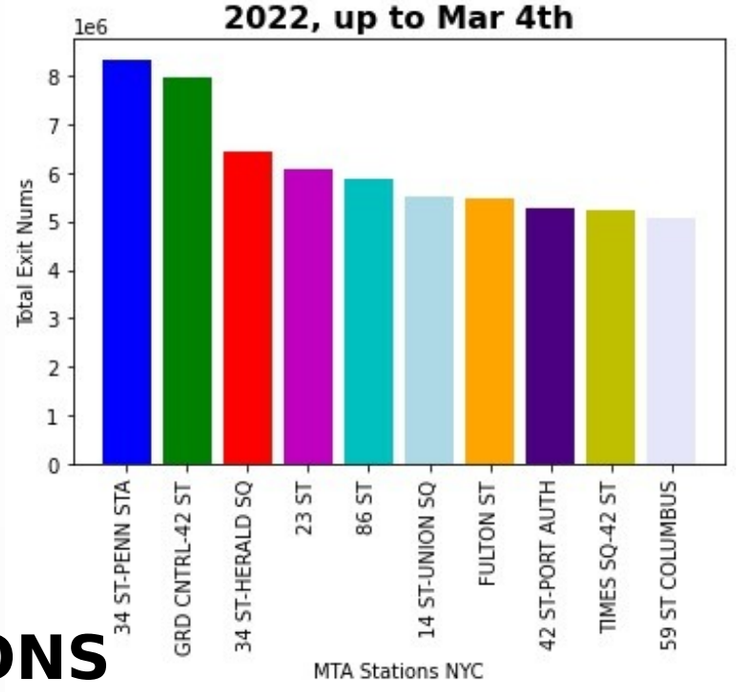
METHODOLOGY

- Compile and examine top 10 stations w/highest annual exit numbers for years 2019, 2020, 2021 and 2022 (partial).









TOP 10 STATIONS

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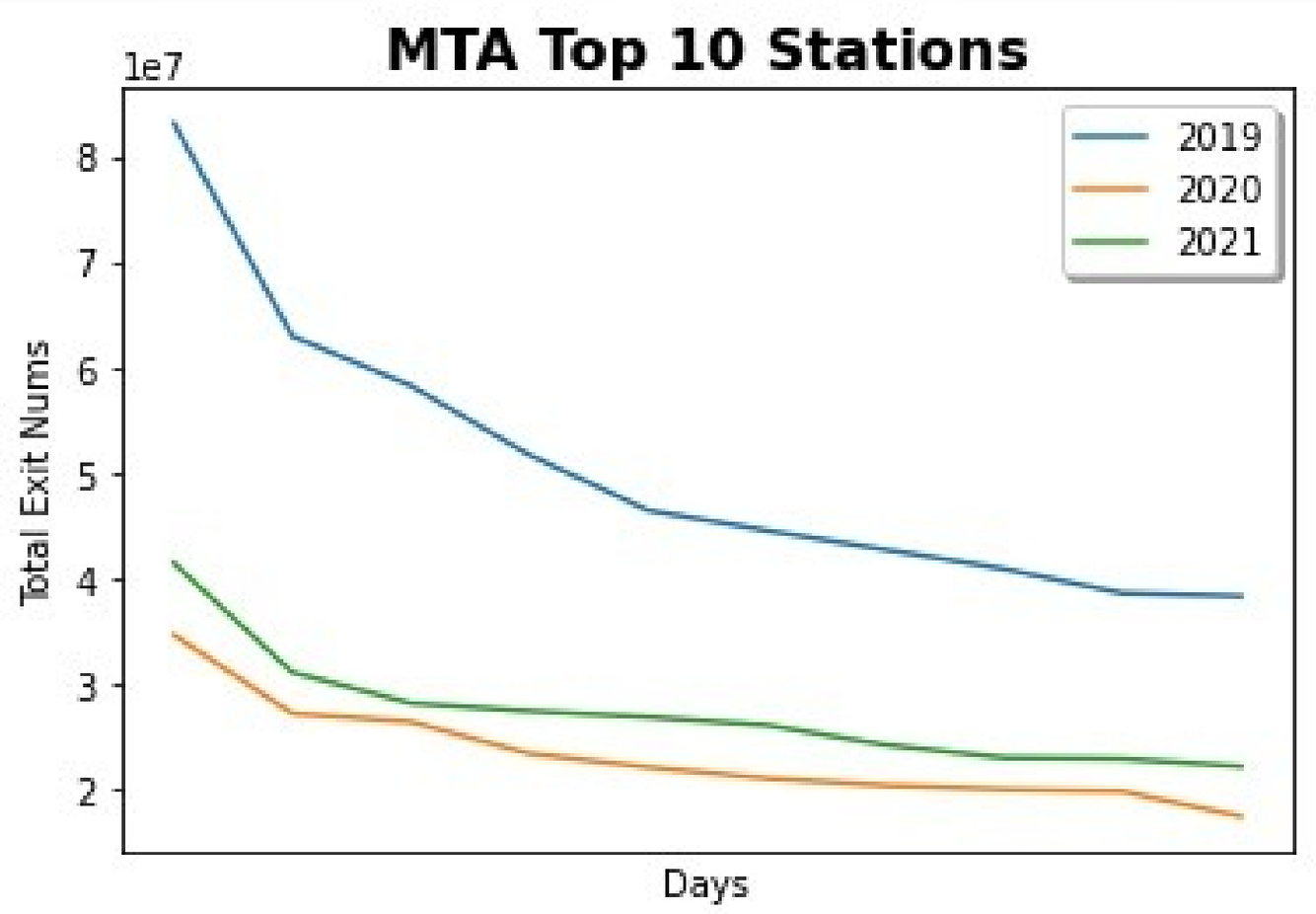

CONCLUSION

- Even though initial total ridership volumes indicated a lesser drop at 125 ST Stations,the median daily ridership numbers indicate that the drop in ridership levels is comparable to other stations in the MTA system.
- However, with new remote work policies put in place in several work sectors, it is recommended that quarterly reports to monitor ridership levels at areas of interest to the management be prepared to identify any possible shifts and/or changes in 2022 as the pandemic restrictions are lifted or improved.