

# DETERMINING POTENTIAL LOCATIONS FOR A FLAGSHIP BICYCLE SHOP IN NYC

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# INTRODUCTION

Motivation: Assist Specialized Bicycle Company\* with expanding the brand's presence in the cycling community.

Purpose of the store:

1. Rent bicycles for individuals to use in Central Park
2. Increase brand awareness

Where should the flagship bicycle store be located?



\* Fictional project

# METHODS

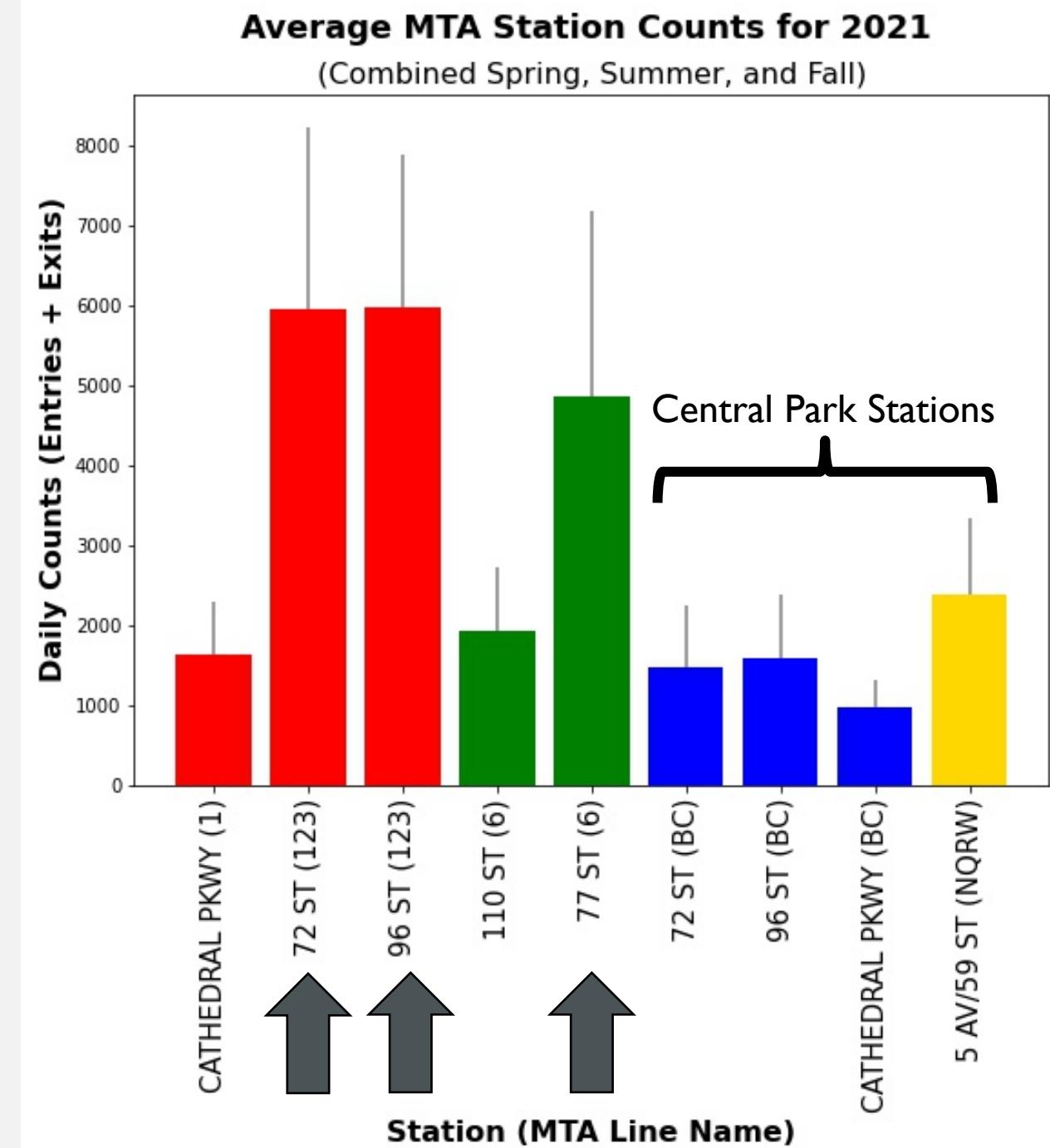
## Data:

- NYC MTA turnstile data
  - Stations on cycling routes
- Time Frame:
  - April, July, and September (Spring, Summer/tourist season, Fall)
  - 8am – 8pm
  - 2019 and 2021
- Data imported through SQL and analyzed using Python



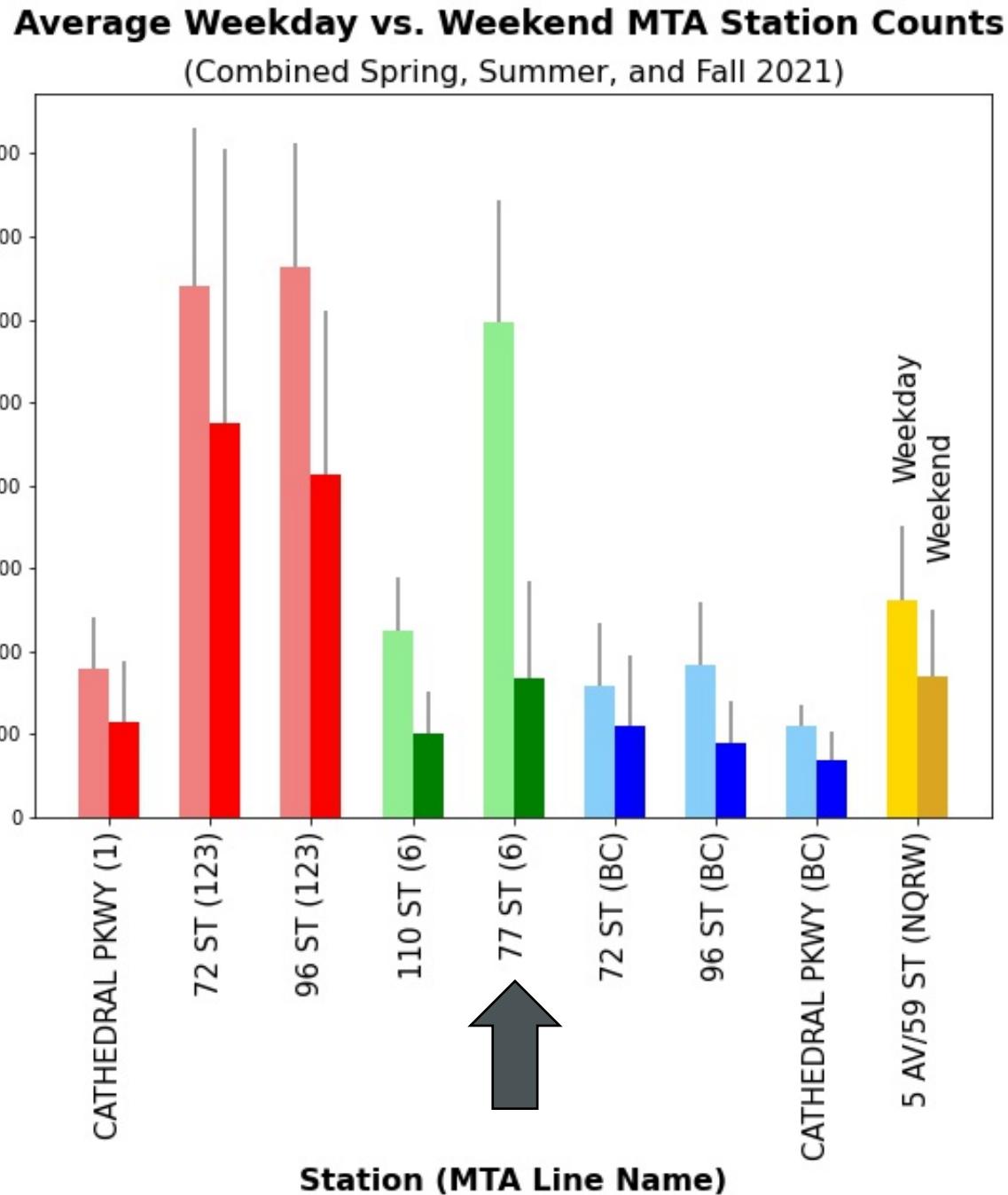
# RESULTS

- The stations alongside Central Park had substantially lower counts (~50% less counts) compared to some stations further from the park
- The most MTA station counts were at 72<sup>nd</sup> St, 96<sup>th</sup> St (both lines 123), and 77<sup>th</sup> St (line 6)
- Similar trends for 2019 and 2021



# RESULTS

- There are fewer counts on the weekends across all stations
- The 77<sup>th</sup> St station had a substantial drop in counts on the weekends suggesting it is primarily used by individuals commuting to work (those less likely to rent a bike to ride in Central Park)



# CONCLUSIONS

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- The 72<sup>nd</sup> St and 96<sup>th</sup> St stations (line 123) would be ideal locations



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- The 72<sup>nd</sup> St and 96<sup>th</sup> St stations (line 123) would be ideal locations
  - **96<sup>th</sup> St has better bike access making it the preferred location**



# FUTURE WORK

- Cost-benefit analysis of the different locations



# QUESTIONS?



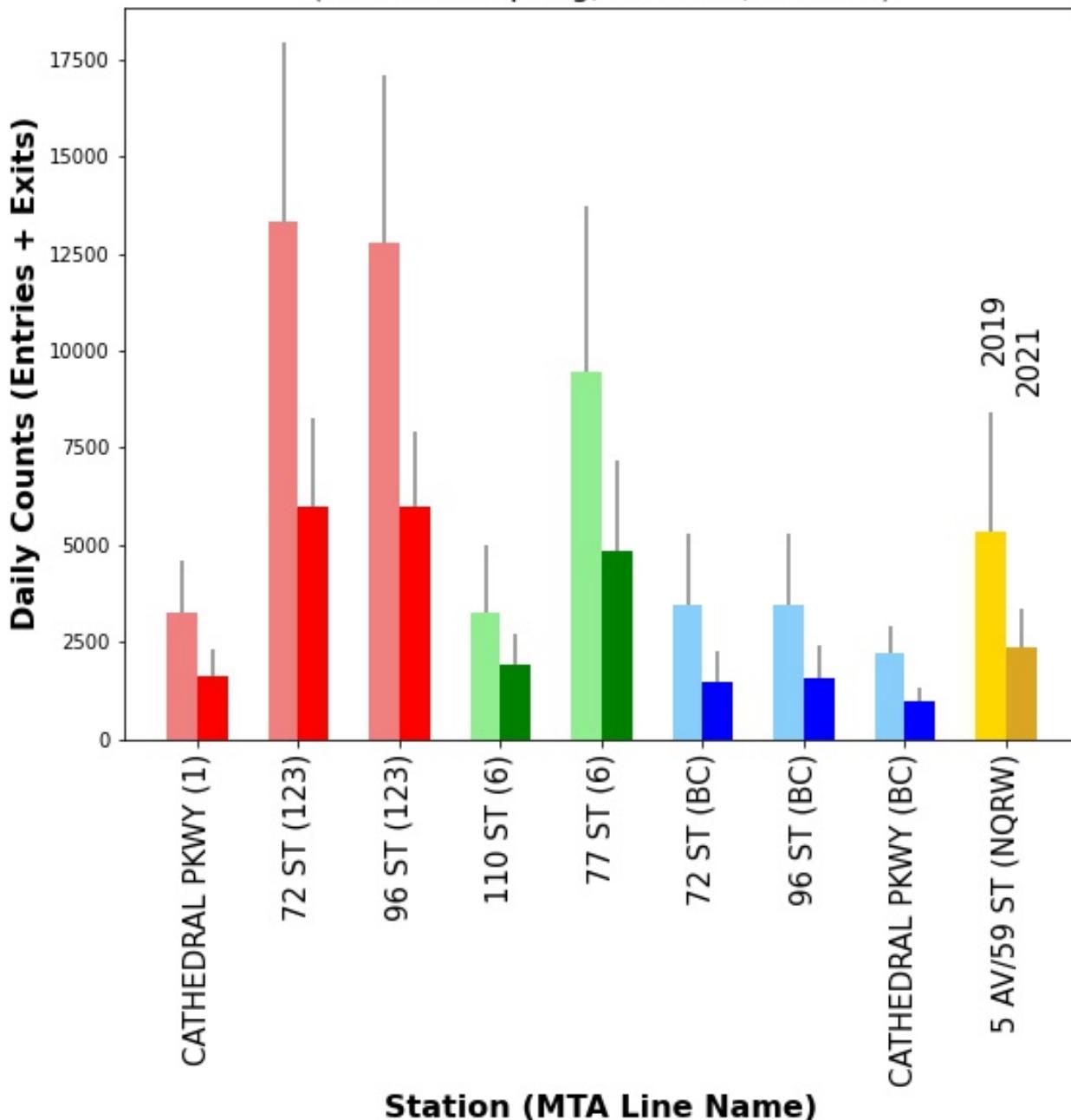
## ADDITIONAL SLIDES

## 2019 VS 2021

- MTA usage is ~50% lower in 2021 compared to 2019
- Similar trends are observed between the years

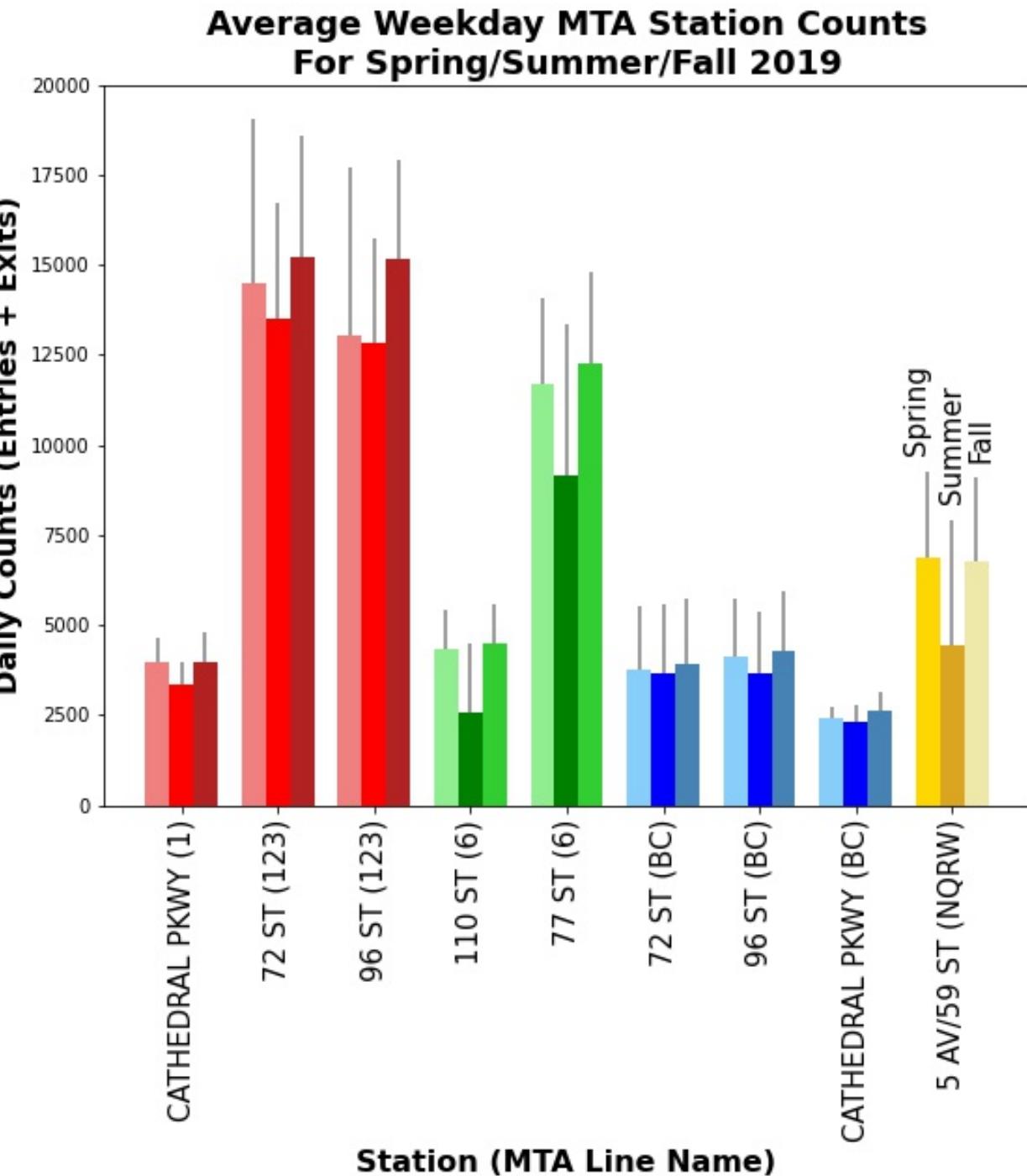
### 2019 vs. 2021 MTA Station Counts

(Combined Spring, Summer, and Fall)



# SEASONS COMPARISON – 2019 WEEKDAYS

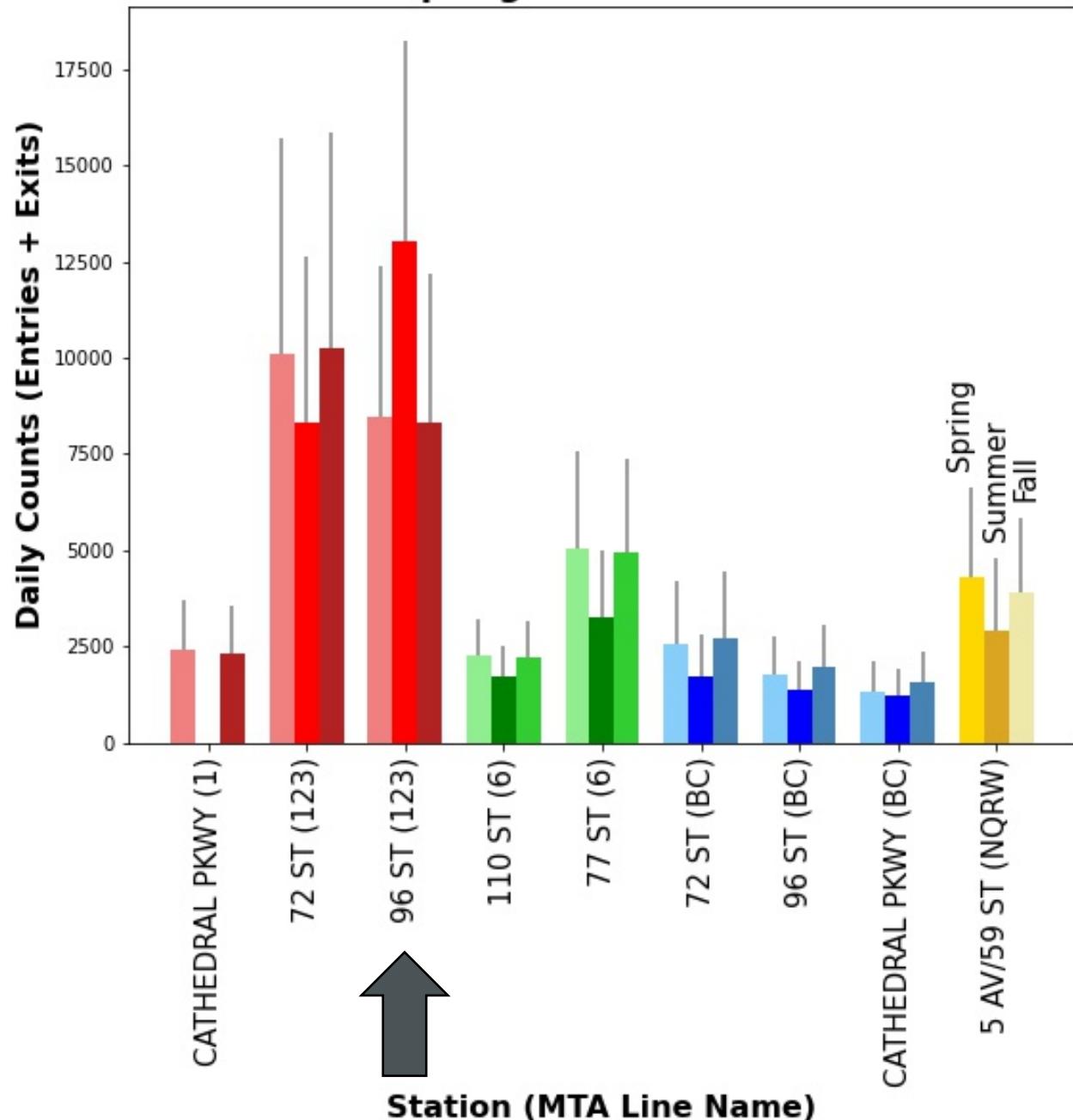
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## SEASONS COMPARISON – 2019 WEEKENDS

- In general, there is a decrease in traffic over the summer at these selected MTA stations.
- However, the 96<sup>th</sup> St station (line 123) has increased summer traffic, which may indicate greater tourist traffic and therefore an area where there could be more interest in renting bicycles

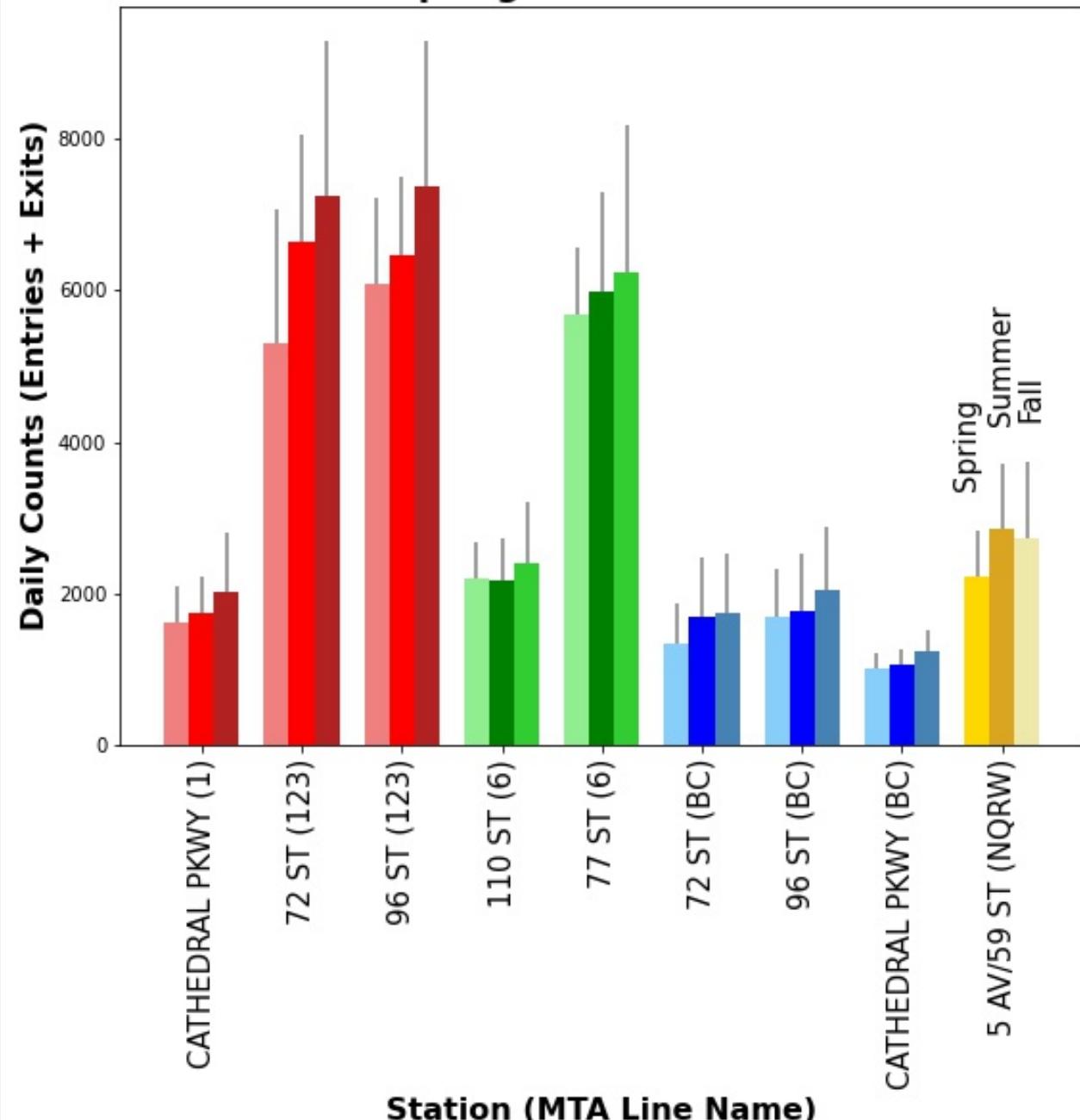
Average Weekend MTA Station Counts  
For Spring/Summer/Fall 2019



# SEASONS COMPARISON – 2021 WEEKDAYS

- Unlike 2019, there is a general trend for increasing MTA traffic across the seasons.
  - This may be due to life returning to “normal”
  - Similar trends observed with weekends

Average Weekday MTA Station Counts  
For Spring/Summer/Fall 2021



# TIME OF DAY

- The traffic at the select MTA stations increases throughout the day
- Weekday counts display a similar trend
- Suggests staffing at the store should be higher later in the day to accommodate the potential increased number of customers

**MTA Station Counts Throughout a Weekend Day**

(Combined Spring, Summer, and Fall)

