



MTA SUBWAY DATA ANALYSIS

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INTRODUCTION

Our annual gala event offers an opportunity to promote greater representation of women in the technology sector. However, we have encountered some challenges in optimizing the placement of our street teams. These challenges hinder our ability to engage potential attendees at the right time and place to boost event registrations.

As part of this project, we aim to optimize street team placement through the analysis of MTA metro data and the implementation of data-driven strategies. By focusing our efforts at major metro stations during peak days and hours, we intend to enhance interactions with potential attendees and increase event registrations.

The primary goal of this project is to increase participation in our gala event and empower women in the field of technology. By optimizing street team placement, we aim to reach more potential attendees and boost event registrations. In doing so, we are taking steps towards fulfilling the mission of the WTWY organization to encourage women's participation in technology and foster an inclusive community.

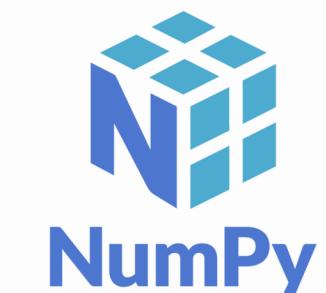
METHODOLOGY

Data Sources

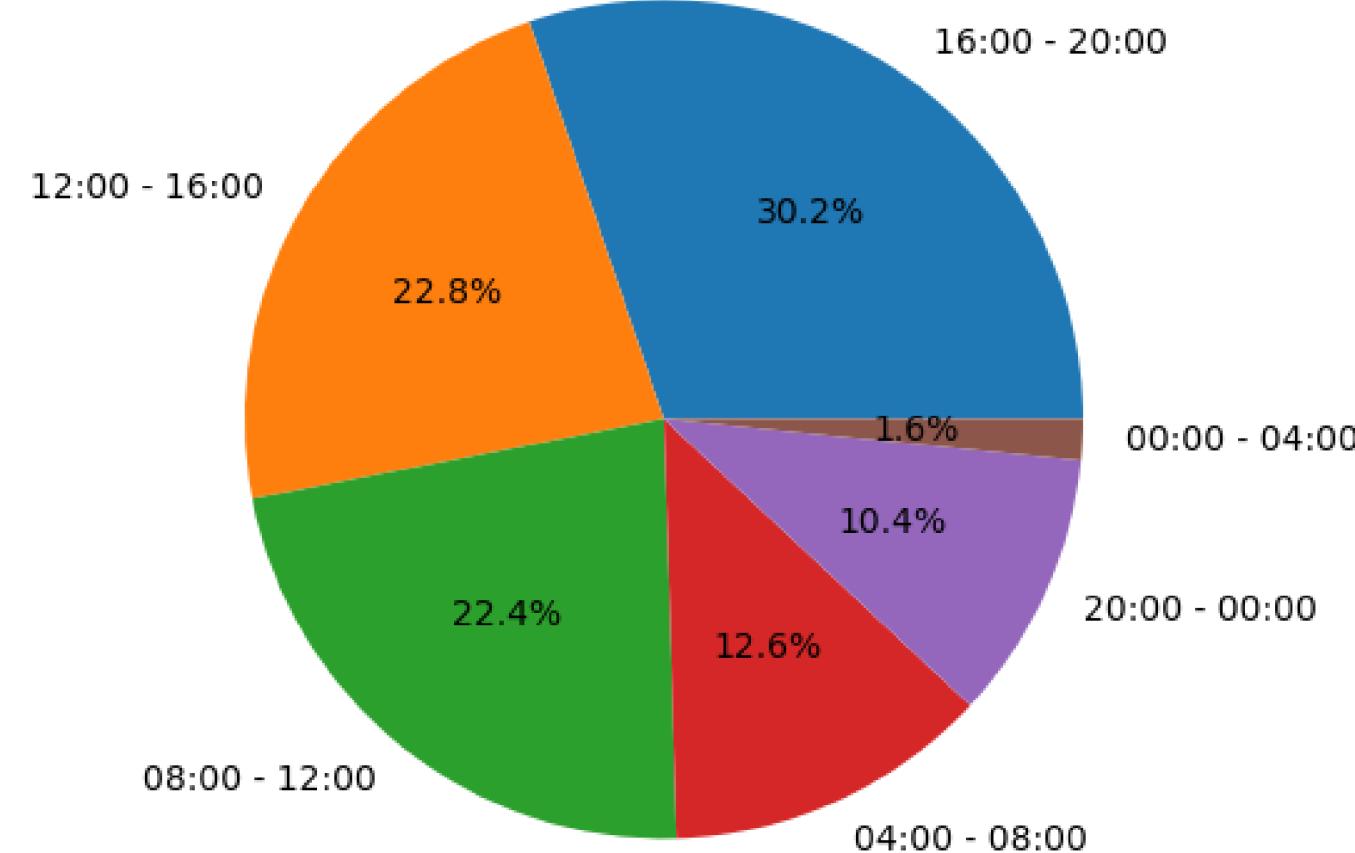


MTA Subway Data
January 2023 - May 2023

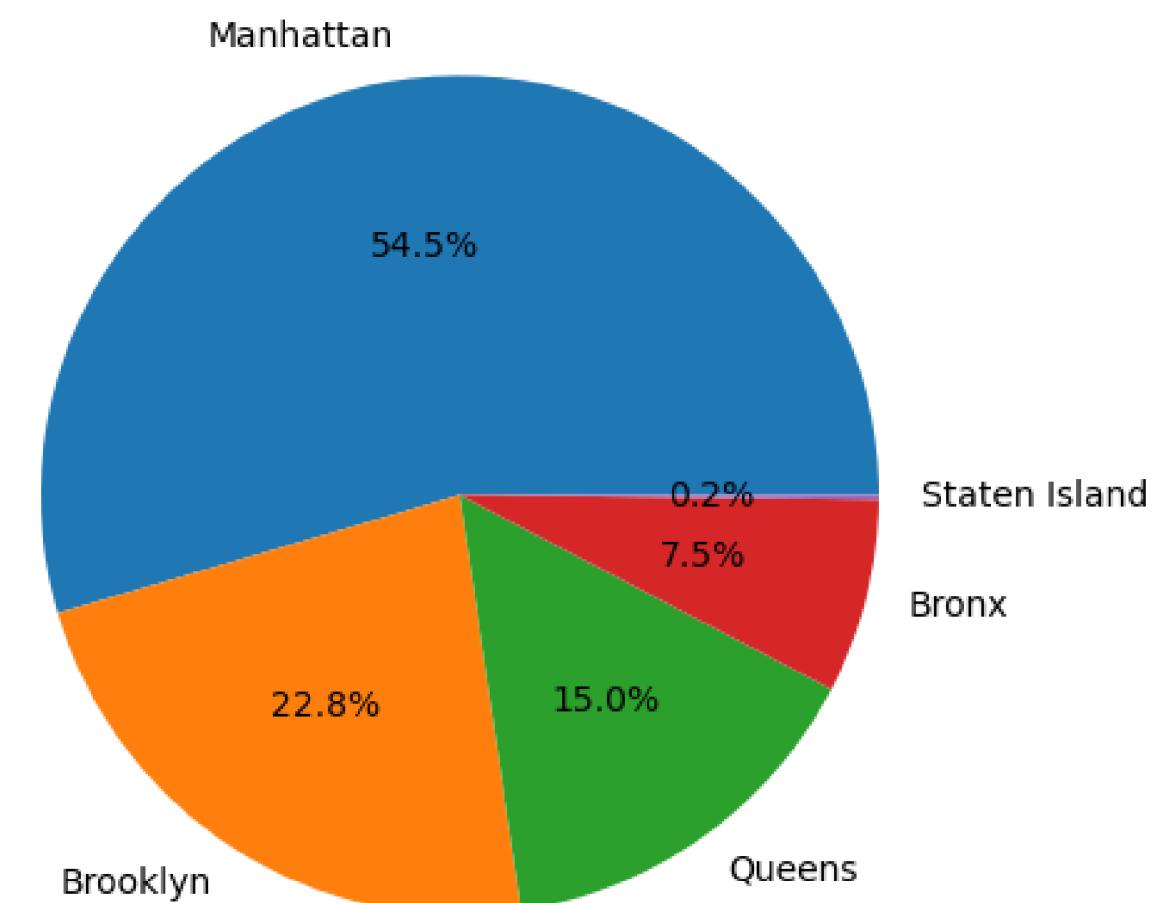
Analysis & Visualization Tools

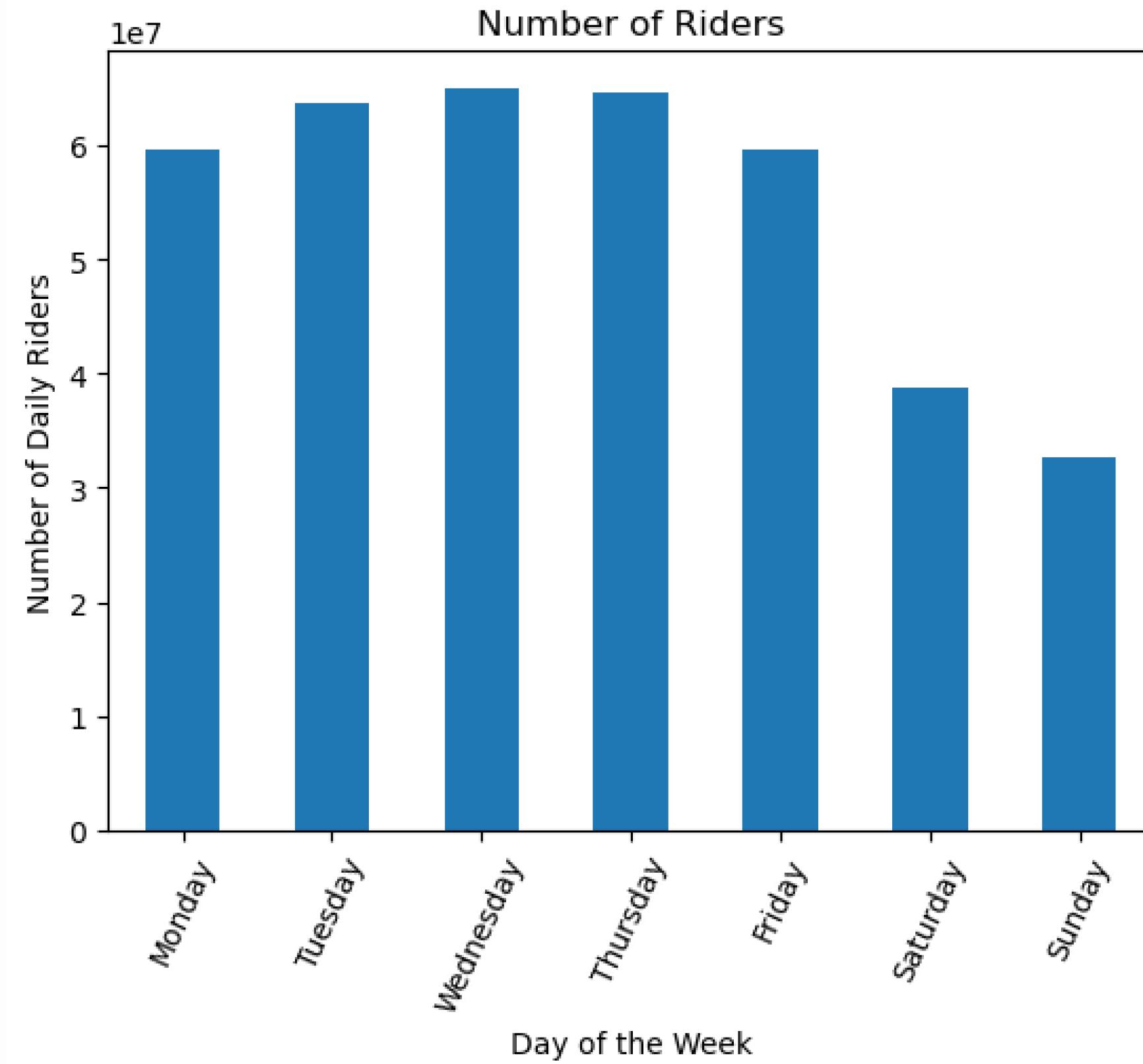


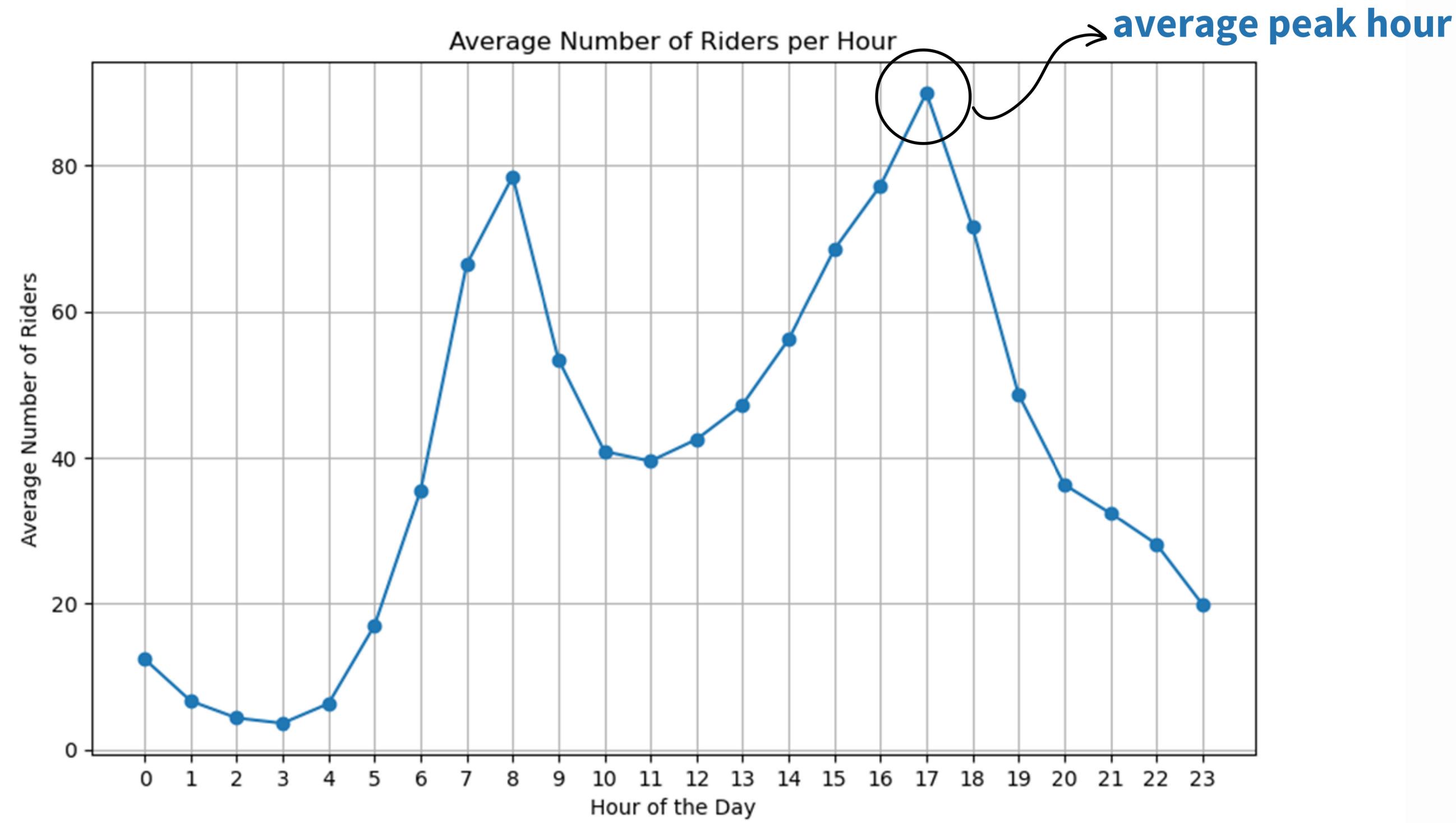
Riderships Chart by Time Range

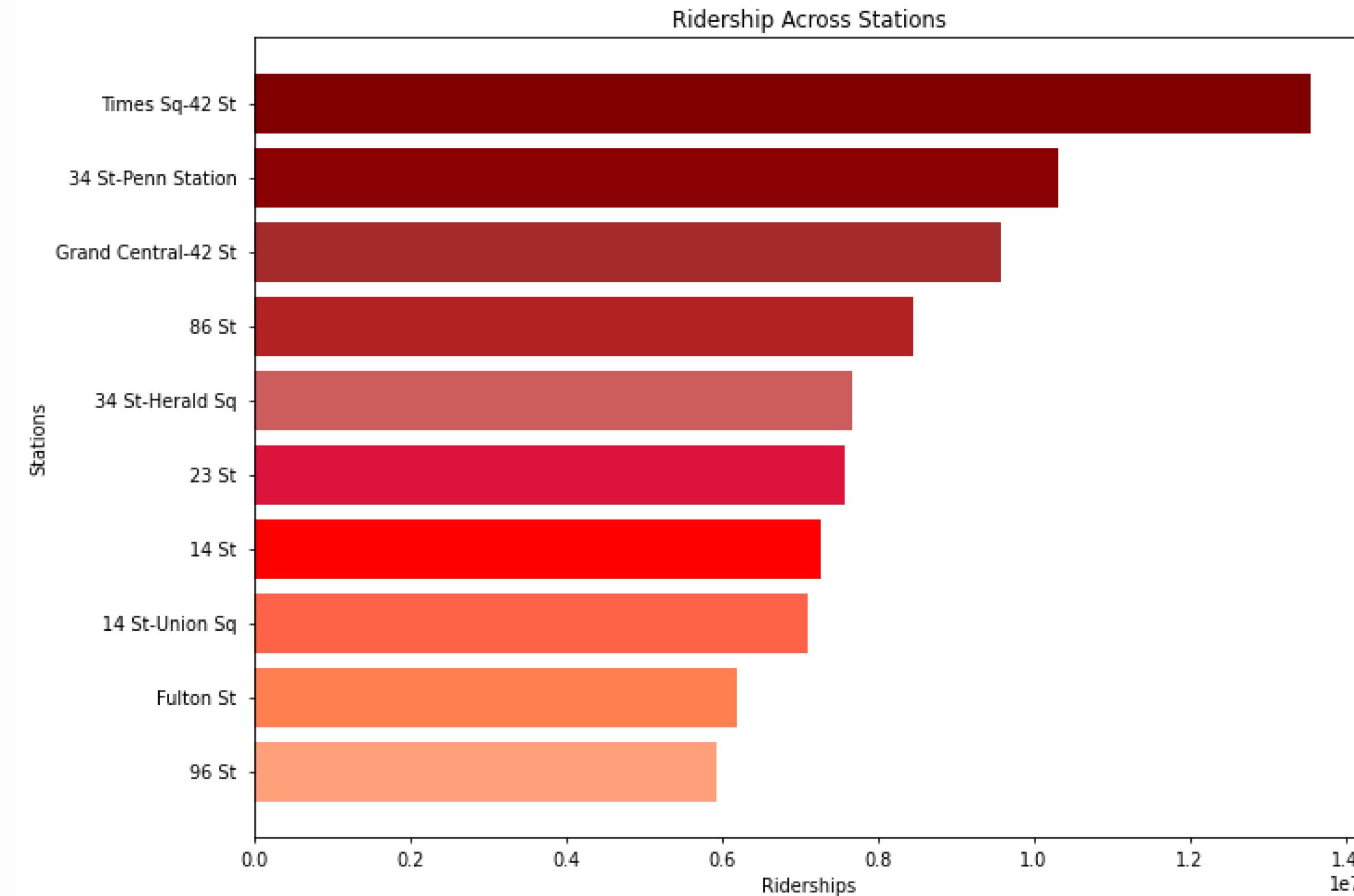


Riderships Chart by Borough

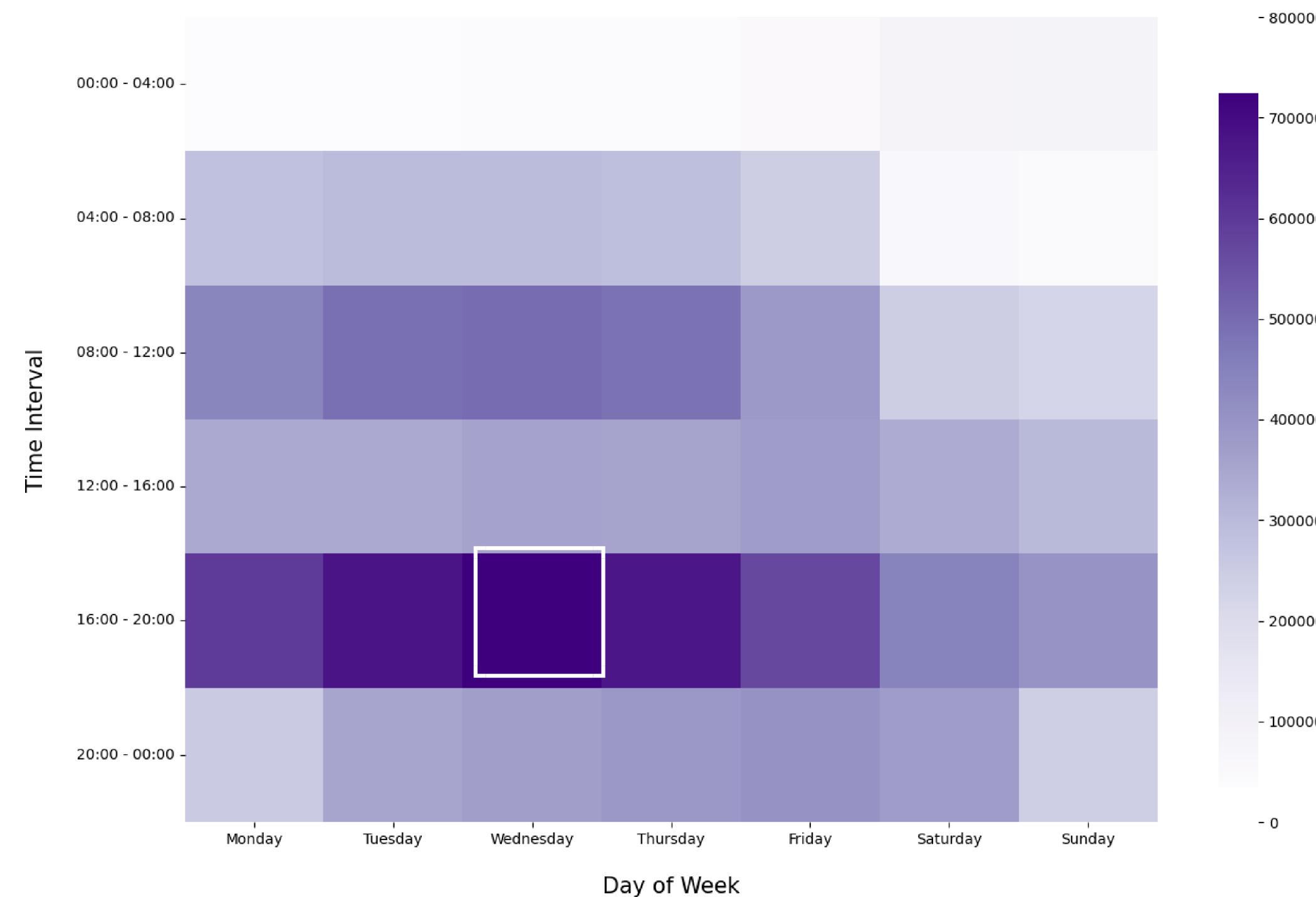




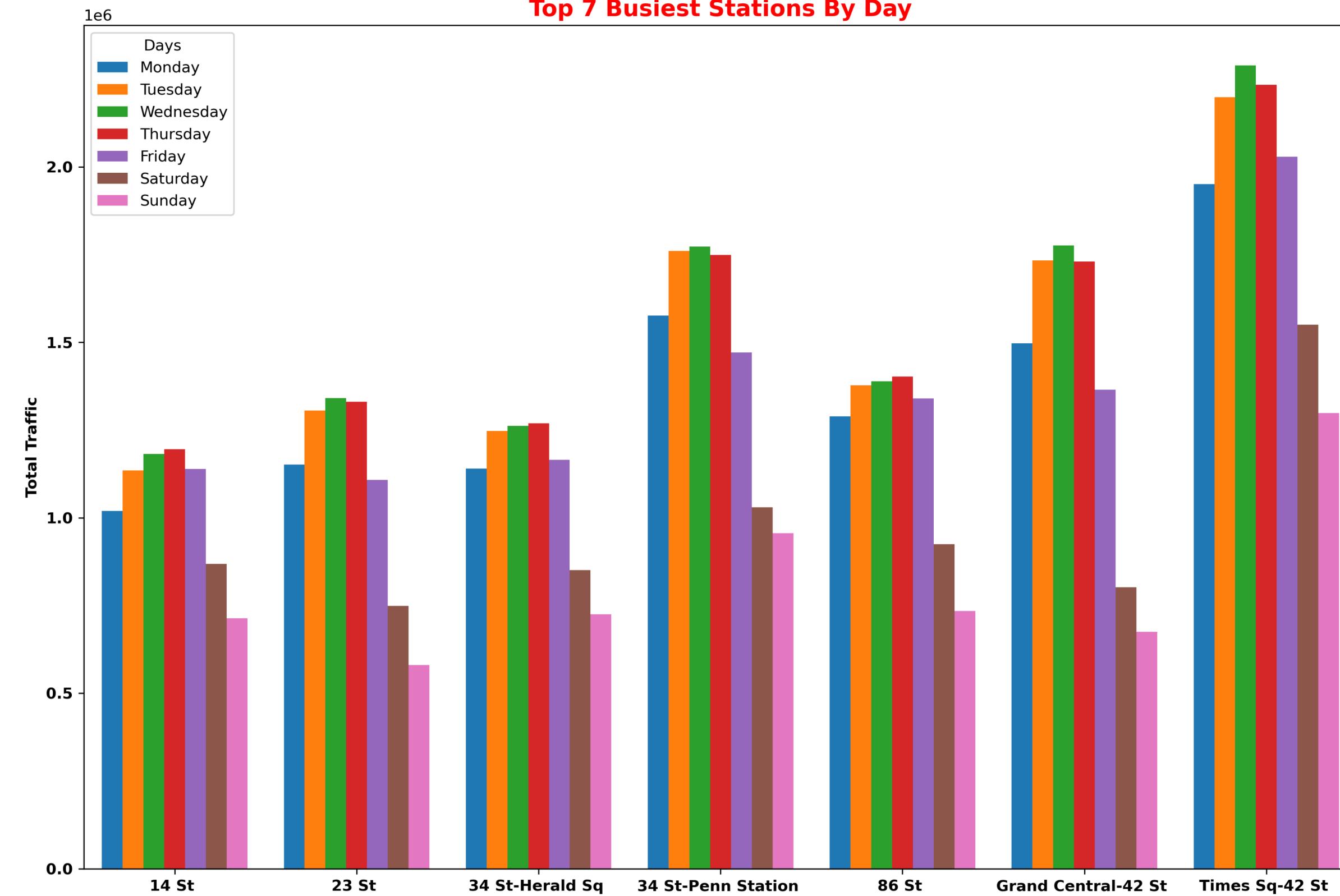




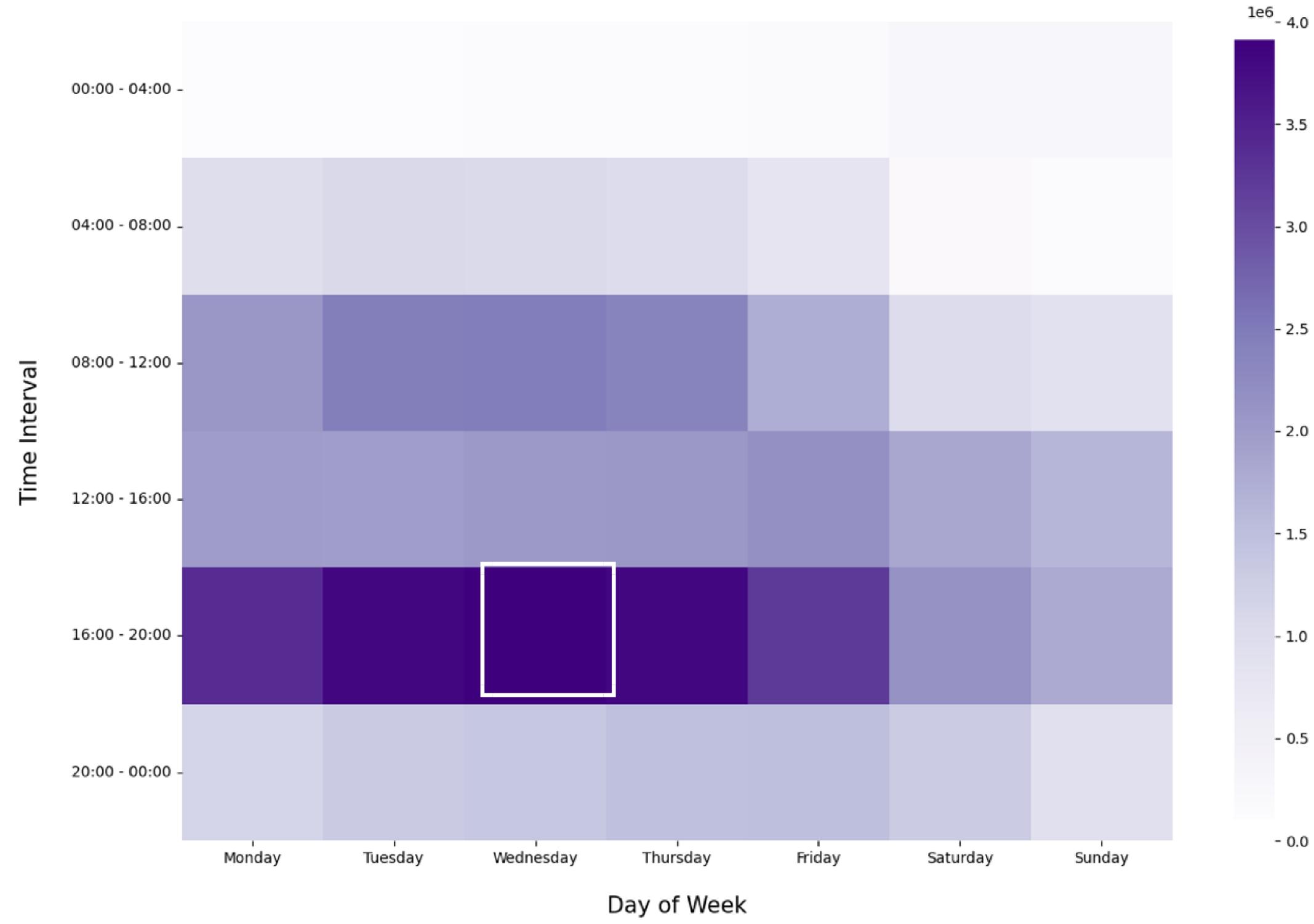
Times Square-42 St Daily & Hourly Passenger Heatmap



Top 7 Busiest Stations By Day



Top 7 Busiest Stations



CONCLUSION

We carefully examined the results of our data analysis related to your event and obtained various findings to optimize the placement of your street teams. Here are the main findings and conclusions of our analysis:

Intense Passenger Traffic Among Boroughs: In Manhattan, there is a significantly higher passenger traffic compared to other boroughs. This intensity is further amplified at major stations such as Times Square - 42 St, 34 St - Penn Station, and Grand Central - 42 St.

Busiest Days and Hours: Wednesday, Thursday, and Friday are identified as the busiest days at metro stations. Additionally, the time frame between 4:00 PM and 8:00 PM is observed to be the busiest overall.



RECOMMENDATIONS

Recommended Action Steps:

Street Team Placement Optimization: Our efforts should concentrate particularly on major stations like Times Square, Penn Station, and Grand Central during the identified busy days and hours. Additionally, consideration should be given to other major stations in Manhattan.

Interaction and Registration Collection: Street teams operating during peak hours can engage with potential participants more effectively and collect event registrations. This can lead to increased event participation and broader outreach to the target audience.

Visual and Communication Materials: Materials used by street teams should be eye-catching and informative. They should highlight the significance of the event and offer information about the opportunity for free tickets.

We hope that these recommendations will help increase event participation and facilitate more effective outreach to the target audience by your street teams.

ENHANCEMENTS FOR EVENT OPTIMIZATION

Integration of Weather Data: Incorporate weather forecasts to anticipate attendance fluctuations based on weather conditions, allowing for better event planning and promotion strategies.

Gender Distribution Data: By examining the gender distribution of the population in different areas of the city, regions with a higher concentration of women can be identified. This data can assist in optimizing the placement of street teams to reach more potential female participants.

Utilization of Historical Attendance Data: Utilize past event attendance data to identify successful promotional tactics and adjust strategies accordingly, optimizing future event planning and promotion.

These suggestions, combined with the analysis of MTA metro data, can further optimize your event planning and promotional strategies.