

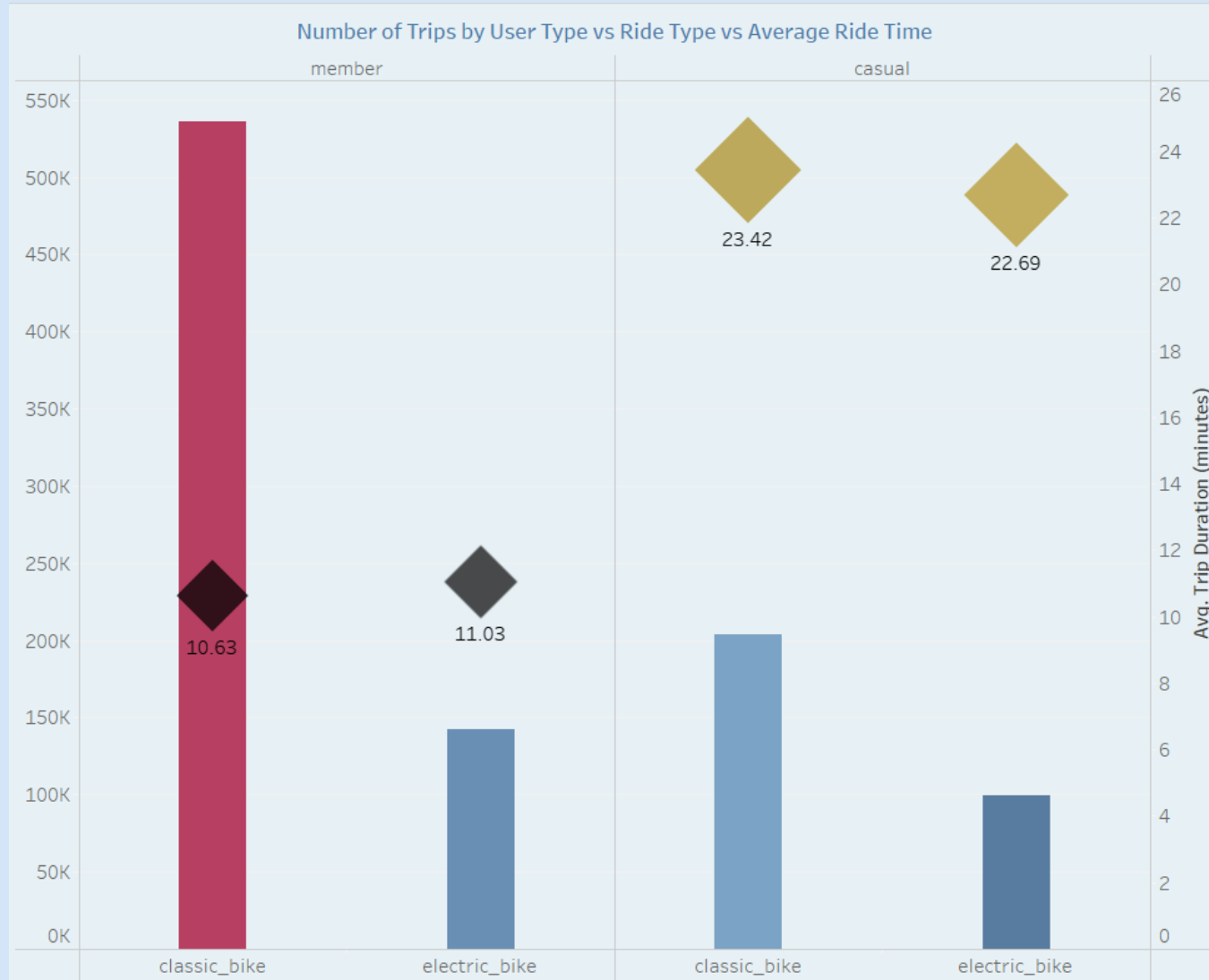


Citi Bike Trip Analysis

Jersey City



Citi Bike User Analysis



Member vs Casual

- Members are by far the biggest users of the service however they have the short average usage time indicating they use the services for commuting for work as opposed to recreation
- Casuals are as expected lower users of the service, but their average ride times are double that of members indicating they are more likely using the service for recreation

Classic vs Electric bike

- There is a clear difference in the user using Classic bikes especially amongst Members
- This could inform future capital expenditure decisions on Electric bikes noting installation and maintenance cost vs ongoing usage

Number of Trips

989,181

Citi Bike User Analysis

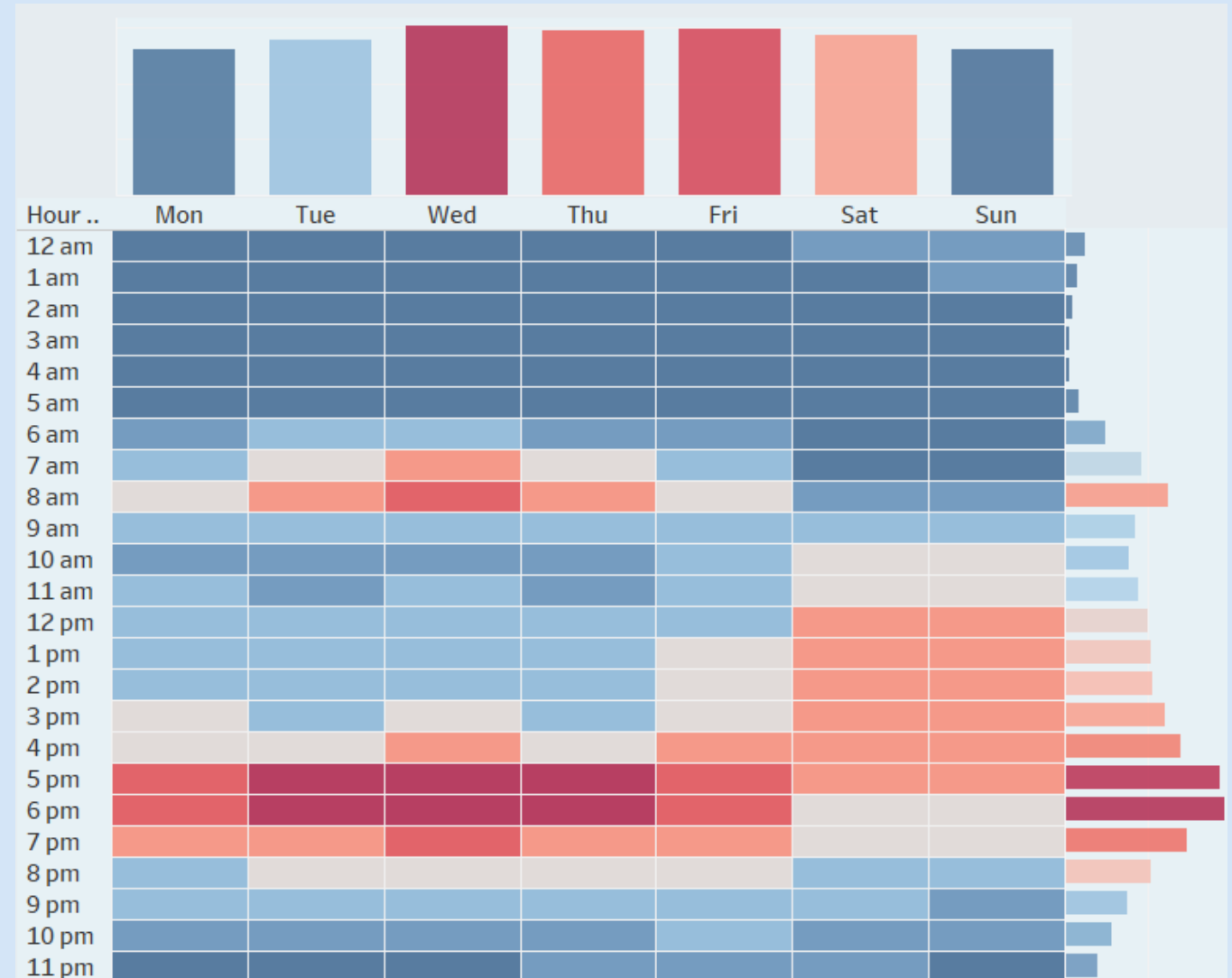


Week Analysis

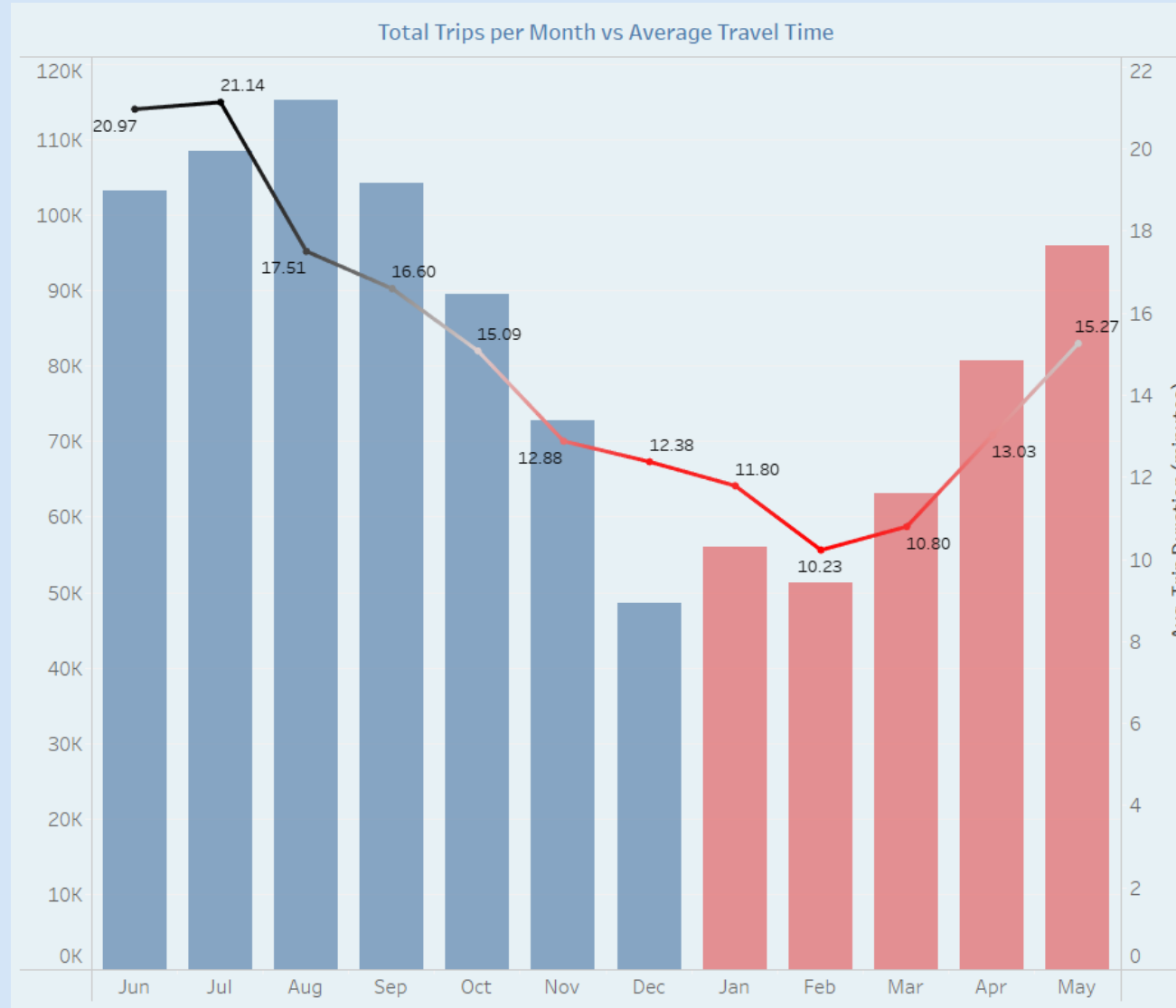
- The busiest day of the week is Wednesdays followed closely by Fridays, and the quietest day of the week is Sunday followed closely by Monday
- Noting the previous analysis, the data indicates that post-Covid Member users are commuting more often between Tuesday and Friday for work although there is still a fair number of Casual users active at the same time

Hour Analysis

- The busiest time of the day for most users are between 4pm to 7pm with a peaks between 5pm and 6pm. It is also worth noting that there is spike in activity at 8am in the morning for Member users
- There is a noticeable difference on the weekend activity between 12pm to 5pm indicating that this is when Casual users are active with Member users predominantly using the service before and after work hours



Citi Bike User Analysis



Month Analysis

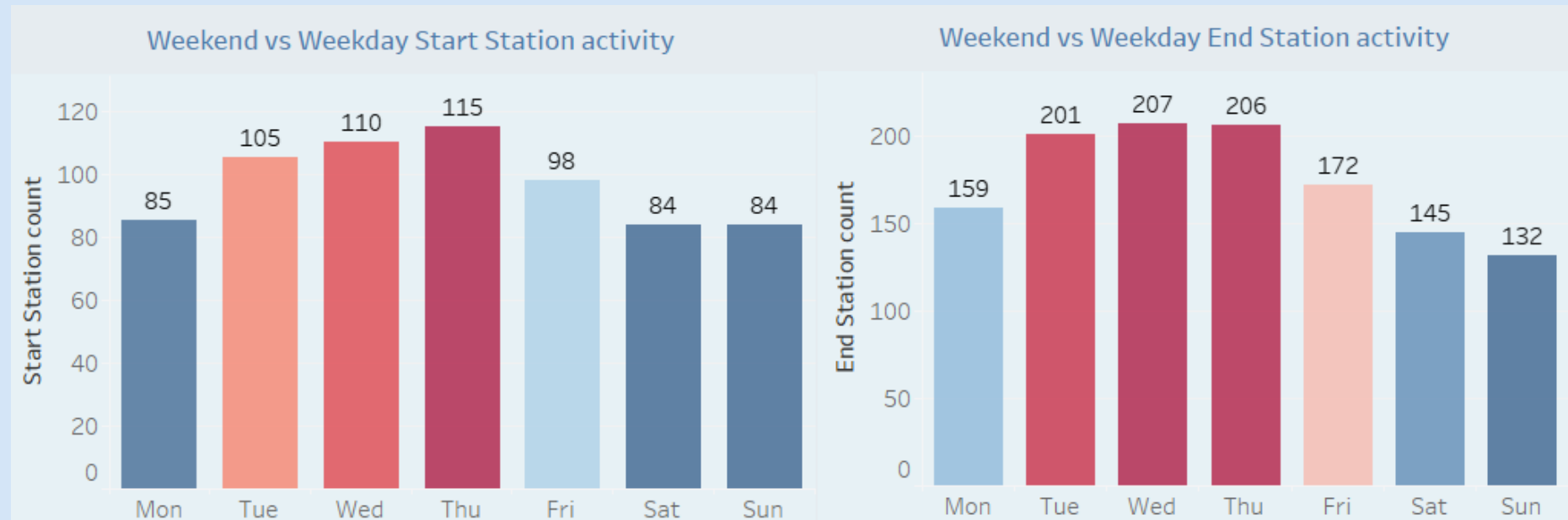
- The busiest period for the service was recorded in June to September which aligns to the seasons when the weather is good for outdoor activity
- The quietest period is December to March when it is the colder months and people tend to stay indoors more
- The data also indicates that average trip times increase over the Summer months and decrease in winter with average July trip times double that of February
- The quieter periods could be used for major maintenance activities across bikes and stations due to lower user activity causing minimal disruption to user experience

Citi Bike Station Analysis



Weekend vs Weekday Station analysis

- The data indicates that there are fewer stations that both Member and Casual users to start their journey
- There are almost double the number of stations where users end their journey and as noted in the Map analysis spread across a much broader area including major boroughs in New York city
- The analysis indicates that stations are much busier during the weekdays when compared to weekends
 - Casual users are more evenly spread across the weekday vs weekend for their starts and ends of their journey which aligns to the theory Casual users tend to be more recreational users
 - Member users are more skewed to the weekday vs weekend for their starts and ends of their journey which aligns to the theory Member users tend to be use the service for commuting to work



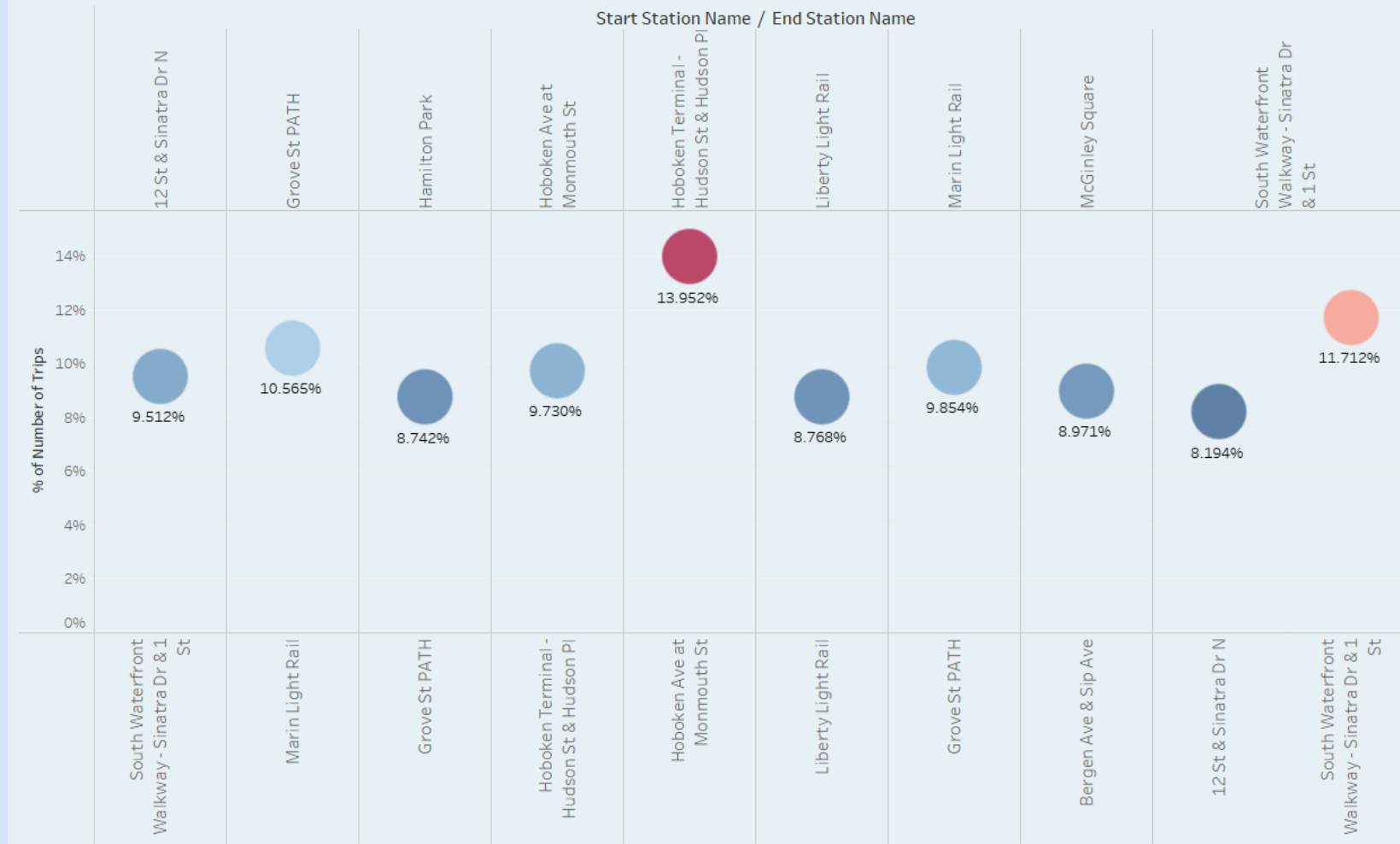
Citi Bike Station Analysis



Busiest Start vs End Station Routes

- Based on the Top 10 journeys by stations, the busiest route is between Hoboken Terminal (Start) and Hoboken Ave at Monmouth St (End) with the return journey also featuring
 - This aligns with the commute for Member users who are making their way to and from work
- The Second busiest route/station is at South Waterfront Walkway
 - This stations is a tourist area and indicates that Users pick-up a bike at the station and then go for recreational journey in the area where they then return the bike back to the same station

Busiest Start vs End Stations Routes



Citi Bike Map Analysis



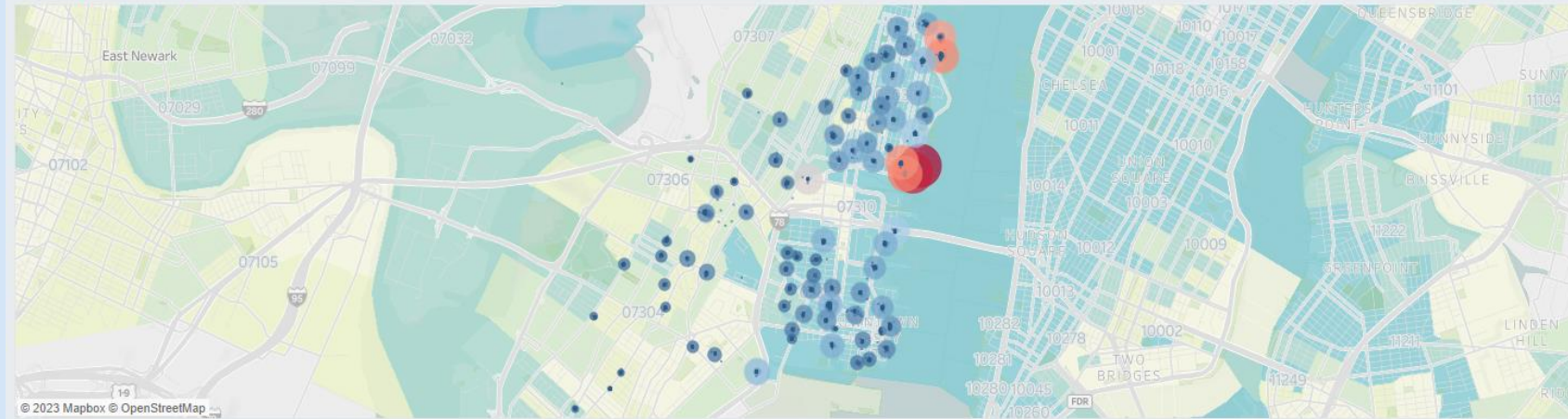
Start Station

- The analysis of the Start Station Activity map reveals a notable concentration of frequently used stations in Jersey City, New Jersey, particularly within the zip codes 07302 and 07310. This observation suggests that residents of Jersey City heavily rely on the bicycle-sharing service, possibly due to its cost-effectiveness in comparison to alternative transportation options like taxis and ride-sharing services. This finding emphasizes the popularity and practicality of the bike-sharing system among the local population.

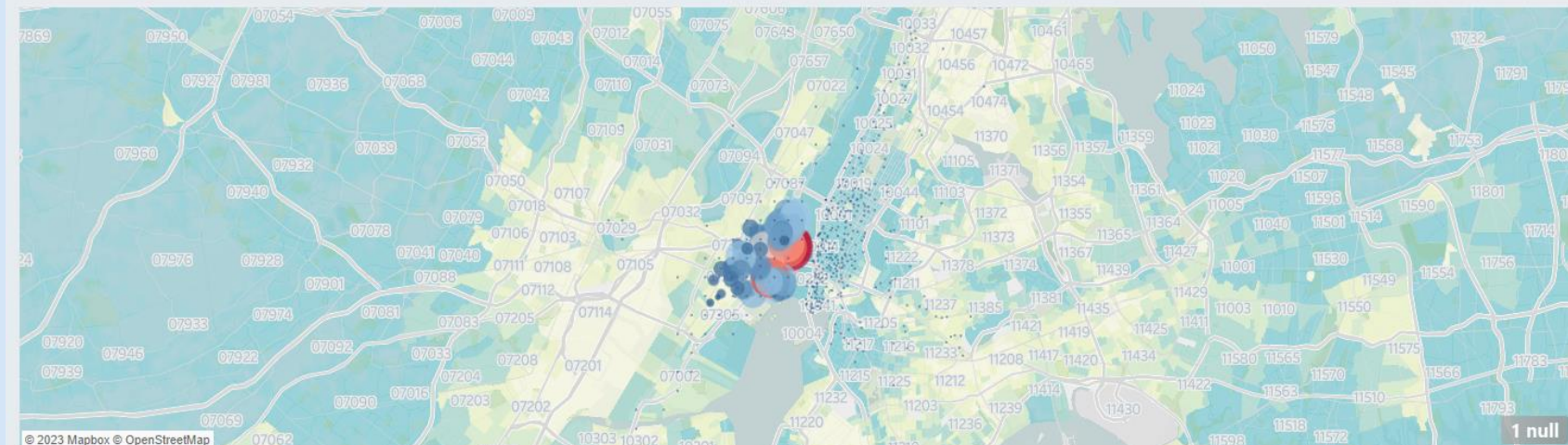
End Station

- Just like the start station map, the end station map also demonstrates a significant concentration of frequently used stations in Jersey City, New Jersey. This pattern suggests that residents rely on the bicycle-sharing service for their daily commuting needs to and from work. The prominence of these stations highlights the effectiveness and convenience of the bike-sharing system in facilitating residents' work-related travel within the city.
- It is also worth noting the spread of end journeys across the New York boroughs including Manhattan Island as noted in the Station Analysis

Start Station Activity Map



End Station Activity Map



Conclusion

In summary, this Tableau analysis offers a comprehensive overview of the trends and patterns in Citi Bike usage within a specific timeframe. By creating interactive dashboards and visualizations, significant insights have been extracted and presented, shedding light on user types, trip patterns by time and day, and notable usage trends among residents of Jersey City, New Jersey, particularly for commuting purposes. This analysis serves as a valuable resource for those seeking to understand Citi Bike usage and delve deeper into the underlying data of this popular bike-sharing service.

