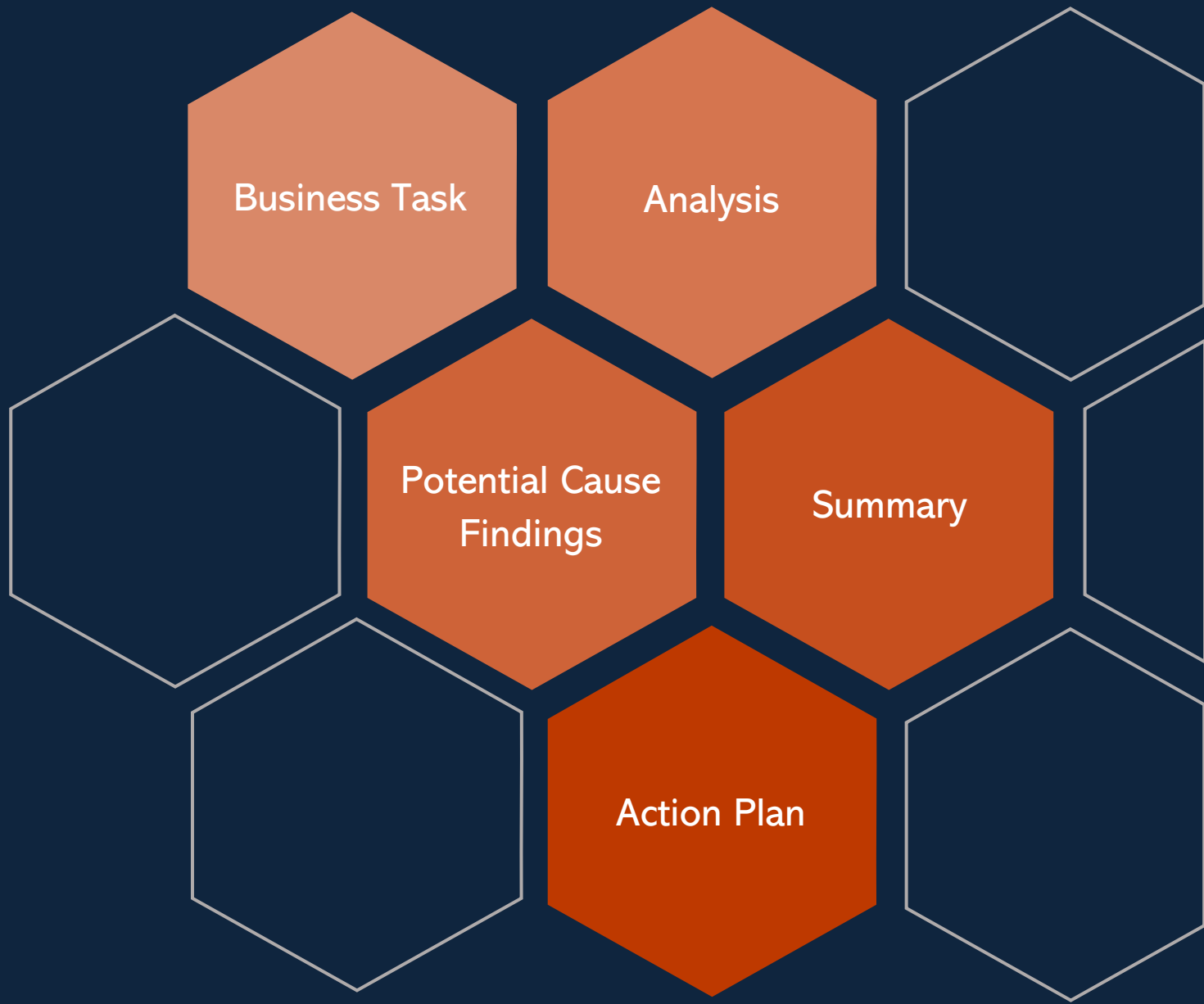
Cyclistic Rider Trends

analusis.dev

Agenda


Business Task
Analysis
Potential Cause
Findings
Summary
Action Plan

Business Task

How do member and casual riders use Cyclistic bikes differently?

Analyze rider data from the last 12 months to identify trends in usage between member and casual riders.

Analysis

Analysis Limitations

Removal of PII

The data set was rightfully pre-filtered of PII. Unfortunately, this does impact trend studies as we are unable to analyze whether casual riders were repeat or unique customers.

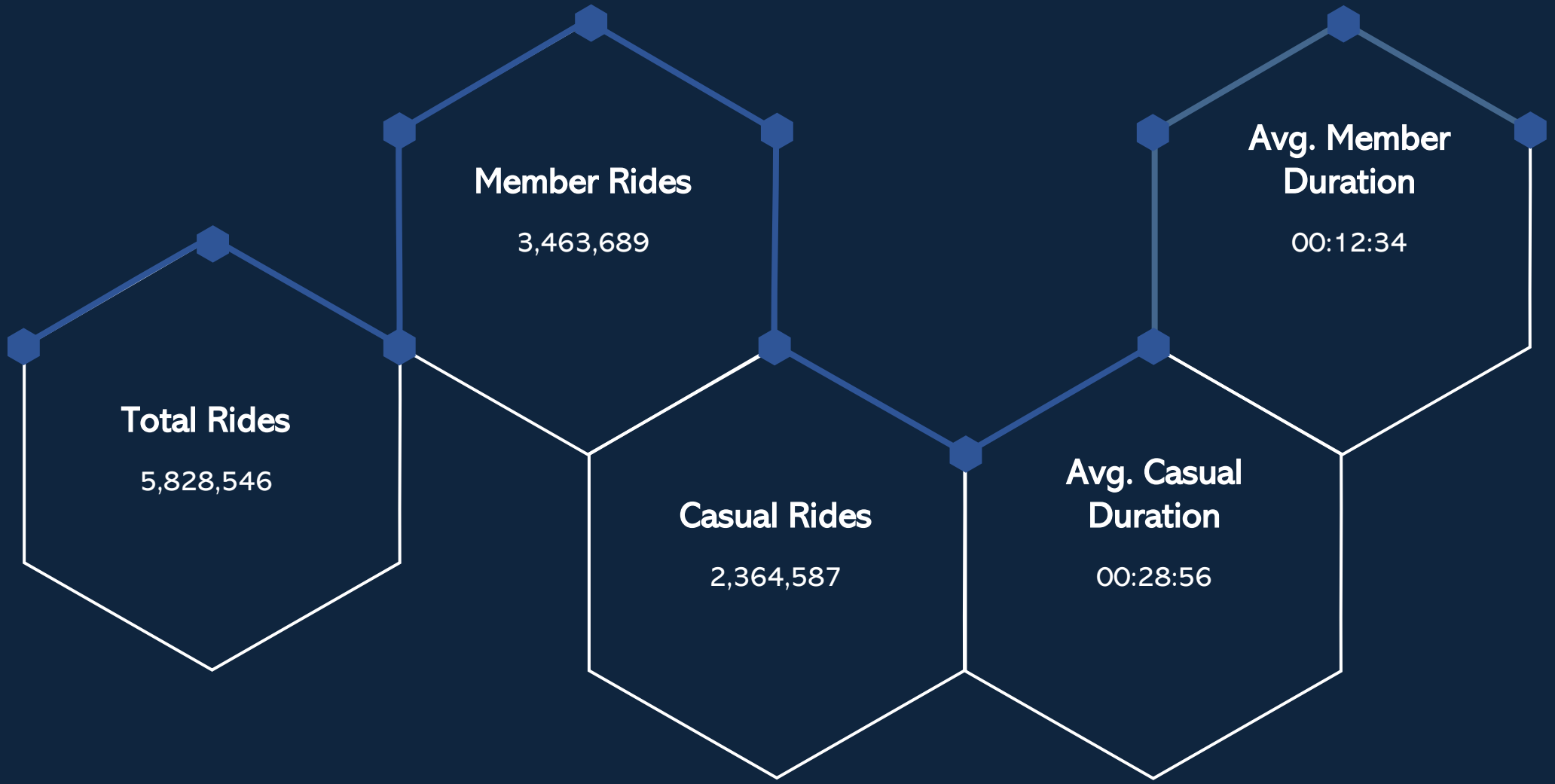
Docked Rides

Docked rides were excluded from charted analysis due to lack of information regarding their usage.

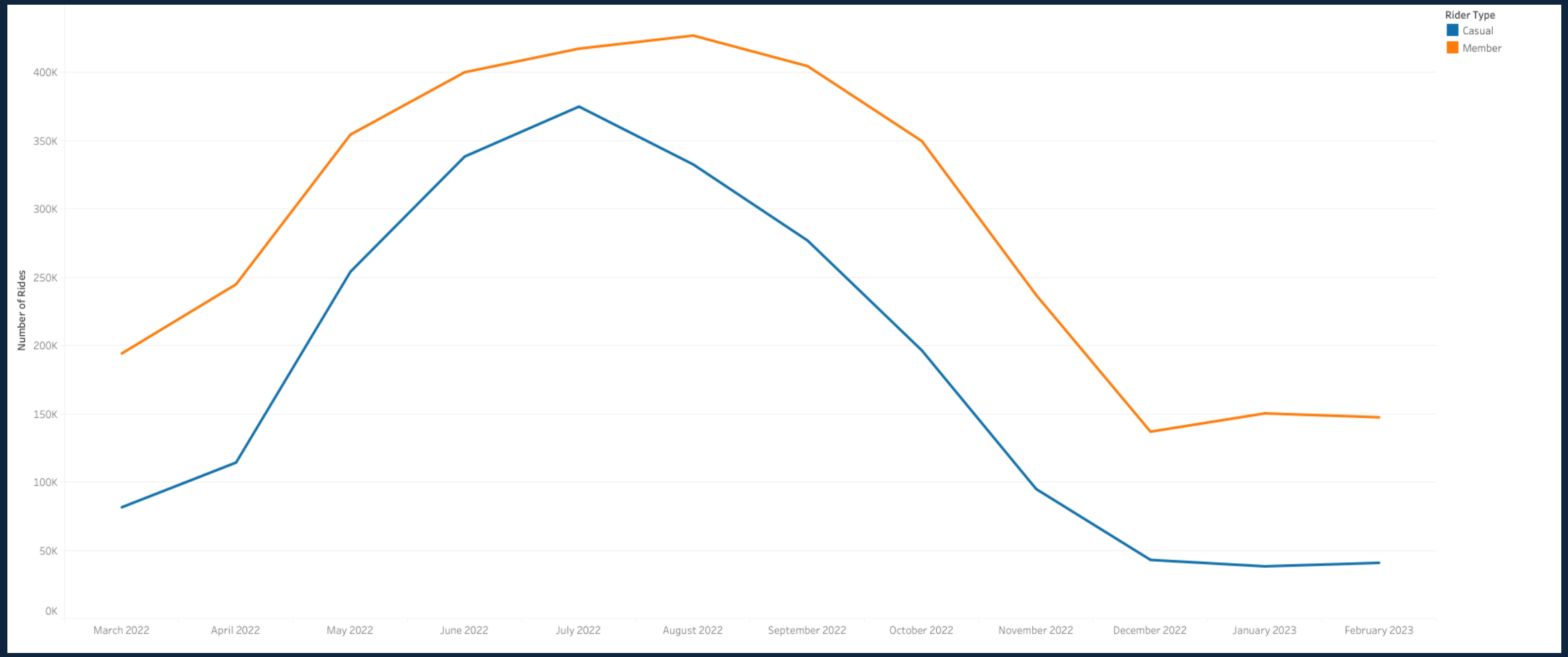
Utilization Capacity

Data regarding bike availability and capacity utilization is not available. It is possible that usage between rider types could be influenced by reservation programs or lack of bike availability.

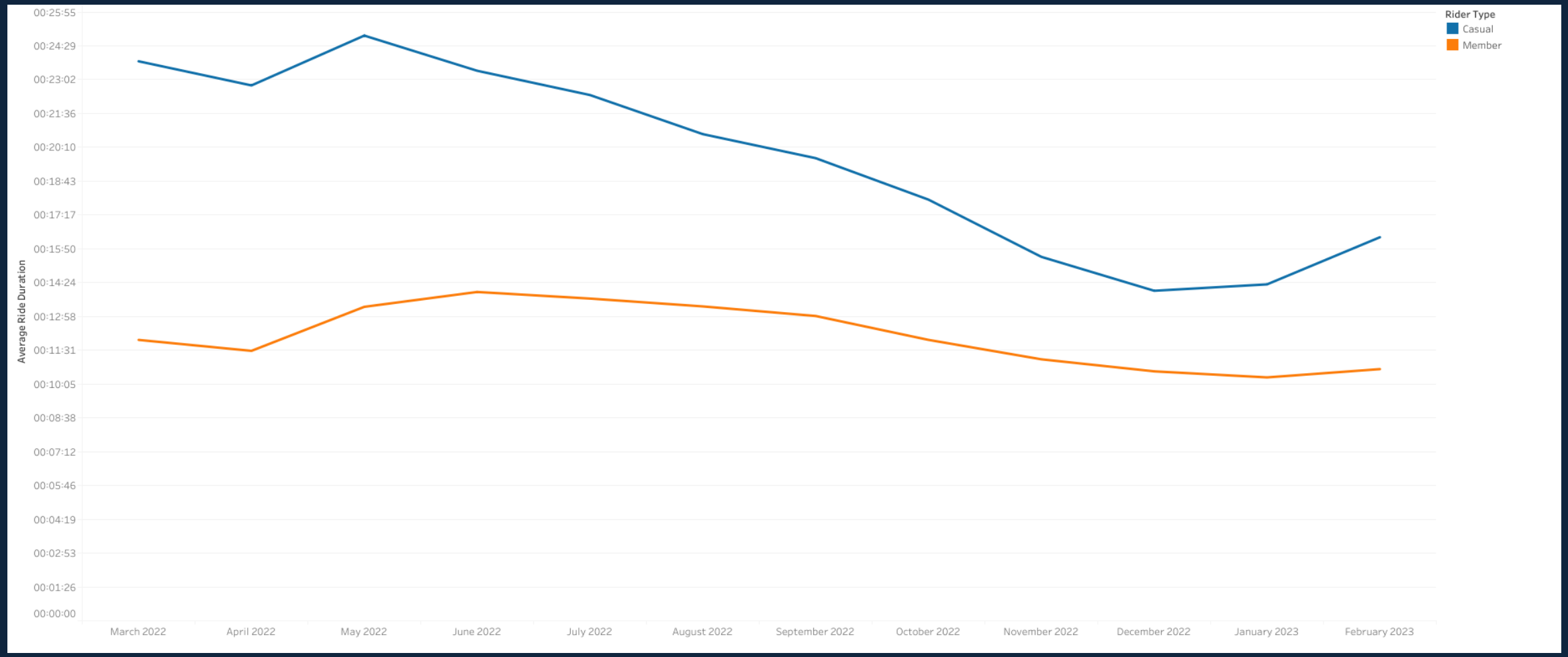
Total Number of Rides and Average Duration



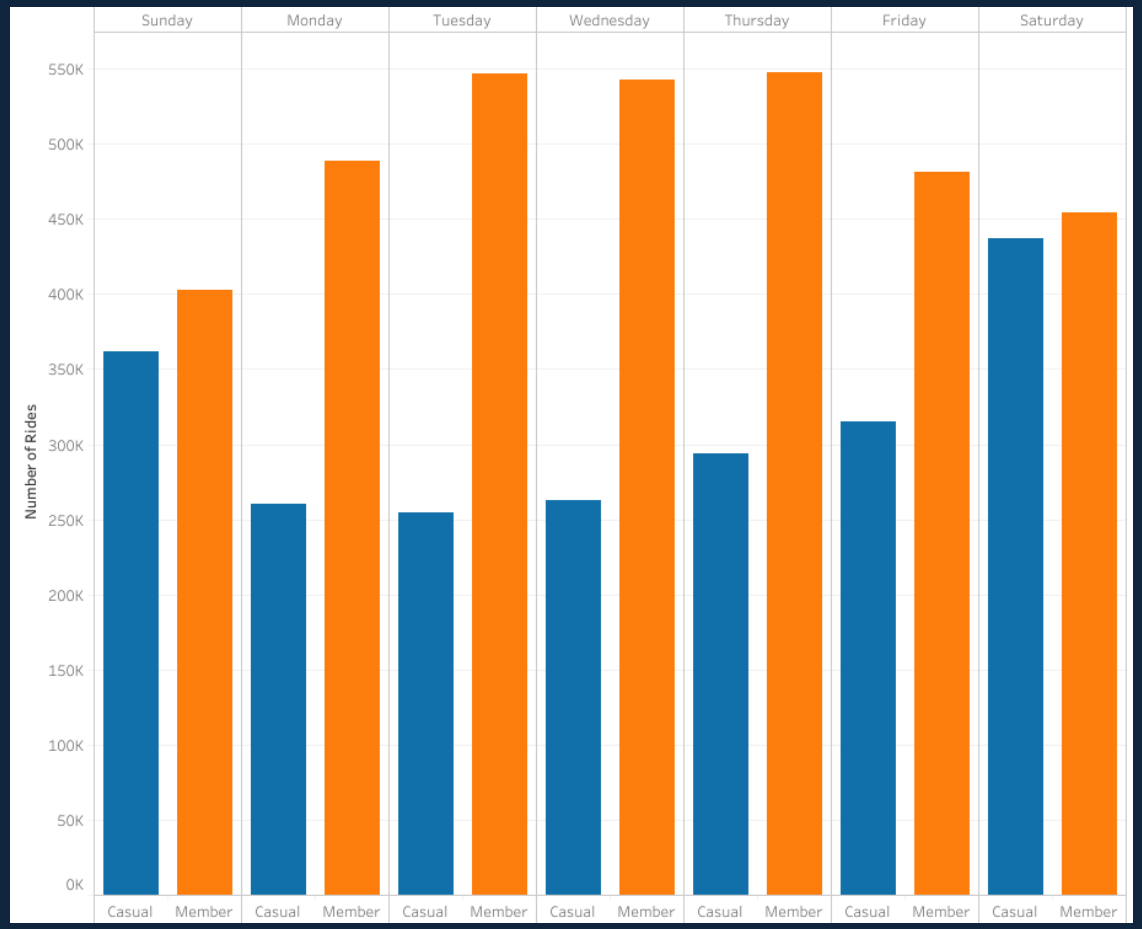
Trend – Number of Rides by Rider Type

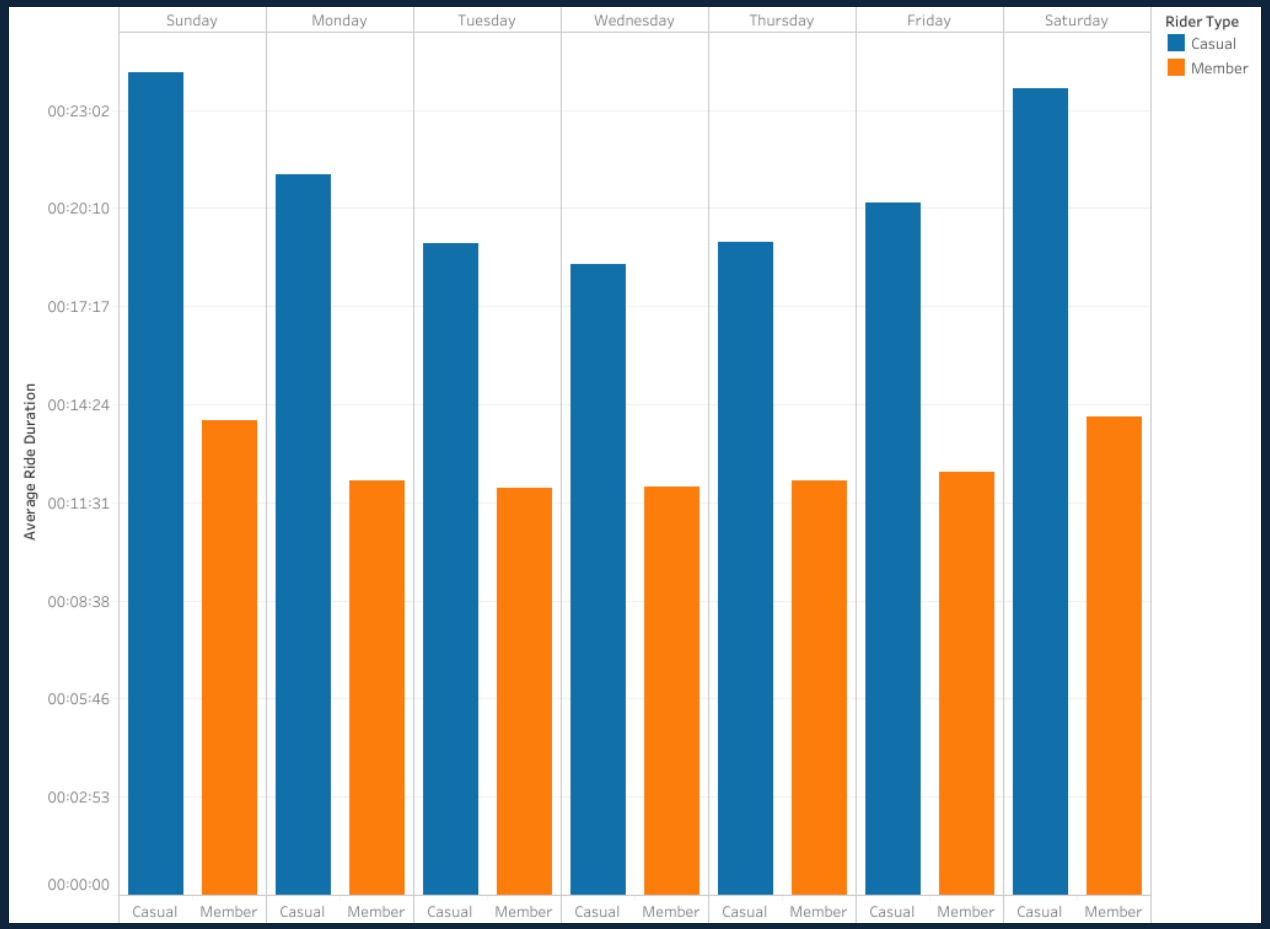


Trend – Duration of Rides by Rider Type

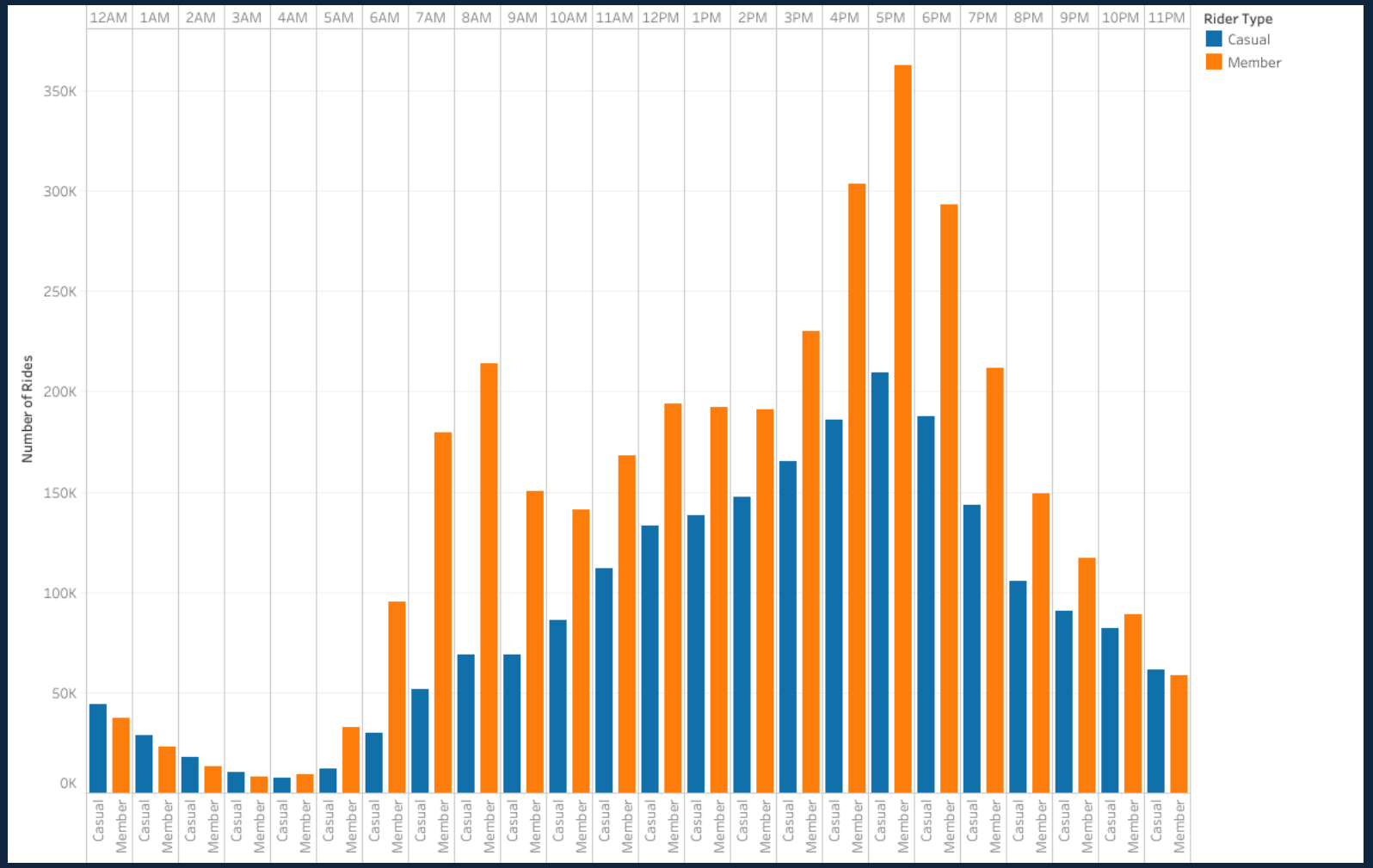


Weekday Differences

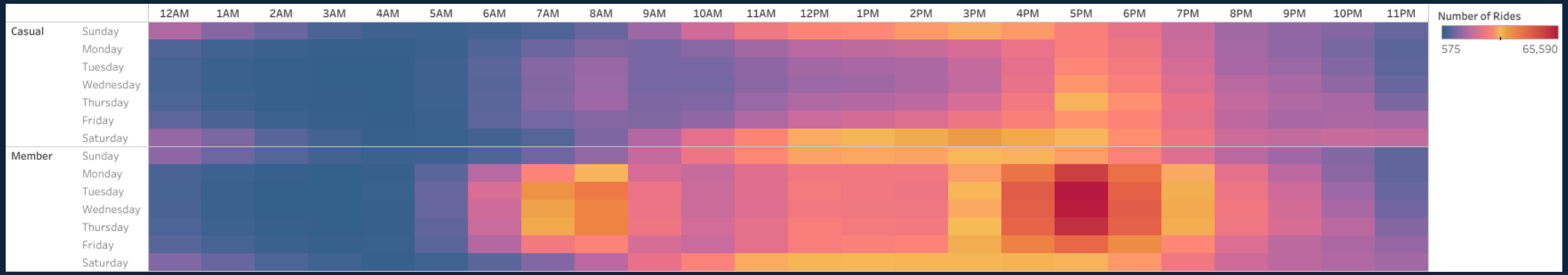


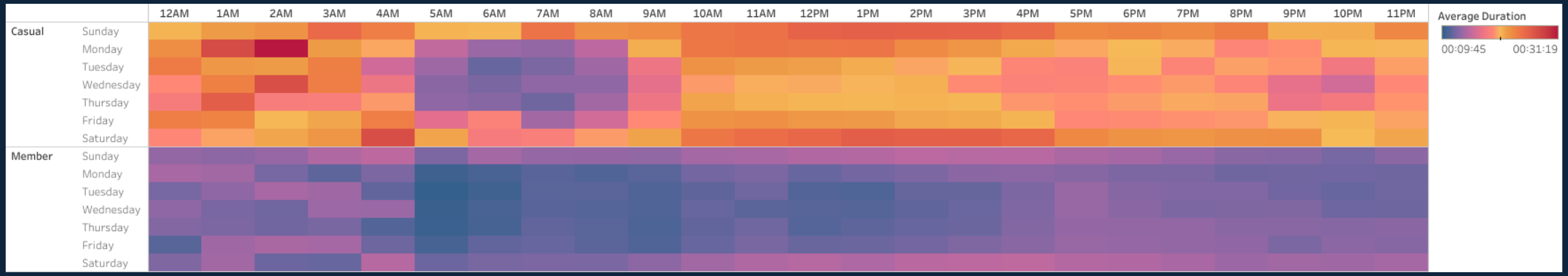


Number of Rides by the Hour

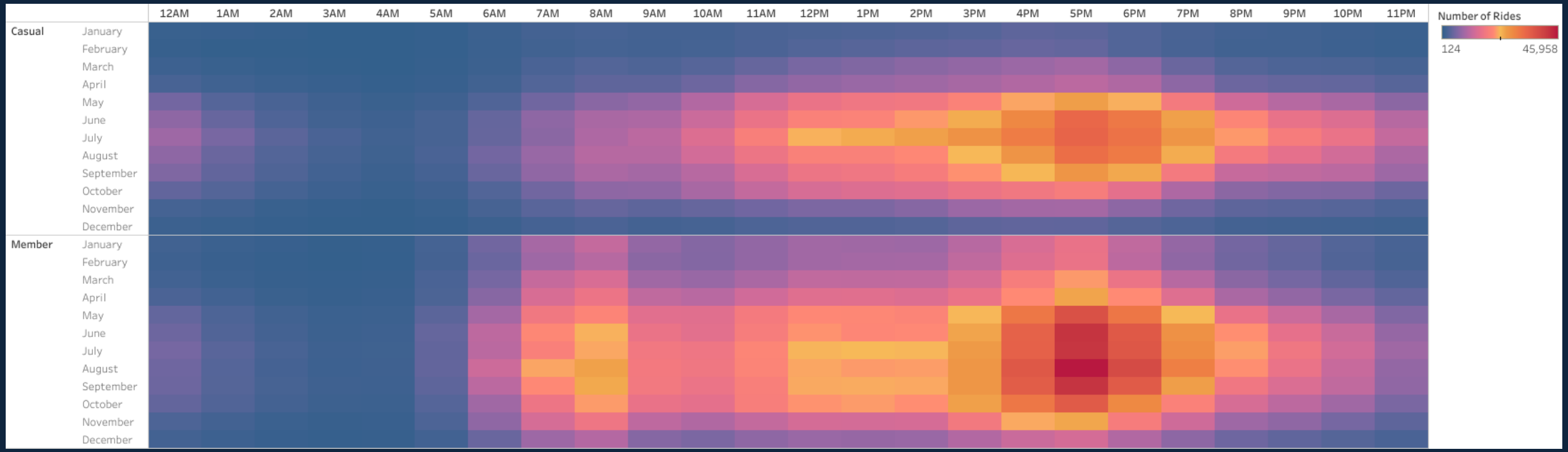


Number and Duration of Rides by the Hour and Weekday

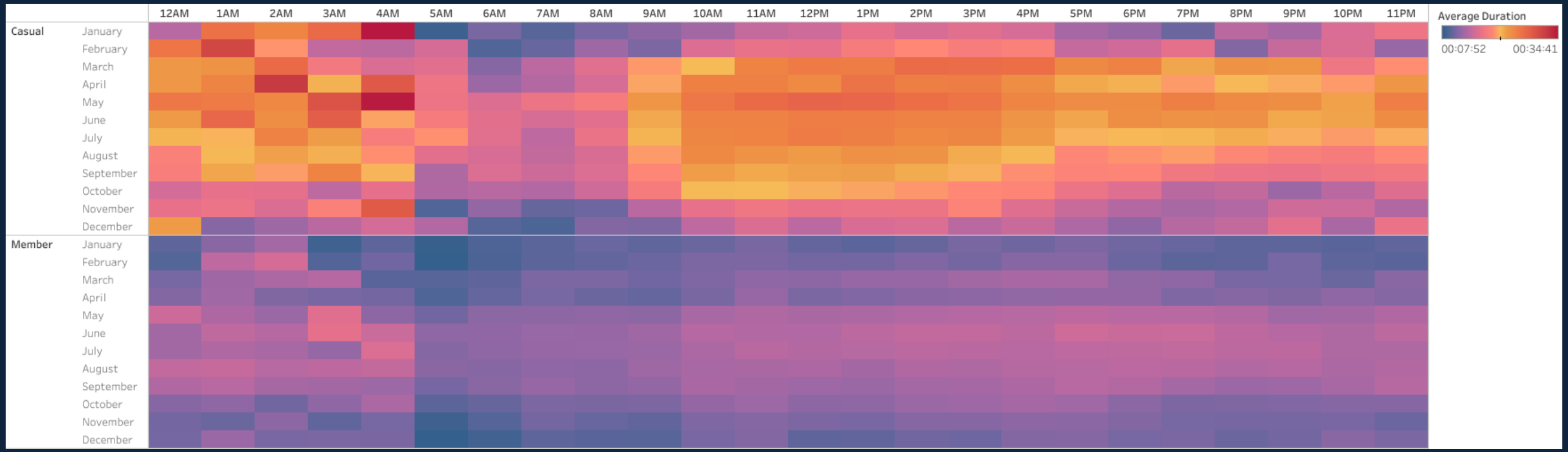




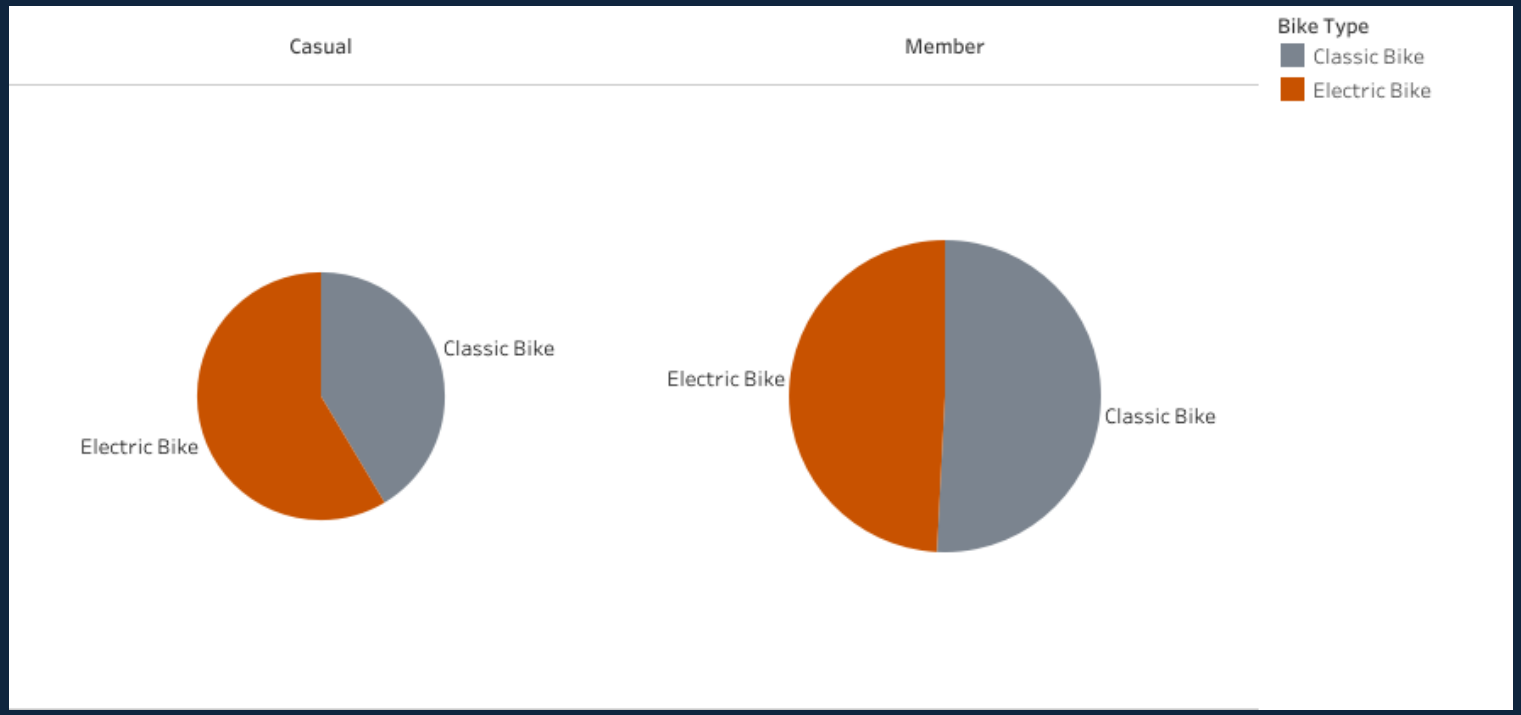
Number of Rides by the Hour and Month



Duration of Rides by the Hour and Month



Bike Type Utilization



Potential Cause Findings

Member Riders May Utilize a Schedule

- Member riders appear to utilize bike services during specific hours of the day

Casual Riders May Utilize Bikes for Leisure

- Casual riders have increased utilization during weekends compared to weekdays.

Bike Type Utilization

- While member riders are nearly even between usage of bike types, casual riders appear to favor electric bikes.

Summary

Member Riders

- More overall rides
- Increased usage during specific hours of the day
- More usage throughout the year

Casual Riders

- Increased duration of rides
- Higher weekend utilization
- More commonly used during warmer months

Action Plan

Conduct Further Analysis

- Continue to work with the data collection team to capture utilization data
- While some trends are discoverable with the current data set, more information could provide further insight into program usage

Consider Rider Surveys

- Consider creating a quick and simple survey to collect information regarding why users utilize the service

Implement and Reassess

- Consider implementation of weekend subscriptions to convert casual riders who may utilize the program for weekend leisure but rely on different modes of weekday transportation
- Consider implementation of summer passes
- Consider implementation of a reservation system should it not currently exist

Appendix

Coursera
Google Data Analytics

This case study was created as a result of course assignment during the Coursera Google Data Analytics learning program.

Divvy
Data Source

The data belongs to and originated from Divvy. The data is provided according to the Divvy Data License Agreement. This case study is not affiliated with, endorsed by, or sponsored by Divvy or the Chicago DOT.




Thank you