CYCLISTIC CASE STUDY: MEMBER VS CASUAL RIDERS

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OUTLINE OF PRESENTATION

1. Business Task Review

2. Data Review

3. Data Cleaning Process

4. Data Analysis

5. Conclusions

6. Recommendations

7. Questions

OBJECTIVE

To determine the key ways in which members and casual riders differ, and then to make recommendations for future marketing campaigns to convert casual riders into members.

DATA REVIEW

Data used is from Motivate International Inc, who operate Divvy bicycle share program in Chicago (since Cyclistic is a fictional company).

Oct 2020- Sept 2021 monthly data was downloaded and combined for cleaning and analysis.

Data is deemed to be reliable for purpose of the case study.

DATA CLEANING PROCESS

Data was combined and cleaned using the Rstudio Program.

Cleaning Actions taken include:
- Creating Ride Length column
- Creating Weekday and Month columns
- Removing nulls and negative trips rides
- Removing trips less than one minute and more than 24 hours
- Separating Date and Time columns

DATA ANALYSIS OVERVIEW

Data Analysis was conducted in the Rstudio program

Data Analysis included:

- Calculating average ride lengths for riders
- Calculating most popular days of the week and month of year for riders
- Calculating most popular times of day for riders
- Determining most popular start and end stations

CONCLUSIONS

Members made up slightly over half of all rides over the last year

Percent of Total Trips by Rider Status

Count of All Trips
4,294,157

45.238%

54.762%

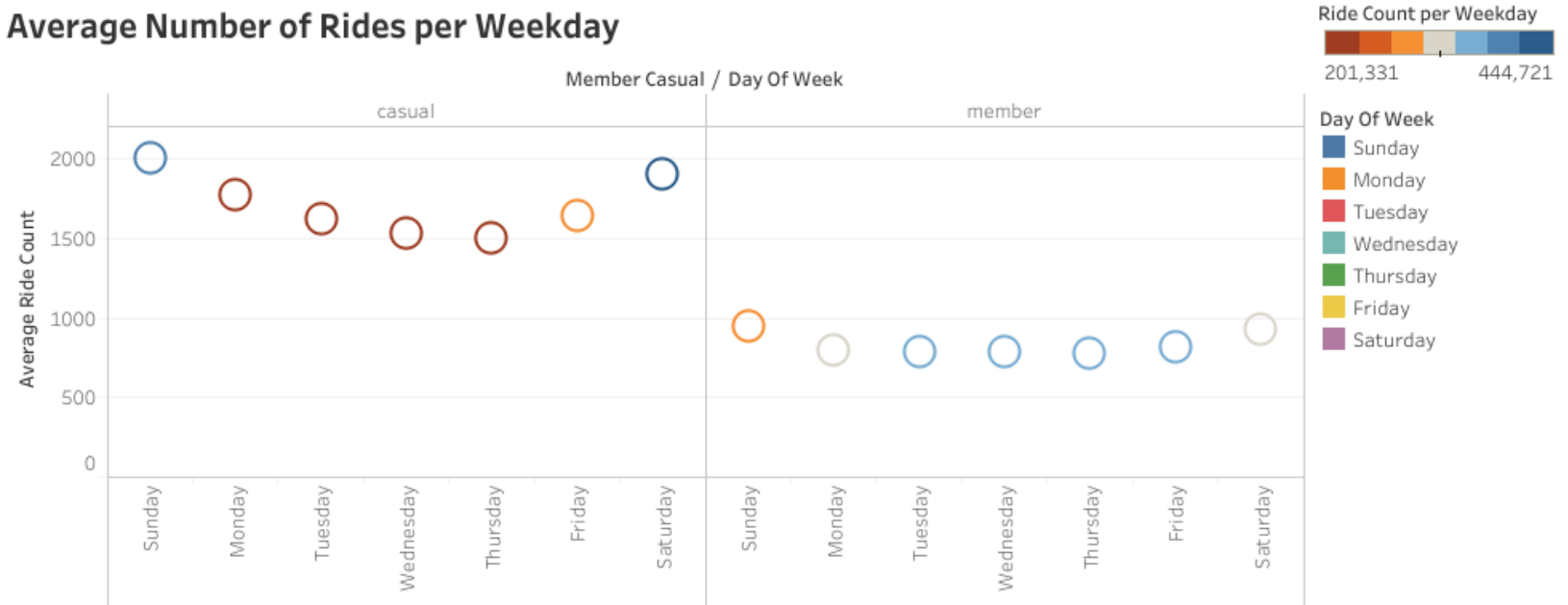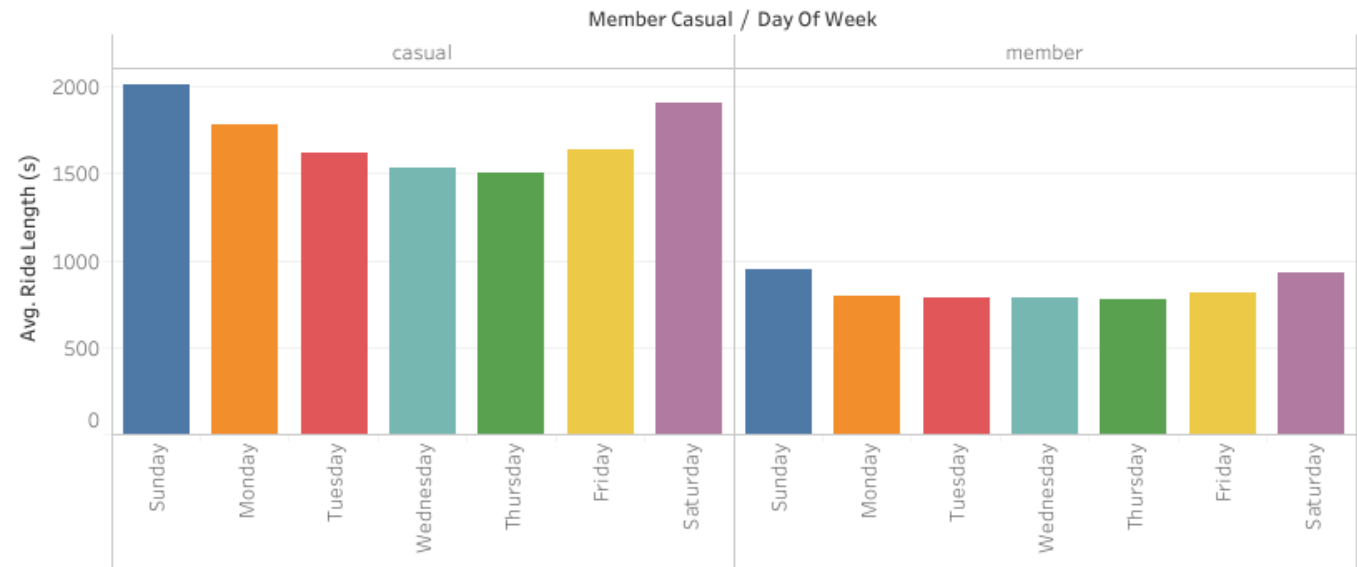Member Casual
- casual
- member
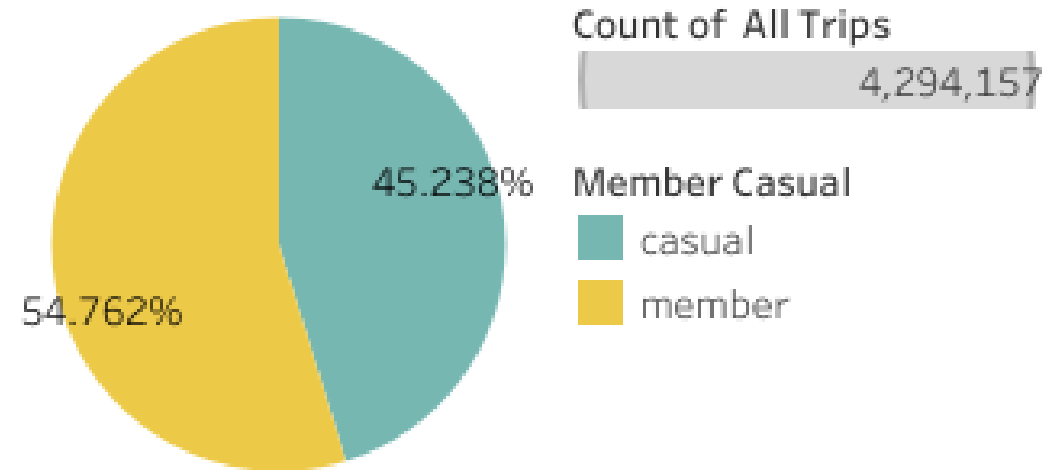
CONCLUSIONS

Casual riders use bikes more on the weekends, but members use them consistently throughout the week

When casual riders use bikes, they ride for longer than members

Average Number of Rides per Weekday

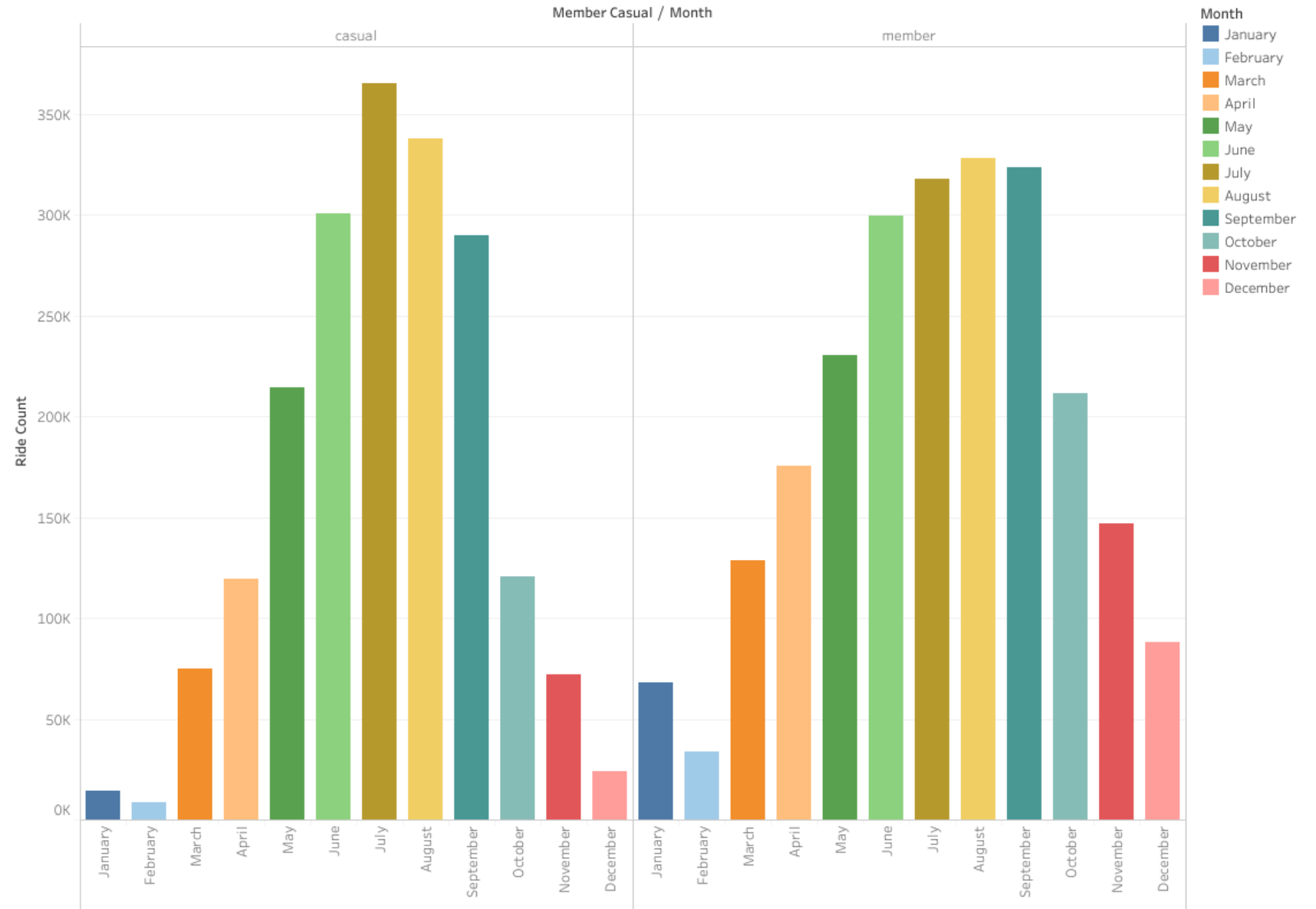## Weekly Overview of Average Ride Length

CONCLUSIONS

Both members and casual riders use bikes most in the spring and summer months

This is likely related to weather
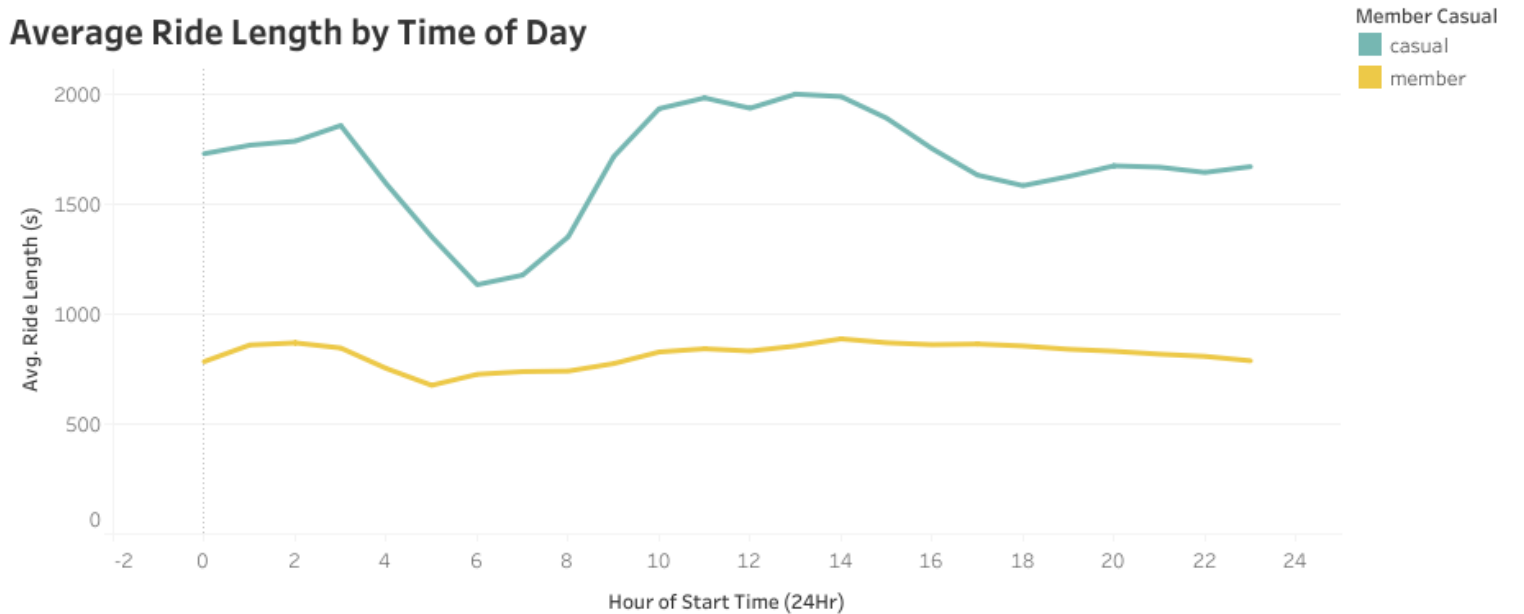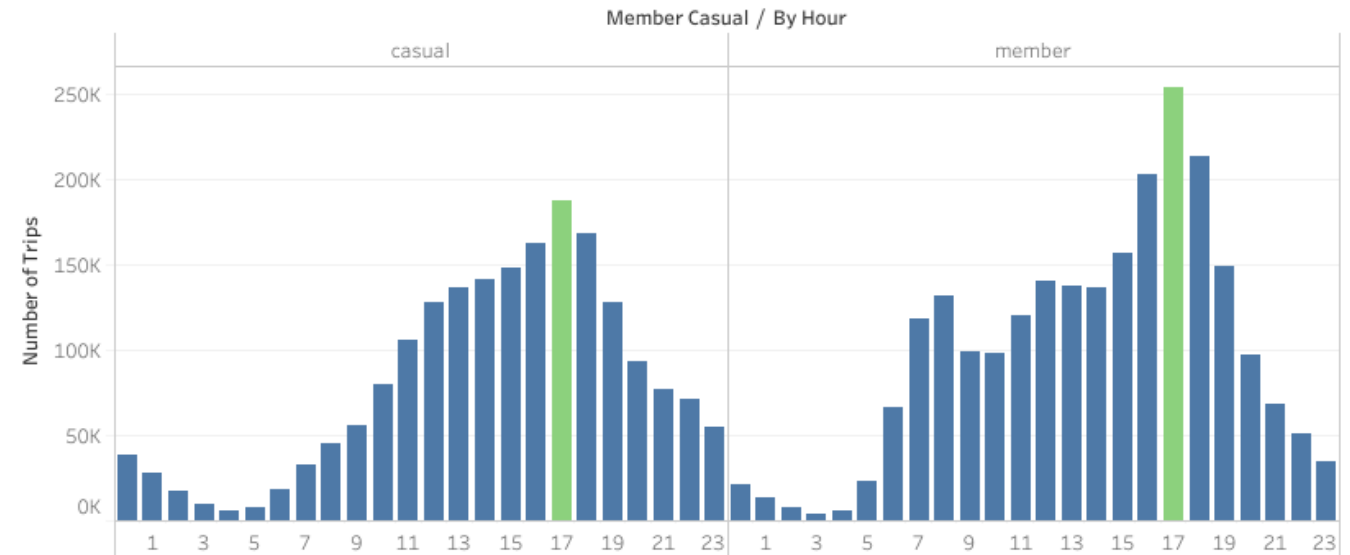

Monthly Overview of Ride Counts

CONCLUSIONS

Member's usage peaks in the morning AND late afternoons but ride length is consistent

Casual riders' usage peaks in the afternoon and ride length is longer than the members'
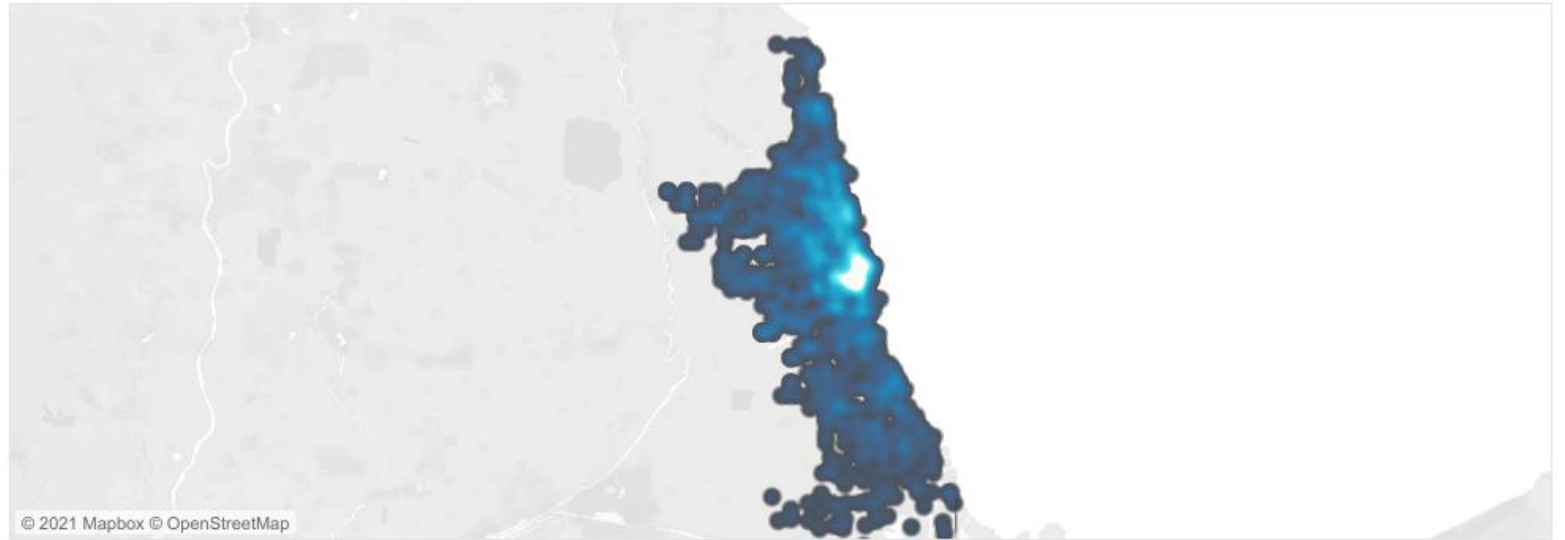
CONCLUSIONS

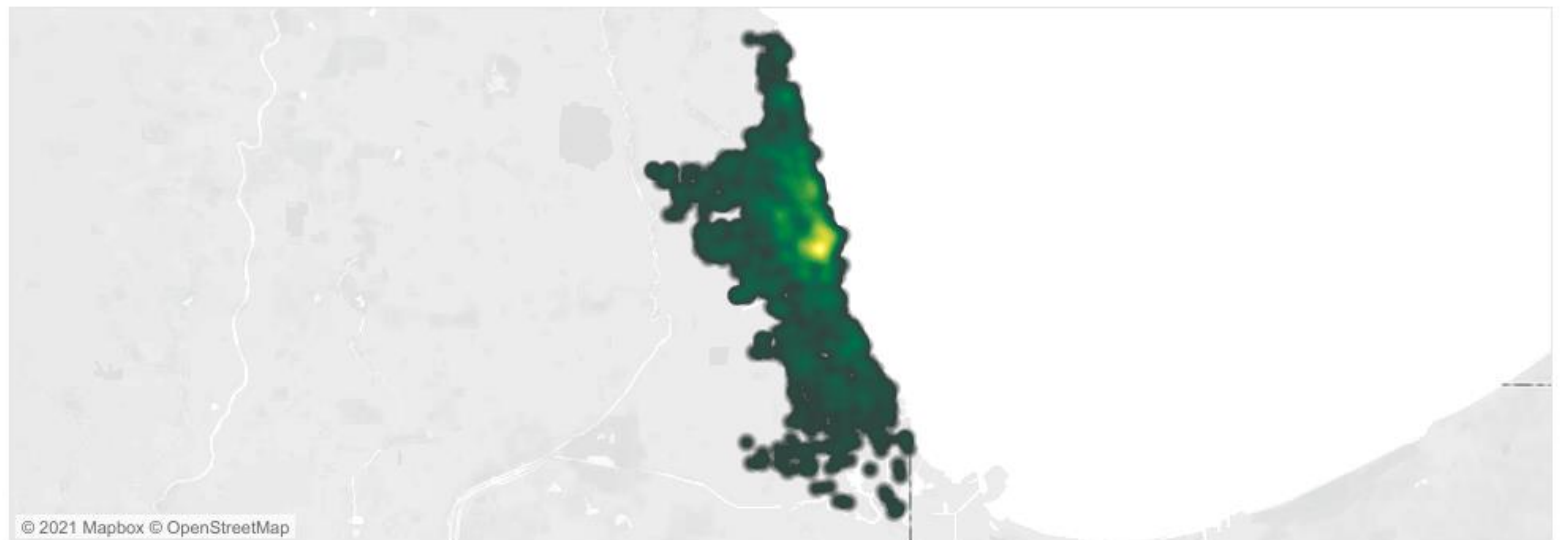Most popular start and end stations are in the same general area

Members start and end at different stations within the vicinity

Casual riders start and end at the same station

Density Chart of Most Used Start Stations

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Density Chart of Popular End Stations

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CONCLUSIONS

The area where the most popular stations are located is near the water

This location includes beaches and a bike path along the lake

Density Chart of Most Used Start Stations

Density Chart of Popular End Stations

CONCLUSIONS

Summary of Findings

Member Riders

➢ Use bikes consistently throughout the week

➢Bike usage peaks during commuting hours and ride length remains steady throughout the day

➢Use bikes more consistently throughout the year than casual riders, but still drop off during winter months

Casual Riders

➢Use bikes more on the weekends and ride for longer than members

➢ Usage increases dramatically in the summer months

➢Usually start and end at the same station

RECOMMENDATIONS

I. Casual riders are likely using Cyclistic for **leisure and fitness** vs members who use Cyclistic for **commuting.**

II. Further analysis should be done with fitness/activity data to see how casual rider trends align with other fitness trends i.e. new years resolutions, gym memberships, fitness trackers....

III. Future marketing should be aimed at encouraging casual members to sign up to meet fitness goals.

IV. Marketing should be concentrated around the Navy Pier area, where the most popular stations are found.

QUESTIONS