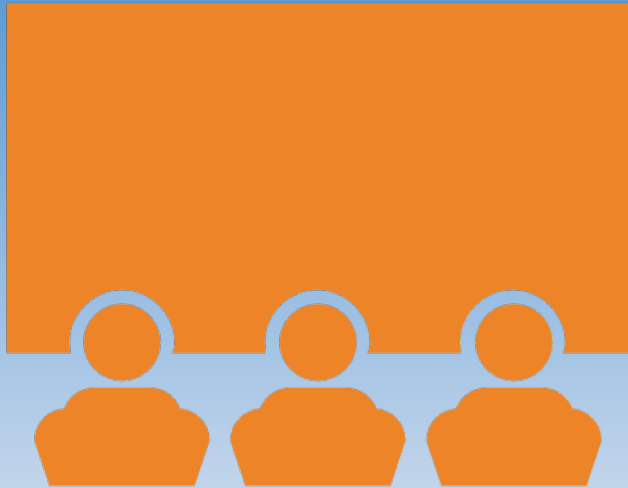# Cyclistic Bike Share Analysis

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OUTLINE

- About the company
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Findings
  - Implications
  - Conclusions
- Recommendations

About the Company

- 2016 launch of a successful bike-share offering

- The program has grown to a fleet of 5,824 bicycles that are geotracked and locked into a network of 692 stations across Chicago. The bikes can be unlocked from one station and returned to any other station in the system at anytime.

- Flexible pricing-plans: single-ride passes, full-day passes, and annual memberships.
  - Customers who purchase single-ride or full-day passes are referred to as casual riders.
  - Customers who purchase annual memberships are Cyclistic members.

- Annual members are much more profitable than casual riders. Although the pricing flexibility helps Cyclistic attract more customers, maximizing the number of annual members will be key to future growth. The team believes there is a very good chance to convert casual riders into members.

- <u>Main goal</u>: Design marketing strategies aimed at converting casual riders into annual members. In order to do that, however, the marketing analyst team needs to better understand how annual members and casual riders differ, why casual riders would buy a membership, and how digital media could impact their marketing tactics.

INTRODUCTION

Goal of this analysis to find answers to the following questions:

• How do annual members and casual riders use Cyclistic bikes differently?

• What would motivate casual riders to buy Cyclistic annual memberships?

• How can Cyclistic use digital media to influence casual riders to become members?

Audience for this Presentation:

• The director of marketing

• Cyclistic marketing analytics team

• Cyclistic executive team

METHODOLOGY
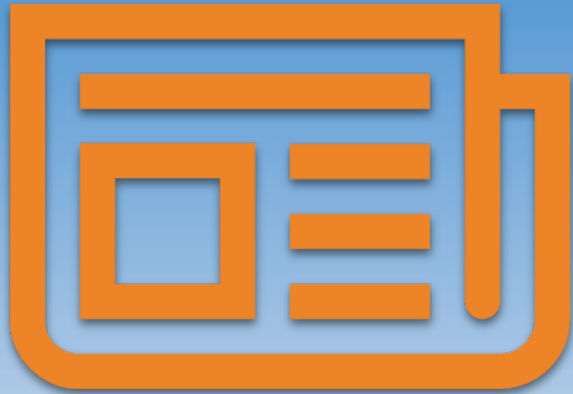
- **Data Collection (Sources):**
  - The data has been made available by Motivate International Inc. under this [license](#).

- **Data Exploration**

- **Data Cleaning**

- **Data Analysis**
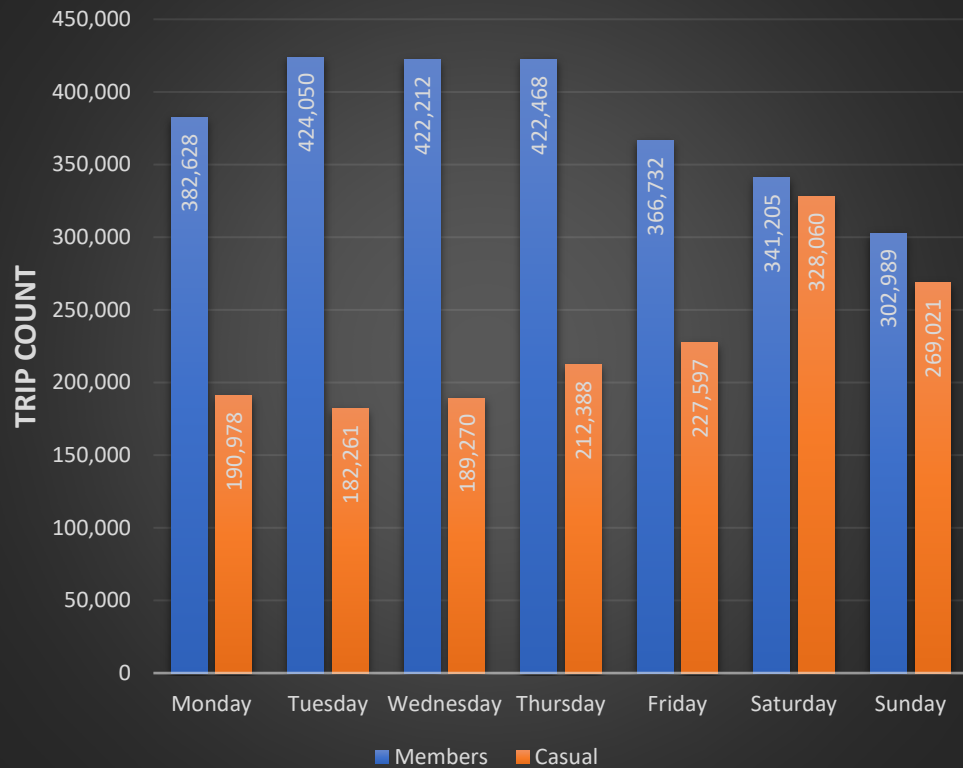 - SQL
  - Microsoft Excel

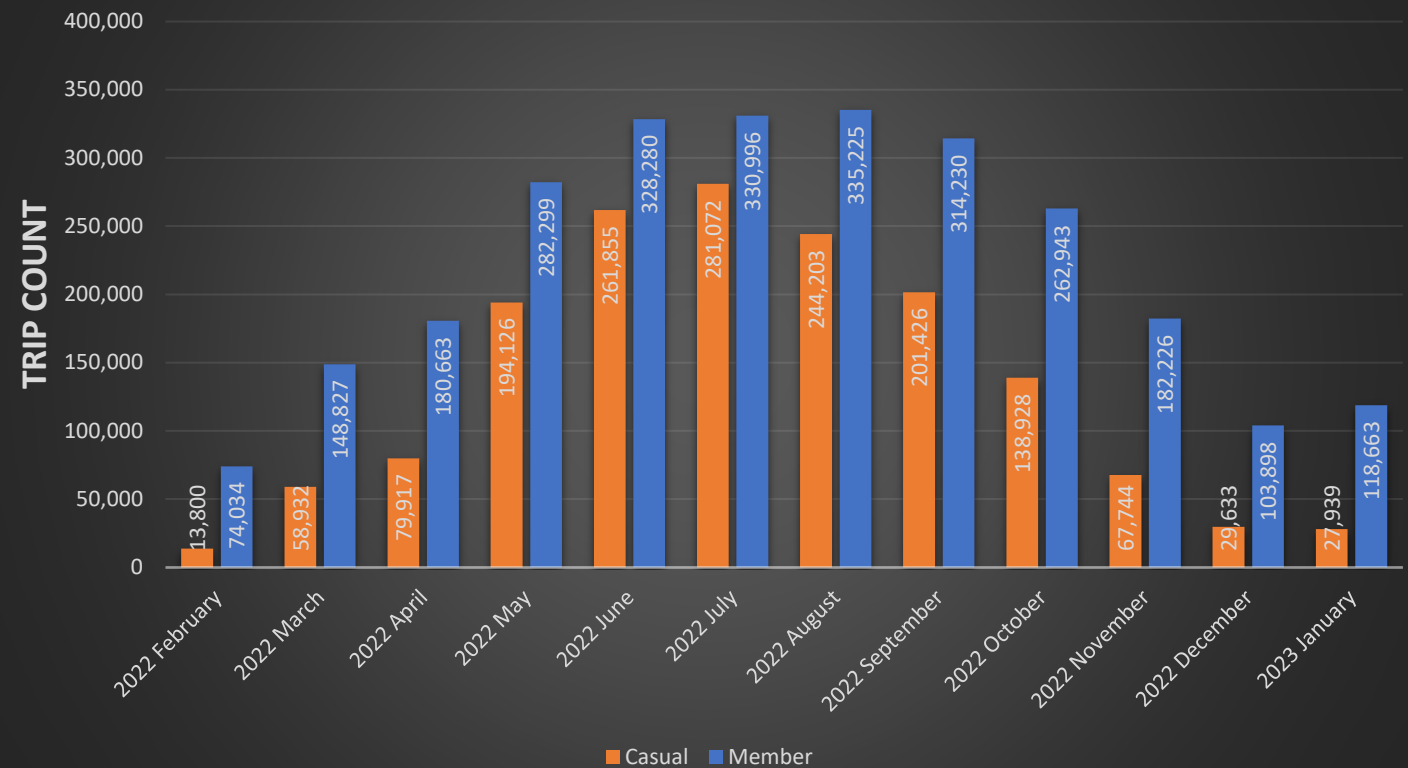- **Data Visualization**
  - Tableau
  - Microsoft Excel

- **Presentation**

Daily and Monthly Trip Data

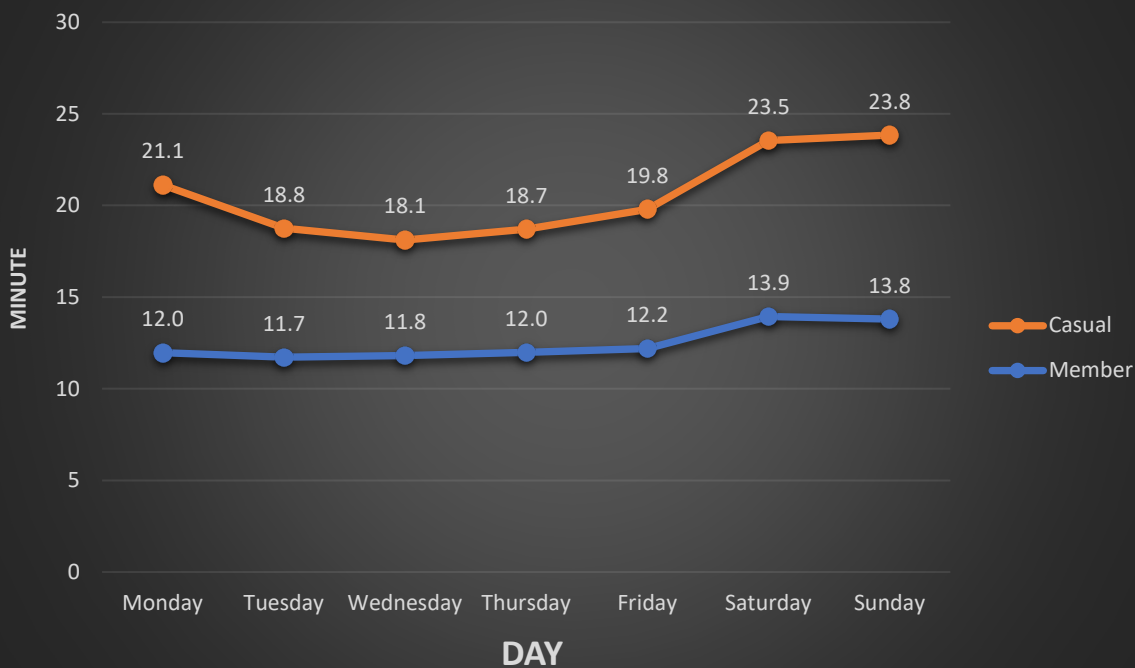# Daily and Monthly Trips - Findings & Implications

Findings

- Member trip counts are significantly higher Monday-Friday while casual trips are highest on the weekends

- Casual riders are more active during the summer months (May-August)

- Member monthly trips have smaller variance throughout the year

- Significant drop in casual trips in the winter season (December-February)
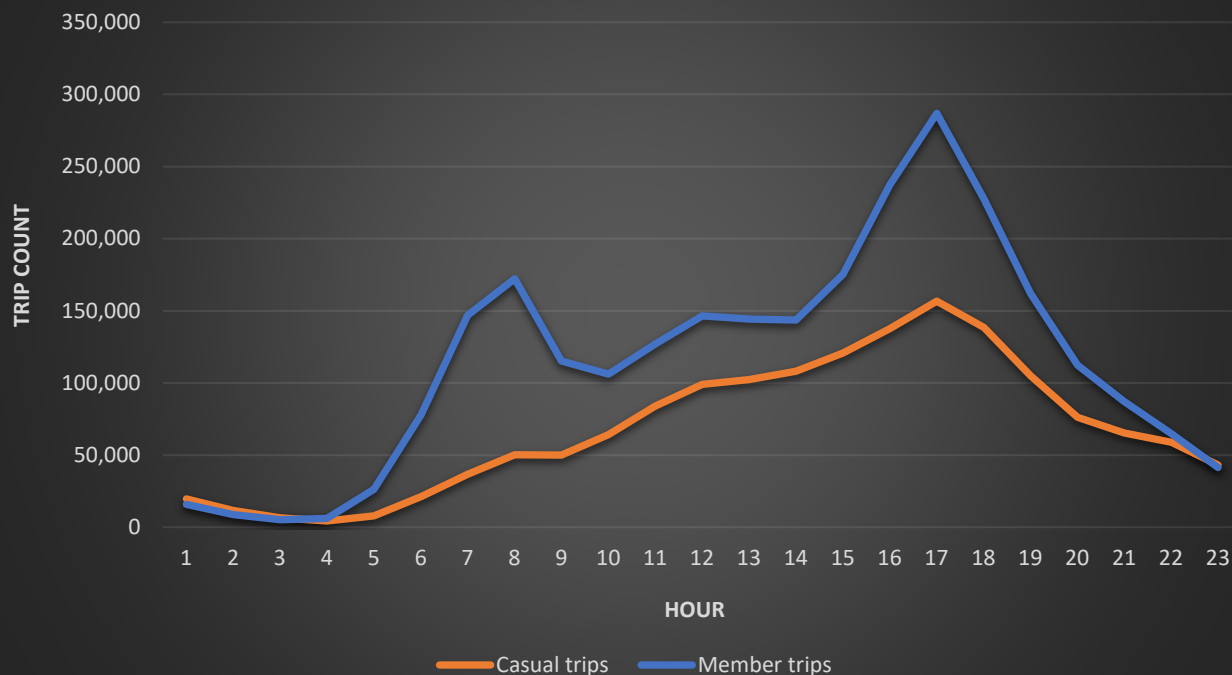
Implications

- Members use the service to commute (school, work, home)

- Leisure purpose for most casual trips – weekend usage and seasonality

- Younger demographic for members (further analysis required)

Daily Trip Breakdown - Findings & Conclusions

Findings

- Significant increases in member trips during rush hours (6-9am & 4-6pm)

- Low variance in member trip lengths Monday-Friday

- Casual riders spend more time on a bike on an average basis

- Average ride lengths are longer for both categories on the weekends

Conclusions

- These findings support our theory about members using the service to commute

- Regular, planned trips for members

- Casual users are more likely to be recreational riders using the service to explore an area

Top 10 Routes by Rider Types

Member			Casual		
Route - Member	Trip count	Average trip length	Route - Casual	Trip count - Casual	Average trip length - Casual
Ellis Ave & 60th St to University Ave & 57th St	6277	4.8	Streeter Dr & Grand Ave to Streeter Dr & Grand Ave	8273	35.0
University Ave & 57th St to Ellis Ave & 60th St	5979	4.8	DuSable Lake Shore Dr & Monroe St to DuSable Lake Shore Dr & Monroe St	4949	29.6
Ellis Ave & 60th St to Ellis Ave & 55th St	5574	5.2	DuSable Lake Shore Dr & Monroe St to Streeter Dr & Grand Ave	3834	25.4
Ellis Ave & 55th St to Ellis Ave & 60th St	5102	5.3	Michigan Ave & Oak St to Michigan Ave & Oak St	3554	40.7
State St & 33rd St to Calumet Ave & 33rd St	3490	4.7	Millennium Park to Millennium Park	2985	29.3
Calumet Ave & 33rd St to State St & 33rd St	3409	4.1	Streeter Dr & Grand Ave to DuSable Lake Shore Dr & Monroe St	2209	25.5
Loomis St & Lexington St to Morgan St & Polk St	3041	5.1	DuSable Lake Shore Dr & North Blvd to DuSable Lake Shore Dr & North Blvd	1951	30.2
Morgan St & Polk St to Loomis St & Lexington St	2991	5.4	Streeter Dr & Grand Ave to Millennium Park	1946	31.2
University Ave & 57th St to Kimbark Ave & 53rd St	2396	7.2	Montrose Harbor to Montrose Harbor	1930	42.5
Kimbark Ave & 53rd St to University Ave & 57th St	2140	6.9	Shedd Aquarium to Shedd Aquarium	1922	17.3
Average:	4039.9	5.4	Average:	3355.3	30.7

Top 10 Routes by Rider Types - Findings

- The top 10 member routes are all in "pairs."

    For example:

    o The #1 route is from the "Ellis Ave & 60th" station to the "University Ave & 57th St" station.

    o The #2 route is from the "University Ave & 57th St" station to the "Ellis Ave & 60th" station – the direct inverse.

    o This indicates a pattern most closely resembling a <u>daily commute</u> to and from a place of work or study.

- Majority of top 10 casual trips start and end at the same station – riders are exploring a specific area

- 20% higher total member trip count – casual routes are more sporadic

Recommendations

- Creating a **new membership plan** that offers better value for casual riders in lieu of single-ride or full-day passes

- Conducting a survey focusing on **casual riders** that are **taking the same routes as the most popular member routes on a regular basis** (Further analysis and data – "rider id" required)

- Targeting younger casual users (young professionals or students) with a social media campaign, detailing the benefits of being a member

Thank you for your time!