



# CYCLISTIC CASE STUDY

HOW ANNUAL MEMBERS AND CASUAL RIDERS DIFFER

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REV: MARCH 1, 2022

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### BACKGROUND

Cyclistic is a Chicago-based bike-share offering that features more than 5,800 bicycles and 800 docking stations.



### OBJECTIVE

Discover how Annual Members and Casual Riders use Cyclistic differently and provide insight towards a marketing strategy that will convert casual riders to annual members.

## SOURCE

- First-party data obtained from Divvy Bikes
- January 2021 to December 2021

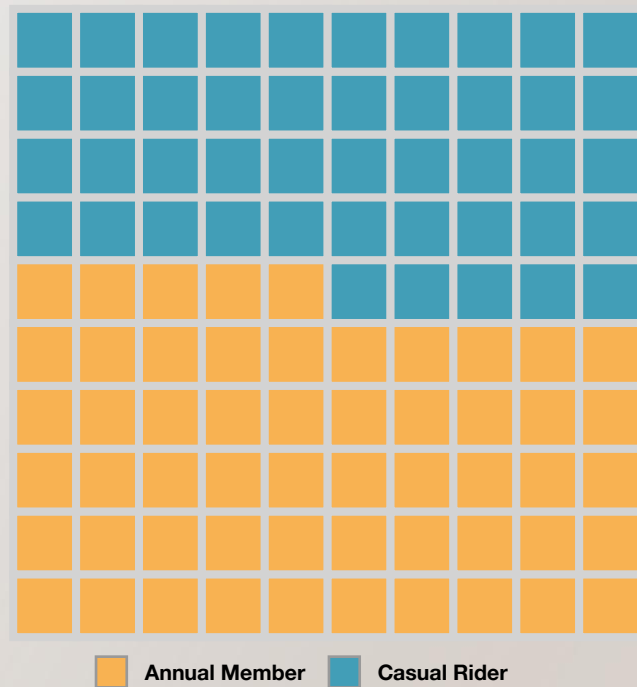
## PROCESSING

- Merged into full-year view
- Removed blank data and outliers

## OVERALL RIDES

### FINDINGS

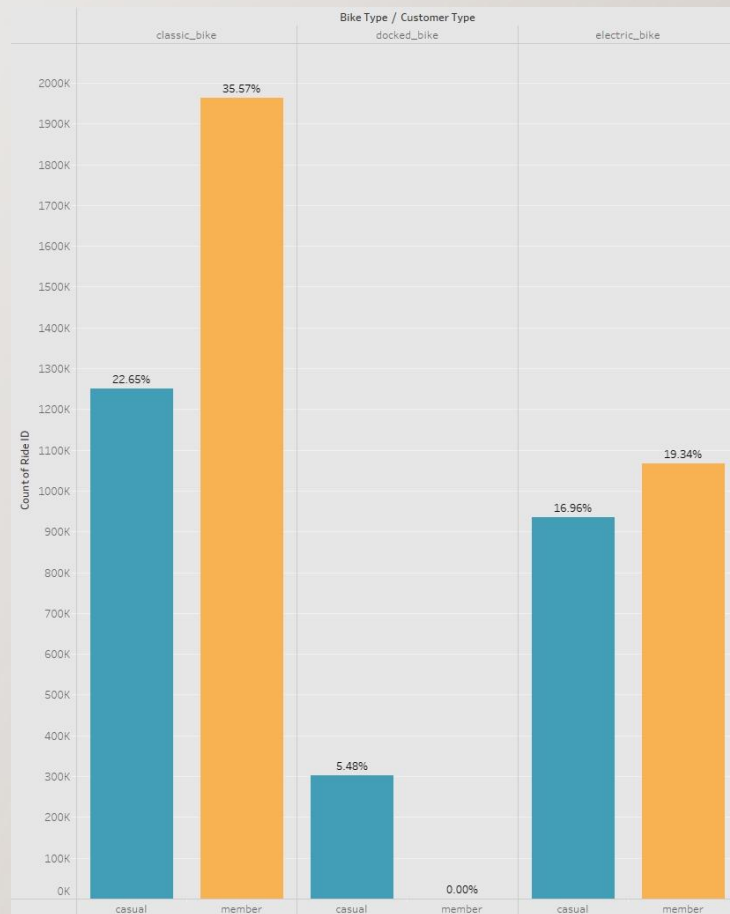
- 5,515,894 rides in 2021
- Annual Members take more rides
  - 54.91% of total rides taken by Annual Members
  - 45.09% of total rides taken by Casual Riders



## PREFERRED BIKE TYPES

### FINDINGS

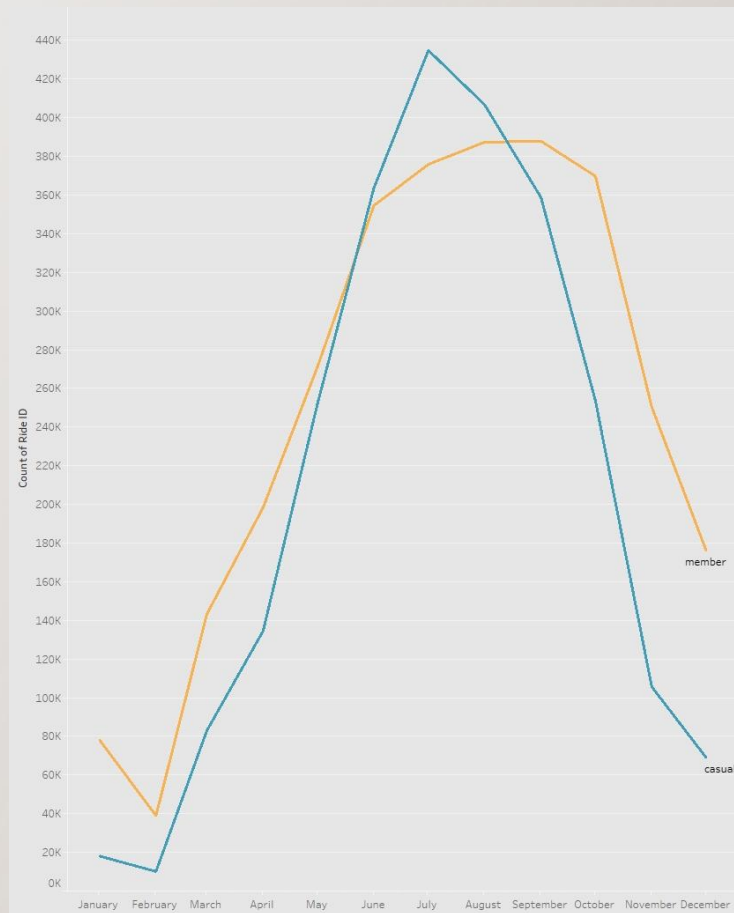
- **Both** customer types prefer **classic bikes**
  - Likely due to cost and availability
  - More data is needed



## RIDES PER MONTH

### FINDINGS

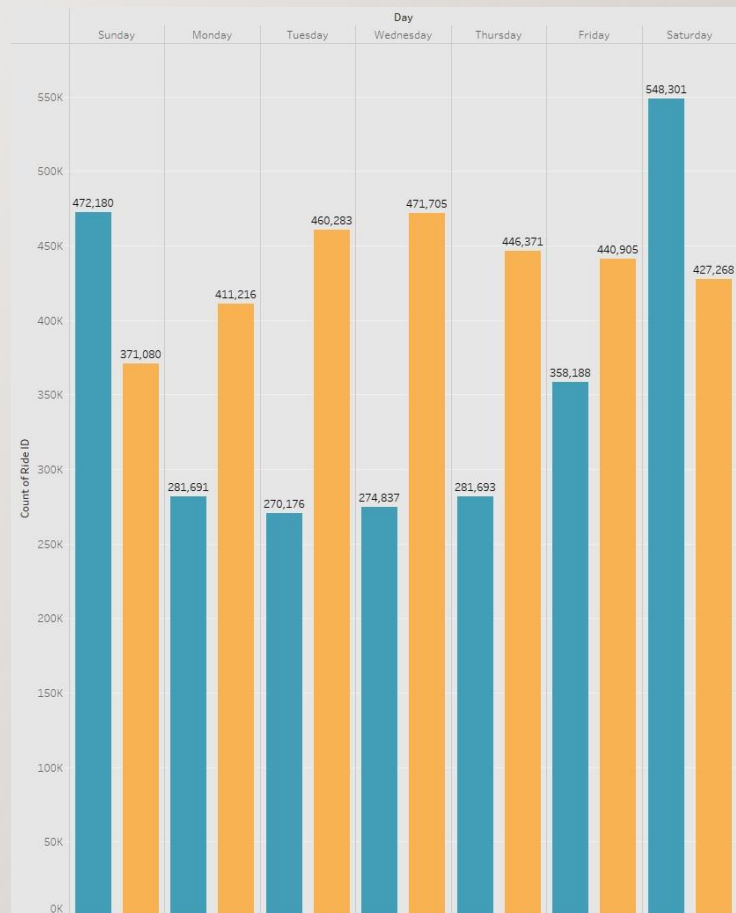
- **Total ridership dipped in Fall and Winter, but increased rapidly through Spring and Summer**
- Most popular period: **Quarter 3** (July, August, September)
- Weakest month: February (48k rides)
- Peak month: July (810k rides)
- **Casual Riders** surpassed **Annual Members** by **4.10% in July**



## RIDES PER DAY

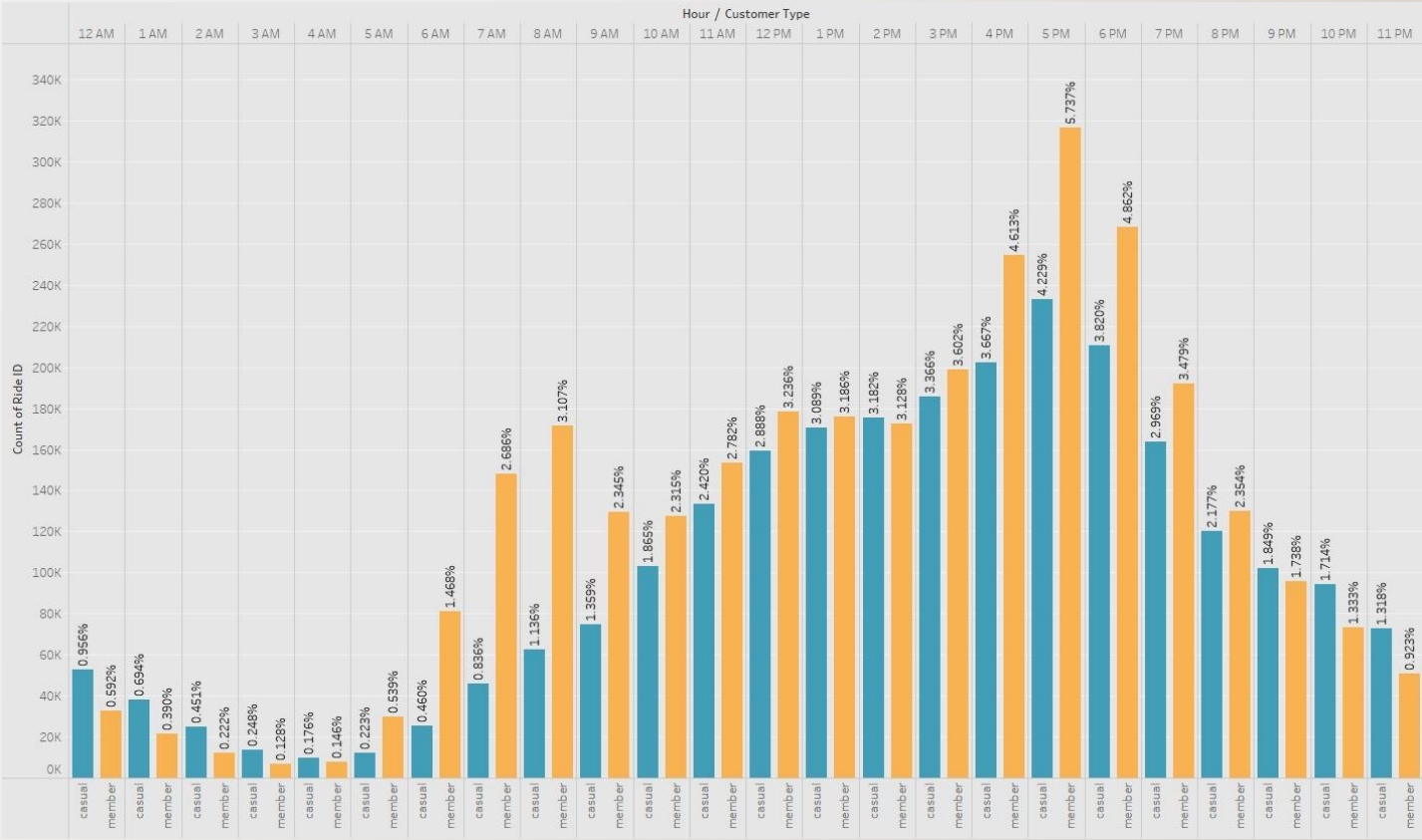
### FINDINGS

- **Annual Members** consistently ride each day of the week, but **prefer weekdays**
  - Most popular day: Wednesday
- **Casual Riders** prefer weekends
  - Most popular day: Saturday





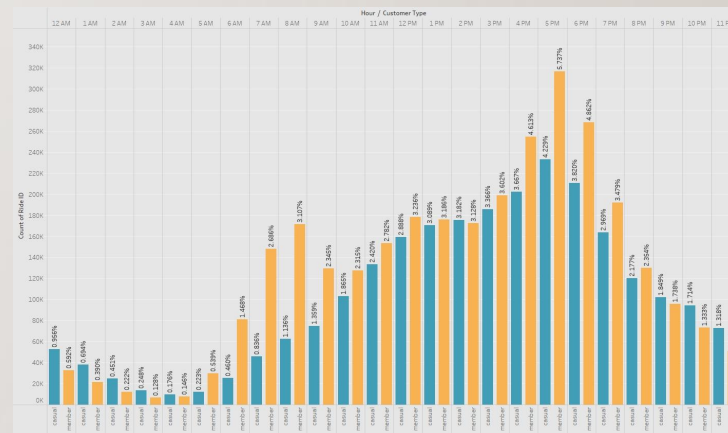
RIDES PER HOUR



## RIDES PER HOUR

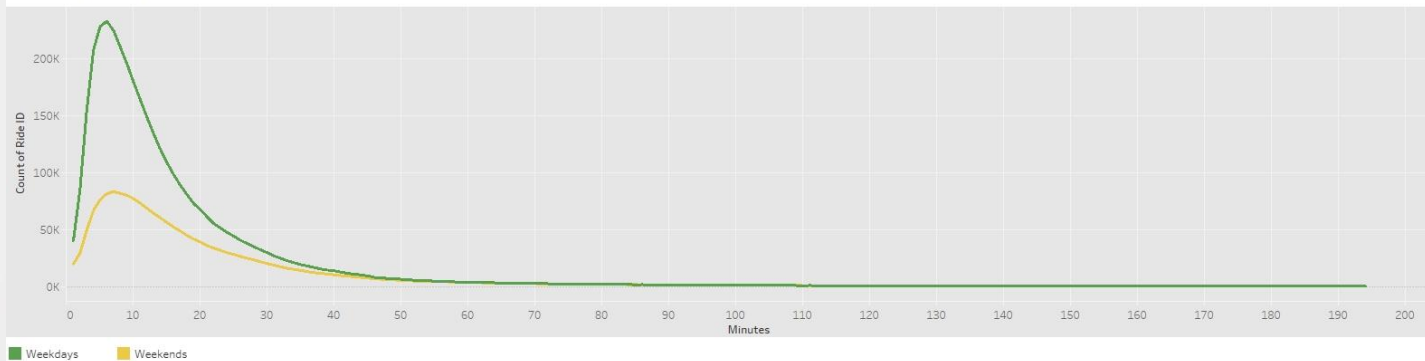
### FINDINGS

- Most **Annual Members** prefer biking in the morning between **7AM** and **8AM**
- Most **Casual Riders** prefer biking in the afternoon between **3PM** to **6PM**
- Ridership for **both** customers **peaked** at **5PM** and **dipped** to their lowest between **3AM** to **4AM**
- Ridership for **Casual Riders** surpassed **Annual Members** between 9PM and 4AM

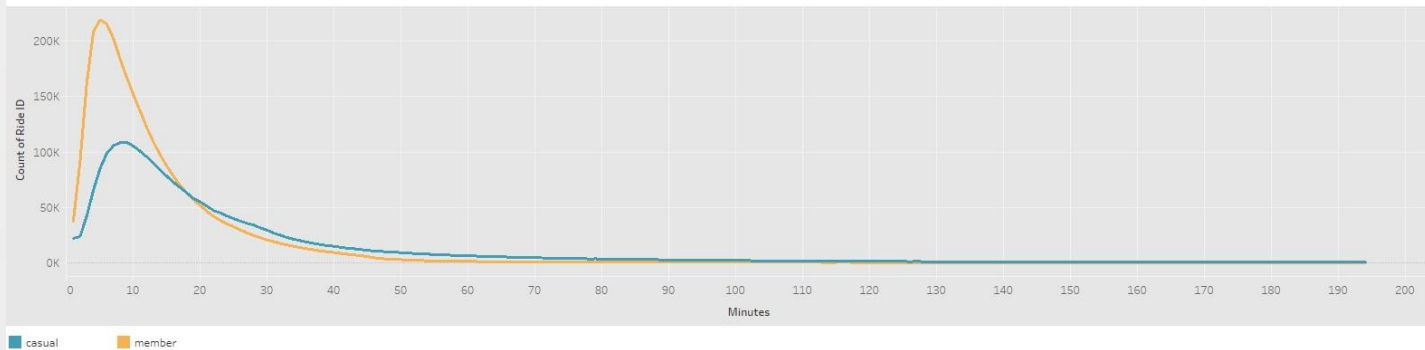


## AVERAGE RIDE TIMES

Ride Lengths by Day



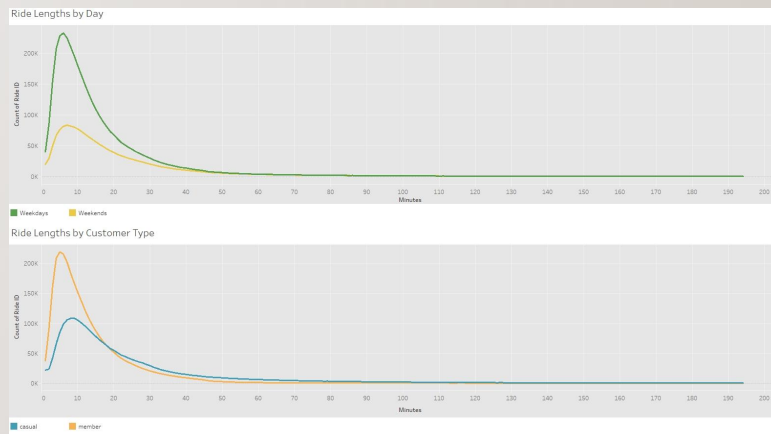
Ride Lengths by Customer Type



## AVERAGE RIDE TIMES

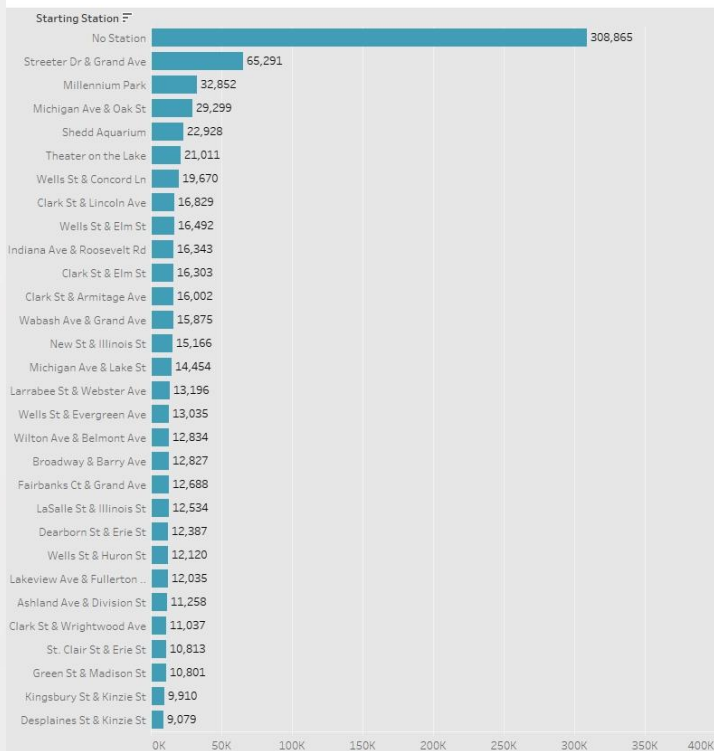
### FINDINGS

- Average ride duration: **00:18:14**
  - **Annual Members**
    - Average ride duration: **00:13:05**
    - Most common duration: **5 minutes**
  - **Casual Riders**
    - Average ride duration: **00:24:30**
    - Most common duration: **9 minutes**
- **Annual Members** had **shorter** average ride times on the **weekends** versus **Casual Riders**
- Most rides on **weekdays** lasted **6 minutes**
- Most rides on **weekends** lasted **7 minutes**

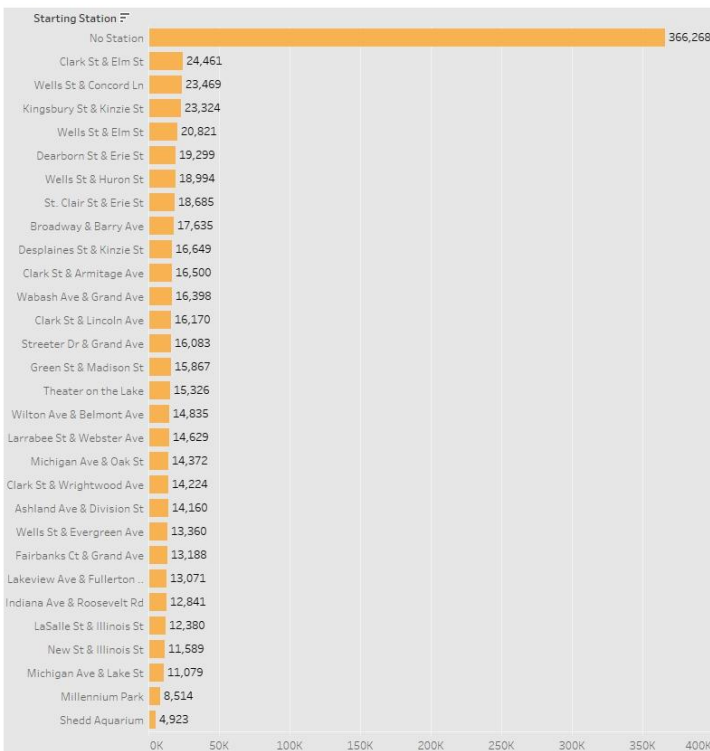


## TOP 30 STARTING STATIONS

Top 30 Casual Customer Starting Stations

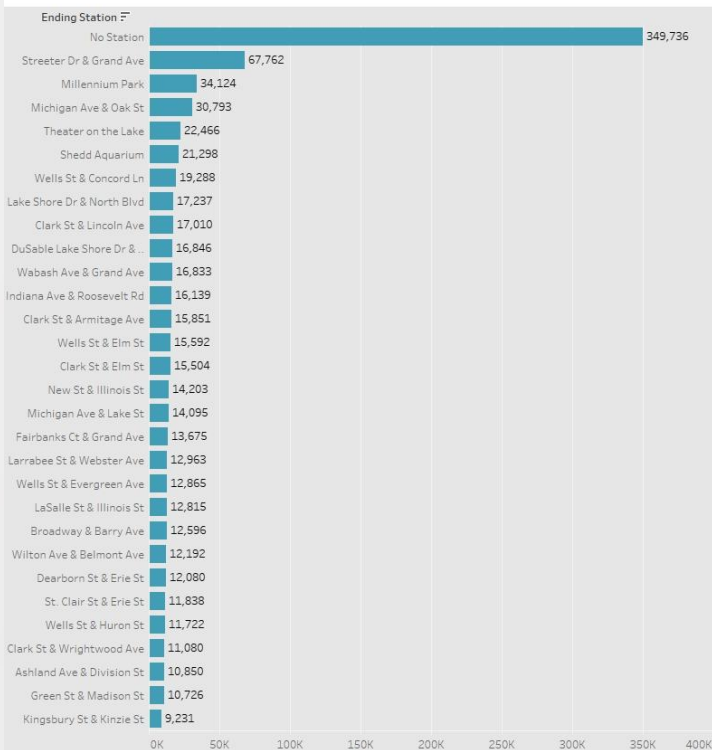


Top 30 Annual Member Starting Stations

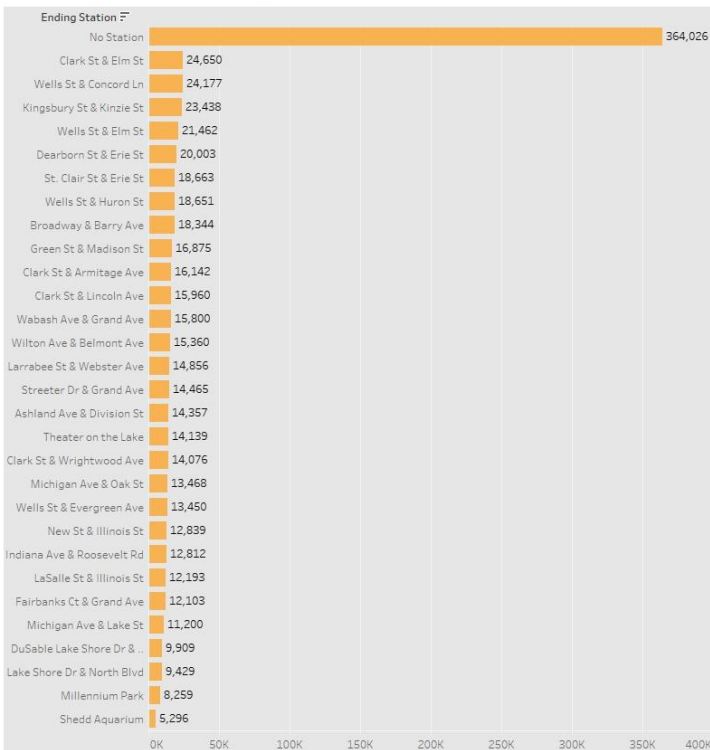


## TOP 30 ENDING STATIONS

Top 30 Casual Customer Ending Stations



Top 30 Annual Member Ending Stations

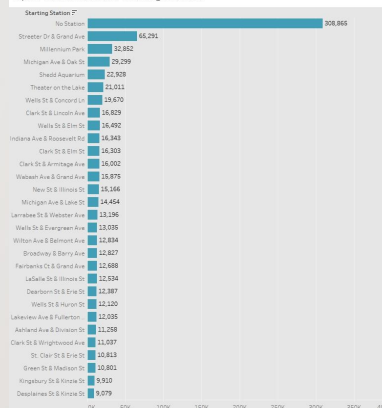


# PREFERRED STATIONS

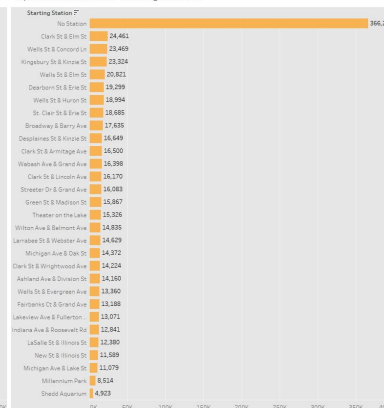
## FINDINGS

- The most popular starting point for **both** customer types was at a **non station**
- For **Casual Riders**
  - The preferred starting and ending station was **Streeter Dr. and Grand Ave.** (29,959 starting rides, 67,762 ending rides)
- For **Annual Members**
  - The preferred **starting station** was **Wells St. and Concord Ln.** (8,511 rides)
  - The preferred **ending station** was **Clark St. and Elm St.** (24,650 rides)

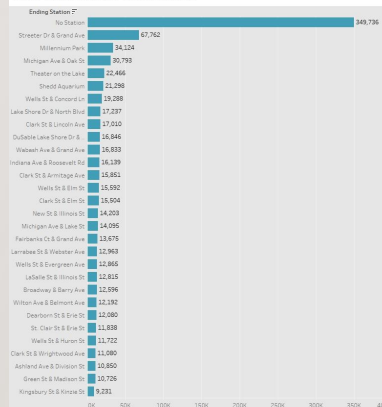
Top 30 Casual Customer Starting Stations



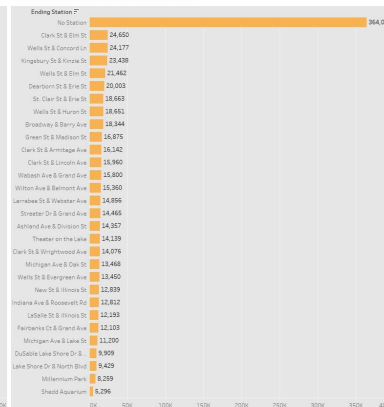
Top 30 Annual Member Starting Stations



Top 30 Casual Customer Ending Stations



Top 30 Annual Member Ending Stations



## SUMMARY

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### Annual Members

- Ride to commute, likely live in Chicago and commute to work with bikes
- Prefer shorter rides in the morning and after work hours
- Mainly rent bikes at Clark St. and Elm St.

### Casual Riders

- Ride for leisure, likely includes a large portion of tourists
- Prefer longer rides in the afternoon and during the weekends
- Mainly rent bikes at Streeter Dr. and Grand Ave.



## RECOMMENDATIONS

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1. Create advertisements around casual customers' most popular stations aimed at converting them into annual members.
  - Ideally, these advertisements would be displayed during Spring and Summer, and showcase how much casual customers would save by becoming an annual member.

## RECOMMENDATIONS

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2. Introduce a points-based rewards system that lets annual members earn points for taking rides and referring others to purchase a membership. Members can use these points to redeem rewards such as:
  - A free ride they can give out to friends and family
  - Cyclistic/Divvy merchandise
  - Coupons and Discounts at retail stores and restaurants partnering with Cyclistic/Divvy
  - Day passes
  - Time limit extension credits
    - i.e.: If a ride lasts 48 minutes and a member has 3 minutes worth of extensions, they can apply all of or a portion of their credits to avoid the \$0.15/minute fee.
  - Waived monthly payments

## RECOMMENDATIONS

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3. Offer a discounted annual membership targeting tourists and individuals who live outside of Chicago.
  - This will encourage tourism in the city and increase ridership at the same time.

## FURTHER ANALYSIS

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I would like to see additional data that:

- Ties rides to customer profiles
- Lists whether a ride was purchased with a day pass
- Shows minute-by-minute GPS tracking of bikes



# THANK YOU.

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## CONTACT

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GitHub: <https://github.com/kenny-t-tran>

## RESOURCES

GitHub Repo: <https://github.com/kenny-t-tran/cyclisticbikeshare>

Tableau Dashboard: <https://shorturl.at/itxCK>