

# NYC CITIBIKE RIDER STATISTICS



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# WHO USES CITIBIKE, AND HOW?

Bike-sharing has become a major part of urban transportation in cities like New York.

## What is CitiBike?

- CitiBike serves both commuters and casual riders
- Offers classic and electric bikes
- Usage likely varies by rider type and day of week

## Motivation:

- Helps CitiBike optimize bike distribution
- Informs pricing and membership strategy
- Reveals whether CitiBike is used more for commuting vs. recreation



# THE DATA!

Our findings are based on a dataset provided on the CitiBike website, collected by the company itself.

- Collected from CitiBike stations all across NYC
- Observations show:
  - Location + time of each bike ride
  - Type of bike (electric vs. not)
  - Rider membership status (member vs not)
  - More!

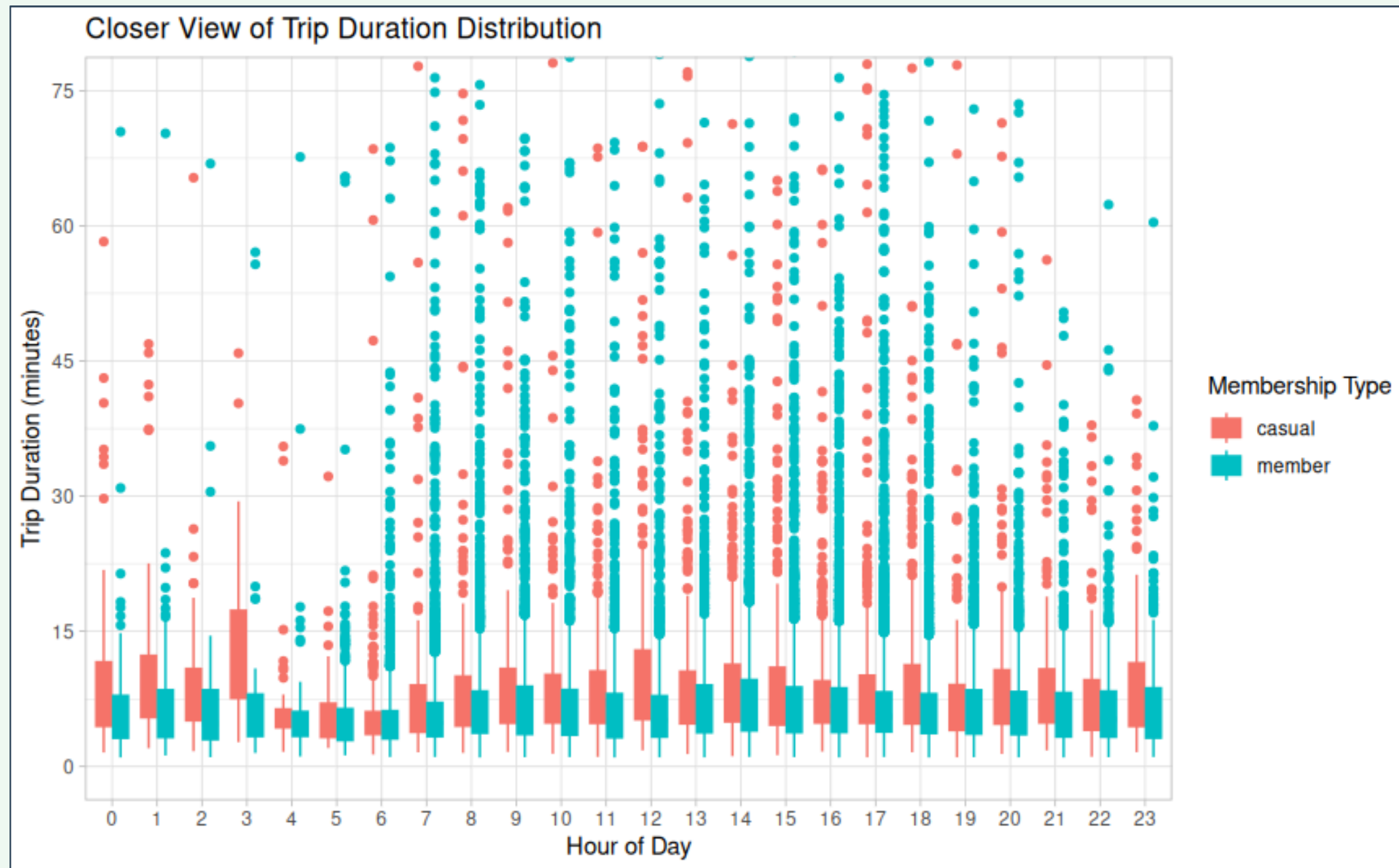


# RESEARCH QUESTION

- How do CitiBike trip durations differ by rider membership status and bike type?



# Trip Duration by Membership Type

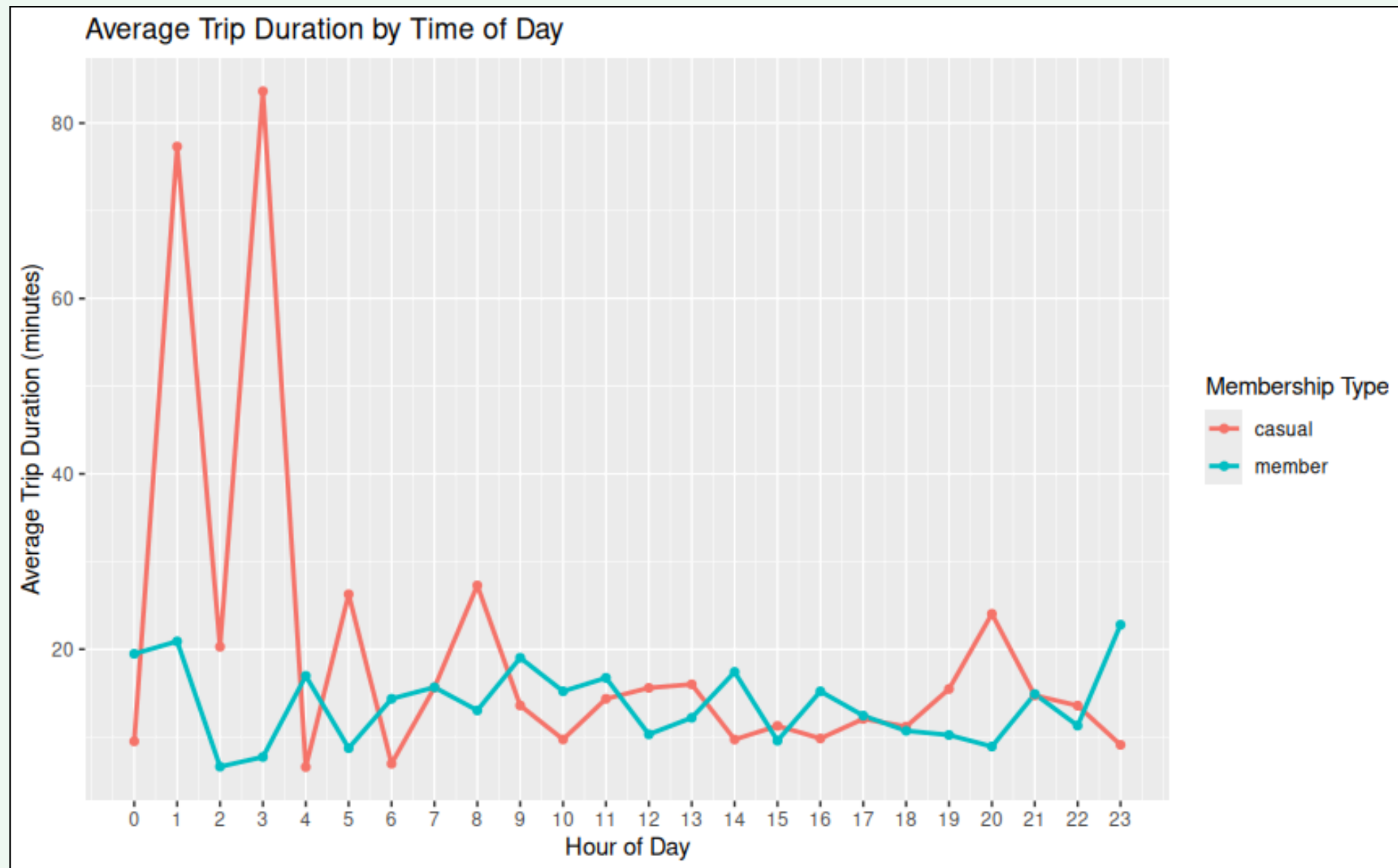


→ “Casual” riders take longer trips than members

→ “Casual” riders display greater variability in trip duration

→ *Members* show shorter and more consistent trips

## *Trip Duration by Time of Day*

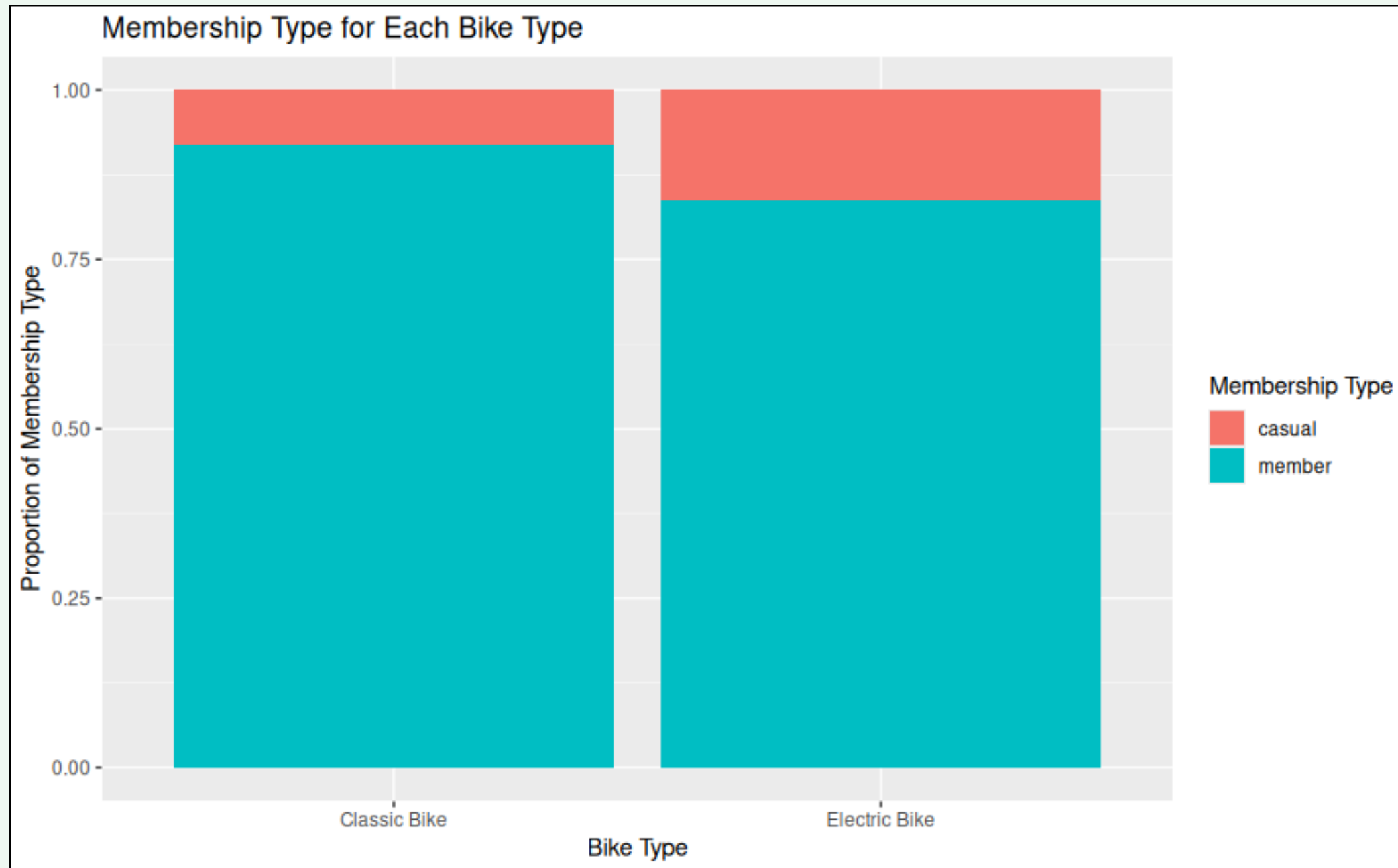


→ Member trip durations remain stable throughout the day

→ Casual riders show large variation across hours

→ Peak durations for casual riders occur late at night (1–3 AM)

# Usage Patterns and Distribution



→ Electric bikes are used more frequently than classic bikes

→ Most trips are under 250 minutes

→ Some extreme outliers exist (up to ~1500 minutes)

# CONCLUSION

- **Members have more consistent trips while casual rider trips have much more variance in trip duration and time of day** → Why would this make sense?
  - Most people who would buy a membership know that they have consistent commutes to account for (ex: every morning to school or work) whereas casual riders are more spontaneous
- **Electric bikes are more popular**
  - Much easier to ride, less effort especially for longer rides
- **Most trips are not too long, but there are certainly outliers**
  - Over a certain time limit, you get charged per minute
  - Bikes may be stolen or lost (I've definitely seen some around the city)
- **Many casual rides were around 1-3 AM**
  - At those times, it may be hard to find Ubers/Lyfts + public transit runs in very spaced out intervals (wait time could be 1 hour+ for a train)

# DISCUSSION / CRITIQUE

Did not analyze relationship between **trips** and **day of the week** (as originally proposed)

→ Dataset provided **dates** rather than days of the week, would have been complicated to convert

It's easy to prescribe causes for the data and their relationships, but the data and graphs are simply numbers – our proposed reasons are just hypotheses.

Our dataset strictly applied to January 2026 – it could be totally different for other months, years, seasons





**THANK YOU!**

