



How do annual member and casual riders use Cyclistic bikes differently?



Summary

Overall, annual members and casual riders differ most in ride usage by day of the week and average ride length.

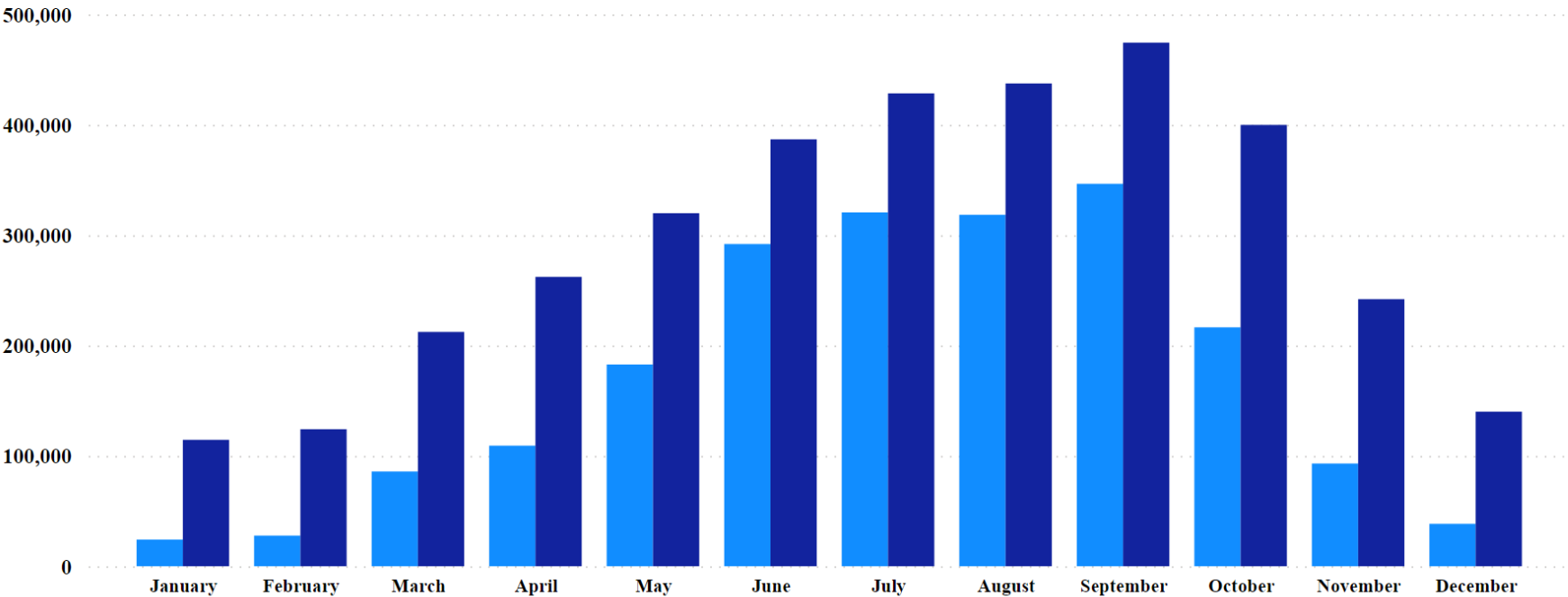
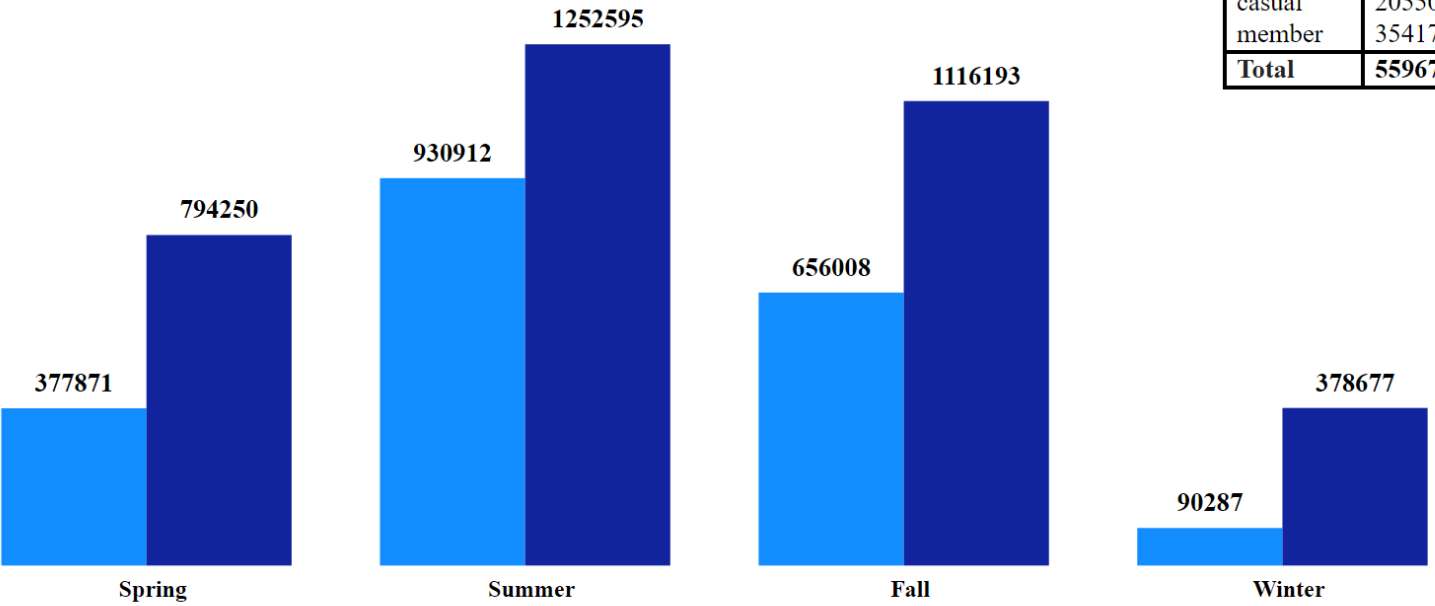
Members ride more on weekdays (over 10,000 rides) and less on weekends (still above 7,000), with short and stable rides of about 10 to 14 minutes.

Casual riders ride less on weekdays (4,300–5,000) and more on weekends (over 6,000), with ride lengths varying widely from about 15 minutes in winter to 26 minutes in summer, showing similar patterns by month, day, or hour.

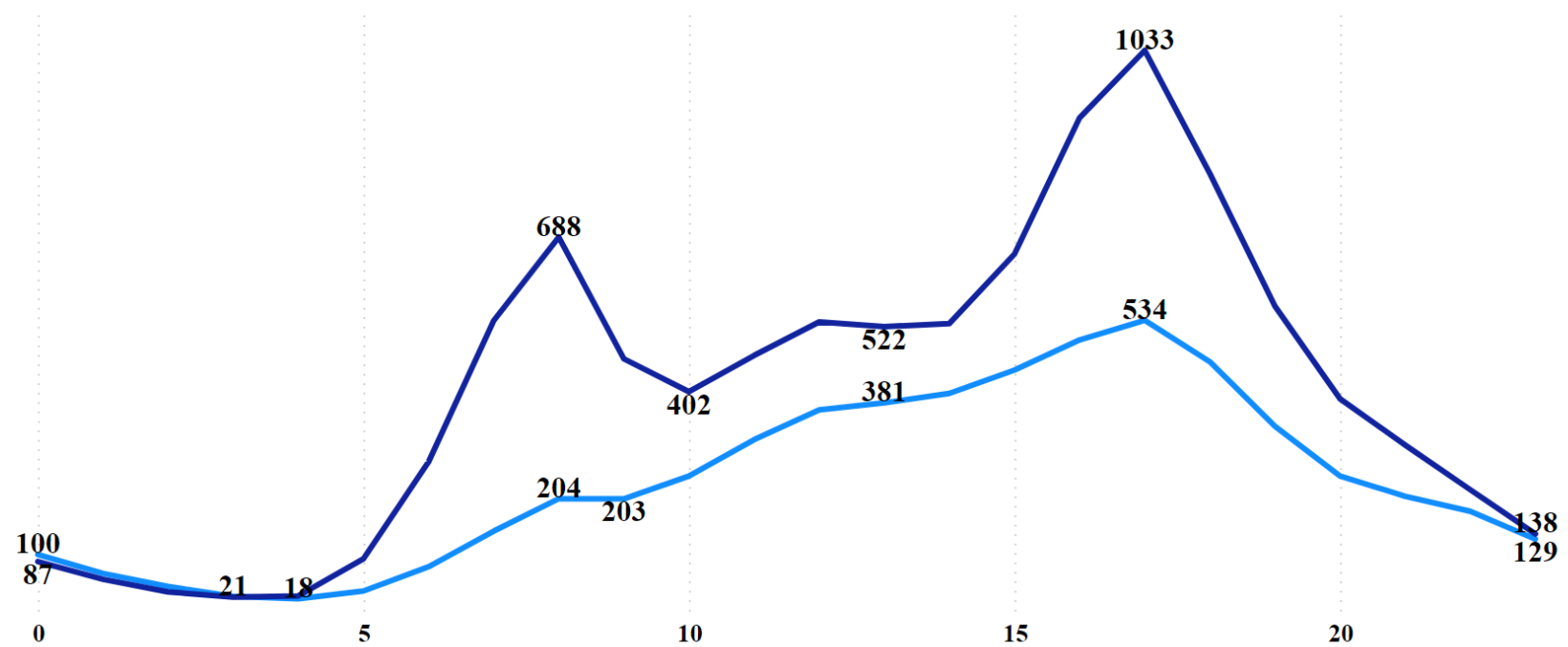
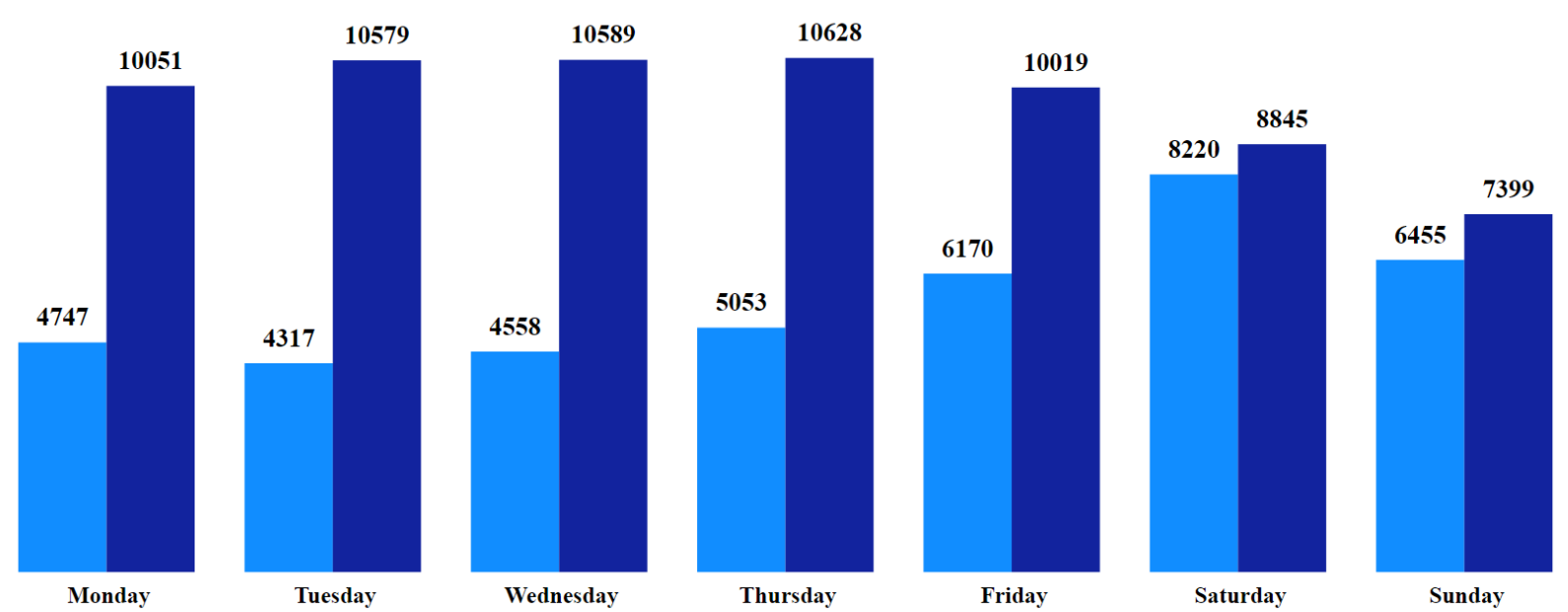
casual member

	Number of rides
casual	2055078
member	3541715
Total	5596793

When looking at different time periods such as seasons or months, ride usage is higher in seasons with favorable weather (summer and fall) than in winter and spring. The highest usage occurs in summer, and the lowest in winter. Overall, members consistently use the service more than casual riders across all seasons, showing the same pattern by month.



● casual ● member



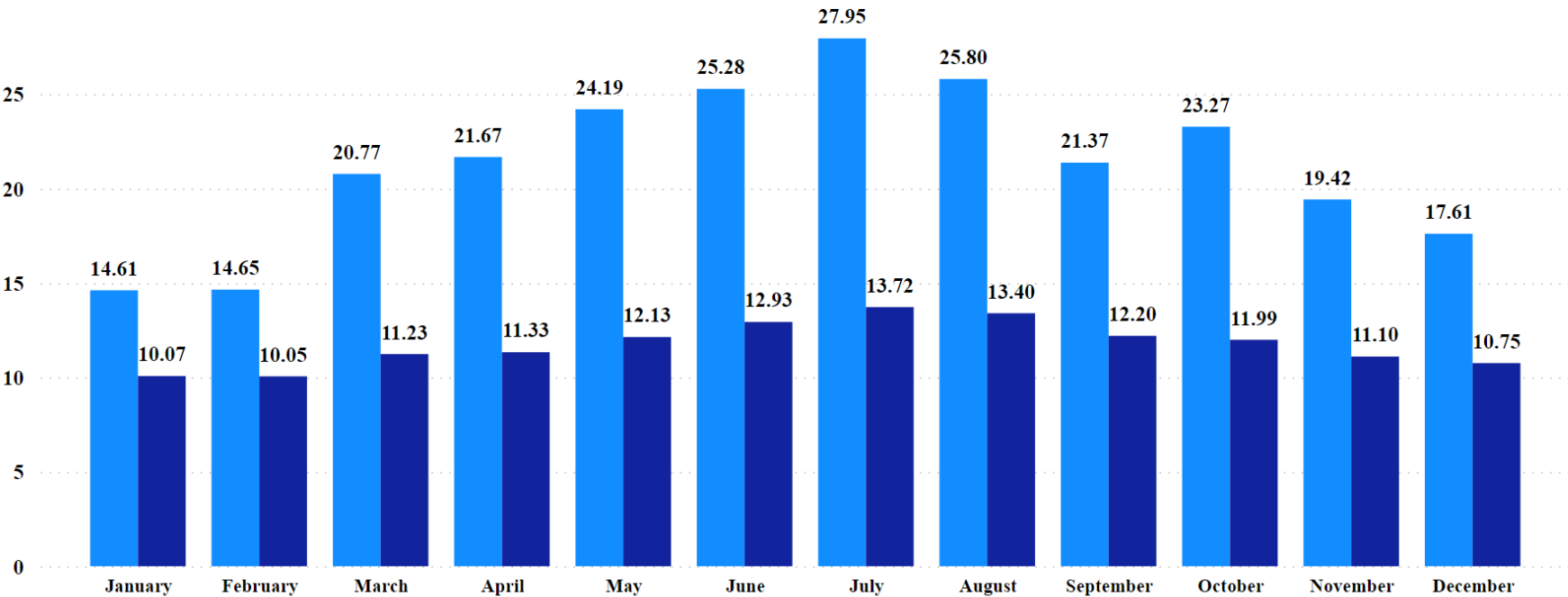
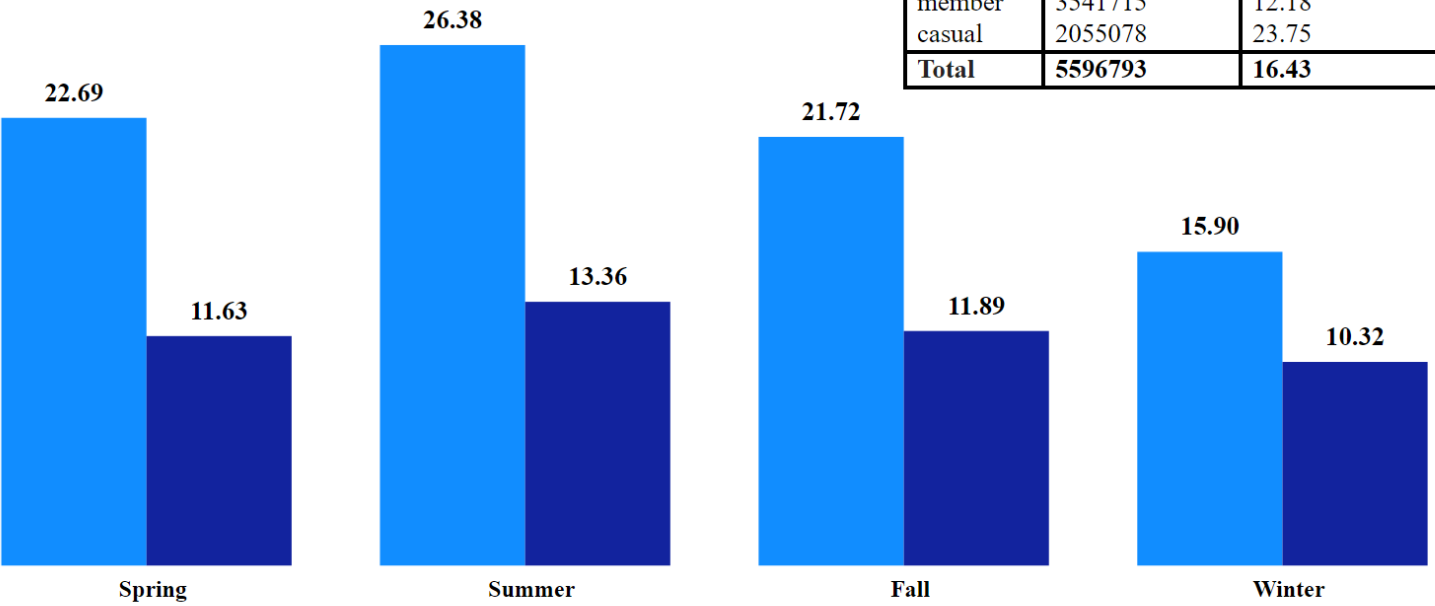
- When zooming in further, new insights can be observed:
- **Members:** The number of rides is stable during weekdays and drops slightly on weekends, though still relatively high. Across the day, usage peaks at:
 - 7–8 a.m.: over 500 rides
 - 1–5 p.m.: increasing from over 500 to more than 1,000 rides at 5 p.m.
 - **Casual riders:** Ride numbers are fairly stable from Monday to Thursday, but only about half of members' usage. Usage increases during the weekend. Over the day, rides gradually increase from 5 a.m., peak at 5 p.m., and then gradually decrease.

● casual ● member

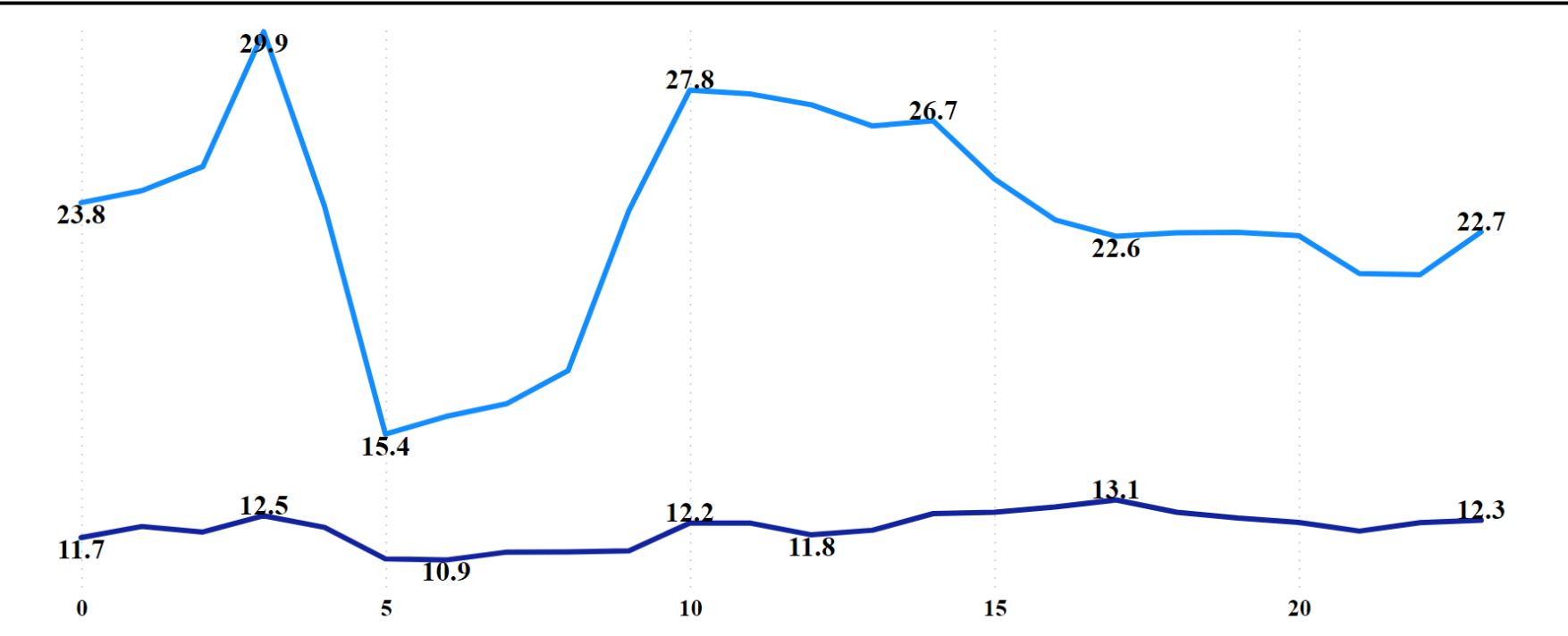
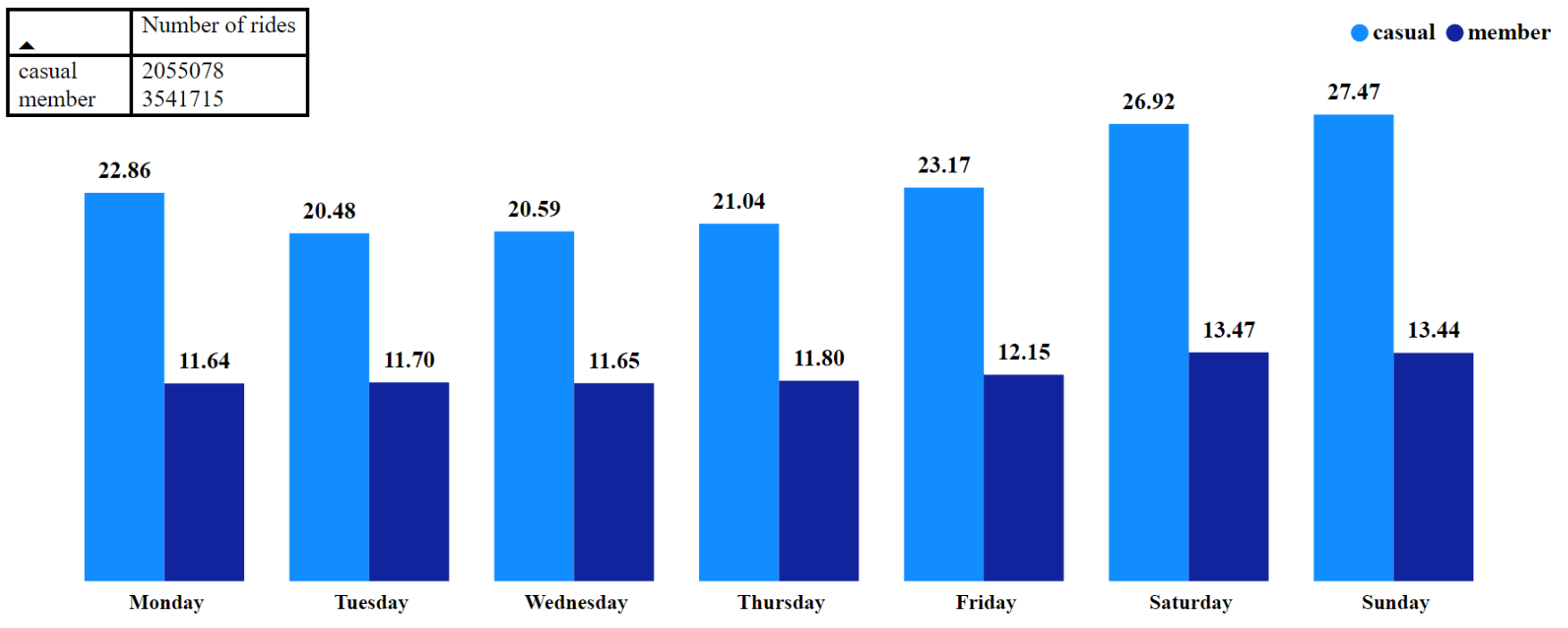
	Number of rides	Average ride length (minute)
member	3541715	12.18
casual	2055078	23.75
Total	5596793	16.43

Both groups show a clear seasonal pattern in average ride length. Rides are longest in summer, shortest in winter, and increase again in spring, which makes sense because winter weather limits long trips while summer is best for outdoor activities.

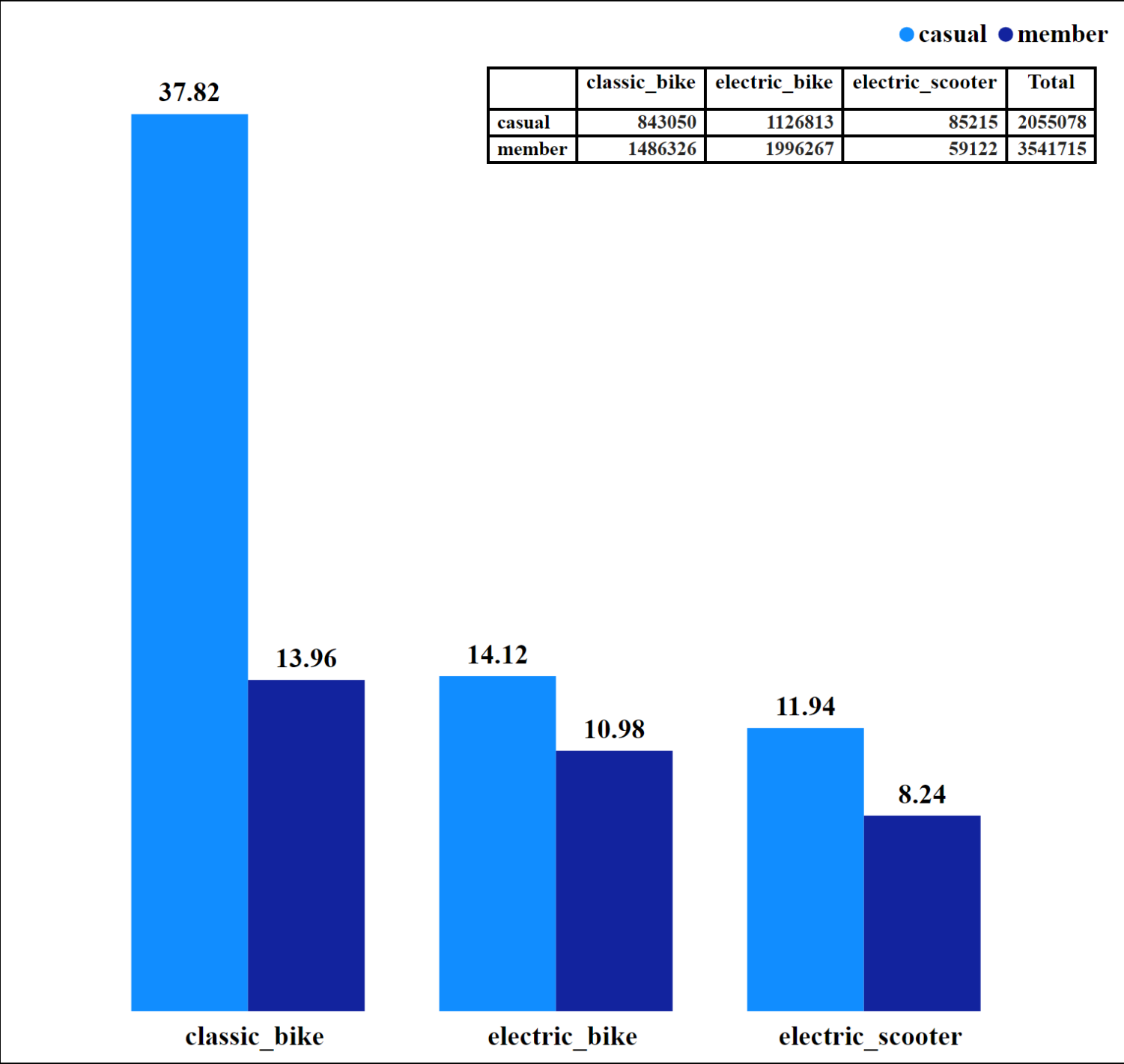
- **Casual riders:** Average ride length varies a lot, from 15.9 minutes in winter to 26.38 minutes in summer, a difference of about 10 minutes. Between months, the difference is around 3 minutes. For example, in spring, May is 24.19 minutes, April is 21.76 minutes, and March is 20.77 minutes.
- **Members:** The change is smaller, from 10.32 minutes in winter to 13.36 minutes in summer, a gap of about 3 minutes. Between months, the difference is only about 1 minute.



▲	Number of rides
casual	2055078
member	3541715



- Looking at the days of the week:
- Casual riders:** The average ride length is always above 20 minutes, reaching a maximum of 23 minutes on weekdays. On weekends, it rises to over 26 minutes.
 - Members:** The average ride length is quite stable on weekdays and increases slightly on weekends, with a maximum difference of only about 2 minutes.



Both groups show the same trend: classic bikes are the most popular, followed by electric bikes, and electric scooters are used least.

Members use classic bikes about 10.6% more than electric bikes, while casual riders use classic bikes about 11.6% more. Electric bikes are still used frequently, making them a preferred option.

Electric bikes may not be suitable for very long trips. The data supports this (see the bar chart), as casual users who choose electric bikes have an average ride length of about 14 minutes, much closer to members. This can help identify potential casual riders likely to become members.

Recommendations

Based on the current data, it seems that annual members use Cyclistic bikes for daily activities such as going to work, school, or exercising. This is reflected in their high and steady ride usage on weekdays and their short, consistent ride length. Casual riders may include people with similar purposes as well as visitors who ride for fun, sightseeing, or exploration, especially along Lake Michigan where biking is popular. However, these remain hypotheses, and more data is needed to confirm them. Therefore, I have the following recommendations for our future marketing program.

1. Collect more data about why customers use the service to test these ideas. This can be done by adding QR codes at docking stations or on bikes so users can take a short survey and get a discount after finishing it. Knowing their real purposes will help explain the differences between members and casual riders.
2. Based on current data, we can find criteria to narrow casual riders to those most likely to become members. These may include similar usage habits as members, short and steady ride lengths, and a preference for electric bikes. Casual riders using electric bikes ride about 12 minutes on average, and 54.8% of them used this type in the past year.
3. After finding the potential members, the next step is to understand what stops them from joining, such as a hard sign up process or high costs. Solving these problems will help answer why casual riders would buy Cyclistic memberships.
4. Finally, a simple website or application should be created so users can access it through QR codes on bikes or at stations. It can share new offers and make it easy for casual riders to see benefits that may encourage them to become members.