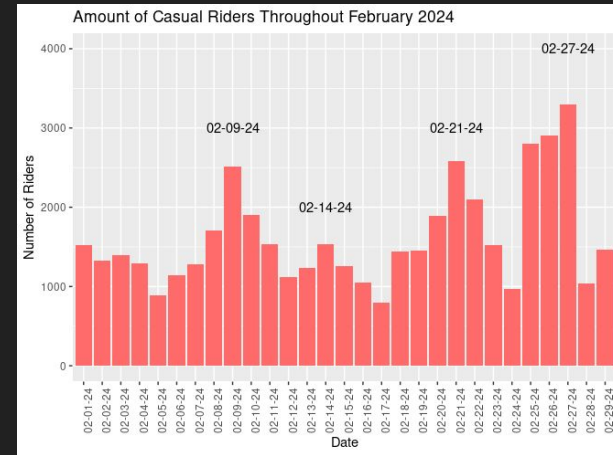
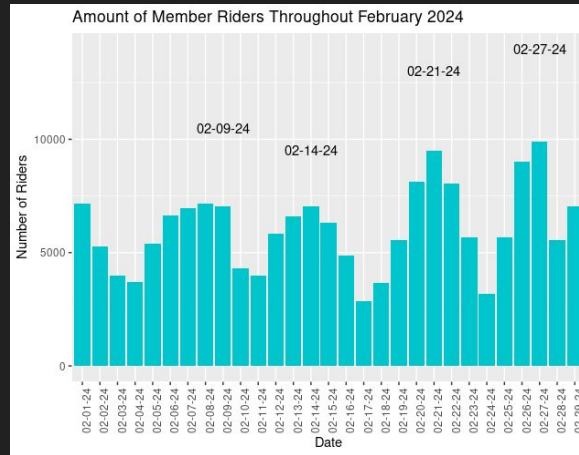


Now that I analyzed the data for usage throughout the day and where the usage is, I decided to analyze the days that we would see peak usage throughout the month. I hypothesize that the usage of bikes by casual riders would have a peak during federal holidays. This is because during federal holidays, casual members could spend their day off along the shore and viewing the Navy pier. As such, I believe that member riders would also see a decrease in usage on federal holidays as they no longer need to use cyclistic bikes as a mode of transportation to work.

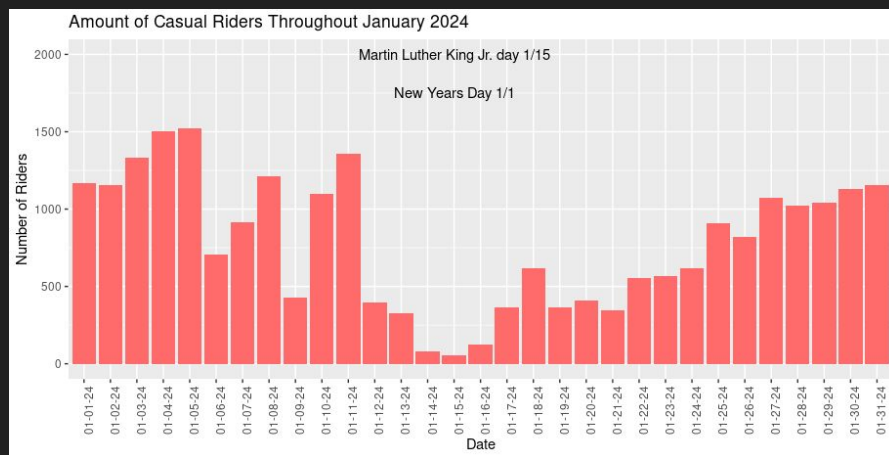
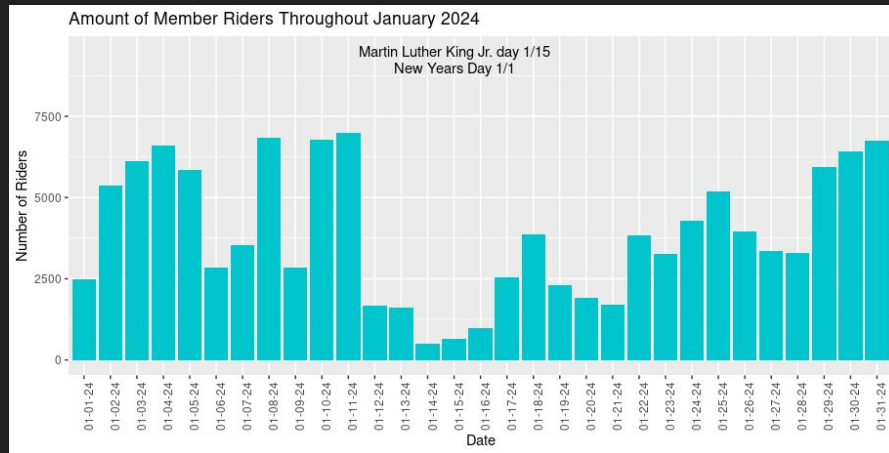
February 2024

In February 2024, 2/14 is valentine's day, 2/10 is chinese new year, 2/19 is president's day. During these days, we see no peak or decrease in usage so there seems to be no correlation between the peaks and holidays.



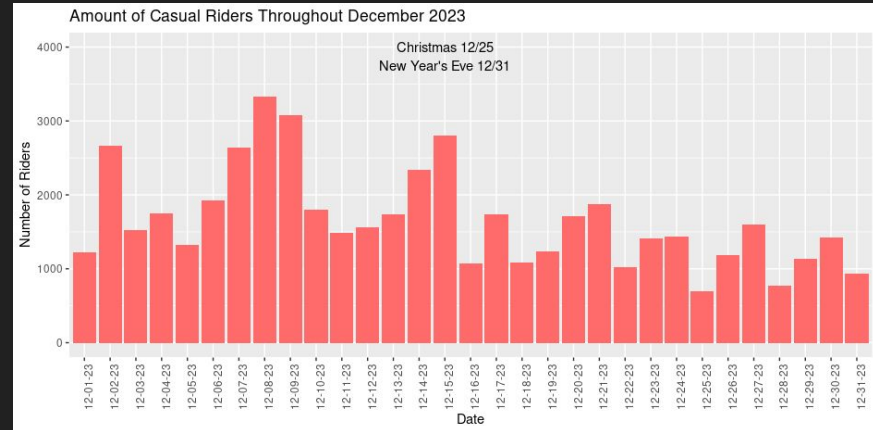
January 2024

In January 2024, Martin Luther King Jr. Day is 1/15 and New Years is 1/1. During these days, we don't see any peaks but rather a dip around 1/15 Martin Luther King Jr. day. Other than that there is no other correlation between peaks and holidays.



December 2023

In December 2023, Christmas is 12/25 and New Year's Eve is 12/31. During Christmas there seems to be a decrease in cyclistic bike usage. There does not seem to be any correlation between New Year's Eve and bike usage.



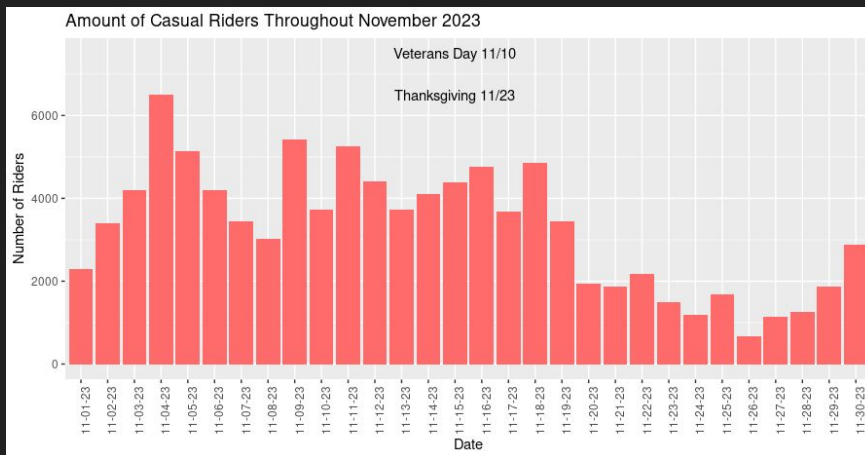
November 2023

In November 2023, Veterans Day is 11/10 and Thanksgiving is 11/23.

During Veterans day, there

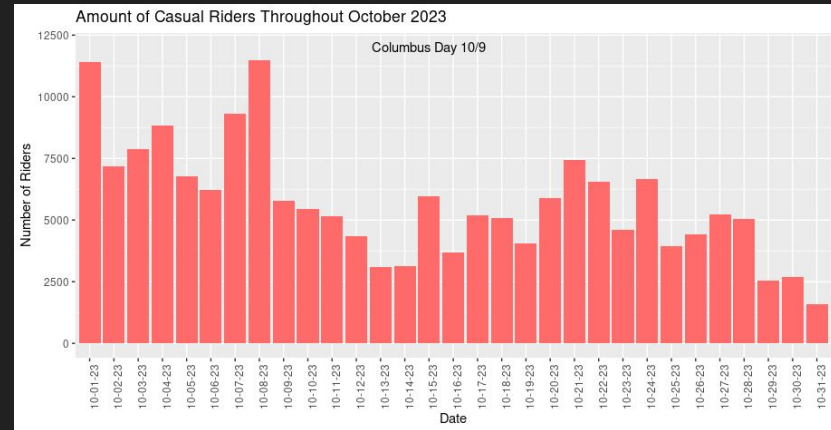
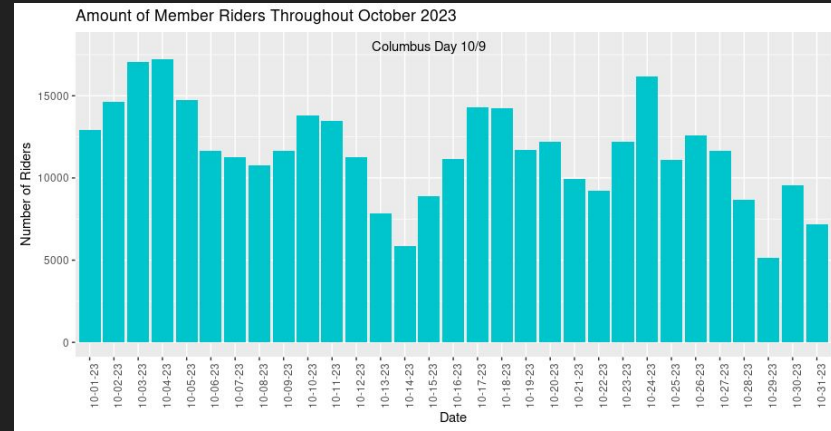
does not seem to be any correlation between that holiday and bike usage.

During Thanksgiving, there seems to be a local minima for member riders but not in casual riders.



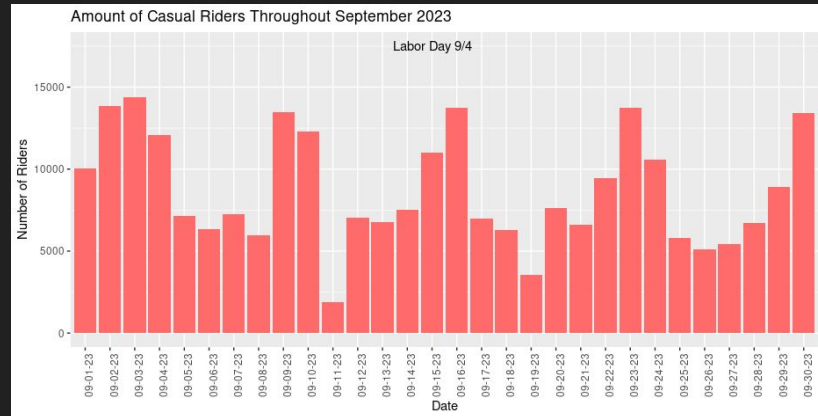
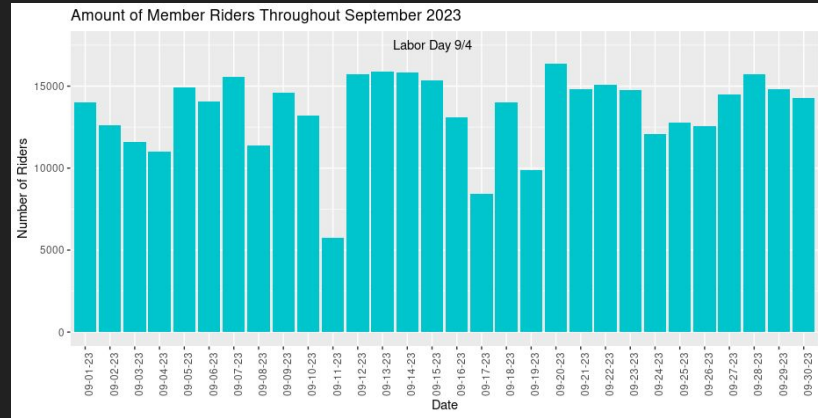
October 2023

In October 2023, Columbus day is on 10/9. During Columbus day, there does not seem to be any correlation between that holiday and bike usage whether it be a minima or maxima.



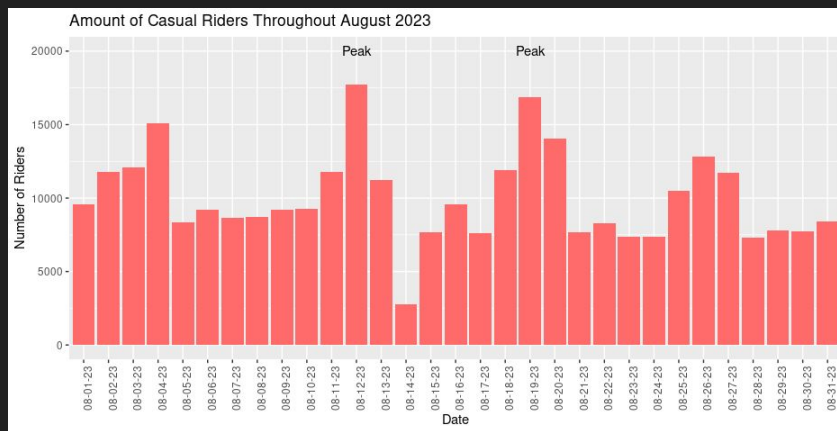
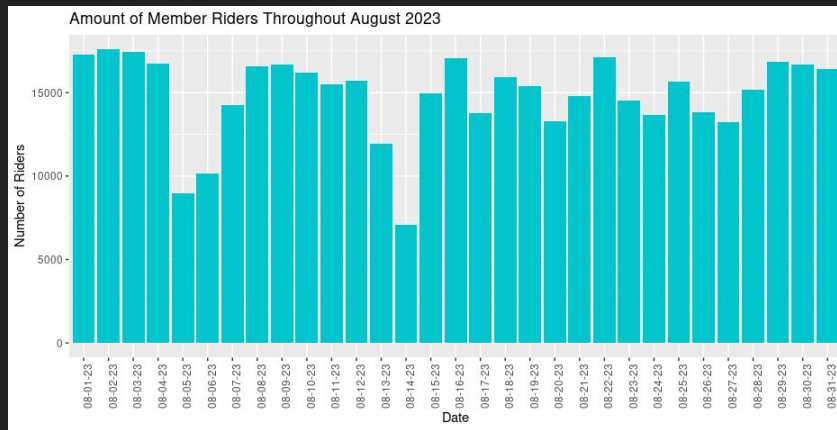
September 2023

In September 2023, Labor Day is 9/4. During Labor day, there there does not seem to be any correlation between that holiday and bike usage whether it be a minima or maxima.



August 2023

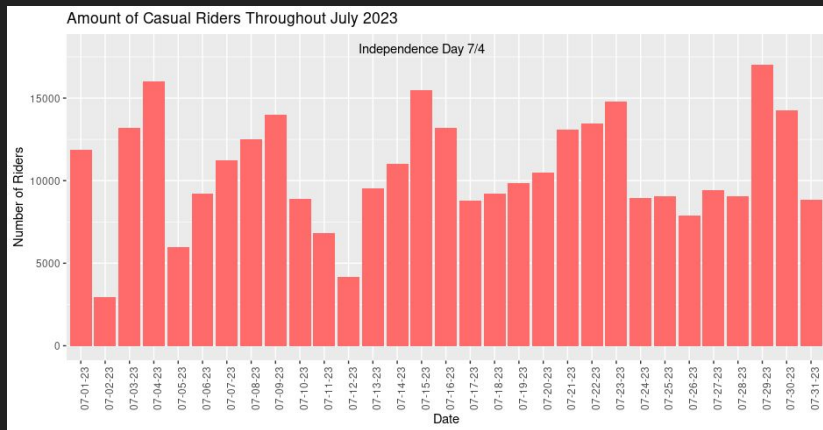
In August 2023, there is no holidays or significant dates. There seems to be two minimas at 8/5 and 8/14 for member riders. The reason behind these minima seem unknown as of now. For casual riders, there seems to be two peaks and a local minima. The two peaks are located on 8/12 and 8/19. The local minima is on 8/14. There does not seem to be any reason behind these minima and maxima as of now.



July 2023

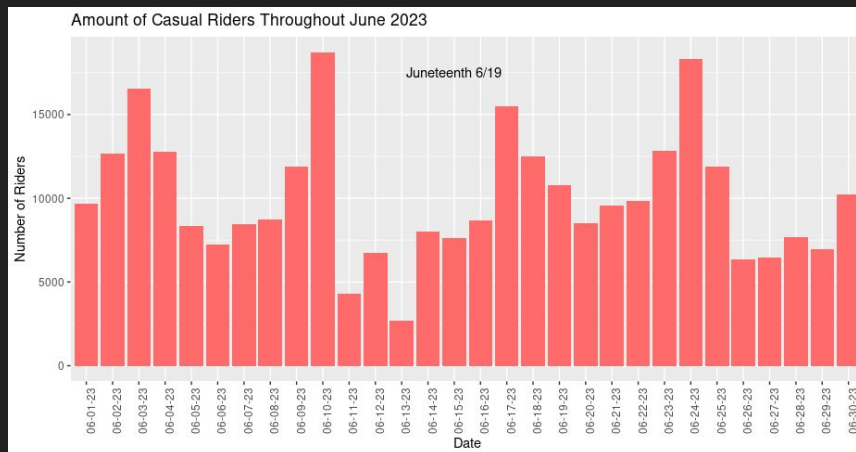
In July 2023, Independence Day is on 7/4. During 7/4, There does not seem to be any correlation between that day and member riders.

However, in casual riders, there seems to be a slight dip on 7/4. This dip does not seem significant enough to place a correlation between the holiday and the bike usage.



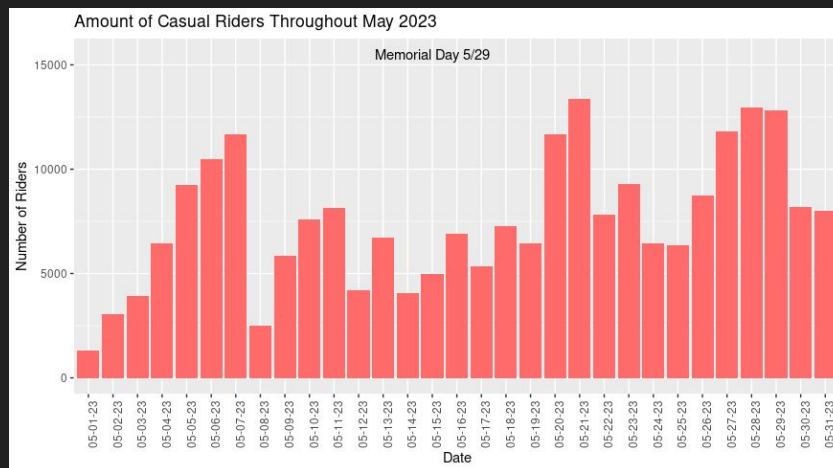
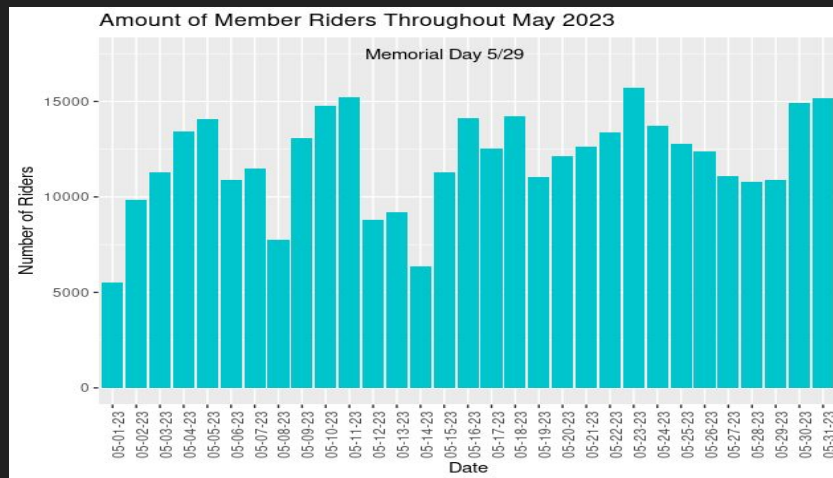
June 2023

In June 2023, Juneteenth is on 6/19. During 6/19, there does not seem to be any significant correlation between bike usage and that holiday.



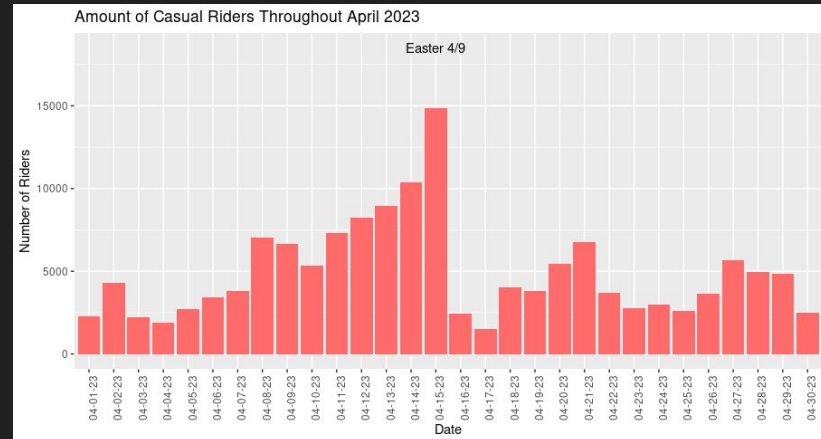
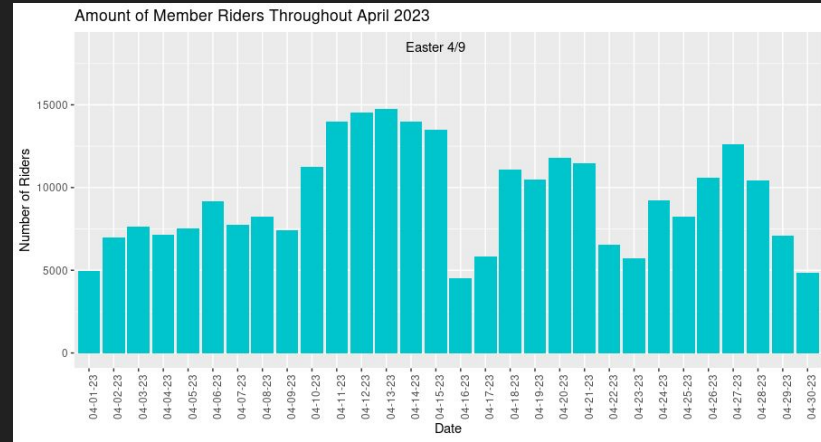
May 2023

In May 2023, there is Memorial Day on 5/29. During 5/29 Memorial Day, there does not seem to be any significant correlation between bike usage and that holiday.



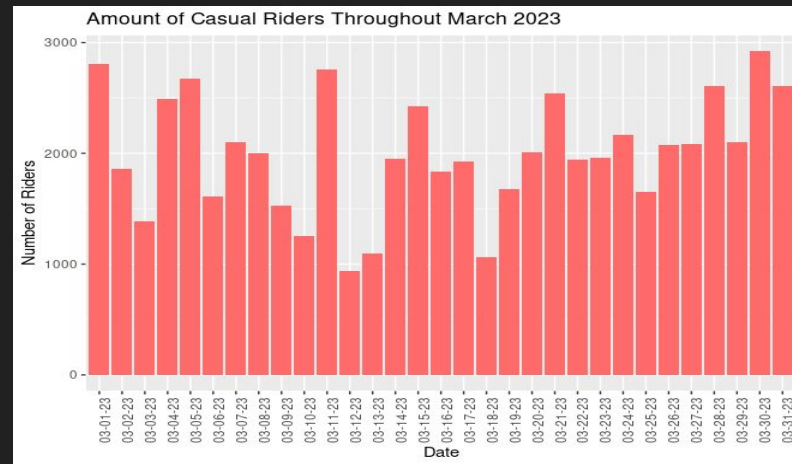
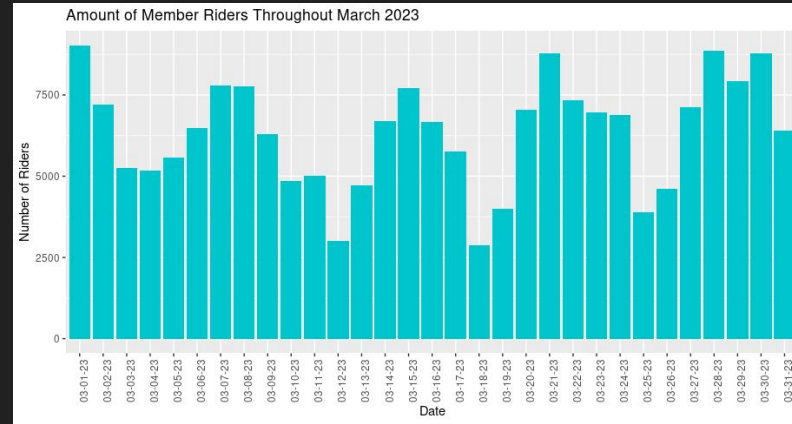
April 2023

In April 2023, Easter is on 4/9. On Easter 4/9, there does not seem to be any significant correlation between bike usage and that holiday. There seems to be a significant drop in bike usage in casual riders from 2/14 - 2/15. The reason behind this seems to be unknown as of now.



March 2023

In March 2023, there is no significant day or holiday. As such, we can't make any analysis between holiday and bike usage. However, despite not having any holidays or significant days, there seems to be stagnant bike usage in Member riders but in casual riders, there seems to be a significant peak on 3/11. The reason behind that peak is unknown as of now.



In depth

After analyzing the 12 months of bike usage throughout each month, there does not seem to be any significant correlation between holidays and bike usage. There seems to be another reason behind there being maxima and minima between the bike usages for casual and member riders. On some days like Christmas, there are minima for member riders so there might be a slight correlation between holiday and member riders decreasing. Nonetheless, this does not give us enough clarity as to how we can make casual riders more enticed into becoming member riders.