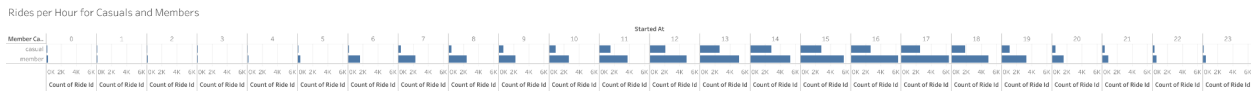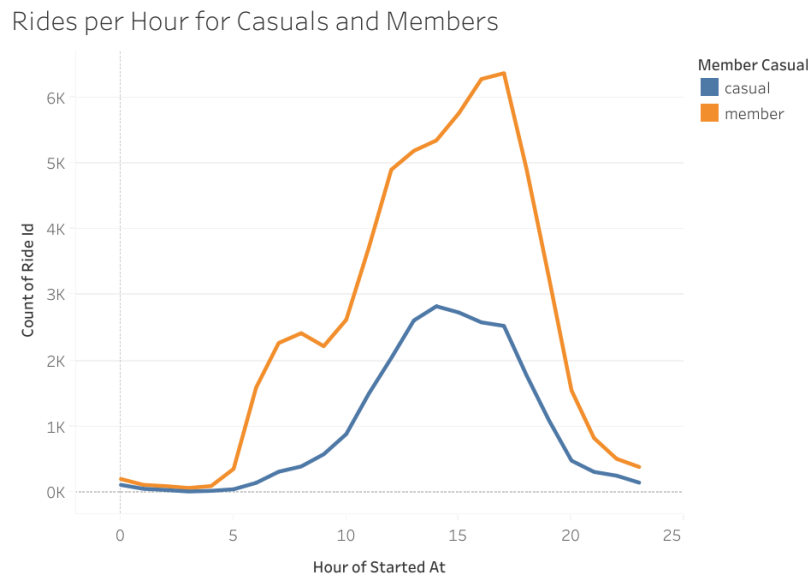Tableau:

Rides per Hour for Casuals and Members

This Tableau visual representation displays the amount of rides that Casual and Members riders make during each hour of the day. There are no significant differences between the peak hour of bike riding between Casual and Member riders.


This Tableau graph further solidifies that the timeframe for when both groups actively ride are practically identical. To be specific, both plots show upward trends from around 5 AM, and then they both peak between noon and early afternoon. Afterwards, both plots show downward trends as riding activities lessen towards the end of the day.

Excel:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6461	2717	3640	1812	2427	2512	4059
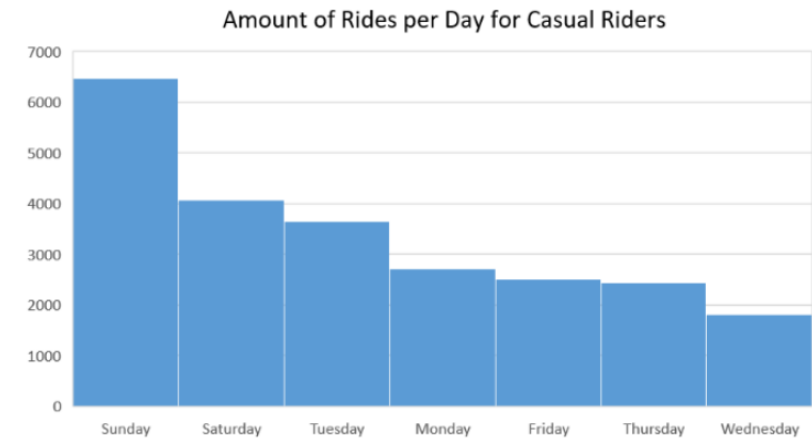
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11442	8061	9170	6918	9266	7455	8836

Amount of Rides per Day for Member Riders
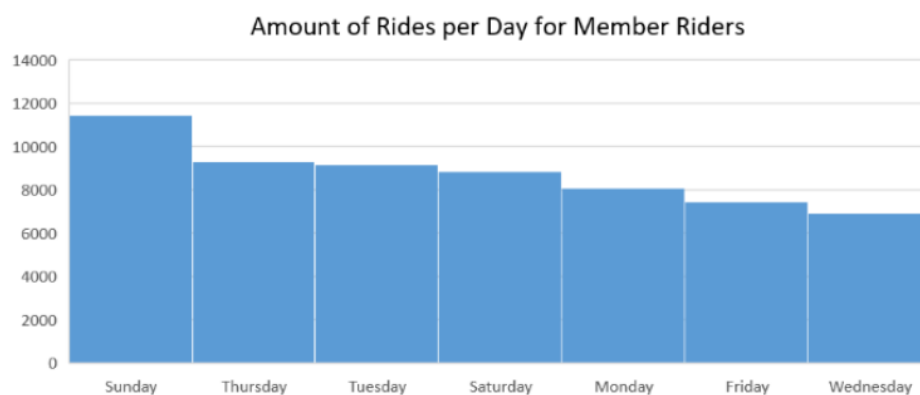
Average of ride_length	Column Labels						
Row Labels	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
casual	0:53:44	1:48:14	1:18:45	1:34:15	1:02:30	1:28:09	1:02:47
member	0:21:15	0:23:08	0:27:50	0:16:39	0:16:26	0:17:02	0:26:26

This pivot table clearly shows a distinct difference between the riding habit of Member and Casual riders. Looking at the displayed average ride lengths throughout the week, those of Casual riders tend to be far greater than those of Member riders.

Furthermore, this table contradicts the original assumption that Member riders buy their annual memberships because they ride "a lot". With further analysis, it was clear that the term "a lot" is a bit vague, since even though Member riders ride more often, Casual riders have longer trip duration. This stark difference can be due to the absence of the getting-your-money-worth mindset in Member riders, since they have an unlimited number of rides within the year. Nevertheless, such significant gaps can be related to the distance that both groups use the bikes for. As a result, by analyzing the habits of both Member and Casual riders, we can observe that Member riders are more willing to use their bikes for shorter rides in comparison to Casual riders.