**\* Throughout this summary, member customers will be represented as MEM, while casual customers will be represented as CAS. \***

1. In Visualization 1, we can see the 3 crucial pieces of data. Firstly, the preferred type of bike for each type of customer is shown.. By this, we can easily see MEM choose little to no docked bikes at all, while CAS do use docked bikes occasionally. In this chart we can also see the bike usage as it pertains to the weekday. Ride usage is highest on weekends for CAS, while MEM use bikes most often throughout the week, particularly on Tuesdays and Thursdays. The second piece of data to observe is the Average Ride Duration, which shows overall average ride time in seconds. This data shows the ride duration to be highest on weekends, especially on saturday. The third piece of data confirms the number of rides to fluctuate the week - more similarly mirroring those of the MEM.

*> CAS most likely represents fitness group, or those who tend to prefer only riding on weekend as a leisurely activity.*

*> MEM most likely represents group of residents, or those who rely on the biking as the primary mode of transport to/from work*

*throughout the week.*

*> MEM prefer classic bikes to electric bikes, CAS don't appear to have a certain preference, other than docked bikes being the certain minority.*

*> When looking at the visualizations, we can draw the conclusion CAS ride longer, while MEM ride more often. This would explain why the ride duration chart mirrors the CAS ride count bar chart, while the overall ride count line mirrors the trend of the MEM ride*

*count bar chart.*

1. In Visualization 2, we can observe the top 5 favorite starting stations for MEM & CAS as two pie charts by ride count. It is important to note the percentage shown is that of the top 5 sample, not the population. So in the CAS pie chart, "Streeter Dr. & Grand Ave." shares 40.5% of the top 5 sample.

*> CAS strongly prefer the station at "Streeter Dr. & Grand Ave." to other stations as their starting point.*

*> MEM share the Streeter Dr. station as a top 5 starting station, but it only represents 11.61% of the sample.*

*> MEM prefer the station at "Halsted St. & Polk St." to other stations as their starting point.*

1. In Visualization 3, we can observe the favorite route for the population as well as each of our customer samples. This is represented as a horizontal stacked bar chart, which shows the top 10 starting stations, using the X-axis as a measure for the ride count. The segments which make up each bar represent the end station name. Only ending stations which are also a top 10 most popular end station by ride count are labeled. This allows us to see not only the routes taken from the most popular start stations, but also the more popular destinations for those rides.

*> The CAS most popular route by ride count is clearly "Streeter Dr. & Grand Ave. - Streeter Dr. & Grand Ave.". This represents a loop route which is again associated with the fitness group our CAS is most likely associated with.*

*> Though the "Halsted St. and Polk St." is the most popular starting station, the most popular route by ride count for MEM is "Ellis Ave. & 60th St. - University Ave. & 57th St.". This data points to "University of Chicago" students being the primary customer base for MEM. This is vital information the marketing team as it relates to MEM adoption.*

*> For the overall population, "Streeter Dr. & Grand Ave. - Streeter Dr. & Grand Ave." proves to be the second most popular route for, while the absolute most popular route is "Ellis Ave. & 60th St. - University Ave. & 57th St.". This can clearly be concluded as a heavy influence by the MEM sample, while the CAS has a significant impact as well, leading to the most popular CAS route being the second most popular route overall. The CAS sample has a relatively low number of rides following the "Ellis Ave. & 60th St. - University Ave. & 57th St." route, meaning most university students who use Cyclistic are already members.*