Tableau Analysis

Using Tableau, analysis is made regarding Citi Bike data from October of 2022. Multiple graphs are made available, but the final story is made up of a few dashboards and a map pulled together. As a starting point, the top 10 stations to start and end a ride are shown. The same stations are present between the two bar graphs, indicating that these are highly utilized stations. The location of these stations, as will be seen on the map, are relatively close together.

The next visualization shows the bottom 10 stations to start and end a ride. Although there is more variability between the station names, a big part of this is that there are multiple ending stations that fall only have a single reported ride ending there. This limits the scope of this visualization, but a look at the data gives us an idea that some values are simply not reported correctly. As such, we should find a way to alter our data collection process to make it simpler. There are various typos that were seen that will eventually play a role in affecting the integrity of our data if not properly handled.

From here, a visualization of our rideable types is shown. It is very clear that the classic bikes dominate over the electric bikes. Reasoning here is dependent on a few factors, which may need to be explored. The availability of the electric bikes may come into play here. If the overall fleet has fewer electric bikes, the representation here makes sense. Use between the two types of bikes fluctuates throughout the month, but the changes seem to be in tandem.

As a final visualization, we see a map of New York City with each station represented. For the sake of clarity, only the starting stations are shown here. The top 10 stations are shown in red, and all happen to lie south of Central Park. The bottom 10 stations are represented by a teal color. These stations are more widely scattered. Further analysis is warranted to determine the frequency of use of the surrounding stations, and whether it is worth retiring these stations for the sake of developing other stations to house more bikes. Alternatively, if the stations are newer, this could potentially explain the lower use of the stations.