Tableau HW Analysis

The first phenomena discovered was that the Covid-19 pandemic had an immense effect on bike overall usage in New York. The first dashboard highlights the phenomena by showing the usage by station on a map as well as on horizontal bar charts comparing the amount of times riders used a station. You can see that the highest used station in May 2019 was used twice as much as the highest station from 2020. This is obviously due to the city wide stay at home orders during the month of May and to my surprise the usage is not lower for May 2020 because in comparison to May 2019 it is approximately a little under 50% of the total usage.

Looking at the first dashboard the maps revealed that the distribution of stations used is similar and some of the most commonly used stations in May 2019 such as Grove St Path and Newport Pkwy are still popular but in 2020 the volume of riders is significantly reduced. Another notable trend is that riders used Liberty Light Rail significantly more during lockdown.

The second phenomena discovered was that average trip duration between Summer month (July 2019) and Winter month (January 2020) had a distinct difference and that was the average trip duration was less during the winter month of January. The other noticeable trend was that younger riders had longer average trip duration among riders. The reason for riders riding less during January is most likely due to the frigid temperatures that average 40 degrees Fahrenheit with snow while the month of July averages 85 degrees and sunny. The causes for the spikes in some of the data for birth year is most likely from users inputting inaccurate data because there is no consequence for doing so, along with people keeping bikes overnight which would increase the average trip duration as well.