

Analysis of Citi Bike Usage July 2019 v. July 2020

As I stated in the beginning of this analysis, my main purpose for this was to see if Co-Vid 19 affected the usage of New York City's bike sharing program, Citi Bike. This is a popular service that people use to get around the city, and between people quarantining and the fear of germs from heavily used public transit, I expected to find a decline from July 19 to July 20. For this data-set I used just the Jersey City reports to keep the amount of records to a reasonable level.

Looking at the total trips I was not surprised to find that July 19 had about 5,000 more trips than July 20 and I thought I may be right with my prediction. However, I was thrown off a bit when I looked at the overall time used and July 20 was about double the amount of total use time in July 2019. I then wanted to breakdown the data down even more and see a per station summary to get a better understanding of if they were being used less or more from 19-20. Using this visualization I see that a majority of the stations were up from 2019, and that Co-Vid 19 was not a major factor in usage. So now I focus on takeaways from the data and I wanted to see what the biggest stations were and show multiple visualizations to do so. I generated a side by side bar graph with the 2 years and most stations generated an increase in usage. I also generated maps and bubble charts for the 2 years.

Trying to look for other phenomena I wanted to breakdown data per day and see if there were any trends I could learn from. There were plenty of peaks and valleys throughout the week so I figured the lows were weekdays and the highs were weekends. Me not being from New York City and not thinking I was completely wrong as it was the complete opposite, citi bikes are a popular option for people going to work and it shows as the highs were mostly during the week and lows during the weekends.

Lastly, I wanted to see what age range primarily uses the bike sharing service, so I made line charts with date of births from the user. Apparently people born in the year 1969 really enjoy using the bikes because they are the primary users by a long shot in both years. Looking at those as outliers, it looks like the primary user age is 29-33 , and judging by the previous finding you can make a guess that this is your working crowd.

One thing I would do differently with this assignment is use 12 months of data from July 19 to July 20 to see if my findings would be any different. I will say I really learned a lot about Tableau with this assignment and would love to have a career based around it as I thoroughly enjoy showing data through visualizations!