Analysis 1 – What Age is Messing with the Data?

Upon quick analysis of the Jan 2019 data the age 51 is showing to be a very popular age to be using citybike, this corresponds to the year 1969. This signifies the immaturity of some of the users of citybike. Delving further into the data to identify if this is more male than female, it was observed that it was utilized by ‘unknown’ individuals. Individuals who chose to not provide that data point.

On further analysis it is shown that these individuals are a mix of customers and subscribers (although there are very few customers who have stated that they are male or female in that birth year). If all of these data points 27, 738 are pulled out of the 45, 342 individuals who state that they are born in the year 1969, the total number becomes 17604, which aligns with the actual Age of Users graph shown.

To verify if this is happening regularly versus only in the month of January, the analysis was completed again in February of 2019. Again with the numbers as shown removal of anyone who states that they are born in 1969 and did not claim whether they were male or female results in a value 16662 which much better fits the Age of Users graph shown.

Comparing this to identify which pick up locations have the most amount of this confounding data shows that they are mostly situation around Central Park and Centre St & Chambers St. Centre street and Chambers street is located right at New York City Hall and the US Attorney’s Office. I will leave the rest of that discussion as to why to the council’s discretion.

Analysis 2 – What are the differences between Winter and Summer CityBike Uses?

Initially the first observation from the data was that in the summer time bikes are used 2x as much as in the winter. Which can be expected due to the temperature differences between August and January the two months used for this analysis. What is also interesting is that the top 5 pick up locations are the same top 5 drop off locations are the same for each season.

The top location to get and drop off a bike despite the weather conditions is Pershing Square North which just so happens to be Grand Central Location. This would indicate that the top users of the citybike throughout the year are also utilizing the subway system and are using the city bike as an extension of their environmentally friendly trips.

E17 St & Broadway is the 5th and 2nd most popular location to use Citybike in the winter and summer respectively is the location of Union Square Park, a location known for its activities and greenmarket. Again, signifying that users of Citybike are environmentally friendly individuals.

8Ave & W31 St is the 3rd and 5th most popular location in the winter and summer months respectivetly. This is Penn Station, the busiest railway station in the western hemisphere as per Wikipedia. This would signify that users of Citybike also use the railway station, another indicator again similar to Grand Central location of Pershing Square North.

All in this would indicate that the majority of the users are very environmentally conscious individuals who don’t have vehicles. To continue to grow this group, focus on marketing to this group on environmentally conscious transportation sources would be highly recommended. Maintaining a good supply of bikes (as the number of bikes picked up and dropped off don’t match) is also highly recommended at these locations, with a plan of ensuring that the total number of bikes doesn’t drop below a set ‘minimum’.