**NYC Station Locations:**

The following maps compare the start and end locations of Citi Bikes trip in New York City from July 2021 to June 2022.

Click on any point on either map to see where riders traveled to or from.

Click anywhere besides the station start location to reset the maps.

*It can be noticed that with most start stations, the most common destination is to return to the same station in one trip. This can be further observed in the ‘Station Popularity’ section of this story. This also represents a sample of trips and not all Citi Bike trips in New York City for the time-period.*

*Twelve individual files were downloaded from the Citi Bike website: https://ride.citibikenyc.com/system-data, for this analysis. However, due to large file download sizes, the data used for each page in this story reflects only a sample for the entire time-period. A Jupyter Notebook was used to create a sample dataset of 1.5% of the entire time-period. Regardless that this is a random sample of the data, with ~440,000 trips accounted for this analysis should be highly representative of reality.*

**Station Popularity**

*As mentioned in the 'NYC Stations Locations' section, the most common end station is the same station location at which the trip started. Again, this is a 1.5% sample of Citi Bike trips taken during the time-period of July 21' to June 22'. However, once again, with a sample size of ~440,000, it is not unreasonable to believe that this is an accurate representation of the actual data for the time-period.*

*Click on a 'Top 10 Station for Starting a Trip' to observe where the most popular station location(s) are for each one. It is important to note that the 'Top 10 Stations for Ending a Trip' for an individual 'Top 10 Station for Starting a Trip' will not reflect the overall 'Top 10 Stations for Ending a Trip'.*

Hover over a blue or pink circle to see how many trips either started or ended at that location.

**Membership Details**

*Analysis of membership types demonstrates a noticeable difference in usage between ‘Members’ and ‘Casual’ riders. Regardless of the year, month, weekday, or time of the day, Citi Bike 'Member' riders are ~3x more likely to utilize the trip service versus those that are 'Casual' riders (non-members).*

\* Click on any blue or pink bar/line to see how specific membership compares across all graphs. Click again on the same spot to reset the graphs.

**Yearly Trends**

*One interesting observation can be made when comparing the second half of 2021 (July-December) to the first half of 2022 (January-June). Regardless of membership type and taking into consideration that each time-period has an equal number of months that are also proportional with seasonality, 2021 had a much greater number of recorded trips than 2022 for a six-month time-period. This is especially interesting, because as we see in the next section 'Seasonal Trends', colder months trend towards less trips an hour per day than warmer months. An idea could be formulated that this could be due to the recent inflation of good & services as well as the higher-than-normal temperatures and low rainfall experienced by most of the country for 2022.*

**Seasonal Trends**

*The season of the year proves to have a substantial impact on peak hours for Citi Bike trips. Little to no surprise, users were more inclined to take a trip during the warmer months than the colder ones. The most obvious difference in seasonal trips taken can be seen by comparing the ‘Peak Hours for Summer’ months to the ‘Peak Hours for Winter’ months. While also different in trip count, a much closer comparison in rider usage can be seen between the ‘Spring’ and ‘Fall’ season.*