

Citi Bike User Analysis from January 2020

<https://public.tableau.com/profile/terril.vallikalam#!/vizhome/Week21-TableauChallenge/Story1>

Citi Bike Map Analysis:

- The goal of the map was to look at the most popular starting and ending Citi bike stations. By looking at the marker legend, we can see that the stations represented by an orange marker are the most popular and the stations represented with dark blue markers are the least popular.
- I added a map layer of points of interest to examine the proximity of Citi bike stations to tourist attractions. By adding this layer, I can see that there are orange markers near the Flatiron Building and Grand Terminal Station. Since the orange markers are on both maps, we can see that these stations are popular places for people to both start and end their bike rides.

Gender Analysis:

Average Trip Duration:

- When the data was first downloaded, we see that “1” is representative of male and “2” is for females.
- The female average trip duration is longer by 100 seconds. Though this value seems substantial right now, when we convert this to minutes, we can see that the average male rider has a trip of 12 minutes and the average female rider has a trip of approximately 14 minutes.
- Looking at this graphic closer, we can see that there are more male riders (900,00) than female riders (550,000).

Number of Riders:

- Looking at the bubble chart of the number of riders, we can more easily visualize the difference between the number of male and female riders. There are almost twice as many male riders as there are female riders.
- For this analysis, the distinct count of bike IDs were taken into account to show that there are, in fact, more male riders than female riders.

Number of Riders per Hour:

- In general, we can see that the peak hours of riding occur at 8 am and 5 pm.
- This relation corresponds to people going to work and leaving work.
- There is a slight uptick around noon when people go to lunch and perhaps leave the workplace early.
- Between the early morning hours from midnight to 4 am, there is very little ridership for either gender.
- Nevertheless, we can still see that there are more male riders than female riders.

Age Analysis:

Count of Riders per Day:

- From this chart, we can see that the majority of users are subscribers to the Citi bike program. The remaining portion of riders are customers that just rent the bike based on their need.
- Using a distinct count of bike ID, we can count the number of riders that are using the bikes on a daily basis.
- Even though this data is from January 2020, we can see that there is a large amount of ridership. The days that do have low ridership may be due to snow or cold weather, which would limit the Citi bike patrons from using the bikes.

Age of Users:

- Looking at this chart, we can see that the majority of riders were born between 1989-1991. This may be because more millennials want to be healthier and also want to limit the amount of CO₂ that is being emitted when they ride their cars.
- Based on the previous Gender Analysis, we can see that there are still more male riders than female riders.

User Type:

- User type is split between customer and subscriber. Subscribers pay a one time monthly fee for bike usage, and customers pay a fee every single time they ride the bike.
- Looking at the customer user type, we can see, as previously mentioned, that there is a spike around customers born in 1990 and then tailing off.
- Similarly, we can see the same trend but magnified when looking at the subscriber user type.
- Nevertheless, for both user types, we can see that there is more male ridership than there is female ridership.