Citi Bike Phenomena Analysis

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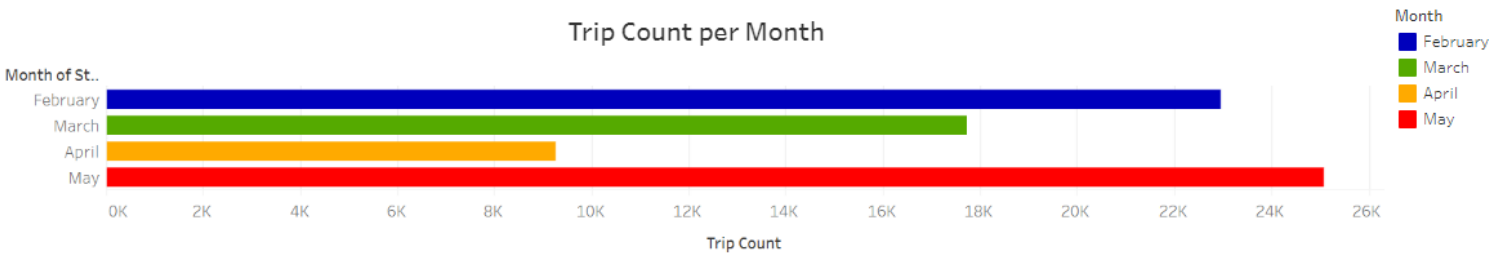
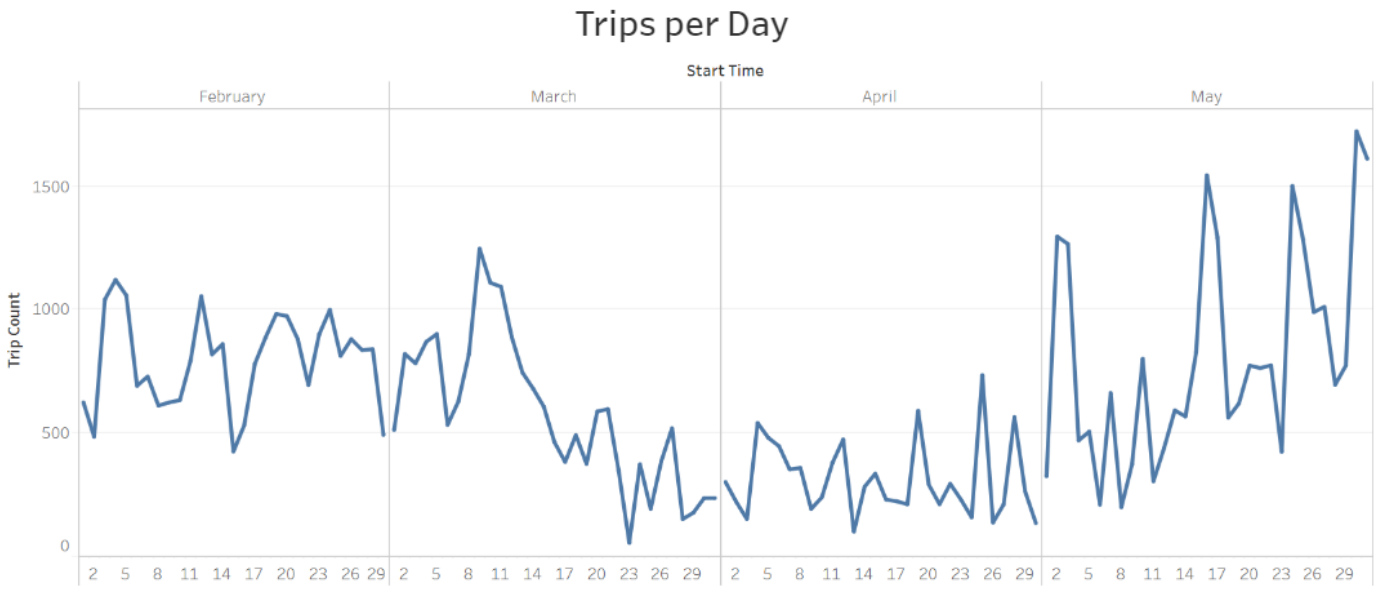
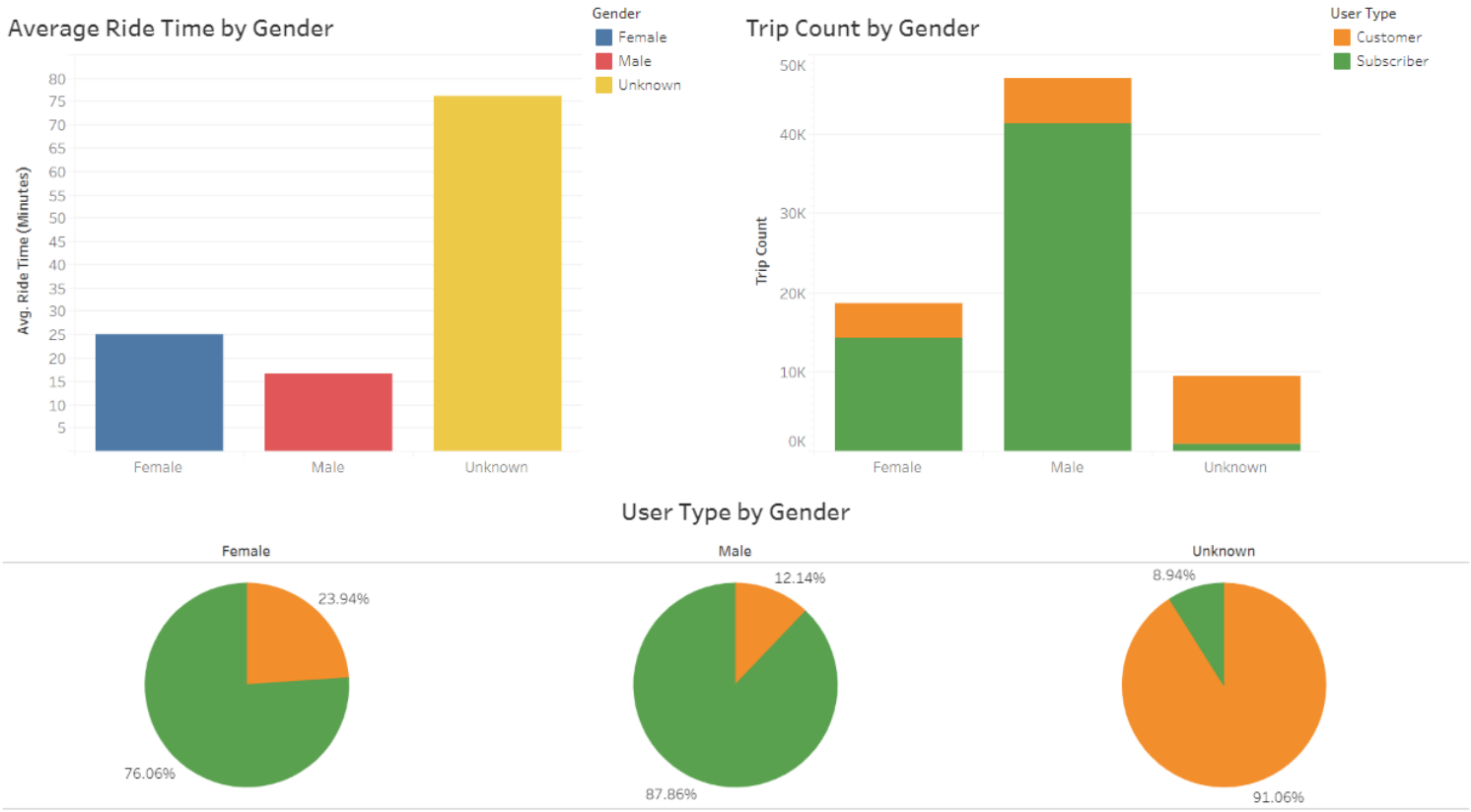




- The first phenomena I uncovered pertains to the number of bike rides per month. According to both charts above, there appears to be a decline in bike usage for March and even less rides in April. It would be expected that ridership would increase as each consecutive month often brings warmer temperatures than the last. Instead, the data depicts continuous decline until May. This drastic decline is most likely due to the impact of COVID-19 on New York City. According to www.nyc.gov, the daily count of confirmed virus cases peaked in late March and early April, which corresponds with the dashboard above.

- Citi Bike should not be too concerned by the recent decline. Ridership in May skyrocketed to three times the ridership in April as confirmed daily virus cases began to decline. However, if a second wave of cases occurs, Citi Bike should prepare to expect another possible drop in users.

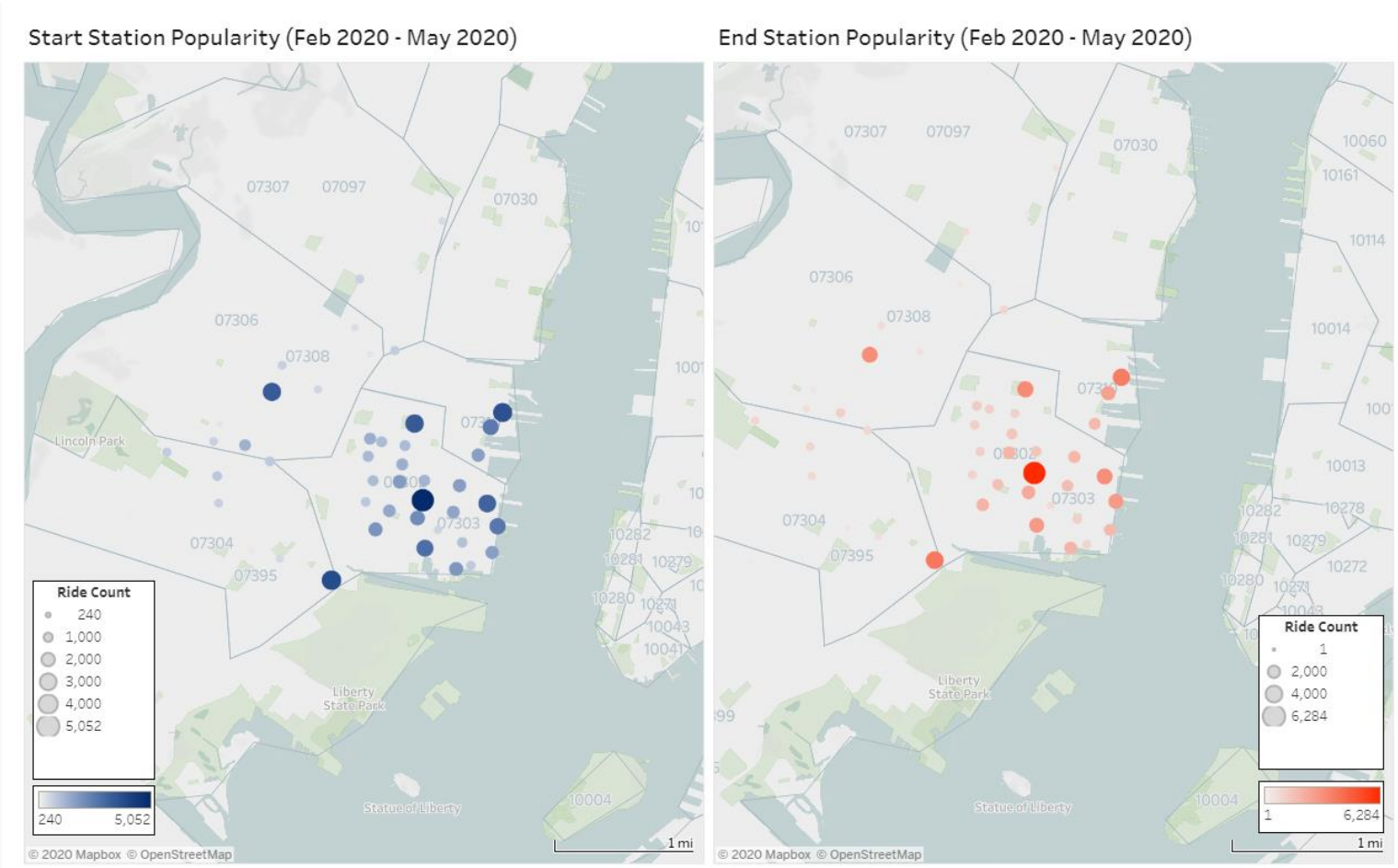


- The second phenomena I discovered pertains to the gender of each user. According to the first bar chart (Average Ride Time by Gender), I found that the average ride time for female users is higher than that of males. However, when examining the second bar chart (Trip Count by Gender), males actually have over twice the number of rides logged. Thus, it seems that females ride bikes less frequently for a longer duration of time, while males take more trips but for a shorter amount of time.

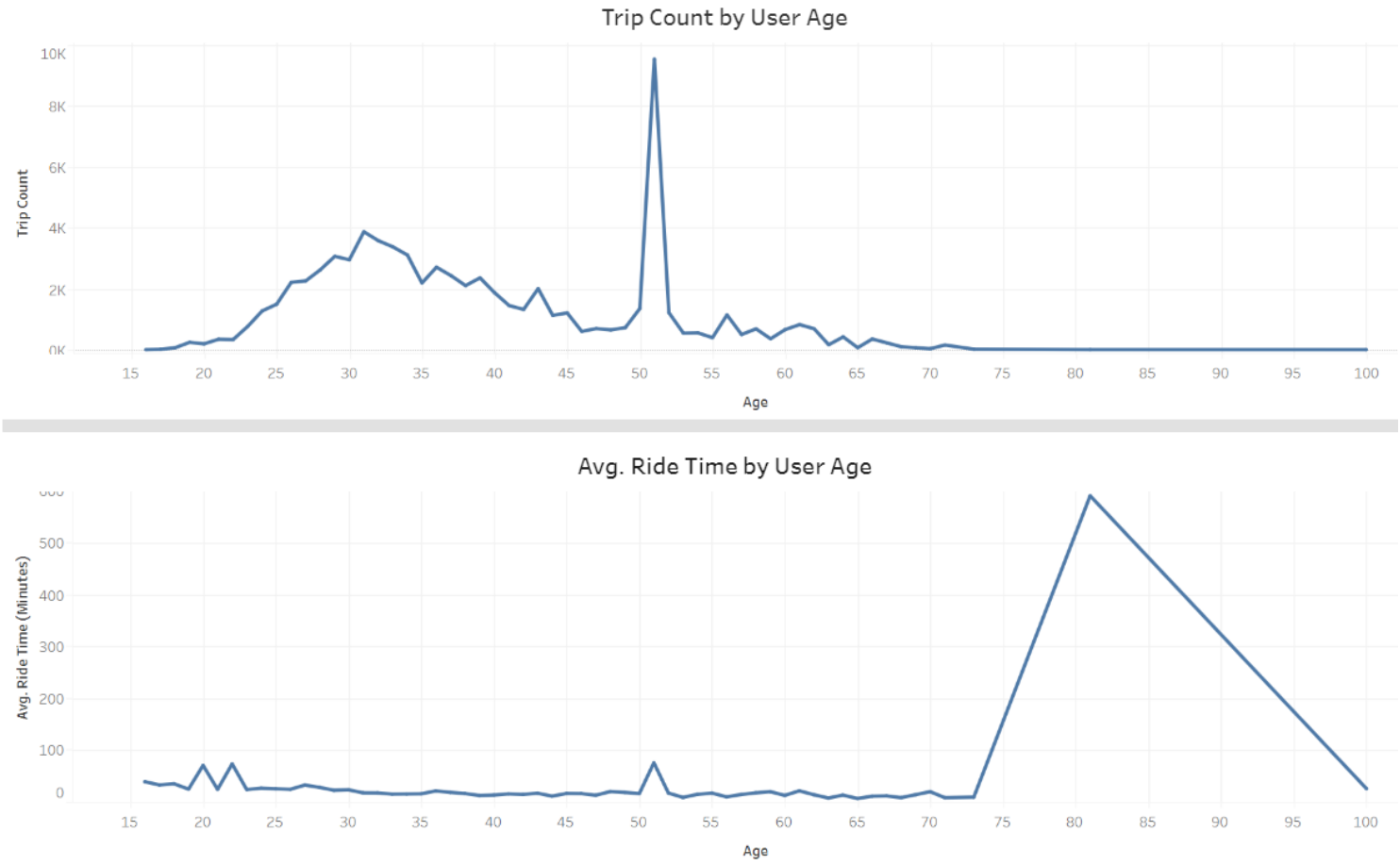
- This is interesting because the www.census.gov shows that the population of NYC is 52.3% female. However, males have over double the number of rides logged than females. Males also appear to make up the vast majority of Citi Bike subscribers.

- Citi Bike does not appear to be as successful in maintaining female ridership as they are for male ridership. Females make up a larger portion of New York City's population, but more males utilize Citi Bike. 41,258 males subscribe to the bike service, while only 14,190 females subscribe. Citi Bike should direct more time and resources to appeal to women in order to increase their usage and subscriptions.

- According to the dashboard, there are many users in which their gender is unknown. Some are even Citi Bike subscribers. Is Citi Bike's gender question easy to skip? Is the question asked to everyone? Does the question need more inclusive options rather than just male and female? Figuring out the "Unknown" issue could benefit future user data.



- The visualization above depicts all bike stations and their popularity as a start or stop location. It appears that Grove St PATH is the most popular start and stop location. 5,052 bike rides have started there, while 6,284 bike rides have ended there. This station may require additional upkeep and bike maintenance due to the large volume of users.



- This is an extra dashboard that I found interesting. According to the top line graph, users aged 25-35 make up a large portion of bike rides logged. However, there is a substantial spike in rides for users that are 51 years of age. This age appears to make up almost 10,000 of the total number of bike rides. Do users 51 years of age actually make up this large portion, or are users skewing the data by inputting incorrect information?

- The bottom line chart shows the average ride time by user age. It appears that younger users ride for the longest amount of time per trip, specifically those aged 20 and 22. Another spike in average ride time occurs for users aged 51, which may be due to the incorrect user input. However, the largest average ride time occurs for users aged 81. There were only two trips logged in the top chart for this age. This may be due to incorrect input as well.

- I removed users that selected any age over 100. There were quite a few. Some ages selected were as old as 132, which is impossible. Those are clearly due to incorrect user input. Citi Bike should not provide the option to select a birth year that is unrealistic.