Anthony Giusti

10/23/2019

Citi Bike Analysis

Dashboard 1: Trip Duration

The first phenomena discovered regarded various factors related to trip duration. The first question I had was, does time of day affect duration of ride. It turns out time of day does have slight variance throughout the day and there was 1 time of the day that really seemed to stand out. Line 4 which is 4:00 am had a huge average trip duration with a small number of total trips. The explanation for this could be that at 4:00 am there are much less public transportation options leaving people to take a bike for longer trips.

The other question I wanted to see was if the starting point by latitude and longitude affected the trip duration. I was able to use a map of the city to understand how these starting points were affected. Green points signal longer trips and blue points signal shorter trips with. After analyzing this map, it appears that those starting points further away from midtown Manhattan generally had longer trips. This makes sense considering there are a lot of commutes into this area everyday and if you are further away from the action it’ll be a longer trip. What is a little less expected is that areas closer to bodies of water have longer trip durations. This could possibly be explained by people more willing to take a long bike ride if they have a nice view or maybe having less subway options in these areas.

Dashboard 2: Customers vs. Subscribers

In this dashboard I wanted to investigate the customer and subscriber relationship and see how they relate to one another in the bigger picture. The first point that I noticed was that in terms of total rides, there are roughly 75% subscribers and 25% customers. Before I looked at the analysis, I expected these groups to “compete” against one another. However, looking deeper into the numbers, they seem to move on a line chart throughout time in similar fashion. When the amount of customer rides ticks up there is a huge tick up in subscribers. What could be happening here is: someone may try Citi Bike for the first time as a customer to see how they like it and if they do, they sign up as a subscriber. As opposed to an inverse relationship, the customer may serve as the gateway for someone to be a describer.

In this dashboard, it is useful to analyze each start station individually. There is some variance for each station in terms of amount of subscribers vs customers. Fulton street for example is one of the few stations where there seems to be more customers than subscribers. It is hard to understand exactly why this station has more customers vs subscribers it could have something to due with being at one of the busiest subway stations.