**Data:**

Data obtained from Citibike NYC (June 2019 – Aug 2019) for a representation of the program over the summer months.

**Priority Station Analysis**

Objective: To find stations where there is high traffic and bike inventory needs to be monitored to ensure customer satisfaction

Dashboard:

* Dashboard presents two maps; one displays the locations where customers are starting their bike routes and the other map displays where customers are ending their bike routes.
* Bottom left graph demonstrates the peak hours for starting a bike route and starting consumption of the citibike service.
* Bottom right graph demonstrates the top 10 most frequented routes that customers take. The data appears to be representing a population that uses CitiBikes as a means of transportation for work. The bottom right graph looks at the top 10 most frequent routes under the assumption that the routes would be a representation of the customer’s travel routine.

Trends:

* Maps:
  + In Red and Yellow you can see the stations that need the most attention as they have a high traffic and high potential for the inventory to drop and customer demand to be high.
  + You can see that Grove St Path is a popular station to start your bike ride consumption but also a popular place to end it
  + You do not see many bike trips around Manhattan, supporting the theory that CitiBikes is mostly used by local resident as a means of transportation to work. Most people in New York will live in the outskirts and drive to a station where they then take a subway to cross the water bodies to Manhattan.
  + Nearby stations exist yet the demand is significantly less than at Grove St Path. There may be different factors to take into consideration that drive the demand; however investing in improving the demand for these nearby stations would take the pressure of monitoring the stock of the select identified high priority stations. A way to understand the market around nearby stations is on the second analysis.
* Bottom left graph:
  + Most customers rent out bikes around 8 am and 6 pm. These support again the theory that customers are mostly using these bikes to travel to work.
* Bottom Right graph:
  + Grove St Path May have a high customer demand for people wanting to start trips but there is also evidence that there is a lot of people ending their journeys there which means that the inventory is replenishing through the market’s consumption pattern.

**Interactive Market Potential**

Objective: To gain a better understanding for the market potential for the individual stations by evaluating the type of user profiles (customer vs subscriber) and their age.

Dashboard:

* Map: In red are the stations that do not have a high traffic for people starting their trips there. Ultimately you would want to attract customers to start their journeys at these stations first before targeting the ones in green that are already doing well
* Bottom Left Graph: This graph demonstrates for each individual station the distribution of customers by subscription type. Whether they are subscribed or simply a “guest” customer. You also see the duration of their trip as you want to target the stations where customers are more likely to enjoy long bike rides as these are more profitable.
* Bottom Right Graph: This graph demonstrates the age distribution of the customer population.

Trends:

* Map:
  + The stations that you need to target are not the ones in Manhattan where you probably see a lot of people especially with the frequented tourists. The stations that you need to target for a profit are in the residential areas.
* Bottom Left Graph:
  + Liberty Light Rail: Is an example of a station where customers are likely to have long duration trips yet the customers make up the minority of the type of users. Thus, if you want to maximize profits you want to ensure that you target these customers and perhaps interest them in subscriptions
* Bottom Right Graph:
  + The data shows a peak of most users being born around the late 1980s; this again points towards the users being in their prime working ages (30s-40s)