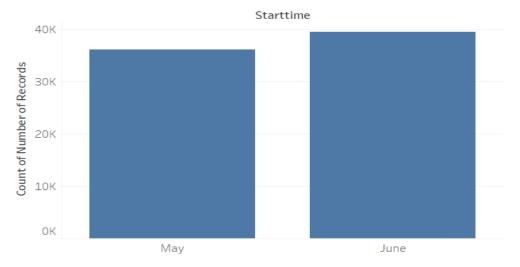
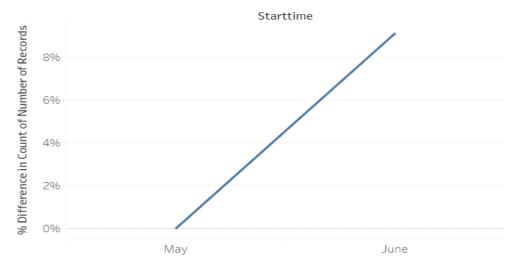
# Citi Bike Analytics

Melaku Wubshet

#### Trips Recorded

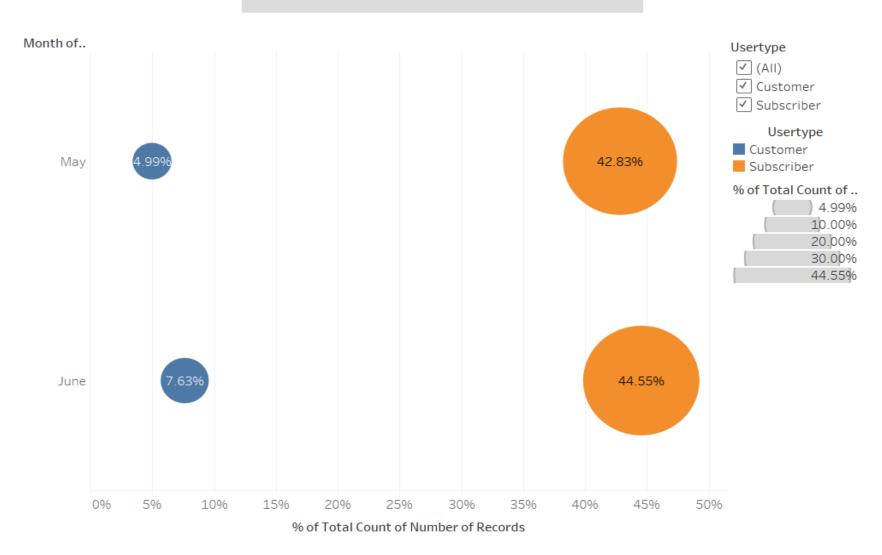


#### Ridership Growth



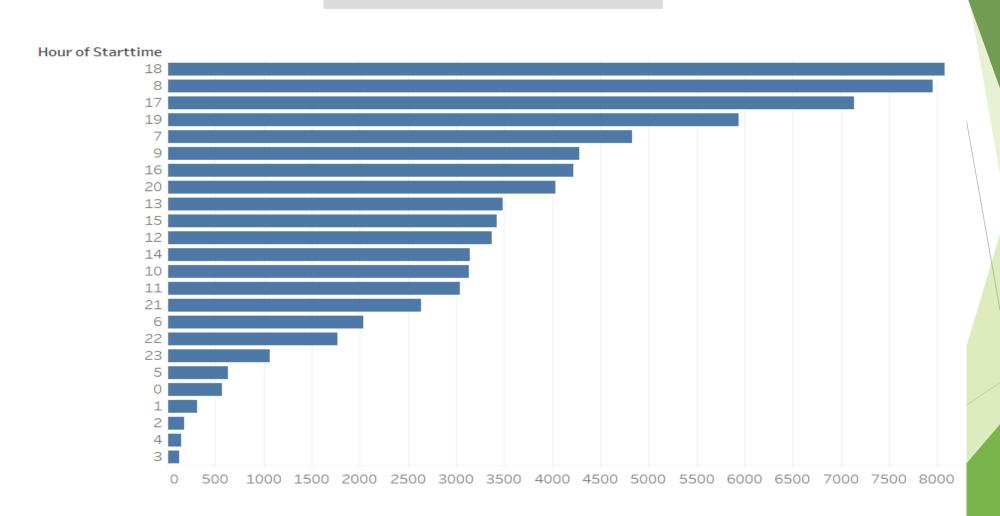
## Change in Short-term customers and Annual Subscribers

Both Short-term customers and Annual Subscribers are increasing over time  $\,$ 



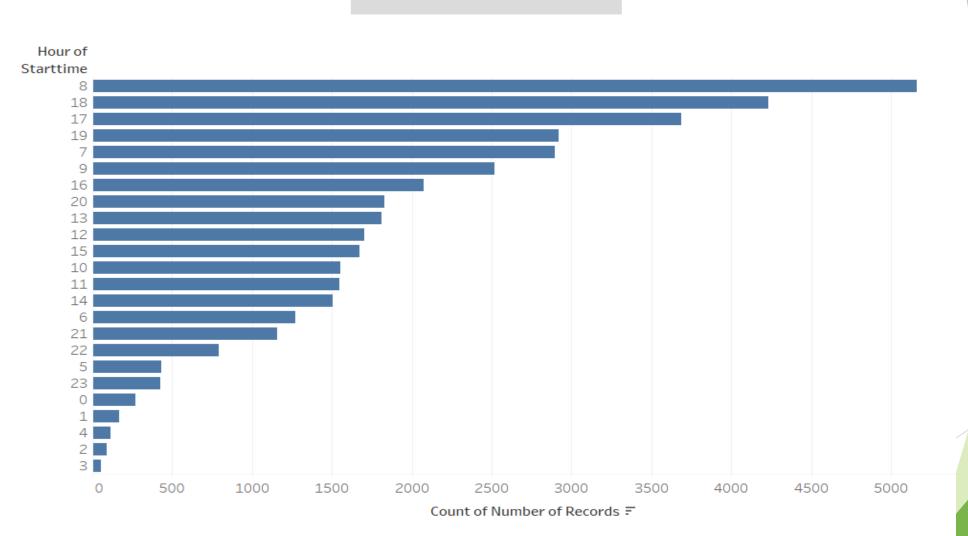
# Peak Hours during the summer months

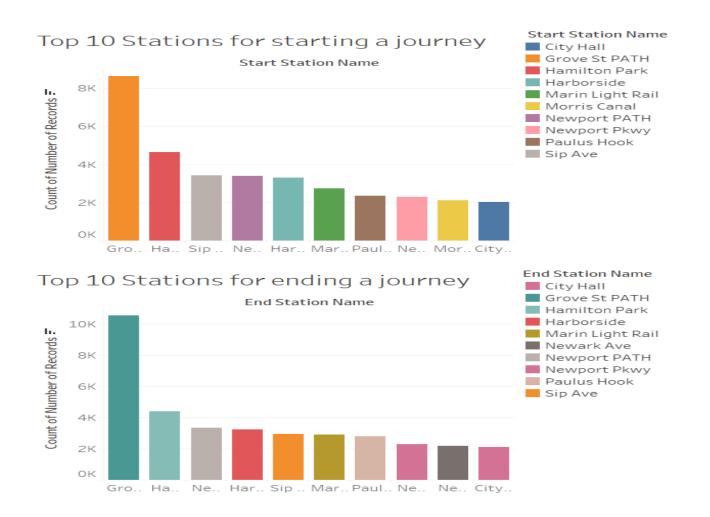
We found that the hours were at its peak at 6pm and 8am respectively



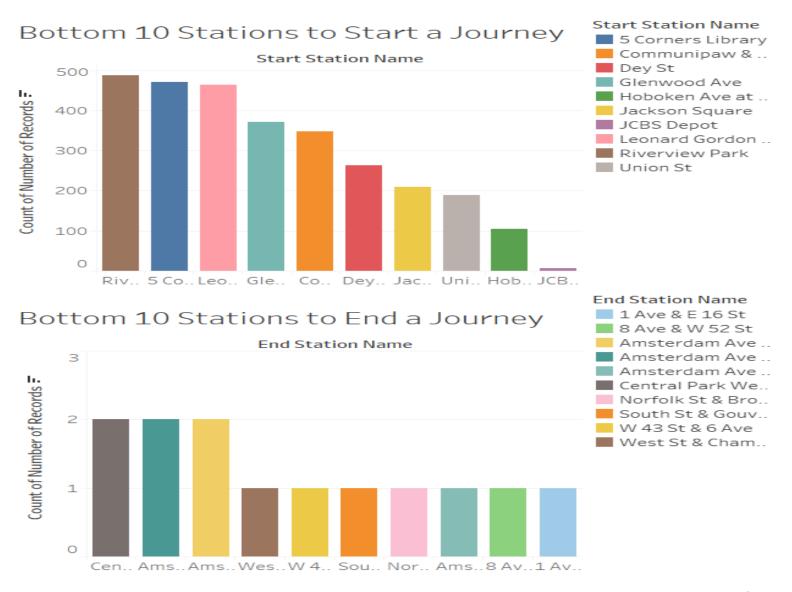
## Peak Hours during the winter months

During the winter months the peak hours are at 8am and 6p respectively

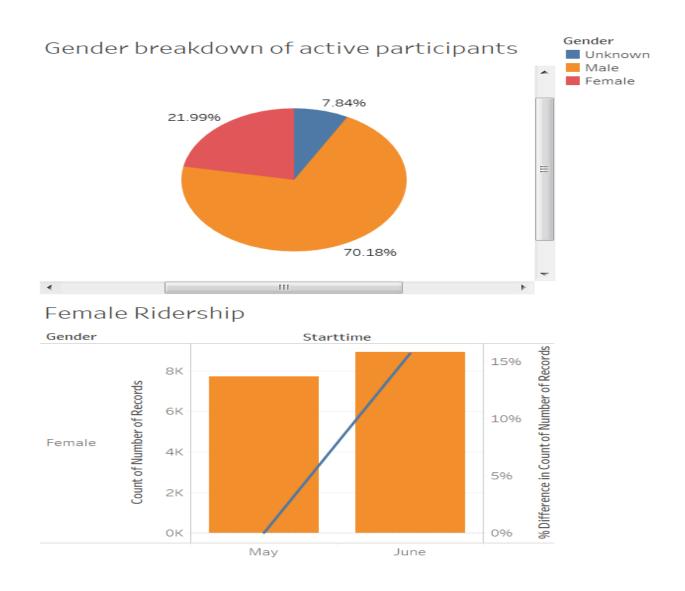




Based on analysis the top 10 stations for starting and ending a journey are at or near public transportation stops with access to Manhattan, NY. This may mean those riding the bikes are using them to commute on the train, ferry or bus that goes into Manhattan and from there they will use the bikes throughout the city to get around.

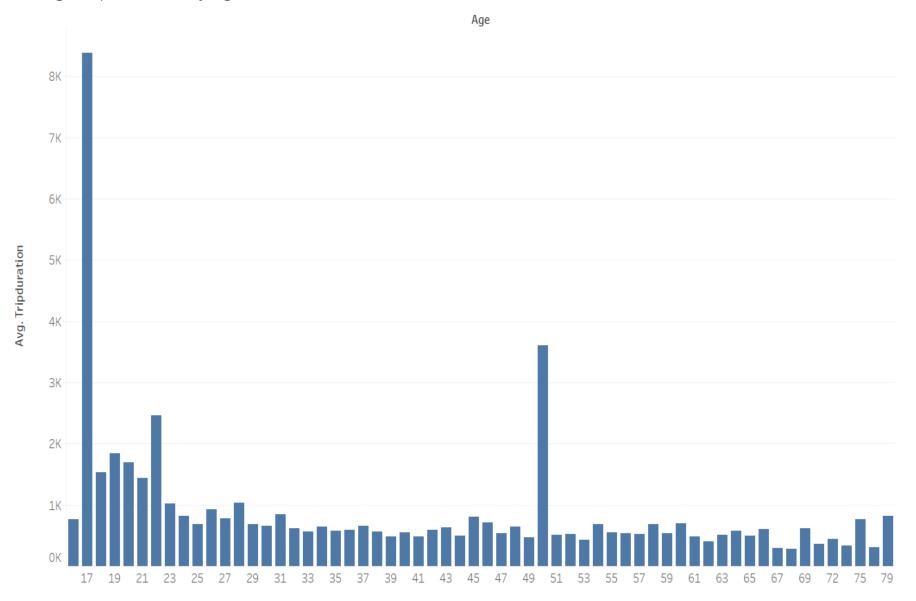


The bottom 10 stations to start a journey are all located at random locations throughout the Jersey City not near any train that goes into Manhattan. The bottom 10 stations to end a journey are all in Manhattan and have a count of either 1 or 2 so this should mean that riders that should have brought the bikes back to their starting location

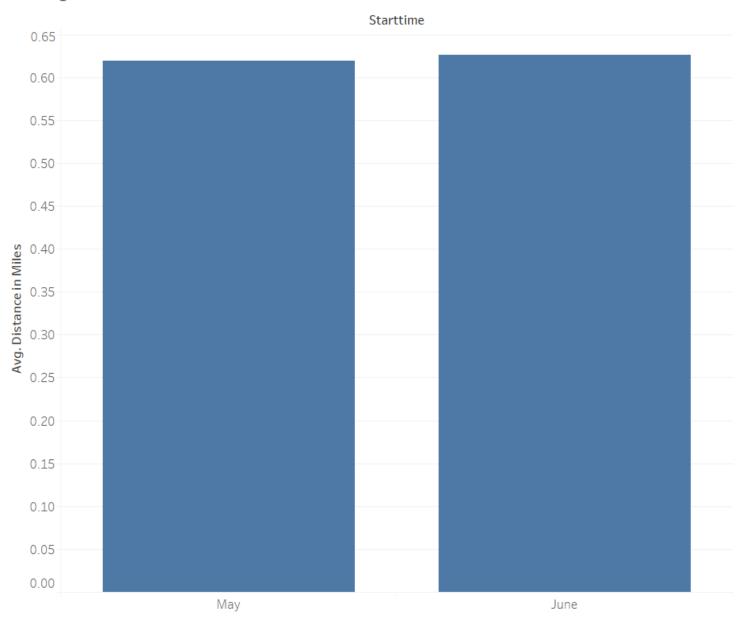


Gender outreach is making a positive impact on female ridership as active participants has increased over the time span by 15.7%.

#### Average Trip duration by Age

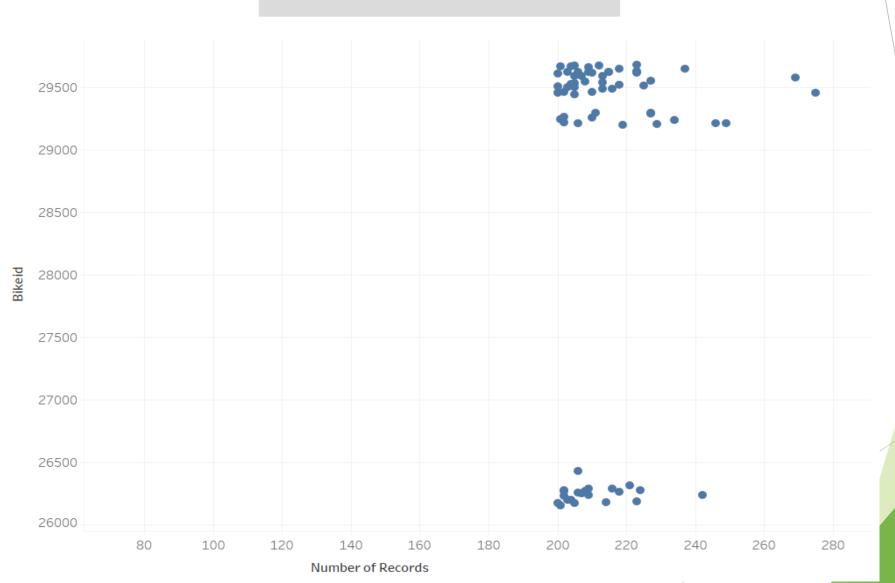


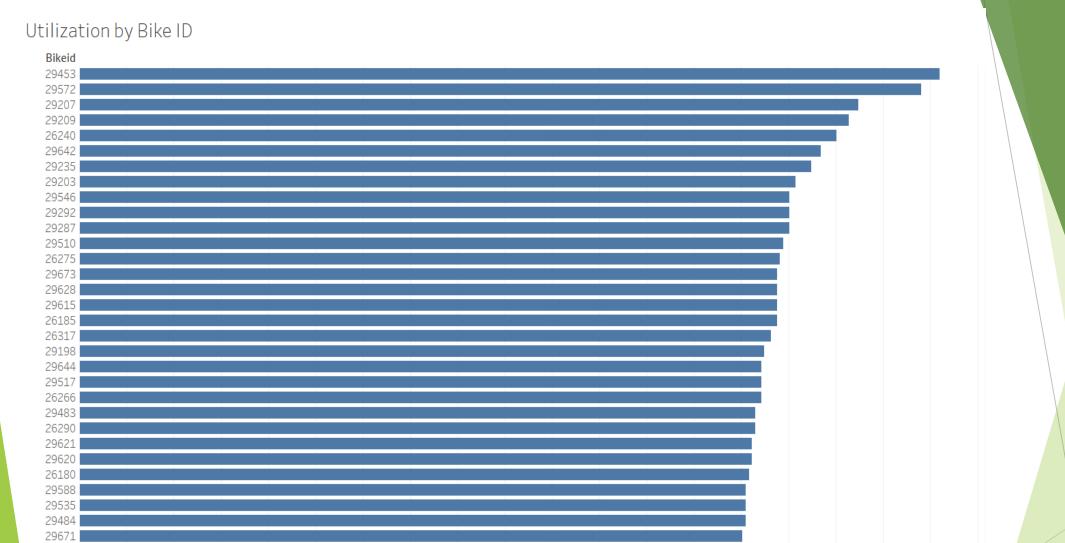
## Average Distance in miles



## Bike IDs due for repair or inspection

Bike IDs due for repairs or inspection should have more than 200 rides over the time span. Top 5 Bike IDs are: 29453, 29572,29207,29209,26240





Utilization does not vary significantly by Bike ID with the highest utilization at 0.36% and most utilization above 0.20%

% of Total Utilization

0.30%

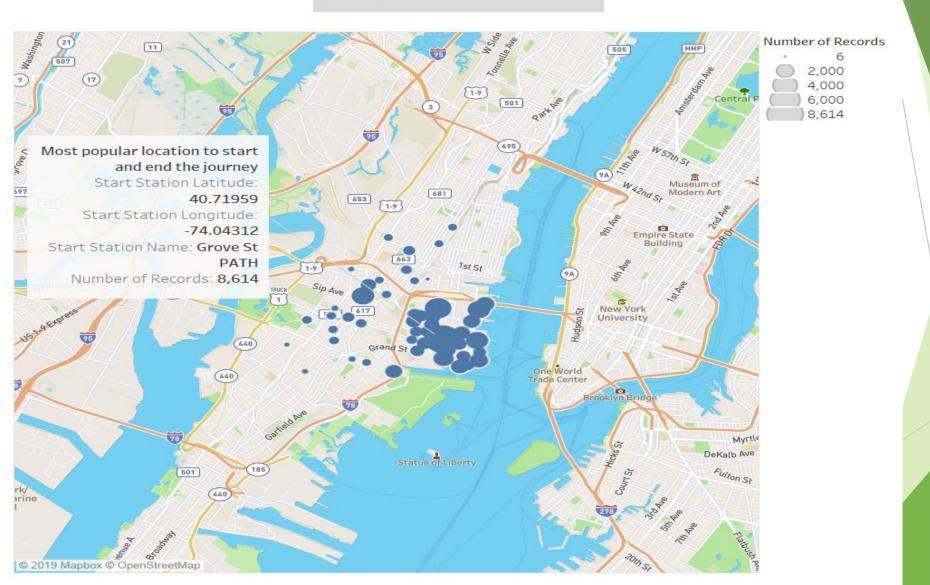
0.14%

0.16%

29289

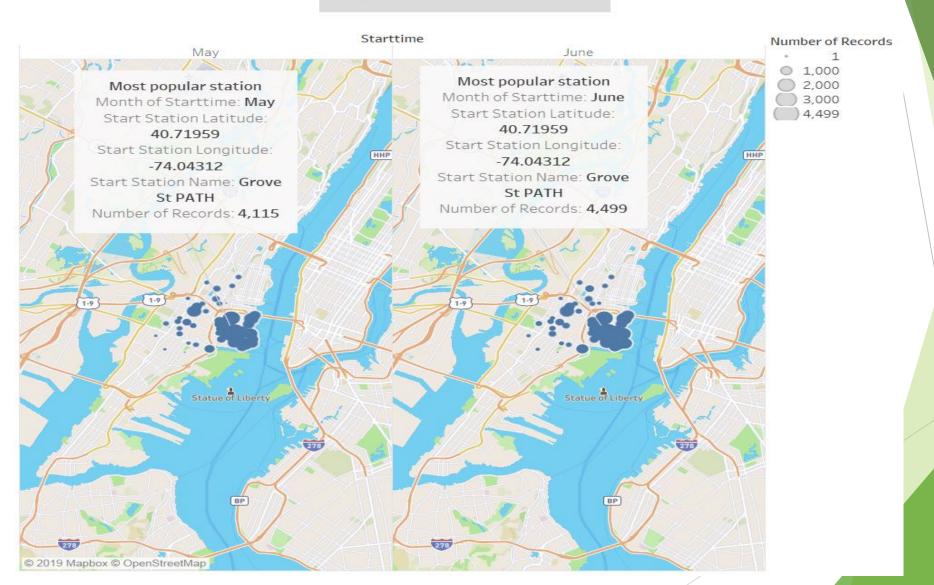
#### Static Map with locations of bike rides

Size increases by number of riders at each location



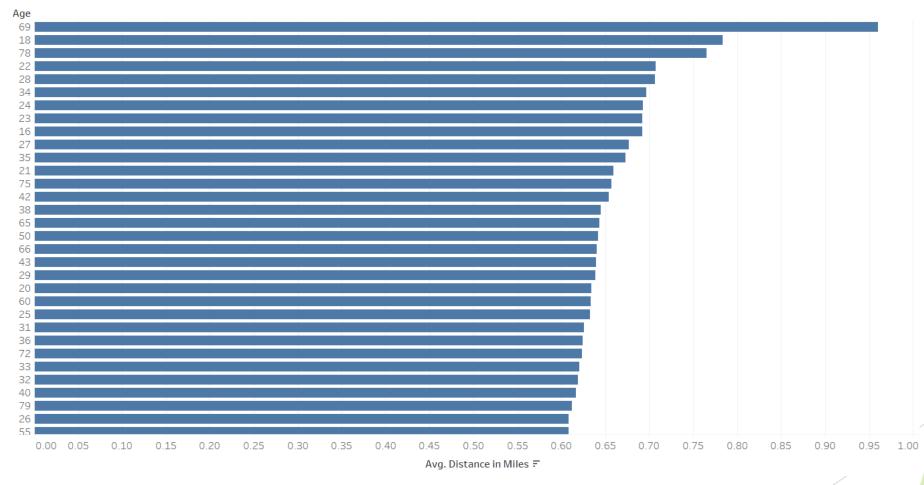
#### Static Map with most popular station(s) by month

Size increases by number of riders at each location



# Phenomenon #1

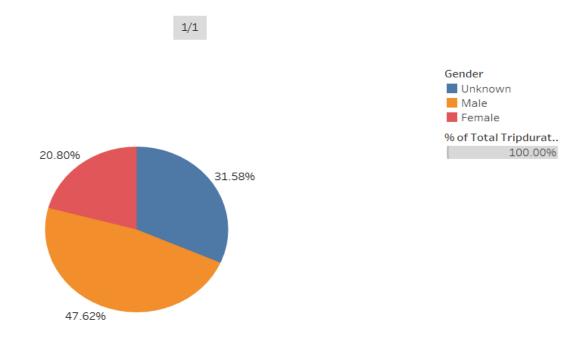
Average Distance in miles by Age



It seemed rather odd that the average distance in miles has no real trend by age and that the highest average was at the age of 69. Median data had the same result.

# Phenomenon #2

Trip duration by gender



Unknown riders have a higher trip duration than female riders