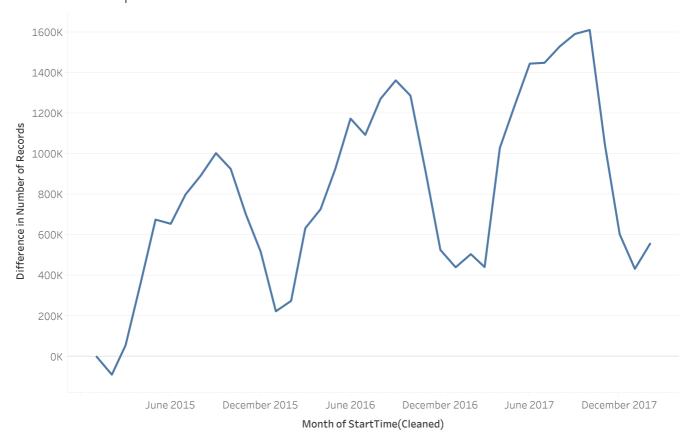
Total Trips and Total Ridership Growth Subscribers vs. Short Term Customers Summer vs Winter Peak Hours Top 10 Stations for Starting and Ending Trips Bottom 10 Stations for Starting and Ending Trips Gender and Growth in Female Ridership

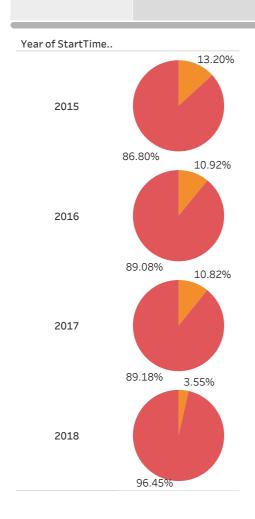
### Total Trips (Jan 2015 - Feb 2018)

41,710,375

## Total Ridership Growth Relative to Jan 2015



Total Trips and Total Ridership Growth Subscribers vs. Short Term Customers Summer vs Winter Peak Hours Top 10 Stations for Starting and Ending Trips Bottom 10 Stations for Starting and Ending Trips Gender and Growth in Female Ridership





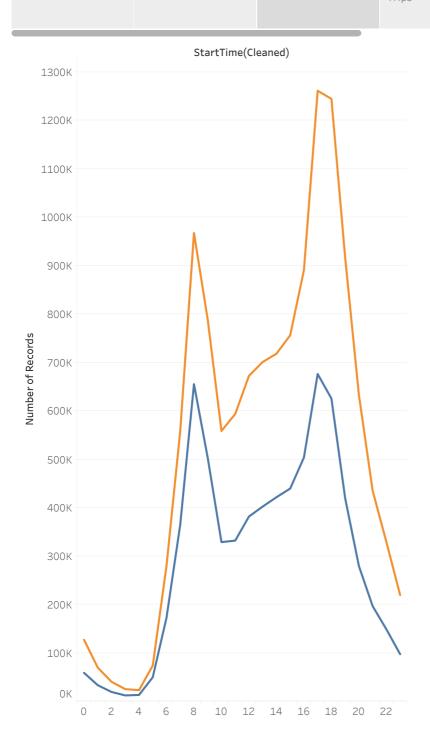
Total Trips and Total Ridership Growth Subscribers vs. Short Term Customers Summer vs Winter Peak Hours Top 10 Stations for Starting and Ending Trips

Bottom 10 Stations for Starting and Ending Trips Gender and Growth in Female Ridership

Summer Months, Wi..

In, Out

Out, In

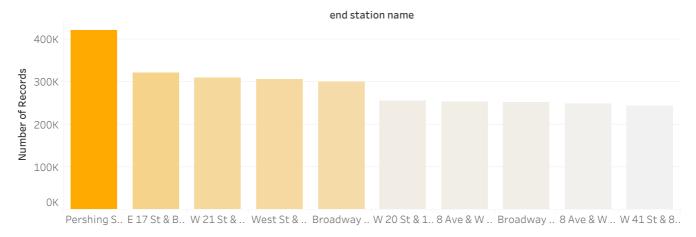


Subscribers vs. Short Top 10 Stations for Summer vs Winter Bottom 10 Stations Gender and Growth in Averag lTri for Starting and Term Customers Peak Hours Starting and Ending Female Ridership e Dista ps a Trips **Ending Trips** nce, Av nd .. erage..

### Top 10 Start Stations

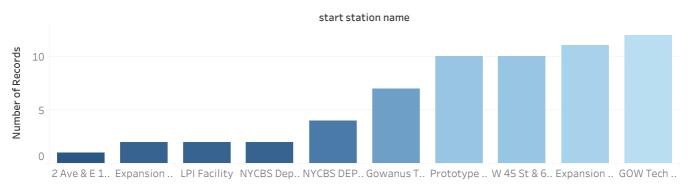


#### Top 10 End Stations



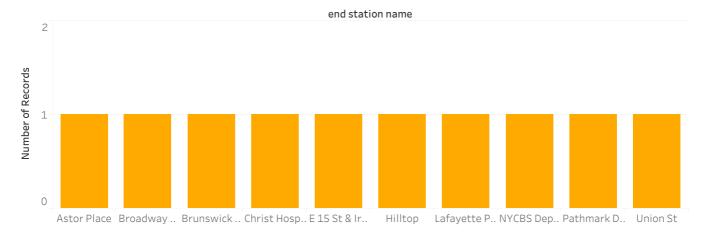
Sub Summer vs Winter Top 10 Stations for Bottom 10 Stations Gender and Growth in Average Distance, Bikes Female Ridership scri Peak Hours Starting and Ending for Starting and Average Trip Duration Due fo bers **Ending Trips** and Age rInspe Trips VS. .. ction ..

#### Bottom 10 Start Stations



Note: Excluded were any stations in the top 10 with the words "Prototype", "Test", or "Don't Use" in the names, as it was obvious that these records were mistakes left in. However, several other stations here may also be mistakes but were left in to limit the deletion of potentially useful data.

#### Bottom 10 End Stations

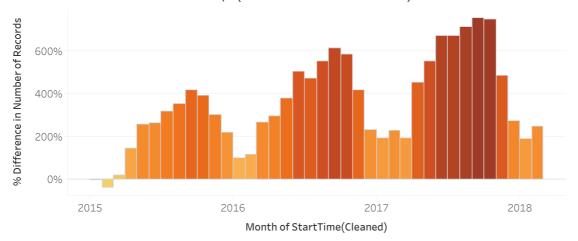


Top 10 Stations for Bottom 10 Stations Gender and Growth in Average Distance, Map of Bikes Due for Starting and Ending for Starting and Female Ridership Average Trip Duration Bike St mer Inspection or Repair vs W Trips **Ending Trips** and Age and Utilization by ations Bike ID color.. int.. Gender(explicit) Gender Female Male Unknown 11.29% 21.68%

Proportion of riders by gender for the whole time period

### Growth in Female Ridership (Relative to Jan 2015)

67.04%



Top Bottom 10 Stations 10 S for Starting and tati Ending Trips on..

Gender and Growth in Female Ridership

Average Distance, Average Trip Duration and Age Bikes Due for Inspection or Repair and Utilization by Bike ID Map of Bike Stations colored by start and end popularity

Bonus: User Types and S..

#### Average Distance Ridden

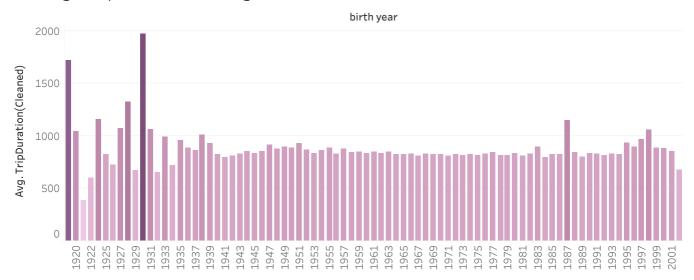
968.0

Average of TripDuration = 968 seconds. This is around 0.2689 hours

At citibikeNYC (<a href="https://www.citibikenyc.com/system-data">https://www.citibikenyc.com/system-data</a>), they calculated milage estimates in another dataset using an assumed speed of 7.456 miles per hour.

Using this assumption, average distance ridden is roughly 2 miles

#### Average Trip Duration and Age



Note: Excluded all ages 100 years or older. The data had many ages which did not seem to be truthful (e.g. there was a suspiciously high average trip duration of 29,372 seconds for people born in 1858). Caution should be exercised for this graph, as the trip duration for older riders seem to be excessively high before 1930. The birth year variable thus seems to be very unreliable.

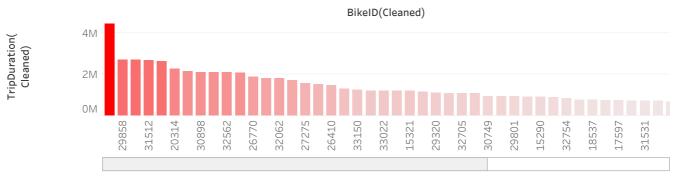
Bott om 10 S tat.. Gender and Growth in Female Ridership

Average Distance, Average Trip Duration and Age Bikes Due for Inspection or Repair and Utilization by Bike ID Map of Bike Stations colored by start and end popularity

Bonus: User Types and Seasonality

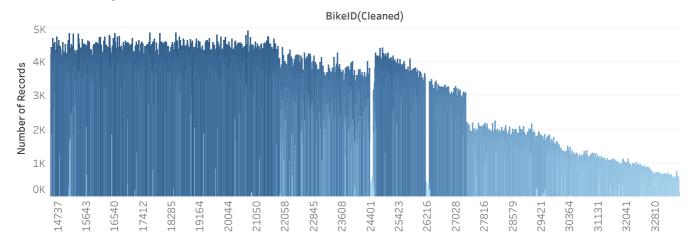
Bonus: User Type & Trip ..

#### Bikes Due for Inspection or Repairs



Note: Sum of TripDuration(Cleaned) for each BikelD(Cleaned). The data is filtered on the Year of the variable StartTime, which keeps 2018. Total trip duration for each bike ID in 2018 is used to determine recent bike usage. The more a bike is used, the more likely it is due for inspection or repairs. A bike that has cumulatively more than 500,000 seconds is considered here to be a sufficient amount of time to require inspection.

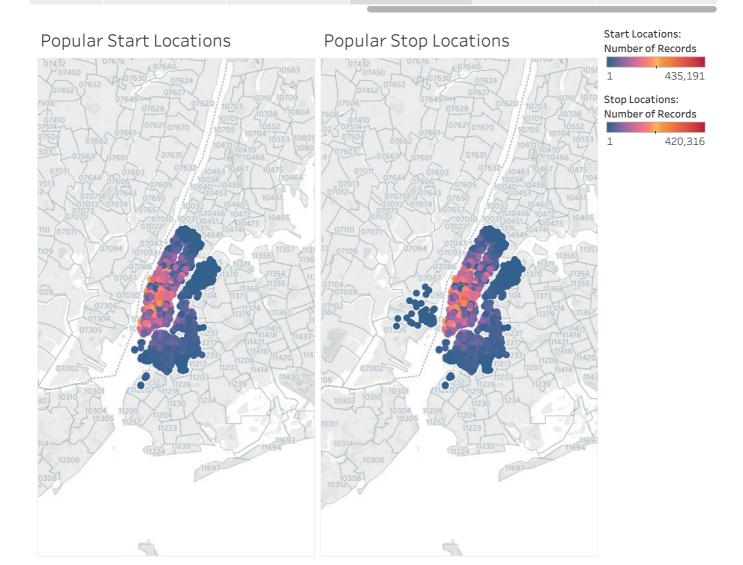
#### Utilization by BikeID



Gender and Growth in Female Ridership Average Distance, Average Trip Duration and Age Bikes Due for Inspection or Repair and Utilization by Bike ID Map of Bike Stations colored by start and end popularity

Bonus: User Types and Seasonality

Bonus: User Type & Trip Duration (Average)

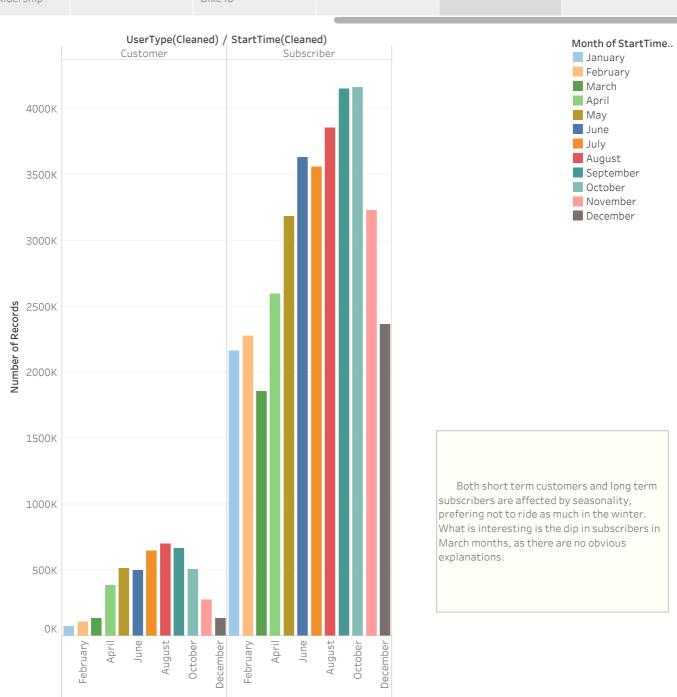


Gender and Growth in Female Ridership Average Distance, Average Trip Duration and Age

Bikes Due for Inspection or Repair and Utilization by Bike ID Map of Bike Stations colored by start and end popularity

Bonus: User Types and Seasonality

Bonus: User Type & Trip Duration (Average)

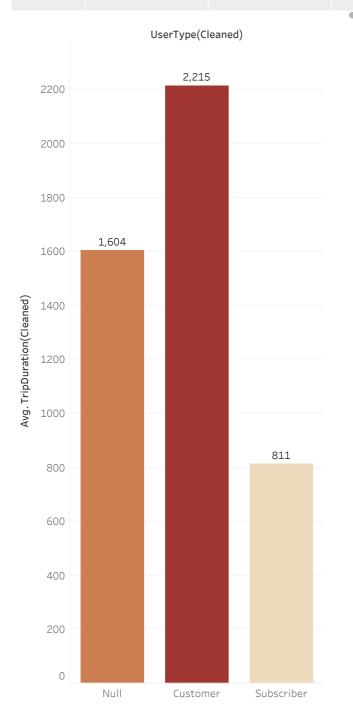


Gender and Growth in Female Ridership Average Distance, Average Trip Duration and Age

Bikes Due for Inspection or Repair and Utilization by Bike ID Map of Bike Stations colored by start and end popularity

Bonus: User Types and Seasonality

Bonus: User Type & Trip Duration (Average)



Avg. TripDuration(C..

811 2,215

Average of trip duration for each user type.

What is unexpected here is the low average trip durations for subscribers of around 13 1/2 minutes. Even unregistered users log more time, although it is likely the case that these users were employees left on by mistake or illegal users.

It is likely the case that subscribers tend to be people who are local residents while short term customers are people who are tourists and are using the bikes to explore the city, not just going from point A to B.