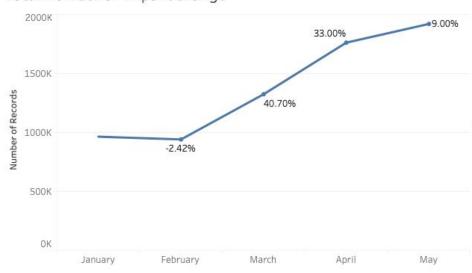
Overview Dynamic Map Showing Bike Station Popularity

Number of Trips by Month Citi Bike User Types Citi Bike User Demographics Bike Usage During the Day and Week Most Popular Stations

Total Number of Trips %Change



Total Number of Trips

Month of St	
January	965,505
February	942,153
March	1,325,595
April	1,763,101
May	1,921,723
Grand Total	6,918,077



As the warmer months approach, there's an increase in bike usage. Biking is more favorable when the temperature is higher and there's no snow around.

The average duration for each trip was just under 14 minutes. Trips are shorter than average during the weekdays and above the average on weekends.

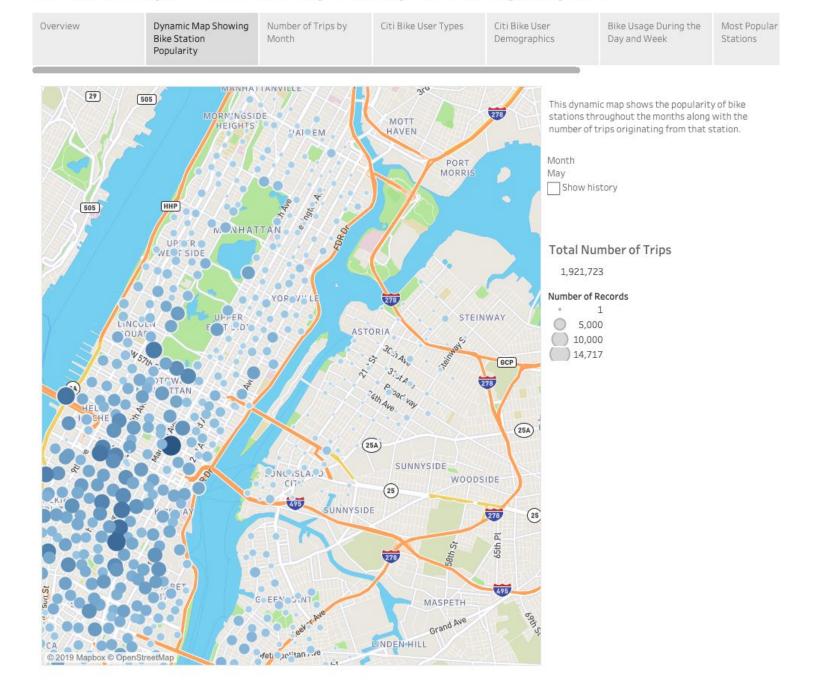
There's over 12,000 bikes being used each month. The highest number of bikes being used occured in April..

Trip Duration Weekday



Number of Unique Bikes

Month	12,642
January	12,042
February	12,620
March	13,964
April	14,455
May	12,893
Grand Total	15,264





Overview Dynamic Map Showing Bike Station Bike Station Popularity Citi Bike User Types Citi Bike User Types Demographics Bike Usage During the Day and Week Stations

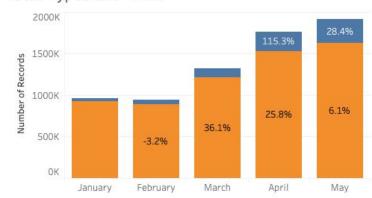
A majority of the users were subscribers. The number of subscribers decreased slightly in February but increased each month since March.

Bike usage was most popular among users between 25 and 35 years of age.

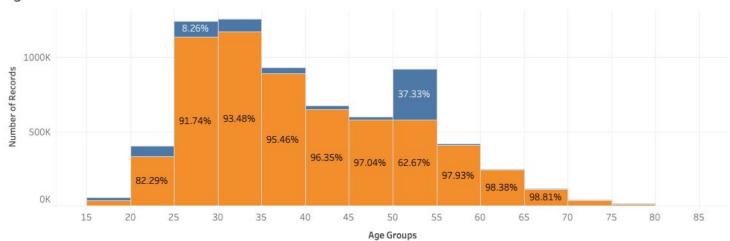
User Types

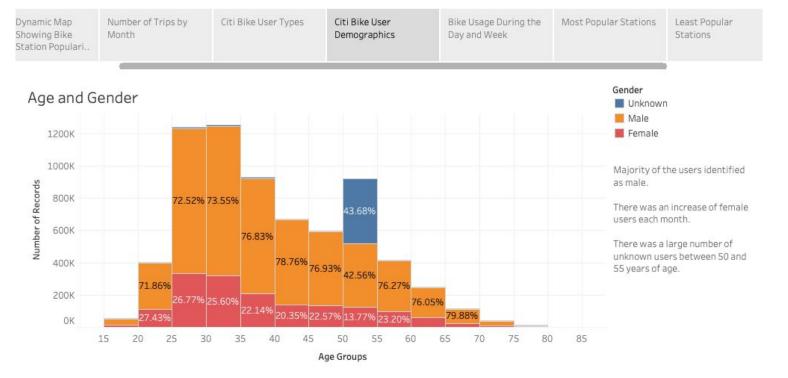


User Types Over Time



Age and Users



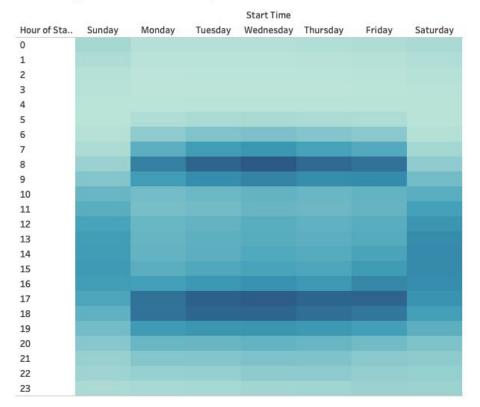


Gender Over Time



Number of Trips by Month Citi Bike User Types Citi Bike User Demographics Citi Bike User Demographics Demographics Day and Week Day and Week Day and Week Day and Week

Weekday and Hour Heat Map



Number of Records

122,370

During the weekdays, there's more usage during peak hours 7am-9am and 4pm-7pm. During the weekends, there's pretty even usage throughout the day between 10am-5pm.

Number of Trips by Month	Citi Bike User Types	Citi Bike User Demographics	Bike Usage During the Day and Week	Most Popular Stations	Least Popular Stations	Most Used Bikes
		6				7.5

The most popular stations to start and end trips tend to be transportation hubs - Penn Station, Grand Central, Union Square L train, Central Park, Chelsea Pier, and Staten Island Ferry.

Four of the popular stations all run along Broadway.

Top 10 Start Stations

Top 10 End Stations



Number of Citi Bike User Types Citi Bike User Demographics Bike Usage During the Day and Week

Day and Week

Day and Week

Day and Week

The least popular stations to start a trip are mostly in Brooklyn. The least popular stations to end a trip are in New Jersey. This may suggest that not many users bike across the bridge and mainly use the bike within Manhattan. Citibike also has a set of bikes in Jersey City.

Oddly, there's a "null" station identified in the Bronx with 37 recorded trips starting from there.

Bottom 10 Start Stations

© 2019 Mapbox © OpenStreetMap

E 12 St & 4 Av NYCBS DEPOT - DELANCEY Stockholm St & Wilson Ave S Portland Ave & Atlantic Ave

Bottom 10 End Stations

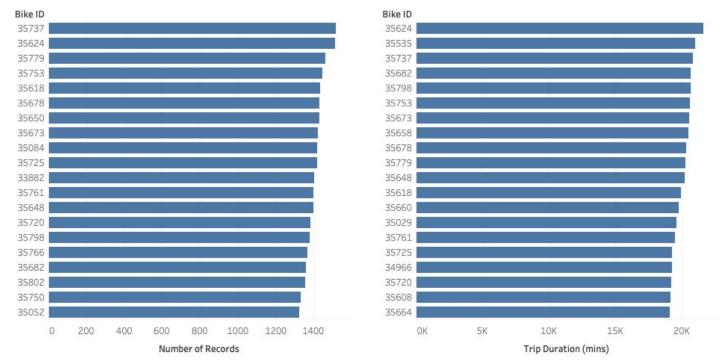


Number of Trips by Month	Citi Bike User Types	Citi Bike User Demographics	Bike Usage During the Day and Week	Most Popular Stations	Least Popular Stations	Most Used Bikes
						19

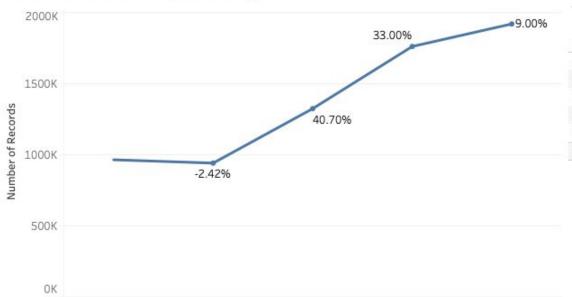
We can consider bikes that have high usage to be likely due for repair or inspection. This can be defined as bikes that have been used for the most trips or for the most time. Here are the top 20 most used bikes determined by number of trips and the top 20 most used bikes determined by trip duration.

Bike ID Usage by Trips

Bike ID Usage by Duration



Total Number of Trips %Change



March

Total Number of Trips

Month of St	
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Trip Duration Weekday

January

February



April

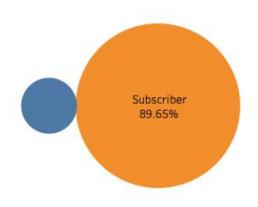
May

Number of Unique Bikes

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Bike usage was most popular among users between 25 and 35 years of age.

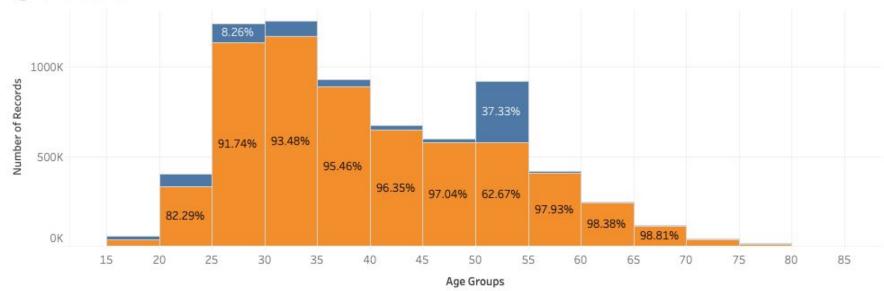


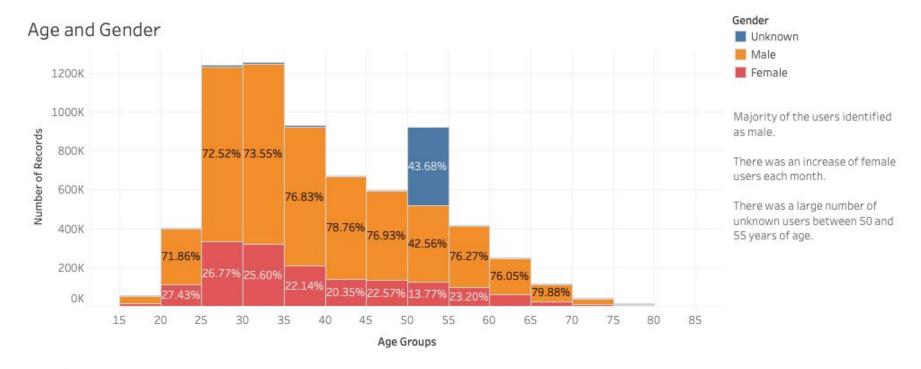


User Types Over Time

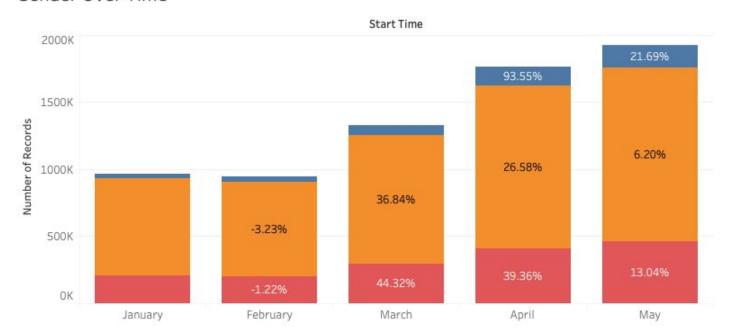


Age and Users

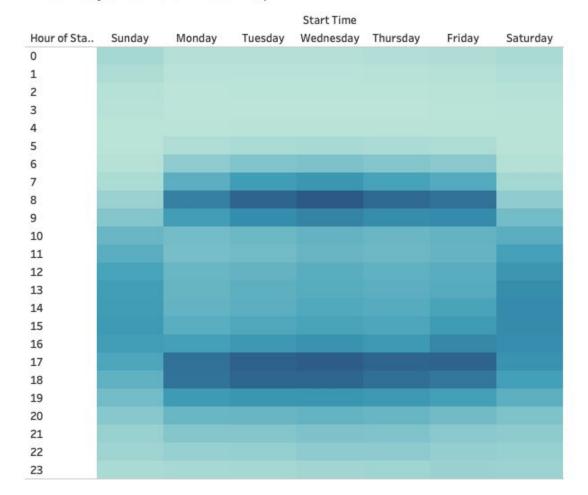




Gender Over Time



Weekday and Hour Heat Map



Number of Records

873 122,370

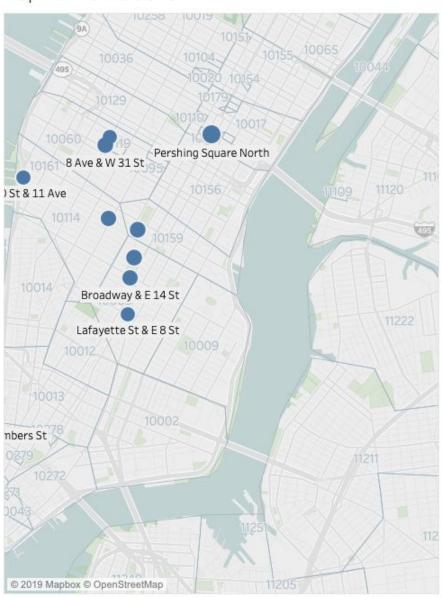
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Top 10 Start Stations



Top 10 End Stations



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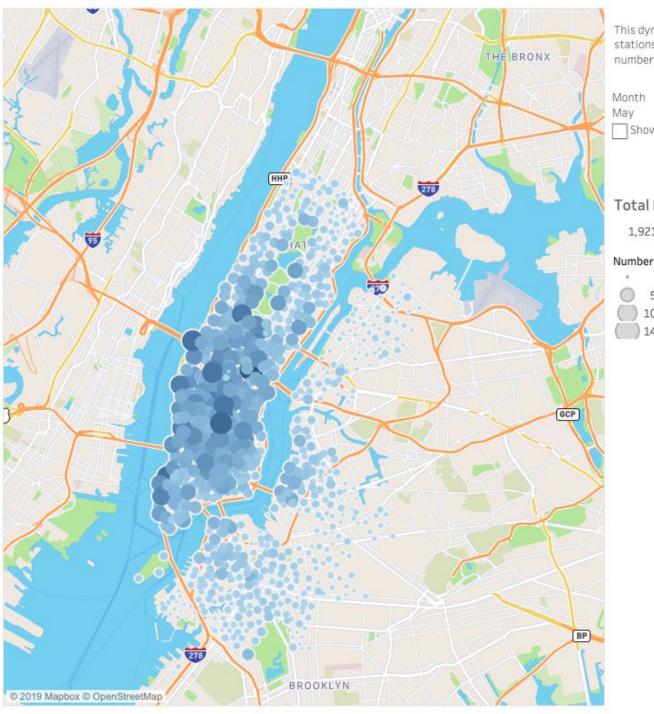
Oddly, there's a "null" station identified in the Bronx with 37 recorded trips starting from there.

Bottom 10 Start Stations

Handlebar @ Gowanus © 2019 Mapbox © OpenStreetMap

Bottom 10 End Stations





This dynamic map shows the popularity of bike stations throughout the months along with the number of trips originating from that station.

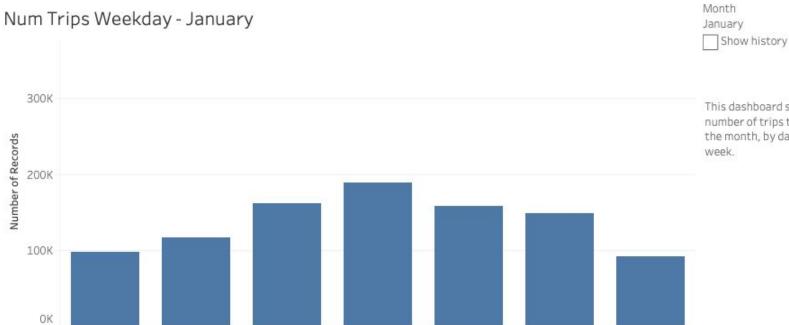
Show history

Total Number of Trips

1,921,723

Number of Records

5,000 10,000 14,717



Wednesday

Thursday

Friday

Saturday

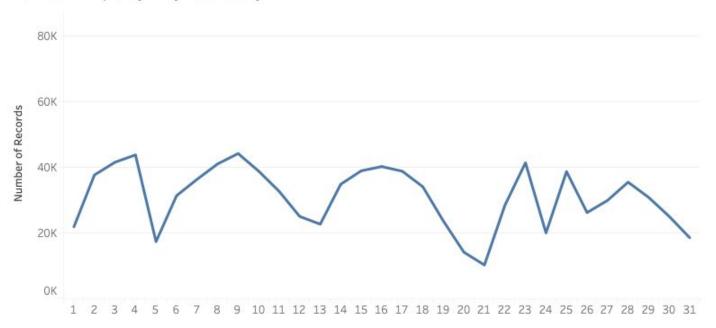
This dashboard shows the number of trips taken each day of the month, by date and by day of week.

Number Trips by Day - January

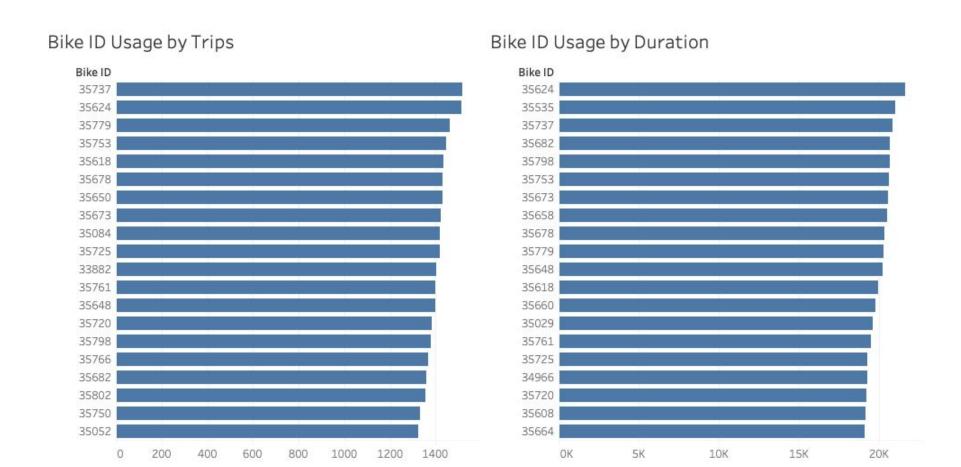
Monday

Tuesday

Sunday



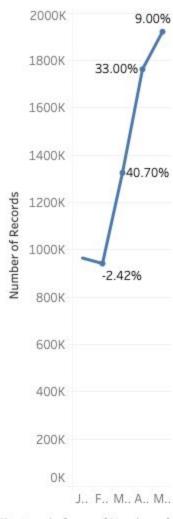
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Trip Duration (mins)

Number of Records

Total Number of Trips %Change



The trend of sum of Number of Records for Start Time Month. The marks are labeled by % Difference in Number of Records.

Total Number of Trips

Month of St..

January	965,505
February	942,153
March	1,325,595
April	1,763,101
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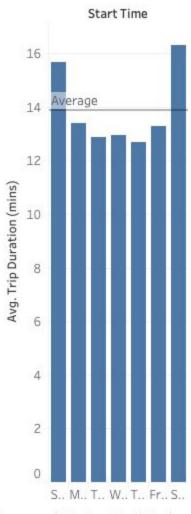
Sum of Number of Records broken down by Start Time Month.

Number of Unique Bikes

Month	
January	12,642
February	12,620
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April	14,455
May	12,893
Grand Total	15,264

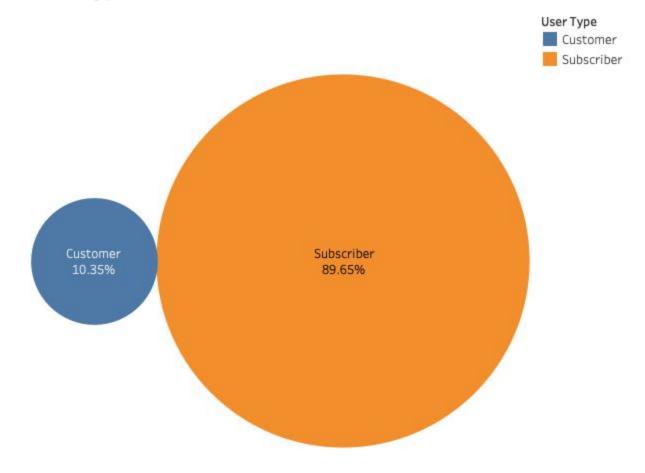
Distinct count of Bike ID broken down by Month.

Trip Duration Weekday



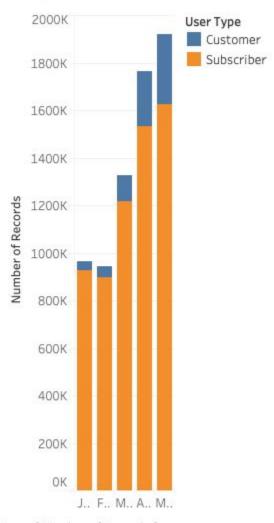
Average of Trip Duration (mins) for each Start Time Weekday. The data is filtered on Month, which keeps April, February, January, March and May.

User Types



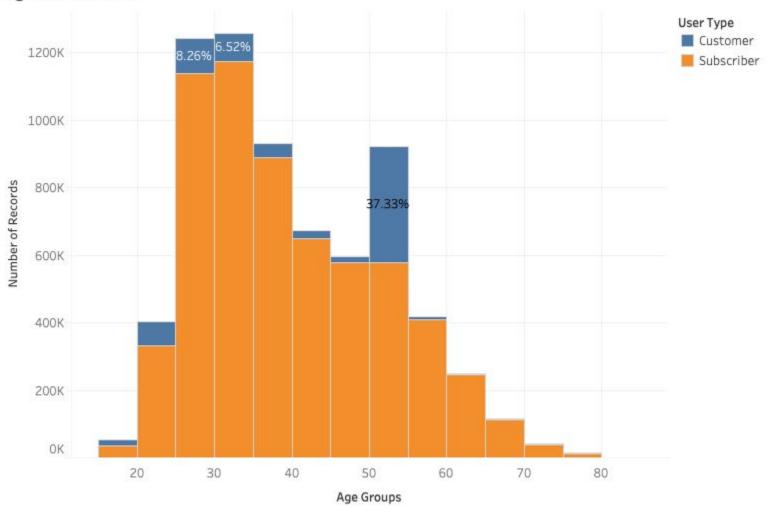
User Type and % of Total Number of Records. Color shows details about User Type. Size shows count of User Type. The marks are labeled by User Type and % of Total Number of Records.

User Types Over Time



Sum of Number of Records for each Start Time Month. Color shows details about User Type. The marks are labeled by % Difference in Count of User Type.

Age and Users



The trend of sum of Number of Records for Age Groups. Color shows details about User Type. The marks are labeled by % of Total Count of User Type.

Age and Gender Gender Unknown 1200K Male Female 1000K Number of Records 800K 43.68% 600K 400K 200K

76.05%

70

80

60

The trend of sum of Number of Records for Age Groups. Color shows details about Gender. The marks are labeled by % of Total Count of Gender.

50

Age Groups

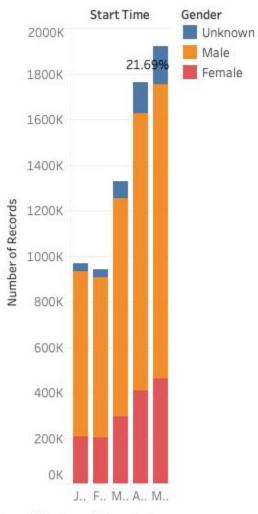
40

0K

20

30

Gender Over Time



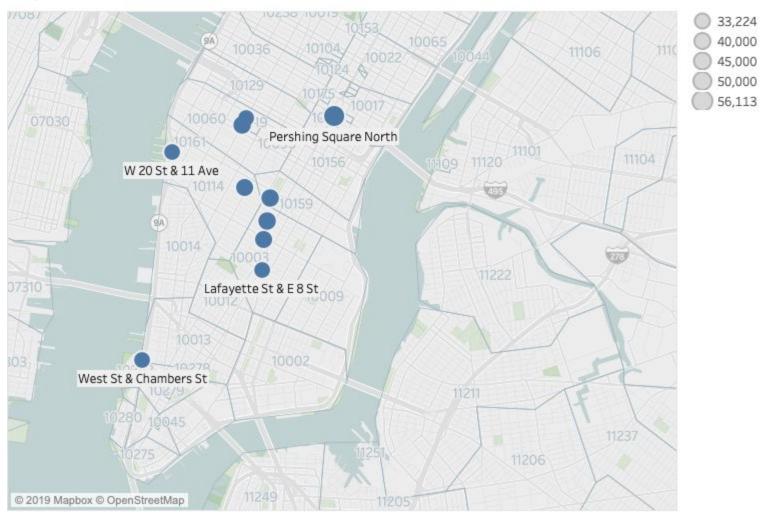
Sum of Number of Records for each Start Time Month. Color shows details about Gender. The marks are labeled by % Difference in Count of Gender. The view is filtered on Gender, which keeps Unknown, Male and Female.

Top 10 Start Stations



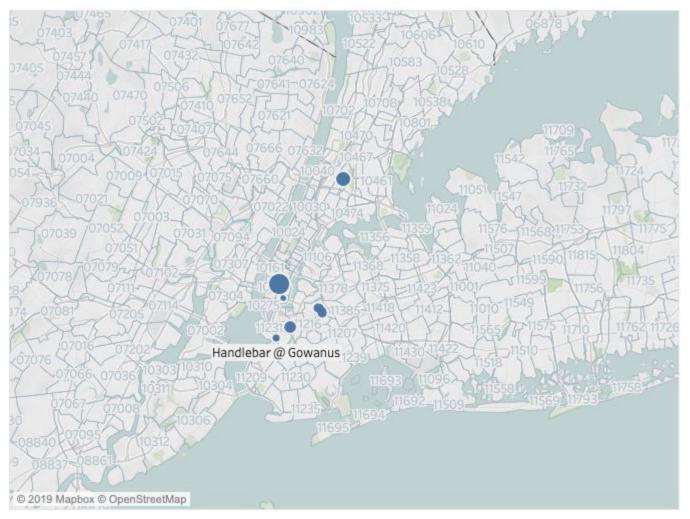
Map based on average of Start Station Longitude and average of Start Station Latitude. Size shows sum of Number of Records. The marks are labeled by Start Station Name. Details are shown for Start Station Name. The data is filtered on In / Out of Top 10 Start Stations, which keeps In.

Top 10 End Stations



Map based on average of End Station Longitude and average of End Station Latitude. Size shows sum of Number of Records. The marks are labeled by End Station Name. Details are shown for End Station Name. The data is filtered on In / Out of Top 10 End Stations, which keeps In.

Bottom 10 Start Stations



20406077

Map based on average of Start Station Longitude and average of Start Station Latitude. Size shows sum of Number of Records. The marks are labeled by Start Station Name. Details are shown for Start Station Name. The data is filtered on In / Out of Bottom 10 Start Stations, which keeps In.

Bottom 10 End Stations



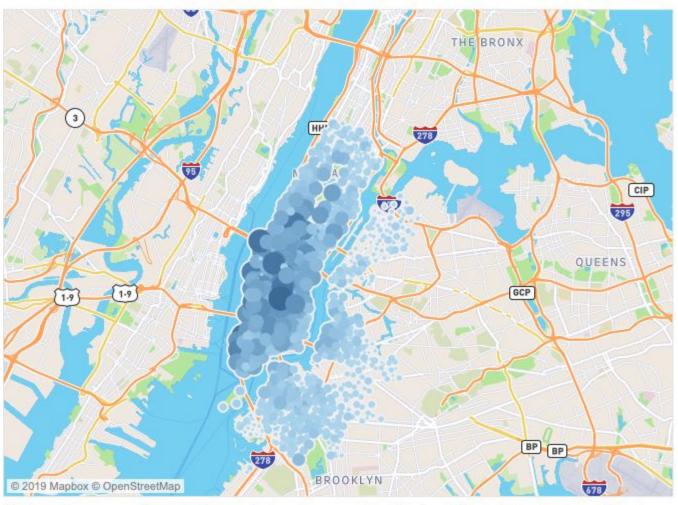
Map based on average of End Station Longitude and average of End Station Latitude. Size shows sum of Number of Records. The marks are labeled by End Station Name. Details are shown for End Station Name. The data is filtered on In / Out of Bottom 10 End Stations, which keeps In.

Total Trips -January

965,505

Sum of Number of Records. The view is filtered on Month, which keeps April, February, January, March and May.

Bike Stations - May



Number of Records

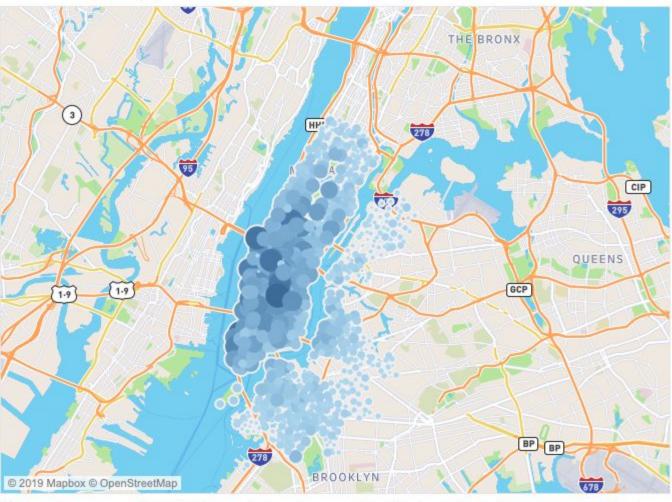
5,000 10,000 14,717

Number of Records

14,717

Map based on average of Start Station Longitude and average of Start Station Latitude. Color shows sum of Number of Records. Size shows sum of Number of Records. Details are shown for Start Station Name. The view is filtered on Month, which keeps April, February, January, March and May.

Bike Stations (2) - May



Number of Records

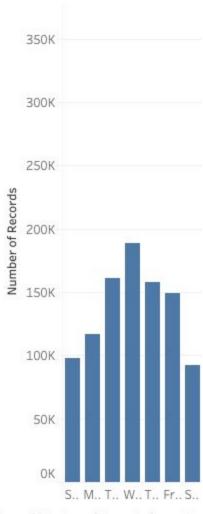
5,000 10,000 14,717

Number of Records

14,717

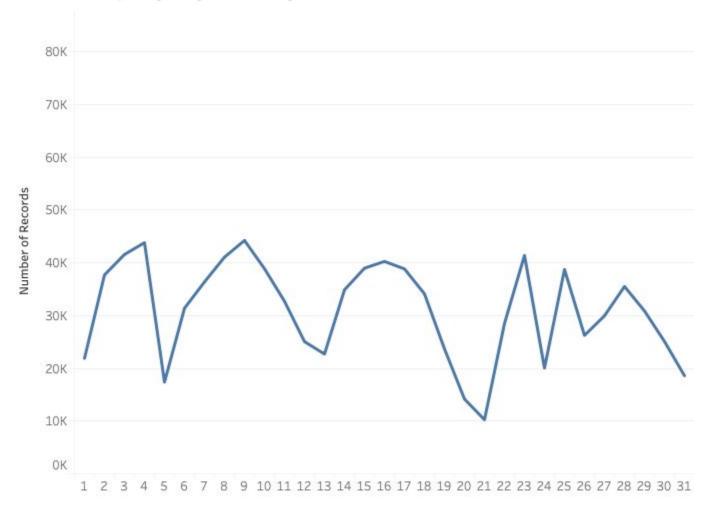
Map based on average of Start Station Longitude and average of Start Station Latitude. Color shows sum of Number of Records. Size shows sum of Number of Records. Details are shown for Start Station Name. The view is filtered on Month, which keeps April, February, January, March and May.

Num Trips Weekday -January



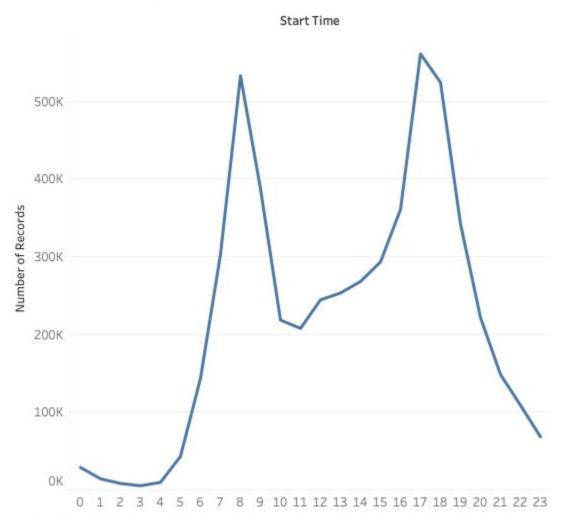
Sum of Number of Records for each Start Time Weekday. The view is filtered on Month, which keeps April, February, January, March and May.

Number Trips by Day - January



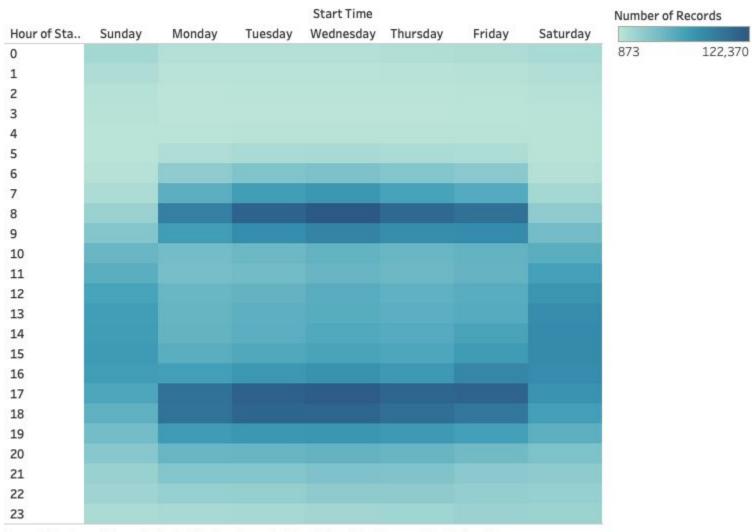
The trend of sum of Number of Records for Start Time Day. The view is filtered on Month, which keeps April, February, January, March and May.

Number Trips by Hour



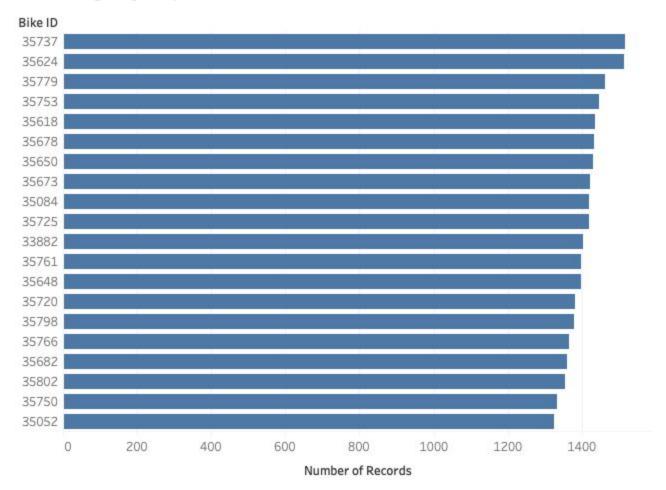
The trend of sum of Number of Records for Start Time Hour. The data is filtered on Start Time Weekday, which keeps Monday, Tuesday, Wednesday, Thursday and Friday.

Weekday and Hour Heat Map



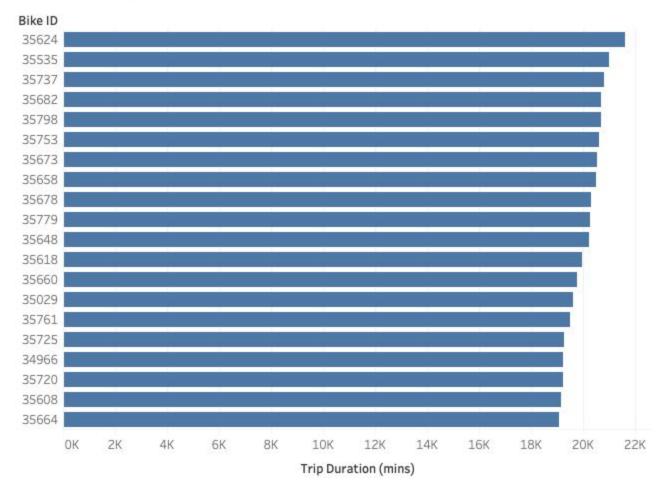
Sum of Number of Records (color) broken down by Start Time Weekday vs. Start Time Hour.

Bike ID Usage by Trips



Sum of Number of Records for each Bike ID. The data is filtered on In / Out of Top 20 Bikes Used by Num Trips, which keeps In.

Bike ID Usage by Duration



Sum of Trip Duration (mins) for each Bike ID. The data is filtered on In / Out of Top 20 Bikes Used by Duration, which keeps In.