

CITY BIKE RENTAL VOLUMES



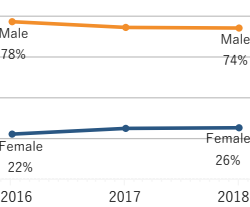
Go To End Stations

Date Filter
11/16 to 11/18

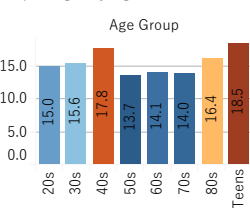
Seasonal
All

User Type All

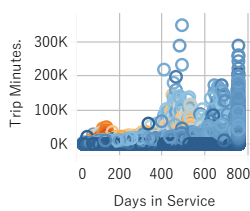
Rentals by Gender



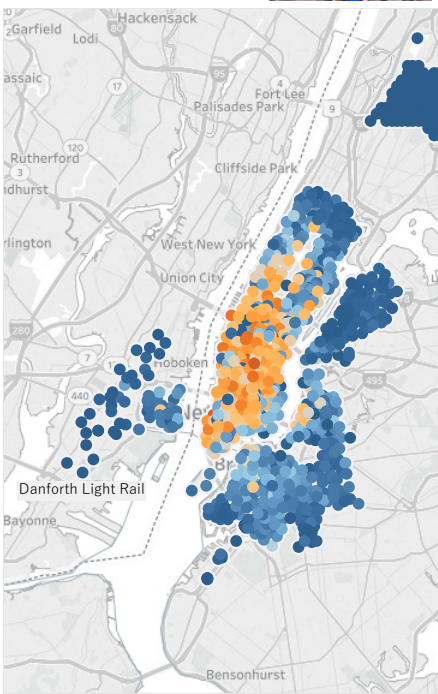
Trip Length by Age(in minutes)



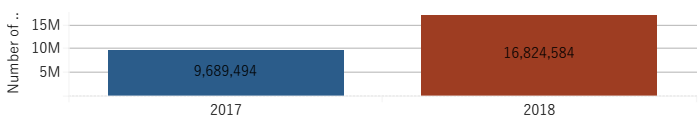
Bike Utilization



Start Station Map



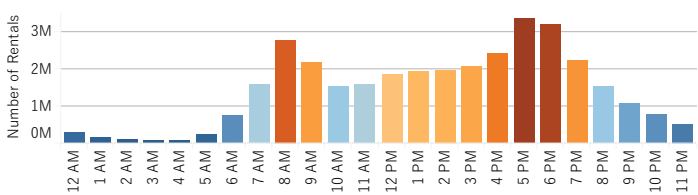
% Growth



Top 10 Start Stations by Volume

	2016	2017	2018	Grand Total
Grand Total	827,841	16,624,113	16,824,584	34,276,538
1 Ave & E 16 St	3,812	66,820	63,003	133,635
1 Ave & E 18 St	2,864	48,762	45,021	96,647
1 Ave & E 30 St	2,897	45,127	40,104	88,128
1 Ave & E 44 St	1,828	30,108	27,770	59,706
1 Ave & E 62 St	2,258	39,359	37,526	79,143
1 Ave & E 68 St	4,394	55,768	53,999	114,161
1 Ave & E 78 St	2,324	36,784	35,902	75,010
1 Ave & E 94 St	703	11,733	13,836	26,272
1 Ave & E 110 St		2,052	10,113	12,165
1 Pl & Clinton St	280	7,363	8,484	16,127

Volume by Trip Start Hour



CITY BIKE RENTAL VOLUMES

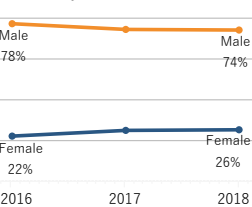


Go To Start Stations

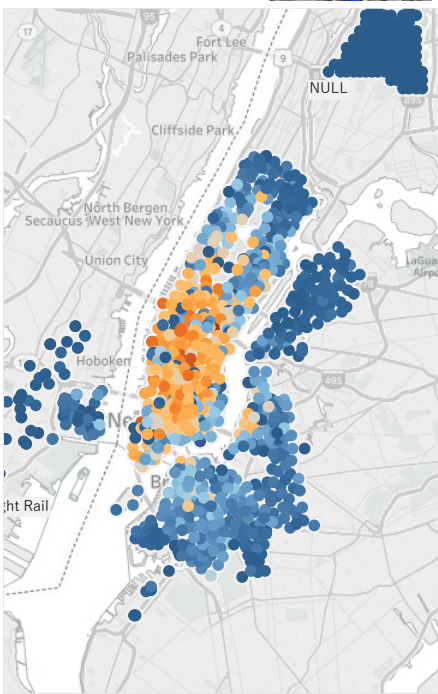
Date Filter
11/16 to 11/18

Seasonal
All

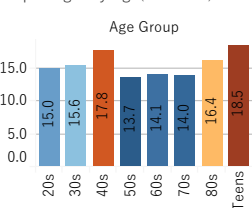
Rentals by Gender



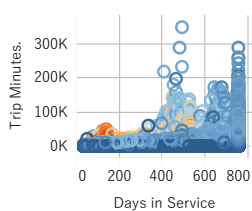
End Station Map



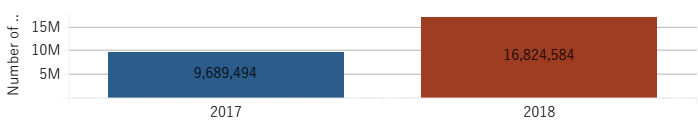
Trip Length by Age(in minutes)



Bike Utilization



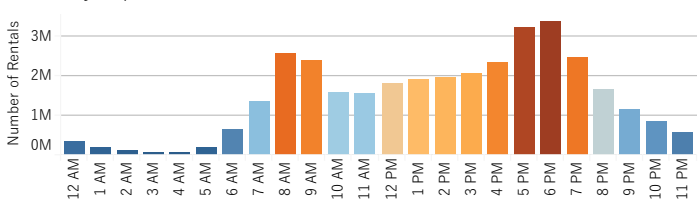
% Growth



Top 10 End Stations

	2016	2017	2018	Grand Tot..
Grand Total	827,841	16,624,102	16,824,576	34,276,519
Pershing Square North	9,513	160,387	141,684	311,584
E 17 St & Broadway	6,407	117,318	106,506	230,231
Broadway & E 22 St	6,960	116,509	102,222	225,691
W 21 St & 6 Ave	6,159	108,458	101,915	216,532
West St & Chambers St	3,826	114,514	95,910	214,250
8 Ave & W 31 St	4,846	98,780	75,458	179,084
8 Ave & W 33 St	5,274	90,574	80,440	176,288
Broadway & E 14 St	5,568	82,160	87,655	175,383
W 20 St & 11 Ave	4,172	96,125	74,804	175,101
12 Ave & W 40 St	2,547	89,925	82,396	174,868

Volume by Trip End Hour



Assignment Questions

* How many trips have been recorded total during the chosen period?
32,276,538 (11/1/2016-11/30/2018)

* By what percentage has total ridership grown?
About 75% from 2017 through 2018 (2018 numbers are not annualized)

* How has the proportion of short-term customers and annual subscribers changed?
The short term customer numbers grown at roughly the same rate as the subscriber numbers. Each have grown by about 75% year over year but the non-suscriber numbers make up only about 11% of the business for 2018.

* What are the peak hours in which bikes are used during summer months?
There is peak morning hour of 8 AM but 5 and 6 PM hourse show the highest utilization over all.

* What are the peak hours in which bikes are used during winter months?
Similar to the summer hours there is a peak around 5 ad 6 pm but the morning is actually is actually a little higher at 8 AM.
I am guessing this is from people not wanting to digh their cars out?

* Today, what are the top 10 stations in the city for starting a journey? (Based on data, why do you hypothesize these are the top locations?)
The top 10 stations are pasted below. These all look they are on the lower east and west sides. Based on this area and hour of utilization I would expect these are commuter users.

* Today, what are the top 10 stations in the city for ending a journey? (Based on data, why?)
The top 10 stations are pasted below. These all look they are in the same areas but are allittle more concentreated as the are common work destinations.

* Today, what are the bottom 10 stations in the city for starting a journey? (Based on data, why?)
Both the top 10 start and end stations are very similar. They are either bike repair shops or in south Brooklyn.
These look like relatively isolated areas as there are no stations in close proximity.

* Today, what are the bottom 10 stations in the city for ending a journey (Based on data, why?)

* Today, what is the gender breakdown of active participants (Male v. Female)?
It is about 74% male and 26% female for 2018.

* How effective has gender outreach been in increasing female ridership over the timespan?
Not very effective. Female ridership did start out very low (around 22% in Nov-Dec 2016) but has been right around 25% for the last 2 years.

* How does the average trip duration change by age?
There a little change. Riders in their 20s and 30s are averaging around 15 minutes per ride where Teends and riders in their 40s average around 18 minutes.

* What is the average distance in miles that a bike is ridden?

* Which bikes (by ID) are most likely due for repair or inspection in the timespan?
30503, 30875 and 30466 are all heavily used and each has only been in service about a year and a half.

* How variable is the utilization by bike ID?
It varies greatly In fact many of the bikes that were release more recently are very heavily used. I am guessing that is due to new, popular locations being opened.

Top 10 Start Stations by Volume

	2018	Grand Tot. 2018
Grand Total	16,824,584	16,824,584
Pershing Square North	142,040	142,040
E 17 St & Broadway	102,226	102,226
W 21 St & 6 Ave	100,440	100,440
Broadway & E 22 St	99,905	99,905
West St & Chambers St	91,123	91,123
Broadway & E 14 St	87,581	87,581
W 41 St & 8 Ave	82,912	82,912
8 Ave & W 33 St	80,378	80,378
Broadway & W 60 St	79,899	79,899
12 Ave & W 40 St	79,598	79,598

Top 10 End Stations

	2018	Grand Tot. 2018
Grand Total	16,824,576	16,824,576
Pershing Square North	141,684	141,684
E 17 St & Broadway	106,506	106,506
Broadway & E 22 St	102,222	102,222
W 21 St & 6 Ave	101,915	101,915
West St & Chambers St	95,910	95,910
Broadway & E 14 St	87,655	87,655
W 41 St & 8 Ave	83,091	83,091
12 Ave & W 40 St	82,396	82,396
8 Ave & W 33 St	80,440	80,440
Lafayette St & E 8 St	78,995	78,995