# NYC Citibike 2017-18 State Of The System

Visual Analysis By Leo Santos

# Analysis - Findings

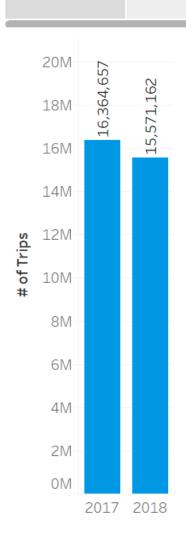
- 1. 2018's overall ridership decreased by 4.84%, mainly due to a dip during 2018-Q3 (30.1% less than 2017-Q3); that quarter alone canceled out all 2018's gains on the rest of the quarters, leaving a overall negative balance compared to 2017.
- 2. NYC Citibike has successfully harnessed the power of loyalty: subscriber base is around 500%-2300% larger than of the short-term ride base.
- 3. Top popular stations follow busiest NYC spots (metro stations, landmarks, business districts); interestingly, top start and end stations are almost the same.
- 4. Ridership-by-hour follows a relatively predictable pattern pegged to usual business operations start and end timeframes, with peaks at the 08hrs and the 17/18hrs. Summer and Winter hour distribution are fairly similar, yet Winter's afternoon peak is a bit skewed towards early 17hr than 18hr, probably due to earlier sunset.
- 5. Female ridership during 2018 had some significant increases Q over Q; however, 2018 Q3 dip affected overall metrics leaving a negative overall balance.

# Bike trips during 2017 and 2018 Quarterly seasonality and growth. There was a significant drop on 2018-Q3

Subscriber proportion is extremely high compared to the short term ride segment Start Time - Winter; highly skewed during business in and out standard hours Start Time - Summer; highly skewed during business in and out standard hours Top 10 Start Stations Bottom 10 Start Stations

Top 10 End Stations

Bottom 10 End Stations Gender Breakdown : heavily skewed towards men Female ri dership pr ogression



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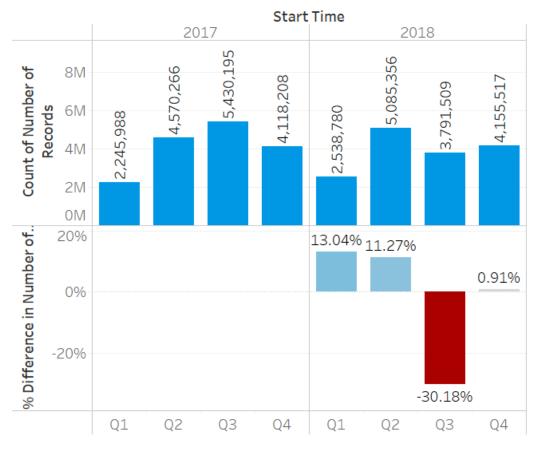
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#### Trip Growth Q Over Q 2017-2018



#### **Trip Growth Q on Q 2017-2018**



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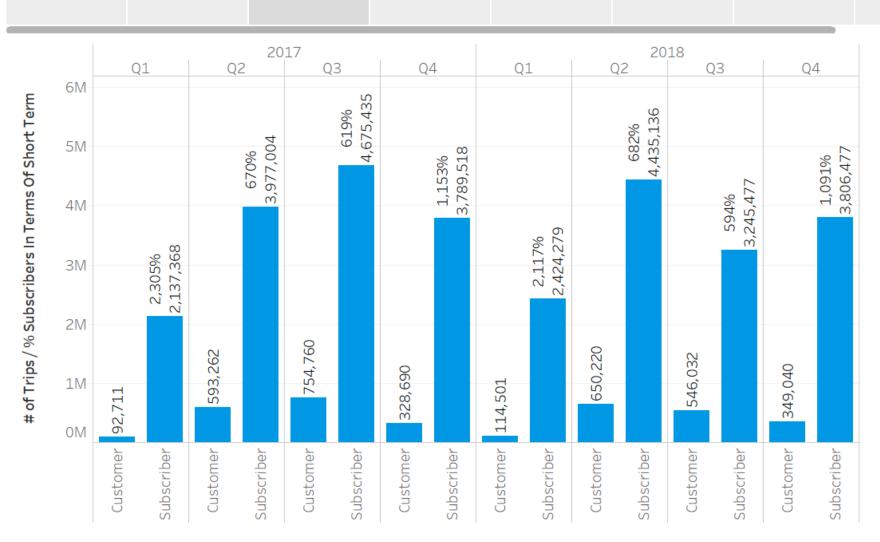
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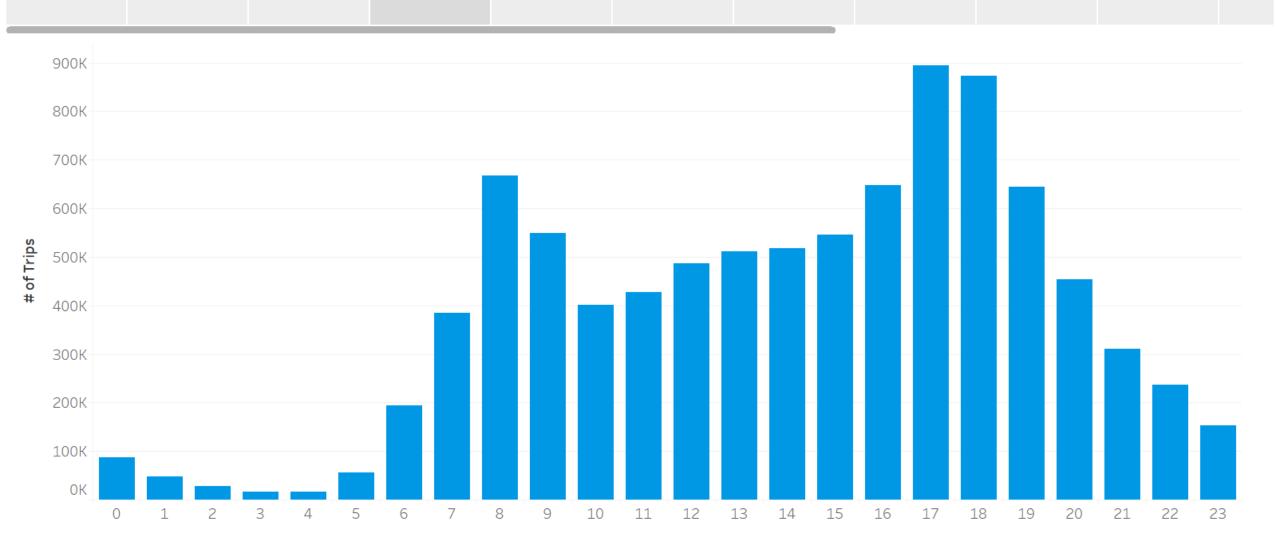




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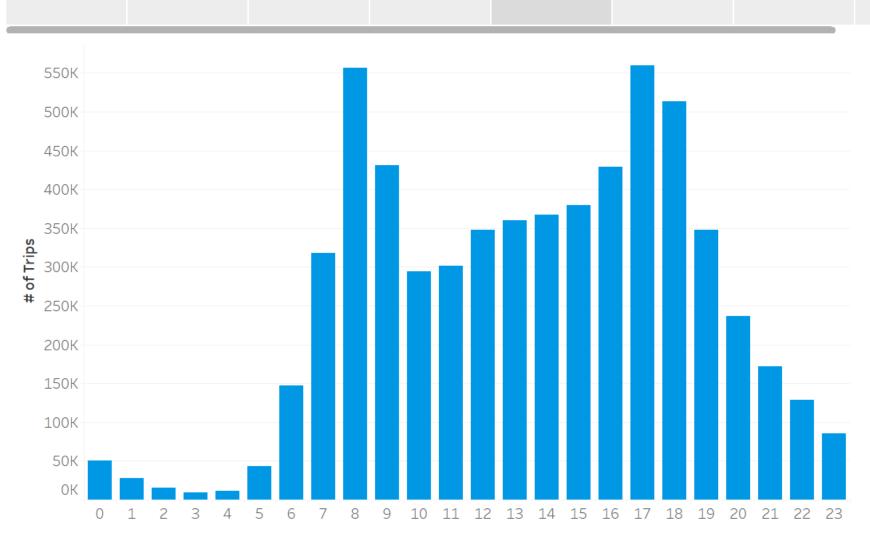


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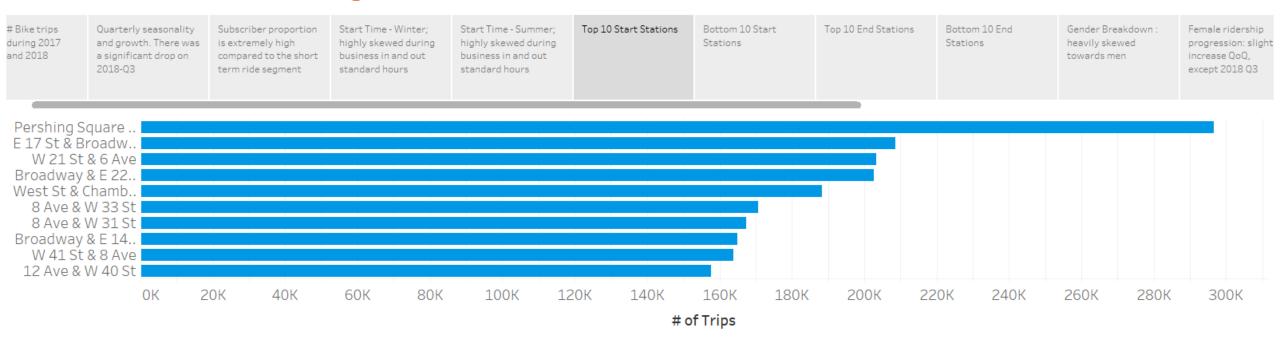
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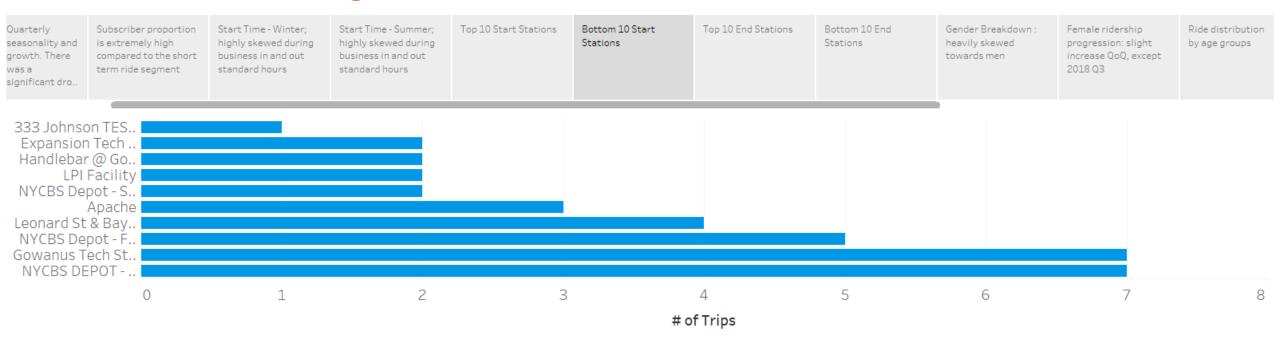
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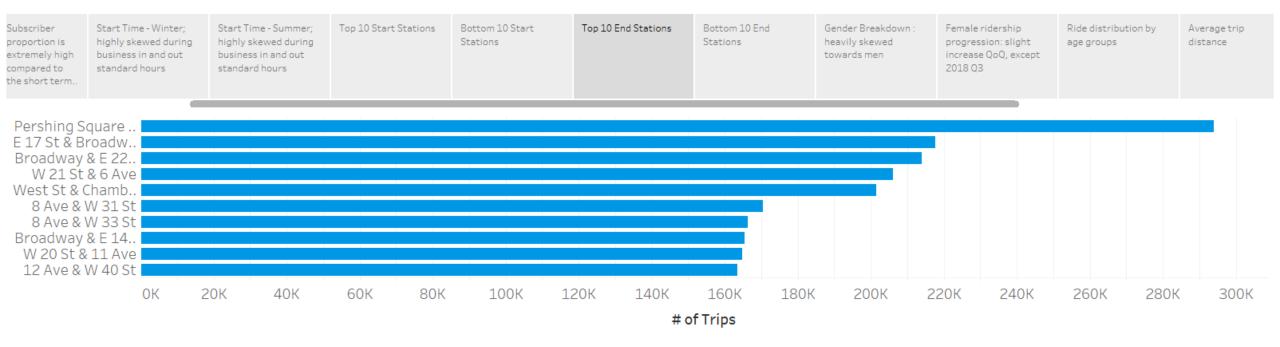


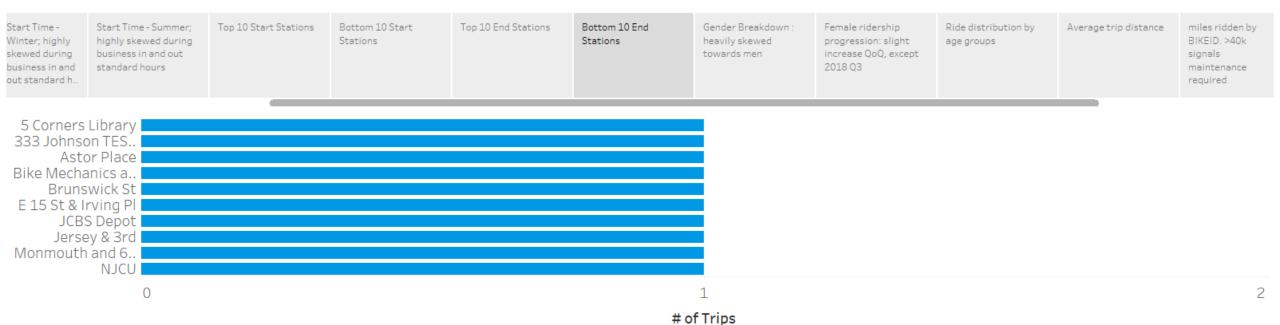


NovemberDecember









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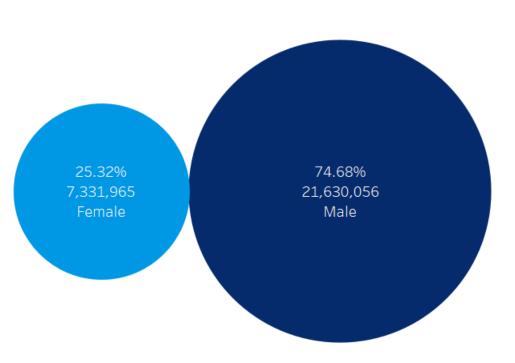
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Average trip distance

miles ridden by BIKEID. >40k signals maintenance required Bike utilization / 24months. Top bike ID gets 33% utilization during the day



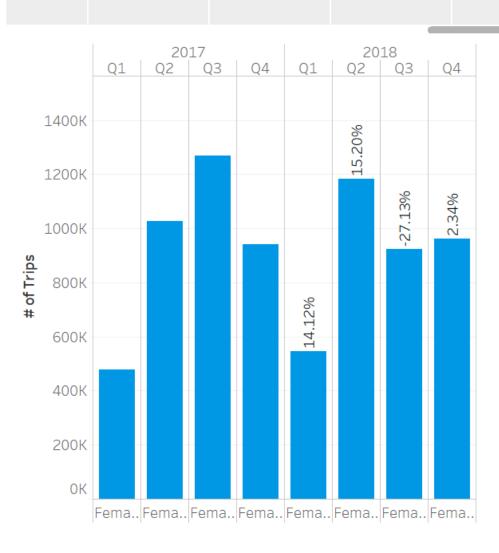


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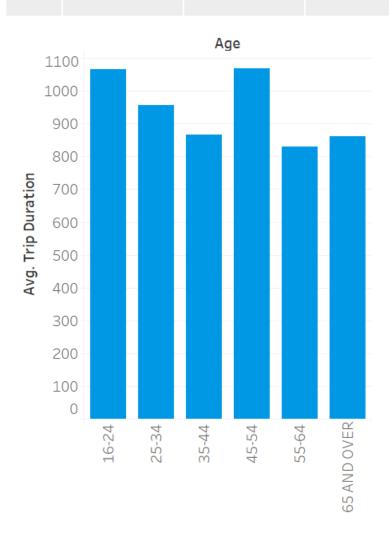


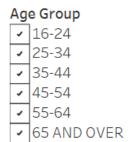
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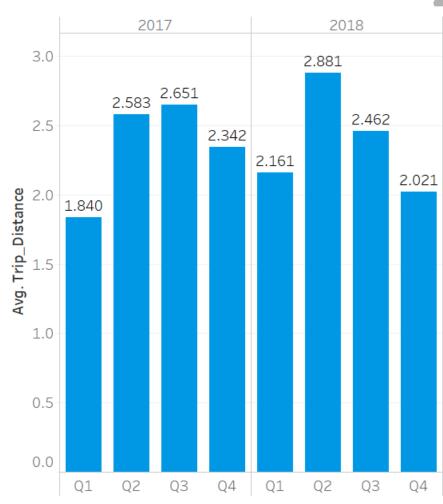
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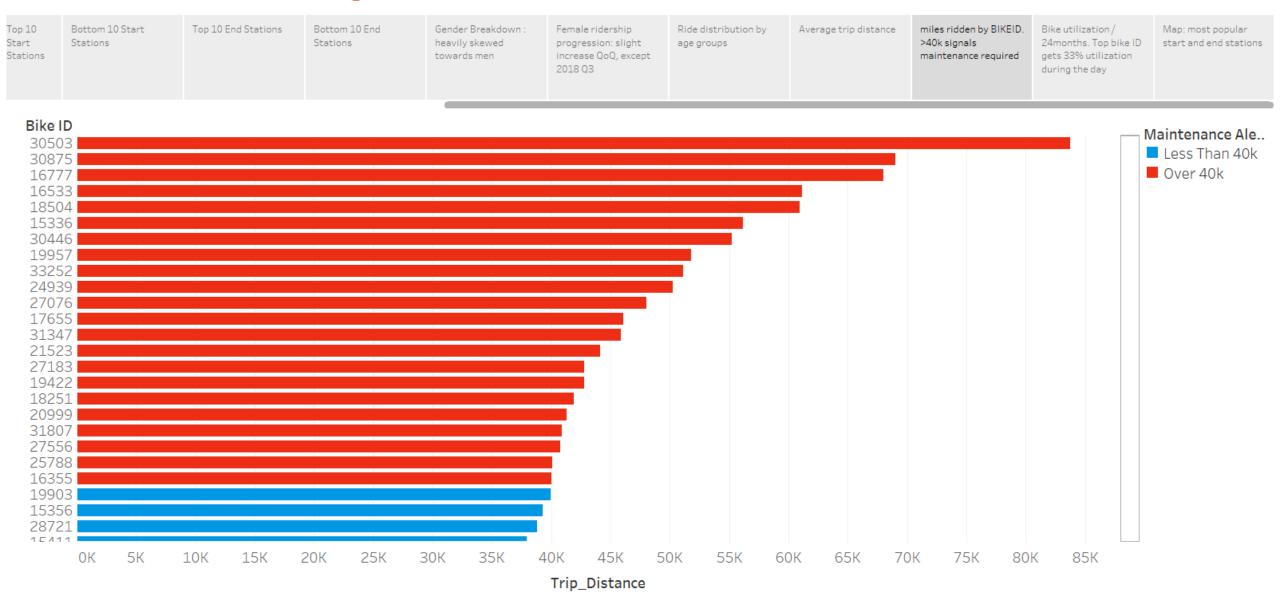
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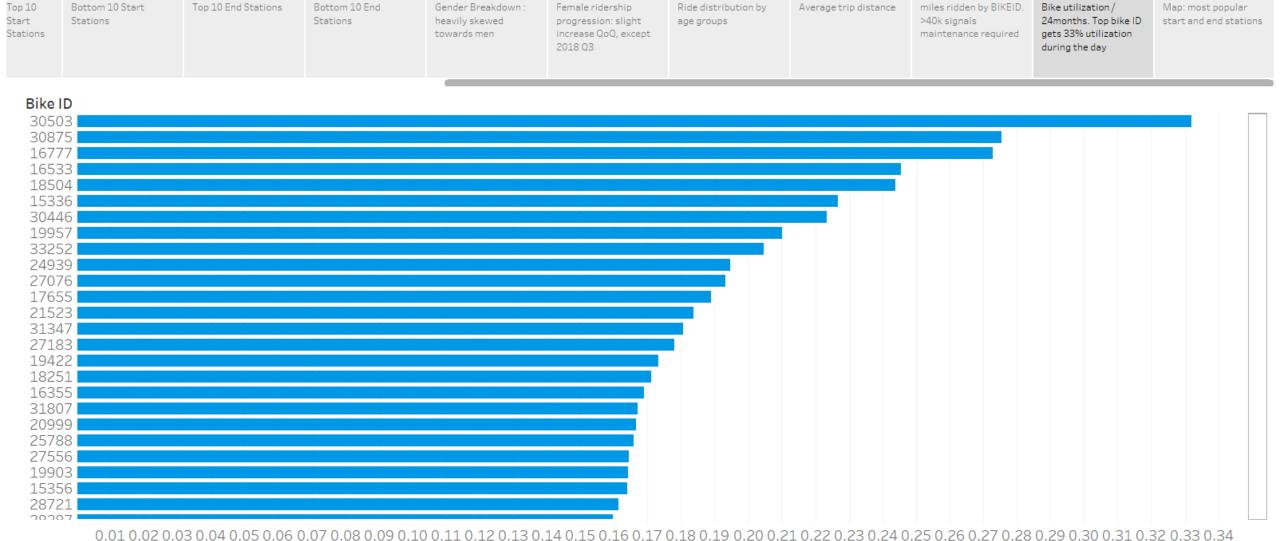




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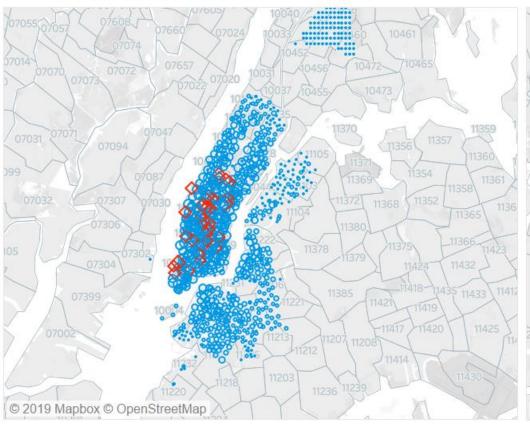


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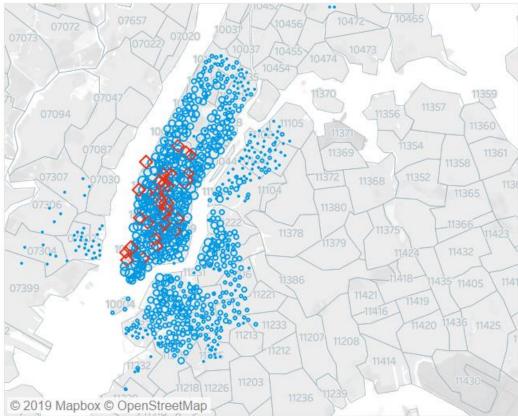
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#### NYC Bike Map: Top Start Stations



#### NYC Bike Map: Top End Stations



#### Popularity

- <120000
- > 120000