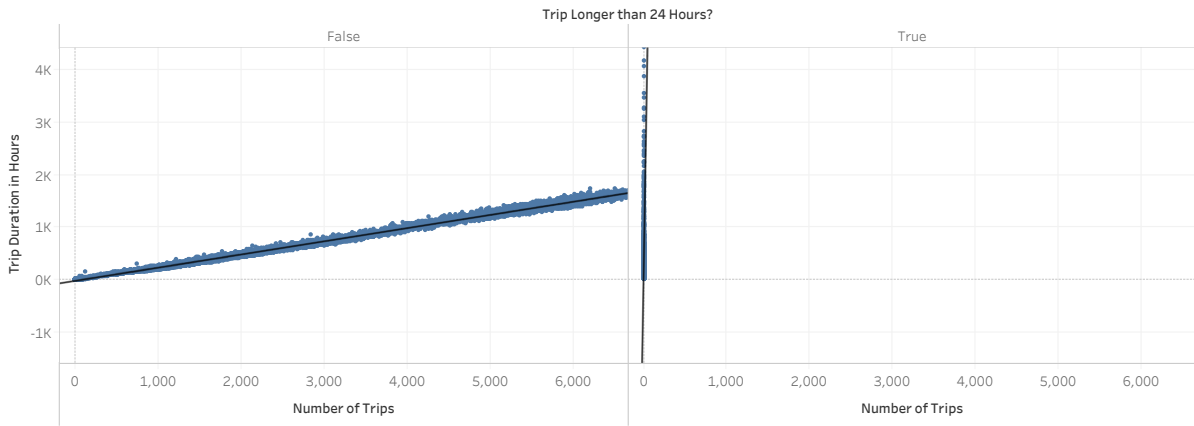


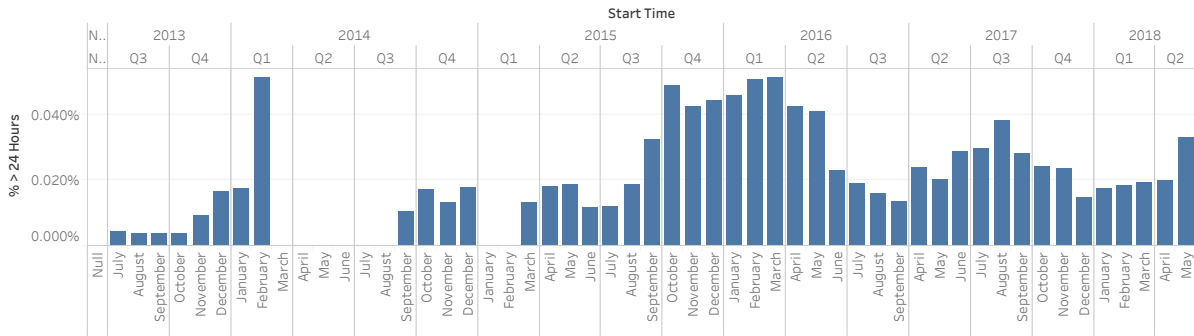
### Trips vs Duration by Bike ID

After excluding trips last longer than 24 hours, the chart on left show correlation between number of trips vs total duration for each bike. Those bike with lots of > 24 duration might have issue docking, or other reasons not been records as returned.



### %ofTrips>24Hours

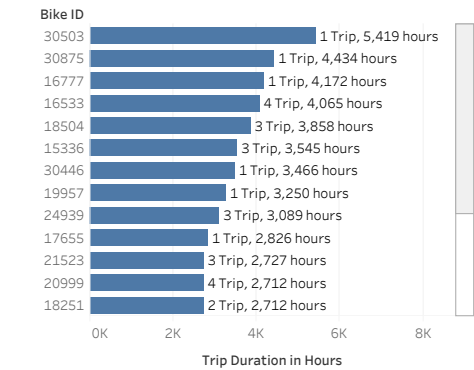
This chart show percentage of trips with duration longer than 24 hours. The greater percentage might indicate problem with docking station or bikes. Futher analysis can be done by station. From this chart, it shows spring 2014 looks like the best time, while during winter of 2015/2016 the rate is high.



### TopPopularBikes

Bike ID	Top Trips Rank along Table (Down)	Total Number of Records
15731	2	7,146
16158	5	7,025
17289	9	6,960
17526	4	7,030
17955	6	6,988
18104	1	7,222
19455	3	7,076
19633	7	6,963
20233	8	6,962

### BikesLongestDuration



### Observations

The data suggests the bikes most likely due to service could one of the following types:

1. High utilization. For example, Bike ID 18014 has been utilized almost 8K times.

2. Long duration. Like strange behavior Bike ID 24502, 24519 etc. have overindexed duration of long trips. Also, those bikes might have locking issues.