



**Bike Share Toronto** offers **24/7** convenient access to **389 stations** (2018) across **200 km<sup>2</sup>** of the city. Whether you're commuting or exploring the city with friends and family, bike sharing is a fun, flexible and cost-effective way to navigate Toronto.

**How to increase revenue by 10% by the end of next year**

- Identify and analyze **5 busiest stations**. From the data we can redistribute bike volume for each station.
- Identify and analyze the **busiest season**, which helps for preparing equipment and staff.
- Identify and analyze the **trend of 2 kinds of membership**. From that we can increase the annual member.

# SUMMARY



**Total trips 2017**

**1.49M**

**Total trips 2018**

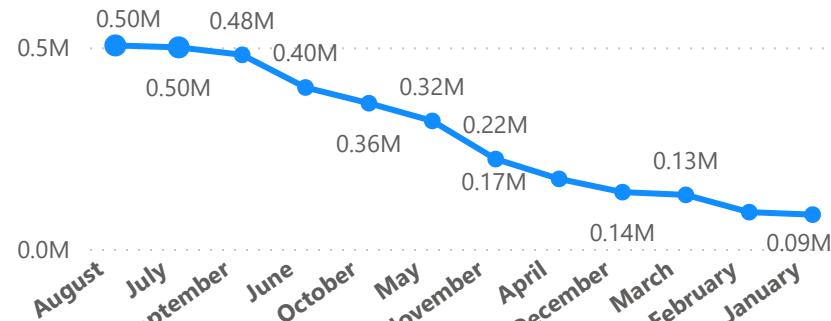
**1.92M**

trip\_start\_day

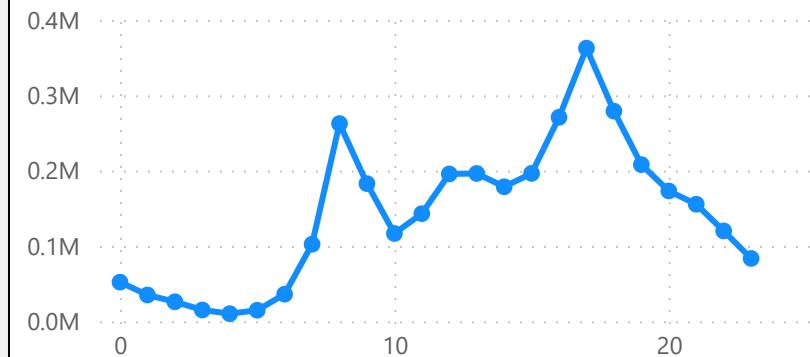
1/1/2017

12/30/2018

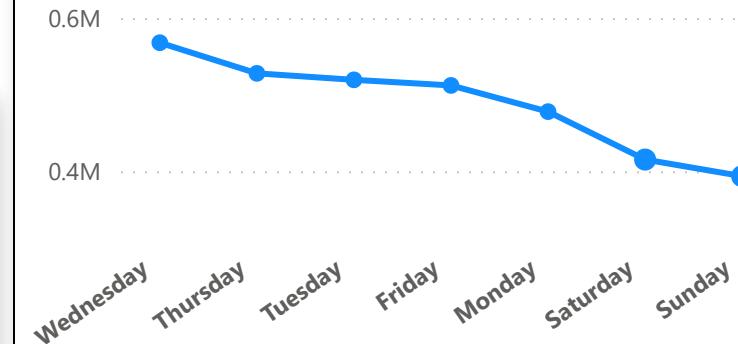
**Total trips Monthly**



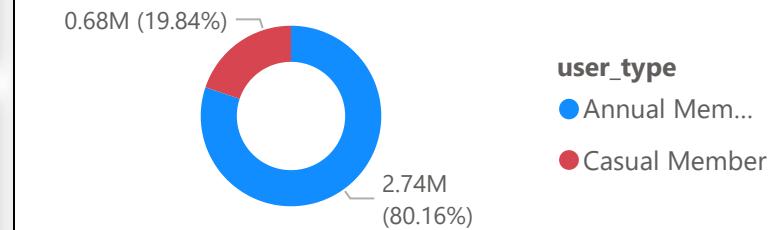
**Total trips by hour**



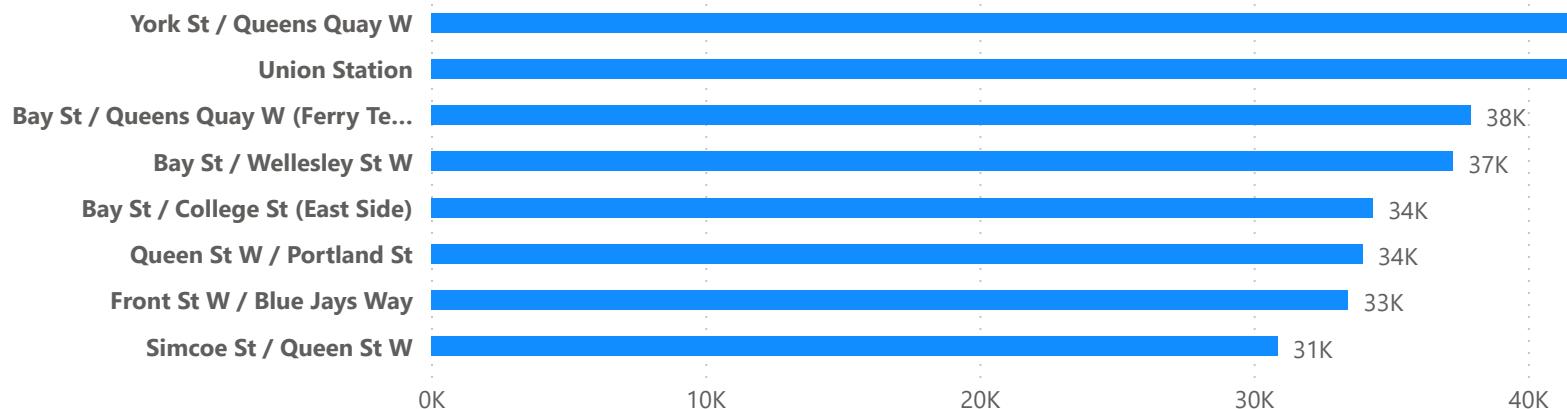
**Total trips by Day**



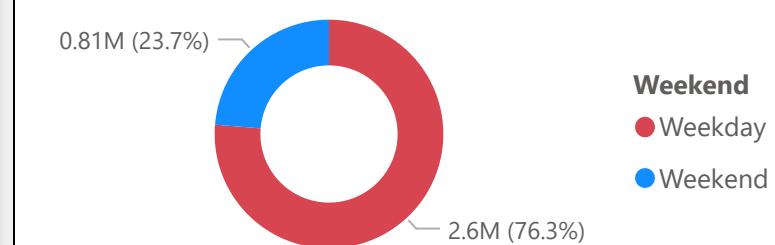
**Total trips Casual vs Annual**



**Total trips by Station**



**Total trips Weekend vs Weekday**



# STATION ANALYSIS



FILTER station\_name

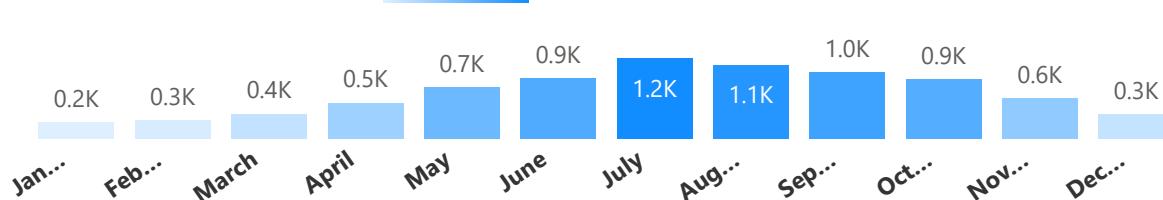
1/1/2017

12/31/2018

Bathurst Subway Stat...

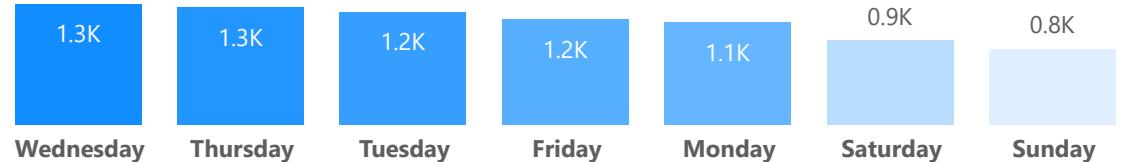
## Monthly Trips

Count of from\_station\_name 0.23K 1.16K



## Daily Trips

Count of Day Name 0.84K 1.33K



## Total trips by Year

## Total trips Weekend vs Weekday

6.2K

1.8K

4K

2K

0K

Weekday

Weekend

Weekend

## Total trips Weekend vs Weekday

6.2K

1.8K

4K

2K

0K

2017

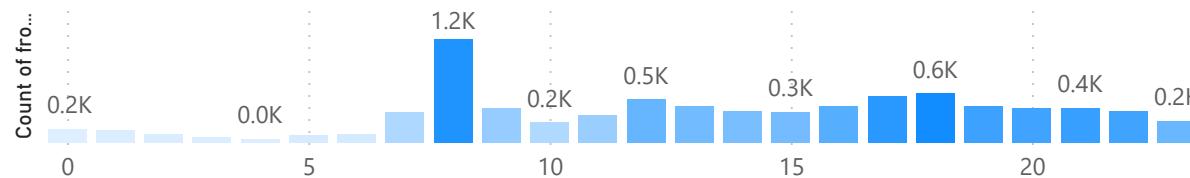
3.9K

2018

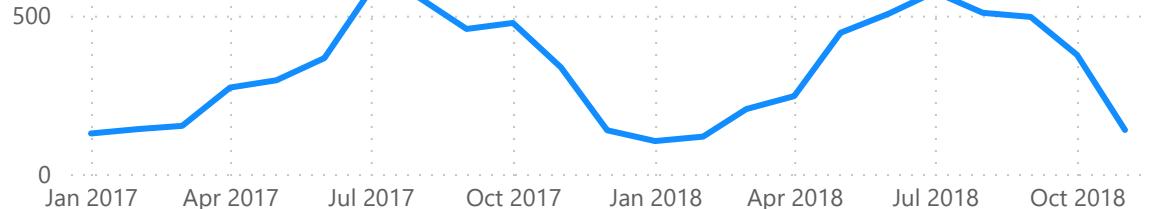
Year

## Total trips by hour

Sum of trip\_start\_time 0K 9.95K



## Total trips through 2 year





Total trips in  
August

2484

Total trips in  
July

2503

Total trips in  
September

2284

trip\_start\_day

1/1/2017



12/30/2018



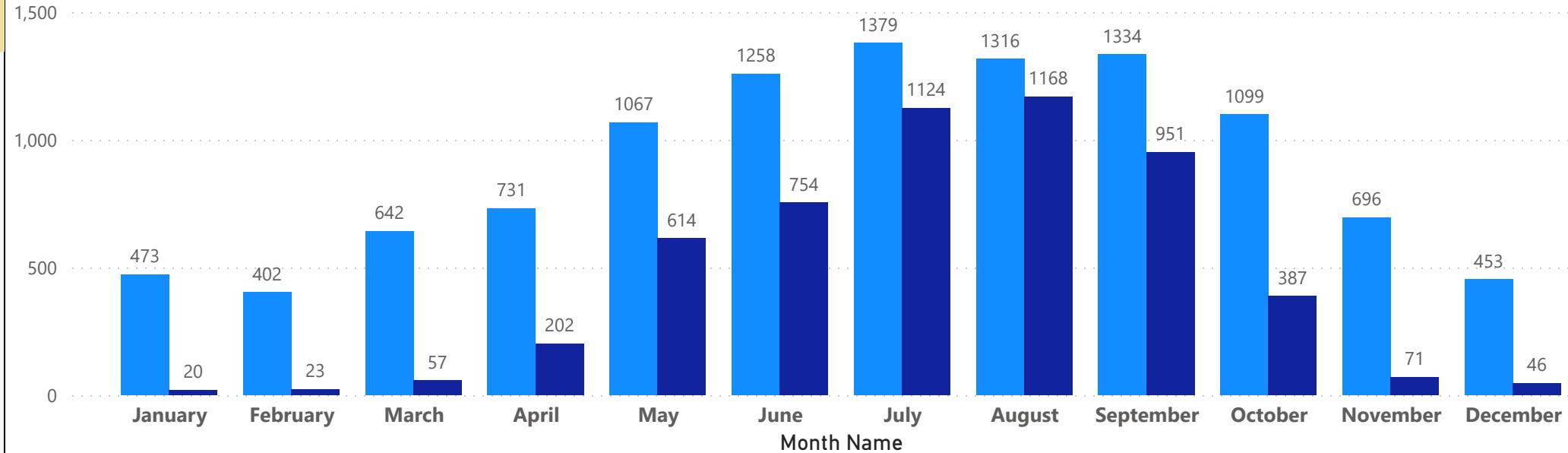
FITTER STATION NAME

from\_station\_name

Augusta Ave / Dundas St...

Total trips Monthly

user\_type ● Annual Member ● Casual Member



Most of total trips are in 3 month : **July, August and September.**

--> recommendation : have preparation for bike volume before July to maximize the need of people using.



## Total trips Casual vs Annual

625M (100%)

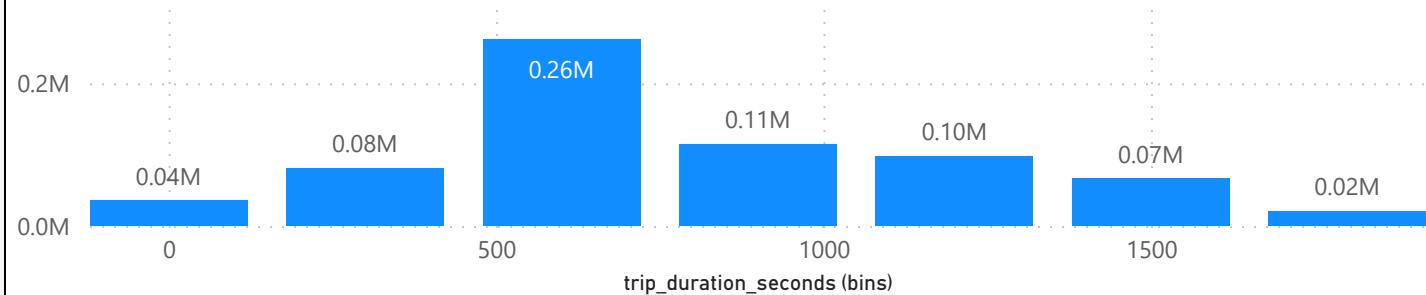
user\_type  
Casual Member

trip\_start\_day

1/1/2017

12/30/2018

### Histogram of trip\_duaration\_seconds



### Total trips Monthly



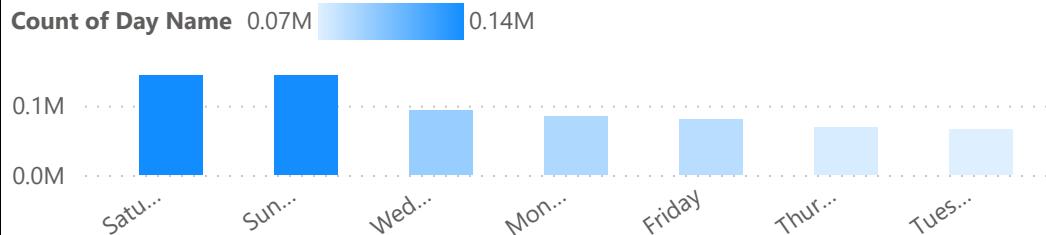
Total trips of Casual member contribute around 20% of total. Most of people in both member have a trips duration is from **5-20 minutes per trip.**

The Casual member have highest trips in **July and August**, in **weekend** and peak time from **15h to 18h** everyday.

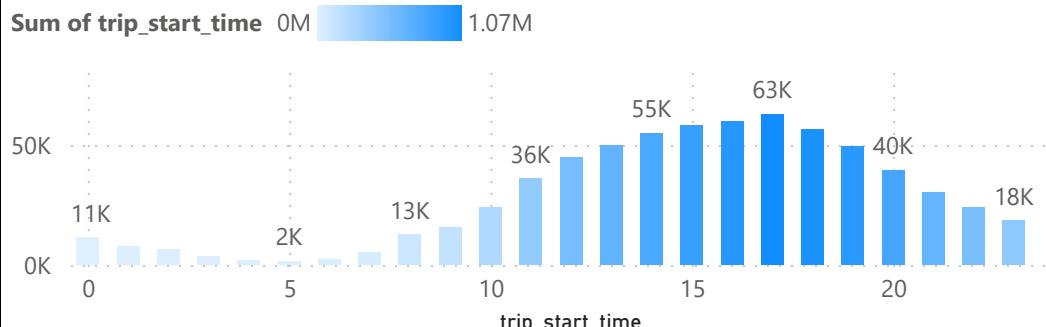
#### Recommendation :

We can release a new member ship called **semi-member** which most focus on a half of year the Casual member use service (maybe from April to October)

### Total trips by Day Name



### Total trips using by hour



## Insights

- . Analysis of the data revealed that the number of trips increased from **1.5 million in 2017** to almost **2 million in 2018**.
- . The peak months for bike usage were **July, August, and September**.
- . Five busiest stations were **York St/Queens Quay W Station, Union Station, Bay St/Queens Quay W Station, Bay St/Wellesley W Station, and Bay St/College Station**.
- . Casual members used bikes more frequently in **July and August**, on **weekends**, and around **5 pm** every day.

## Recommendation

- . **Increase bike volume for 5 busiest stations** which helps more people to use the service, which improves the revenue.
- . Have a **plan for bike distribution and staff** for the peak month in **July, August, September**.
- . **Launch a new membership** which is available from March to October to encourage the Casual members to increase their frequency of using the service.