**Tableau Homework: New York Citi Bike**

Due: October 13, 2020

Data source: <https://www.citibikenyc.com/system-data>

Citi Bike Daily Ridership and Membership Data: 2018 (Jan ~ Dec)

## Citi Bike Trip Histories: 2019 (Jan ~ Dec)

Analysis

1. Purchase analysis (2018) by user type and by month

Annual Subscriber numbers drops most in Feb and big increase in March. It seems when Winter is over, New Yorkers start purchase annual subscription in March. It may be new year’s resolution is still effective on in the early year.

Short-term users gradually increase as the weather getting warmer peaked in July and gradually decreased till next year January. It may be the more tourist coming in New York in the warm weather. But there is no tourist info in the data.

1. User demographics analysis

Most active user age: 29 for annual subscriber group and 30 for short-term user. Both user type shows right skewed bell curve shape.

1. The most popular Station

Starting station: Grove St Path is by far the most popular starting station in 2019 (41.8K used)

Ending station: Grove St Path is also the most popular ending station in 2019, followed by Hamilton Park and Sip Ave.

1. Seasonality

Summer months (Jun, Jul, Aug), as expected, have by far the highest trip duration time (more than rest of season combined) in 2019 for both subscribers and short-term user type. But on average trip, short-term user rides longer in Spring (54.47 mins) than in Summer (39.07 mins). Also, Short-term user rides longer than Subscribers on average.

1. Most used Bike by number of used in 2019: ID 29286 (used 1027 times)

Most used Bike by trip duration in 2019: ID 29490 (used 811.8 hours)

Maintenance should be based on the number of used as primary and the trip duration as secondary.