**Explorer US BikeShare Data Project**

## Bike Share Data

Over the past decade, bicycle-sharing systems have been growing in number and popularity in cities across the world. Bicycle-sharing systems allow users to rent bicycles on a very short-term basis for a price. This allows people to borrow a bike from point A and return it at point B, though they can also return it to the same location if they'd like to just go for a ride. Regardless, each bike can serve several users per day.

Thanks to the rise in information technologies, it is easy for a user of the system to access a dock within the system to unlock or return bicycles. These technologies also provide a wealth of data that can be used to explore how these bike-sharing systems are used.

## **The Datasets**

**Randomly selected data for the first six months of 2017 are provided for all three cities. All three of the data files contain the same core six (6) columns:**

* **Start Time (e.g., 2017-01-01 00:07:57)**
* **End Time (e.g., 2017-01-01 00:20:53)**
* **Trip Duration (in seconds - e.g., 776)**
* **Start Station (e.g., Broadway & Barry Ave)**
* **End Station (e.g., Sedgwick St & North Ave)**
* **User Type (Subscriber or Customer)**

**The Chicago and New York City files also have the following two columns:**

* **Gender**
* **Birth Year**

**‘**

**A “ bikeshare.py” file, and you will do your scripting in there also. You will need the three city dataset files too:**

* **chicago.csv**
* **new\_york\_city.csv**
* **washington.csv**

**CHICAGO CITY**

**common month : June**

**----------------------------------------**

**That took 0.04079008102416992 seconds.**

**Calculating the common day of week...**

**common day of week from start time: Tuesday**

**----------------------------------------**

**That took 0.03954672813415527 seconds.**

**Calculating the most common hour for start time...**

**common hour of day from start time : 5pm**

**----------------------------------------**

**That took 0.03670001029968262 seconds.**

**Calculating the tota trip & average trip duration...**

**The total trip duration is 78019 hours, 56 minutes and 27 seconds.**

**The average trip duration is 15 minutes and 36 seconds.**

**----------------------------------------**

**That took 0.006459236145019531 seconds.**

**Calculating the most common start & end station...**

**The most commonly used start station : Streeter Dr & Grand Ave**

**The most commonly used end station : Streeter Dr & Grand Ave**

**----------------------------------------**

**That took 0.25088000297546387 seconds.**

**Calculating the most common trip ...**

**Popular trip is Lake Shore Dr & Monroe St to Streeter Dr & Grand Ave.**

**----------------------------------------**

**That took 0.3113570213317871 seconds.**

**Calculating the counts of user types....**

**There are 238889 Subscribers and 61110 Customers.**

**----------------------------------------**

**That took 1.483067274093628 seconds.**

**Calculating the counts of genders...**

**There are 181190 male users and 181190 female users.**

**----------------------------------------**

**That took 0.2807741165161133 seconds.**

**Calculating the birth year...**

**The earliest (oldest) users are born in 1899.**

**The recent(youngest) users are born in 2016.**

**The most common birth year is 1989.**

**----------------------------------------**

**That took 0.14872503280639648 seconds.**

**NEW YORK CITY**

**common month : June**

**----------------------------------------**

**That took 0.03316974639892578 seconds.**

**Calculating the common day of week...**

**common day of week from start time: Wednesday**

**----------------------------------------**

**That took 0.04030489921569824 seconds.**

**Calculating the most common hour for start time...**

**common hour of day from start time : 5pm**

**----------------------------------------**

**That took 0.0356290340423584 seconds.**

**Calculating the tota trip & average trip duration...**

**The total trip duration is 74973 hours, 40 minutes and 48 seconds.**

**The average trip duration is 15 minutes and 0 seconds.**

**----------------------------------------**

**That took 0.0039670467376708984 seconds.**

**Calculating the most common start & end station...**

**The most commonly used start station : Pershing Square North**

**The most commonly used end station : Pershing Square North**

**----------------------------------------**

**That took 0.34542012214660645 seconds.**

**Calculating the most common trip ...**

**Popular trip is E 7 St & Avenue A to Cooper Square & E 7 St.**

**----------------------------------------**

**That took 0.40622687339782715 seconds.**

**Calculating the counts of user types....**

**There are 269149 Subscribers and 30159 Customers.**

**----------------------------------------**

**That took 1.4522912502288818 seconds.**

**Calculating the counts of genders...**

**There are 204008 male users and 204008 female users.**

**----------------------------------------**

**That took 0.2754020690917969 seconds.**

**Calculating the birth year...**

**The earliest (oldest) users are born in 1885.**

**The recent(youngest) users are born in 2001.**

**The most common birth year is 1989.**

**----------------------------------------**

**That took 0.1977231502532959 seconds.**

**WASHINGTON CITY**

**common month : June**

**----------------------------------------**

**That took 0.03648519515991211 seconds.**

**Calculating the common day of week...**

**common day of week from start time: Wednesday**

**----------------------------------------**

**That took 0.04184079170227051 seconds.**

**Calculating the most common hour for start time...**

**common hour of day from start time : 8am**

**----------------------------------------**

**That took 0.036448001861572266 seconds.**

**Calculating the tota trip & average trip duration...**

**The total trip duration is 103106.0 hours, 39.0 minutes and 45.48400002717972 seconds.**

**The average trip duration is 20 minutes and 37 seconds.**

**----------------------------------------**

**That took 0.004084110260009766 seconds.**

**Calculating the most common start & end station...**

**The most commonly used start station : Columbus Circle / Union Station**

**The most commonly used end station : Columbus Circle / Union Station**

**----------------------------------------**

**That took 0.2461991310119629 seconds.**

**Calculating the most common trip ...**

**Popular trip is Jefferson Dr & 14th St SW to Jefferson Dr & 14th St SW.**

**----------------------------------------**

**That took 0.3323650360107422 seconds.**

**Calculating the counts of user types....**

**There are 220786 Subscribers and 79214 Customers.**

**----------------------------------------**

**That took 1.4537959098815918 seconds.**