# citibike. Data Analysis

By Arya Tayade



#### **Project Goal:**

- To better understand the behavior of Citi Bike's customer base (both one-time users and subscribers) and how they use Citi Bikes
- This will help us to:
- 1. Identify where more bikes should be installed
- 2. Understanding customer base for creating successful targeted marketing campaign

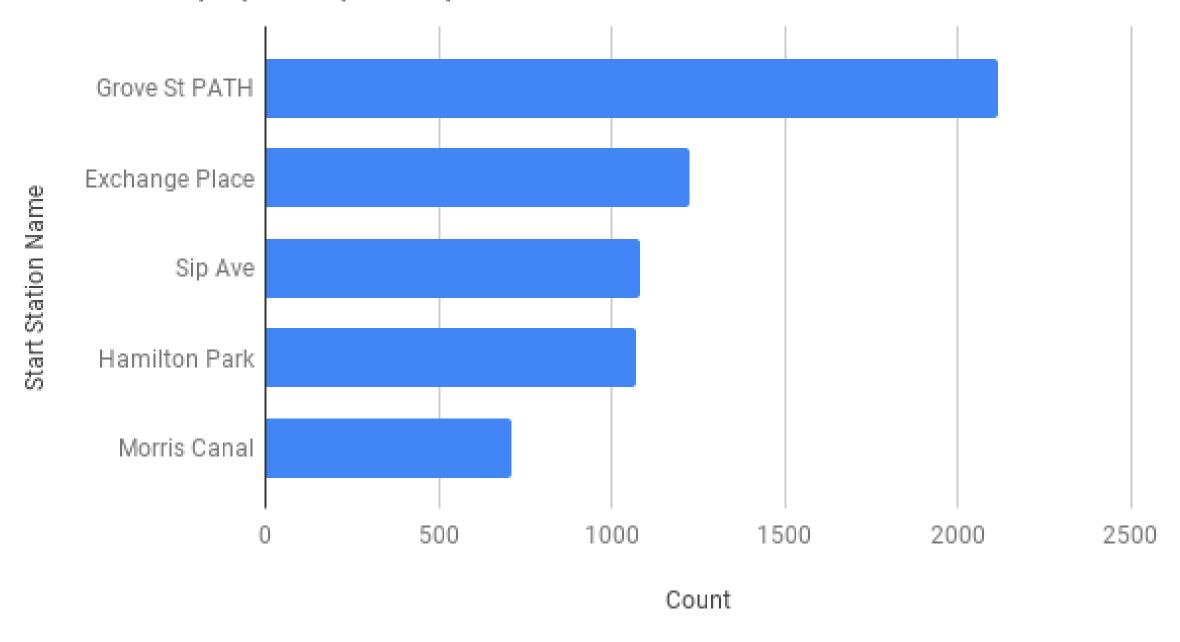
#### **Key questions:**

- What are the most popular pick-up locations across the city for Citi Bike rental?
- How does the average trip duration vary across different age groups?
- Does the factor of user age impact the average bike trip duration?
- Which age group rents the most bikes?
- How does bike rental vary across the two user groups (one-time users vs long-term subscribers) on different days of the week?
- How does the average trip duration vary during different weekdays?

## Findings & Insights

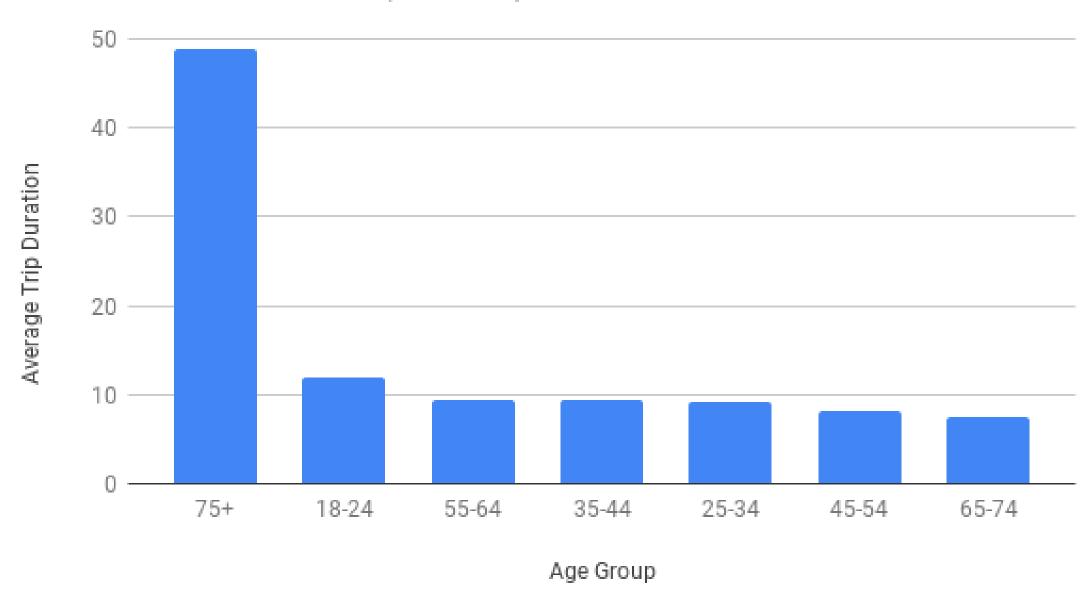
### 1. What are the most popular Citi Bike pick-up locations?



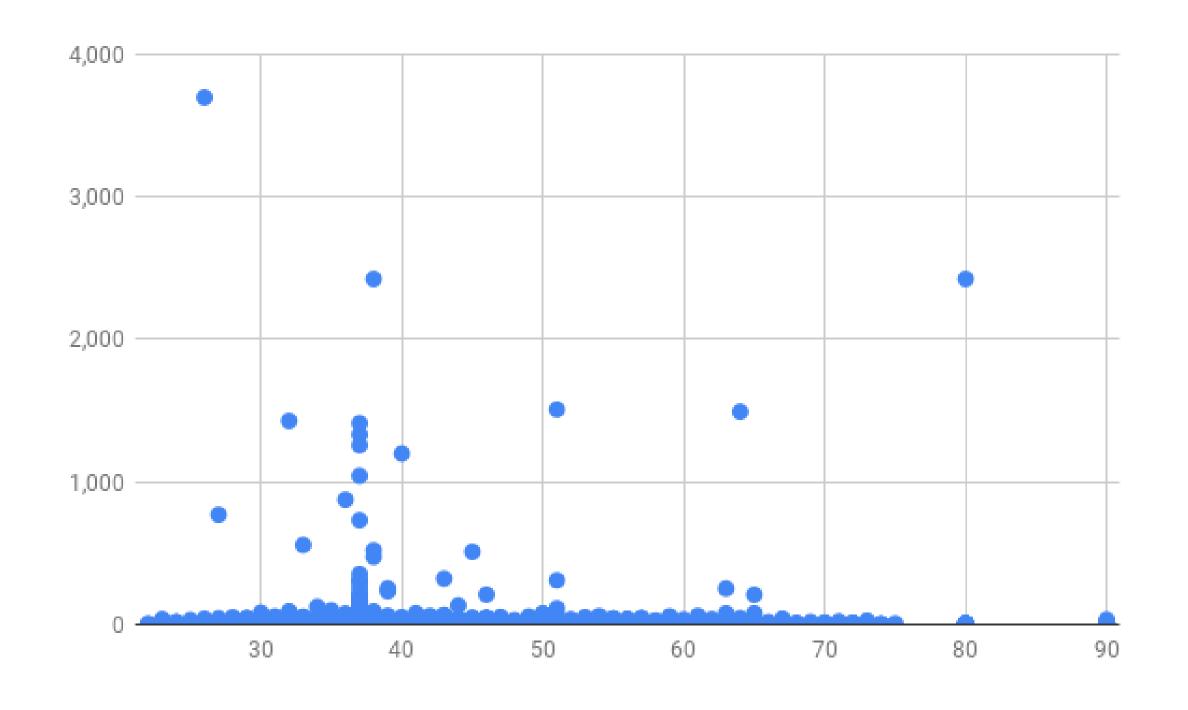


# 2. How does the average trip duration vary across different age groups?

Average trip duration (in mins) per age group

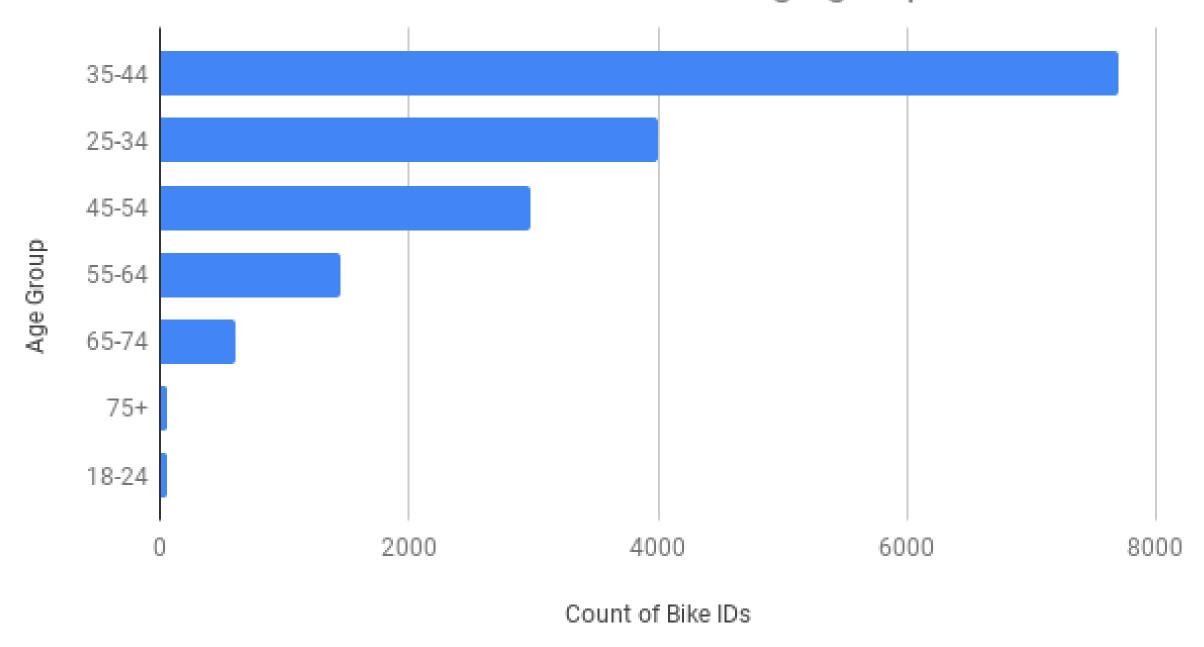


## 3. Does factor like age impact the average bike trip duration?



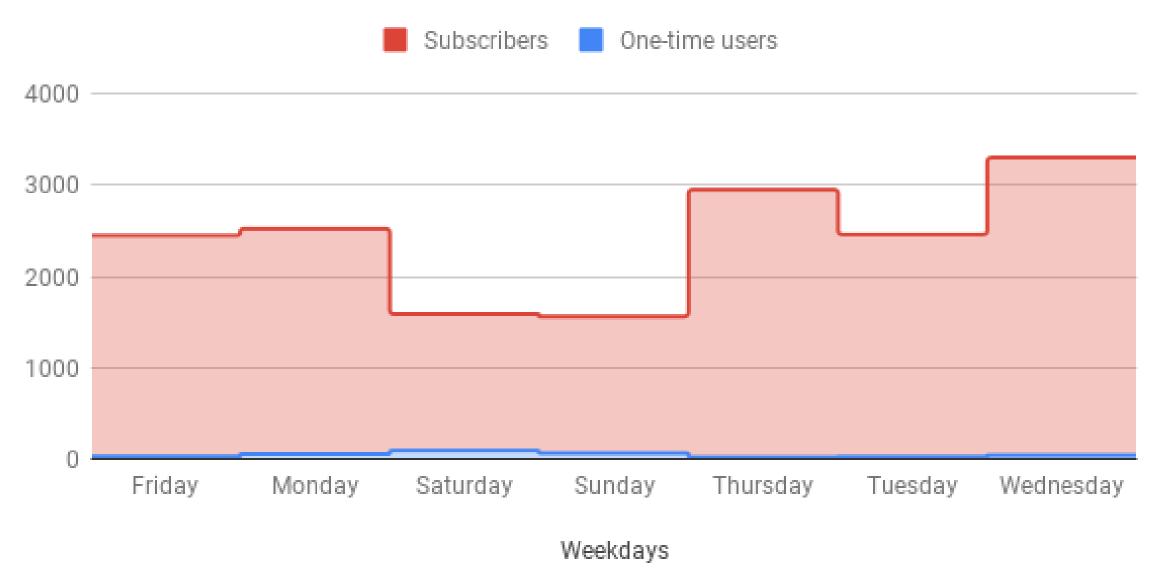
## 4. Which age group rents the most bikes?

Number of bikes rented across different age groups



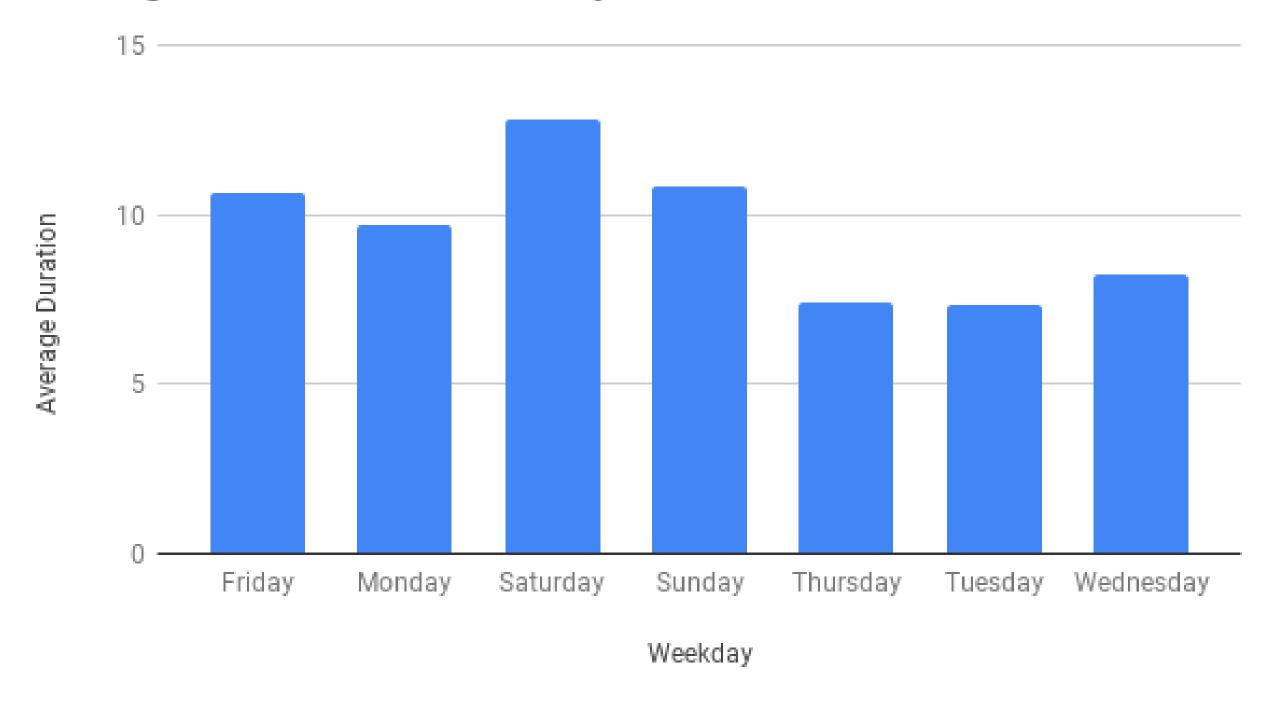
## 5. How does bike rental vary across the two user groups on different days of the week?

Numbers of bike rented by one-time user and subscribers on different days of the week



## 6. How does the average trip duration vary during different weekdays?

Average Duration vs. Weekday



## Summary

## **Summary of findings:**

Top 5 pick-up locations for bikes:
 Grove St Path, Exchange Place, Sip Ave, Hamilton Park, & Morris Canal

Customer base:

Majority of our customers are subscribers and 69.45% of the whole customer base belong to the age range 25-44 years

• Citi Bike customer behavior:

Customers over the age of 75 take the longest trips

## Actions & Recommendations

#### Recommended actions:

Product recommendations:
 Install more bikes at Grove St Path, Exchange Place, Sip Ave, Hamilton Park, & Morris Canal

Marketing recommendations:

The Citi Bike customer base is mostly subscribers aged between 25-44 who are most active on weekday. This tells us that they are probably people who live in New York and use Citi Bikes to commute. Marketing and advertising campaigns should therefore target this particular demographic.

#### Recommended actions:

• Survey Recommendation:

Since the trip duration during weekdays don't vary too much we initially thought customers might be using our services for office commute. But the the average start time is 9 p.m . To understand how our customers use our services we can conduct a survey.

## Thank You.

