

Citi Bike Data Analysis

By Chioma Nwosu

Project Goal:

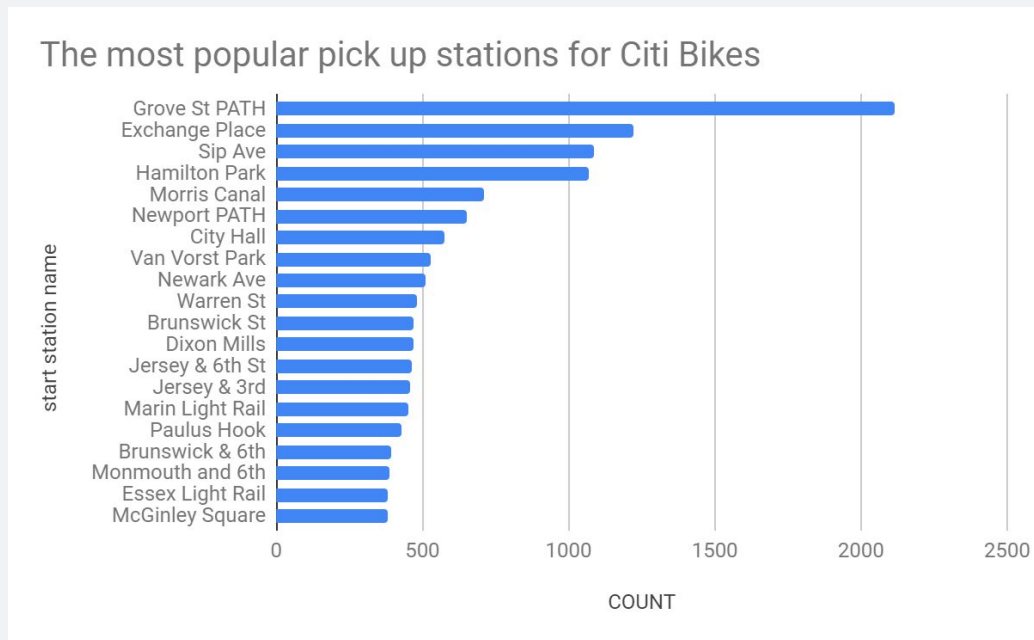
- *To better understand the behavior of Citi Bike's customer base (both one-time users and subscribers) and how they use Citi Bikes*
- *This will help us to:*
 - *Identify where more bikes should be installed*
 - *Create targeted marketing campaigns that will appeal to different customer segments*

Key questions:

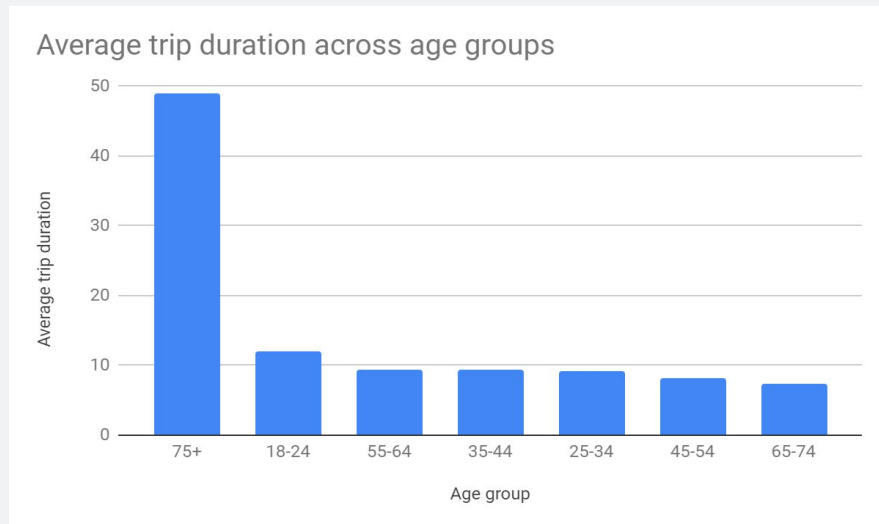
- What are the most popular pick-up locations across the city for Citi Bike rental?
- How does the average trip duration vary across different age groups?
- Which age group rents the most bikes?
- How does bike rental vary across the two user groups (one-time users vs long-term subscribers) on different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

Findings & Insights

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



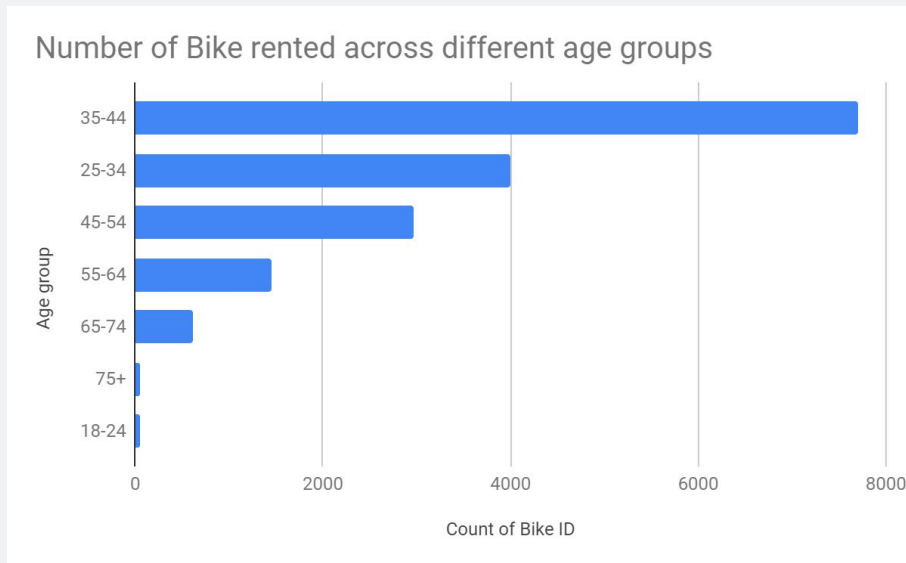
2. How does the average trip duration vary across different age groups?



75+ year olds take the longest trips (on average)

65-74 and 25-34 year olds take the shortest trips (on average)

3. Which age group rents the most bikes?

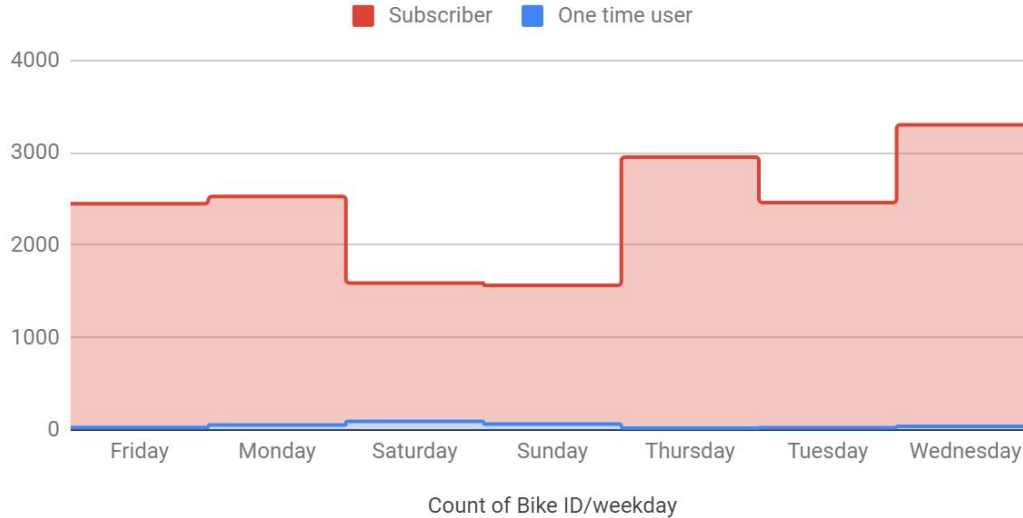


35-44 year olds rent the most bikes

75+ and 18-24 year olds rent the least bikes

4. How does bike rental vary across the two user groups (one-time users vs long-term subscribers) on different days of the week?

Number of bikes rented by One time users and Subscribers on different days of the week

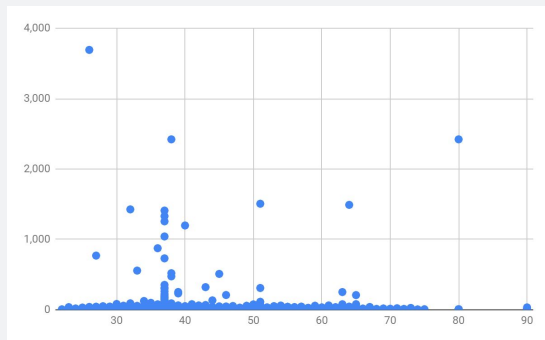


Citi Bike customer base is predominantly made up of long-term subscribers

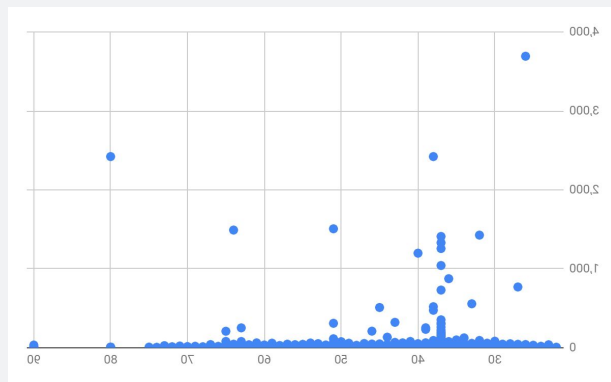
Subscribers are more active during the week

One-time users are more active on weekends

5. Do factors like weather and age impact the average bike trip duration?



There is no correlation between age and average bike trip duration.



There is also no correlation between Weather and average bike trip duration.

Summary

Summary of findings:

- **Top 5 pick-up locations for bikes:**

- *Grove St Path, Exchange Place, Sip Ave, Hamilton Park, & Morris Canal*

- **Customer base:**

- *Mostly long-term subscribers who are more active during the week*
- *One-time users more active at weekends*
- *Most bikes rented by 35-44 year olds*
-

- **Citi Bike customer behavior:**

- *Longest Bike average trip duration are by 75+ years old.*
- *Shortest bike average trip duration are by 65-74 and 25-34 year olds*

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 long - time subscriber aged between 35 & 44, who are most active weekdays. 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.*

Thank you!