

Citi Bike Data Analysis

By Samantha Noon

Project Goal:

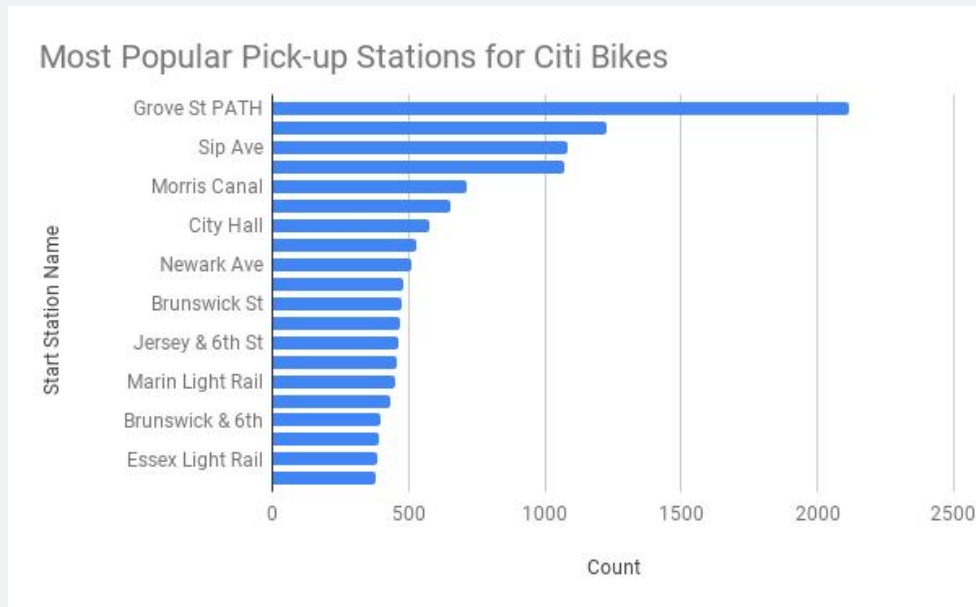
- *To better understand the behavior of Citi Bike's customer base (both one-time users and subscribers) and how they use Citi Bikes*
- *This will help us to:*
 - *Identify where more bikes should be installed*
 - *Create targeted marketing campaigns that will appeal to different customer segments*

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, and over time?
- 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?
- Do factors like weather and user age impact the average bike trip duration?

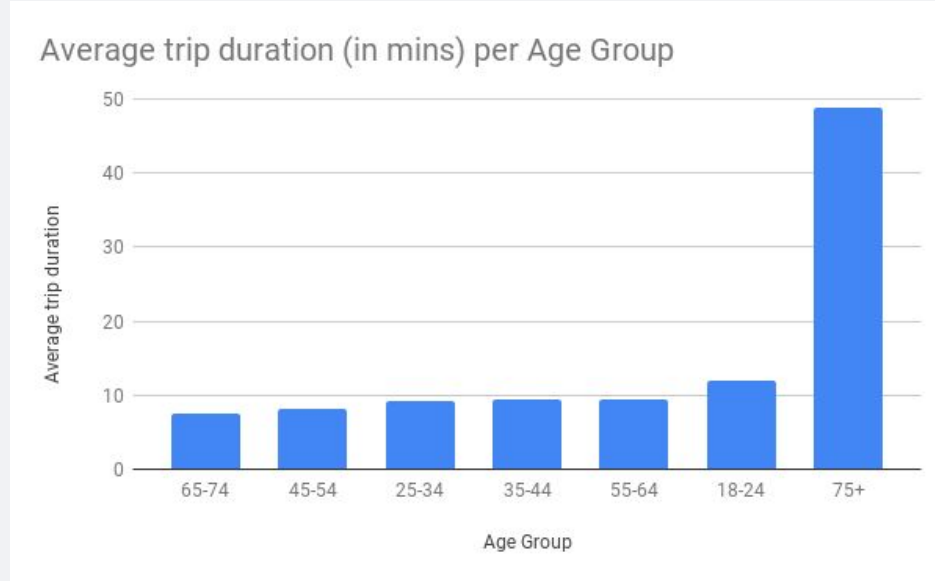
Findings & Insights

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



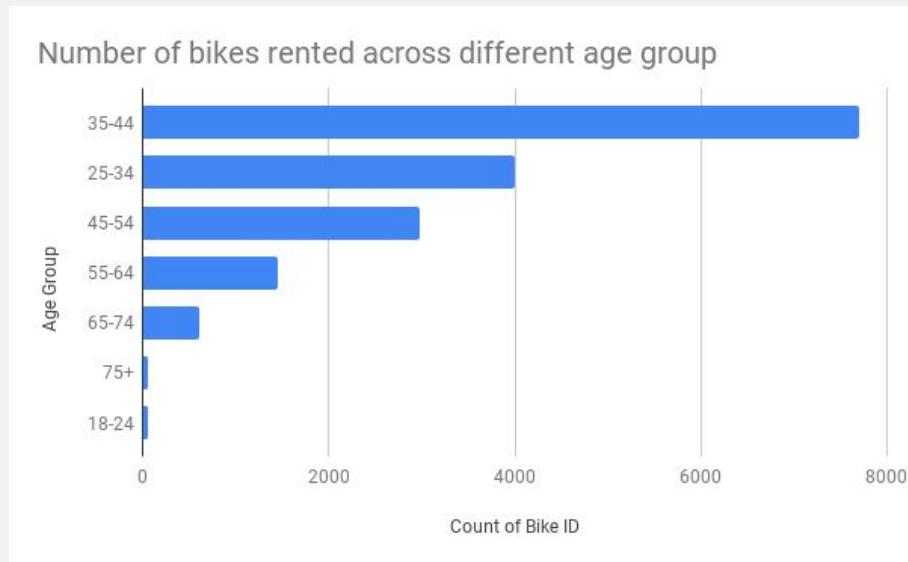
Results: Above are the top 20 pick-up stations

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



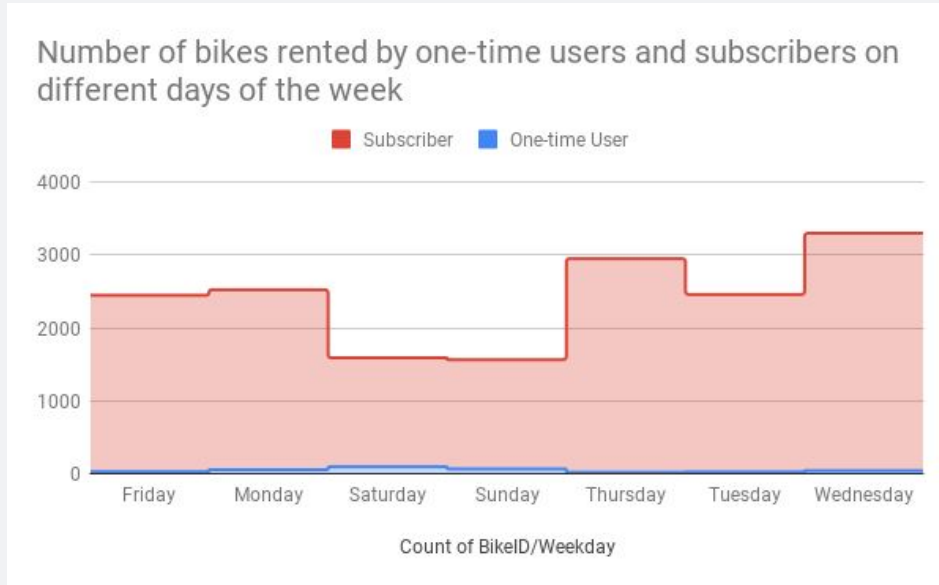
Results: The 75+ category tend to take the longest trips on average, while 65-74 year olds take the shortest trips on average.

3. Which age group rents the most bikes?



Results: 35-44 age range rented the most bikes.

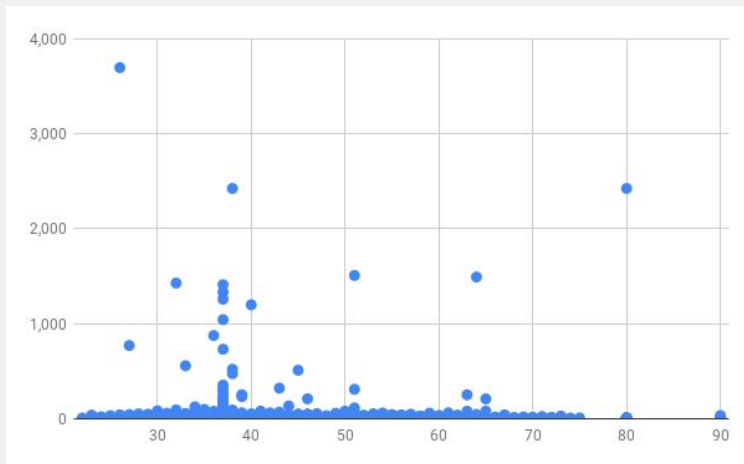
4. How does bike rental vary across the two user groups (one-time users vs long-term subscribers) on different days of the week?



Results: One-time users were more active on the weekend.

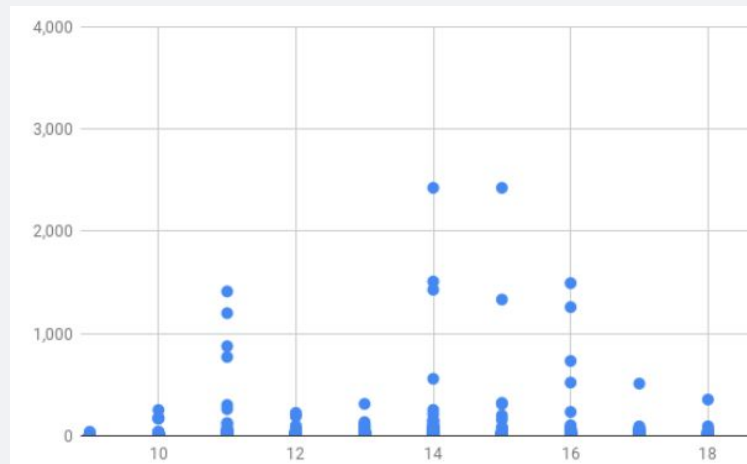
5. Do factors like weather and age impact the average bike trip duration?

Age (0-90) and Trip Duration in mins



Results: mid 30s-40 yr olds take the longest trip most frequently

Temp. and Trip Duration in mins



Results: Longer bikes rides when weather is between 14-16 Celsius/57-60 Fahrenheit

Summary

Summary of findings:

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

- *Grove St Path, Sip Ave, Newport Path, Newark Ave, Van Vorst Park*

- **Customer base:**

- *25-44 yr olds range rent the most bikes. Your one-time users are most active on weekends. Grove St Path is the most popular pick-up location, more than double any one location.*

- **Citi Bike customer behavior:**

- *Longest trip, age: 75+ and shortest trip age: 65-74*
- *More riders when the weather is between 57-60 Fahrenheit.*

Actions & Recommendations

Recommended actions:

Product recommendations:

- *Install more bikes at top 5 locations: Grove St Path, Sip Ave, Newport Path, Newark Ave, Van Vorst Park*
- *Make more bikes available in May-Jun and Sep-Oct when temps range from 55-65 degrees, as this is when Citi Bike users take the longest trips.*

Marketing recommendations:

- *The Citi Bike customer base is mostly [subscribers](#), [aged between 25-44](#), who are [most active on 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!