Citi Bike Trip Histories Analysis (NYC)

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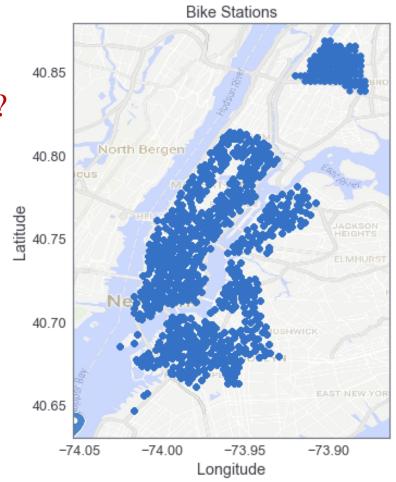
Stony Brook University

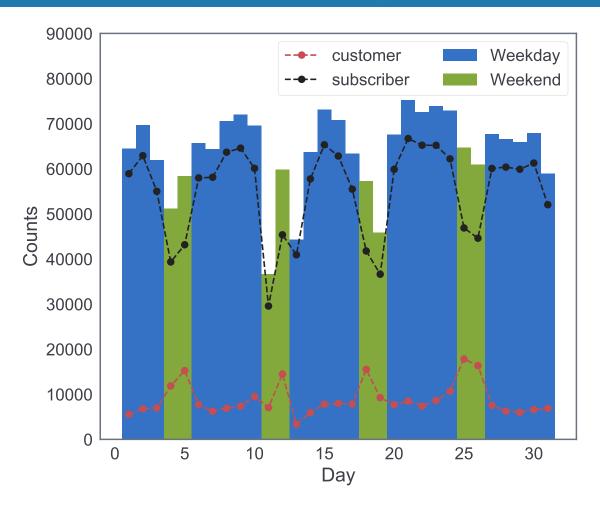
Data Incubator Mini-Project
Oct. 23th 2018

GitHub

- Shared bikes getting popular, especially in big cities like NYC;
- Citi Bike published <u>trip histories data in NYC</u>;
- Questions:
 - Where, when, how far do people bike?
 - Promotions for certain people?
 - Relocation of the bikes?

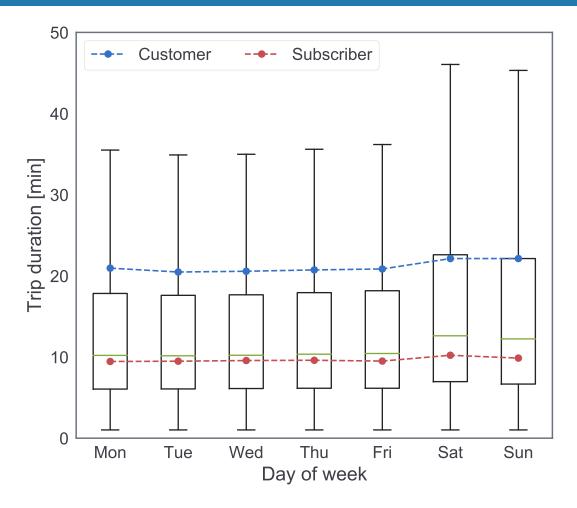






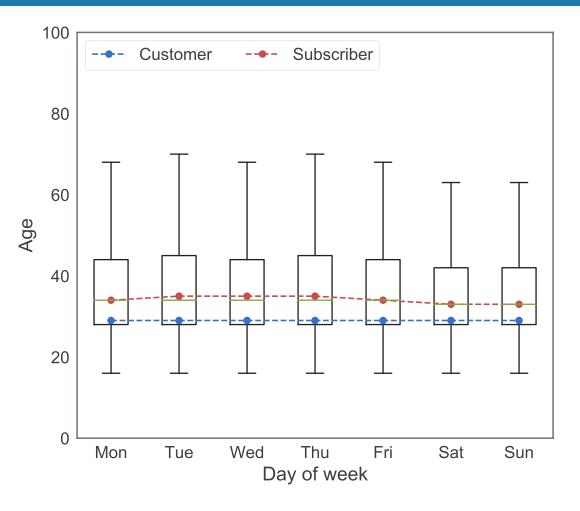
- More local users (subscribers) than visitors (customer);
- Locals bike more on weekdays, visitors bike more on weekends;
- Discount for visitors weekend usage? Locals left or didn't care.

Trip duration

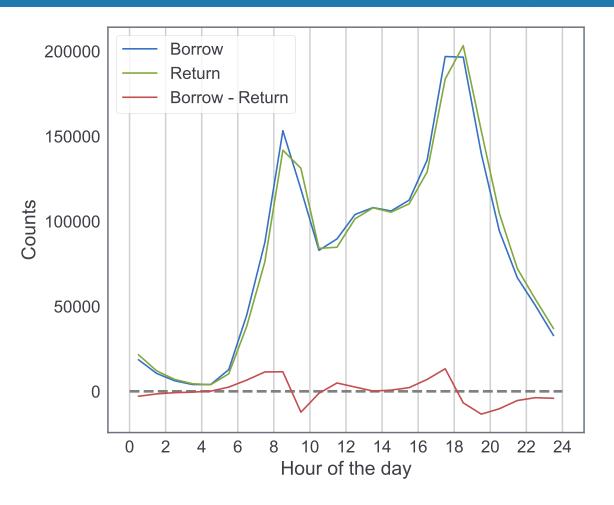


- On average, users bike 10-15 mins per trip;
- Visitors bike longer than locals: sightseeing;
- Both groups bikes slightly more on weekends: exercise.

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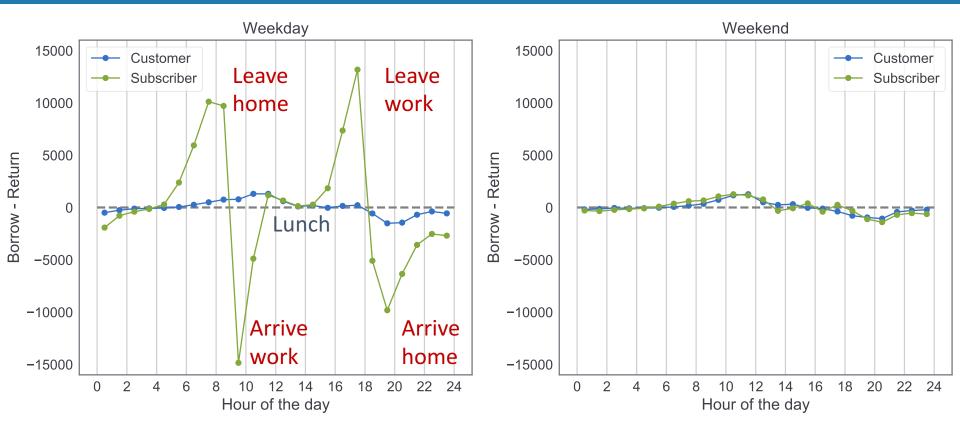


- Average user age is 35;
- Age and day are weakly correlated;
- No promotions based on age.



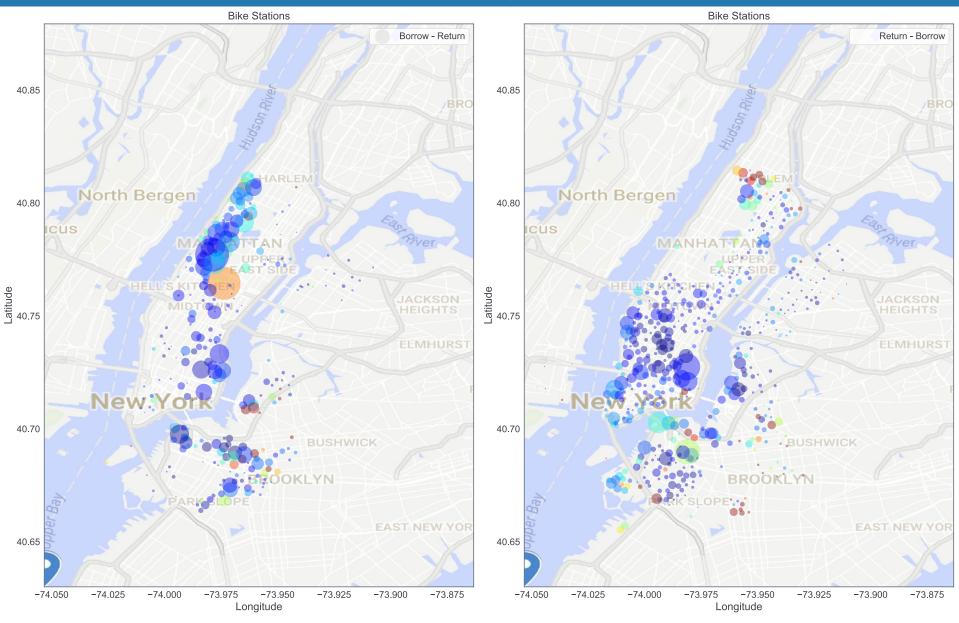
- Borrow and return are imbalanced;
- Most users bike during rush hours;
- More detailed studies needed.

Bike availability: weekday v.s. weekend

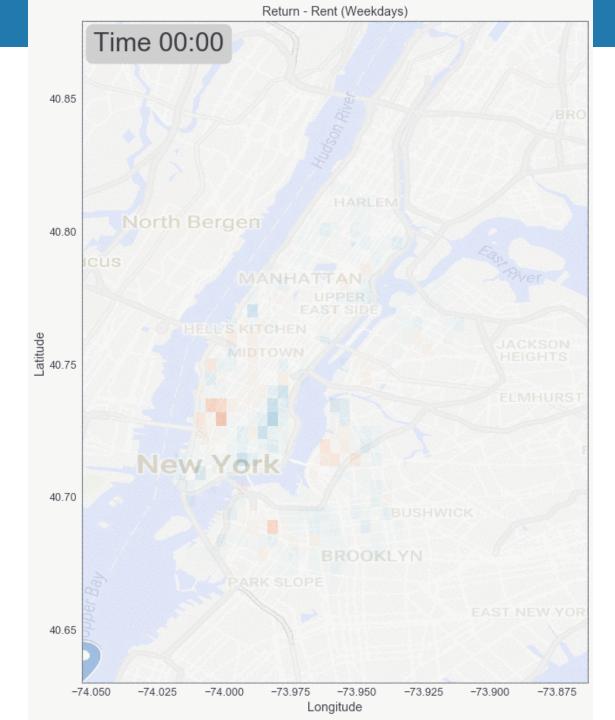


- Confirmed: two rush hours are the major challenges;
- 5 imbalance time period explained;
- Relocation after rush hour? Location study needed.

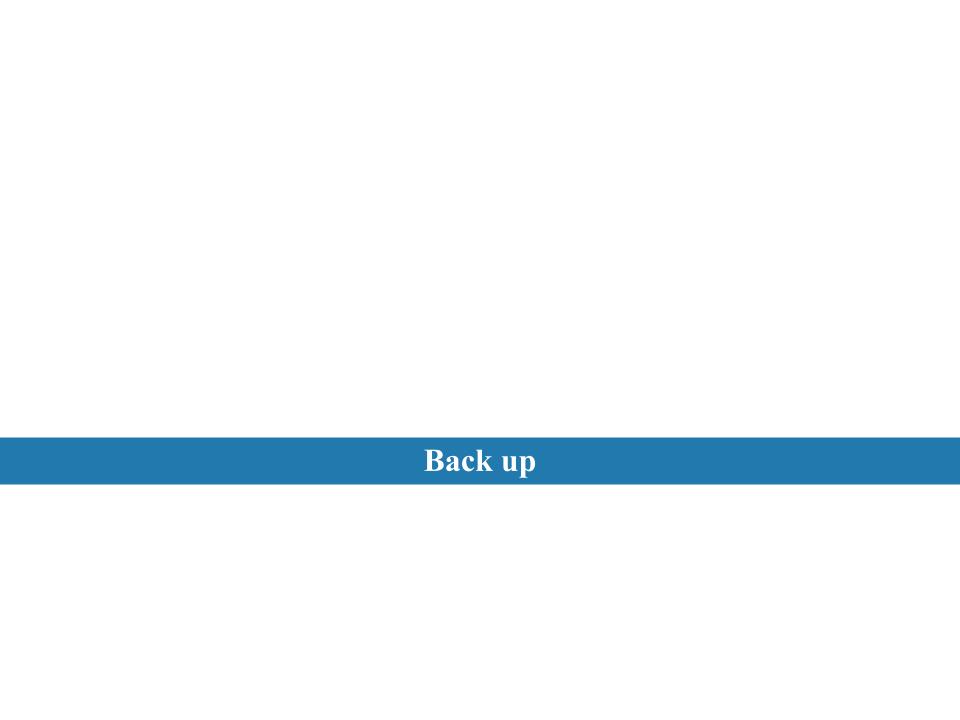
Bike availibility: location



• Imbalance highly depends on locations. How about time?



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