Working Peoples' Bikes Org
New York, NY

September 5, 2014

Hello,

We want to set up a service that directly challenges Citibike as a provider of alternative transportation for the working population of NYC. Citibike is broadly targeted to a wide range of users and doesn't provide adequate support for the daily commuter.

We would like to know, to start, where to place bike racks to target these commuters and avoid the problems of bike and parking availability. Looking forward, we would like to provide a more well-rounded service, including best bike routes for the busiest home-work paths within the city.

Thanks,

WPB

WORKING PEOPLES' BIKES

Problem statement:
Working Peoples' Bikes is committed to providing New York City residents with bike sharing services for their workday commuting needs. Specifically, they would like to ensure constant availability of bikes and free spaces to create a low-stress commute in the high-volume traffic of morning and evening weekday commutes.

The MTA data provides us with the daily number of commuters entering and exiting each station. Using this data can we use this data to plot the best locations for WPB stations?

Preliminary results:

As a bike sharing service for daily New York City commuters, we want to focus on stations with less tourists and more residents. We identified the commuter stations that have the highest difference between weekday and weekend travel volume.

We used the MTA turnstile data to determine which stations had heavy usage during weekdays and lighter usage on weekends. These stations are the ones that most match the profile of a commuter station and a table of average weekday ridership is shown below. Using this data, we should be able to come up with a geographically feasible strategy for bike hub locations.

Station	Average Weekday Ridership
42 ST-GRD CNTRL	137801
CHAMBERS ST	59382
47-50 ST-ROCK	53081
WALL ST	47336
FULTON ST	46961
LEXINGTON-53 ST	39340
PATH WTC	38097
42 ST-BRYANT PK	37909
BOROUGH HALL/CT	33627
JAY ST-METROTEC	33608
28 ST	31883
68ST-HUNTER COL	28123
23 ST-6 AVE	24930
5 AVE-53 ST	22599

51 ST	20849
FLATBUSH AVE	17853
HOUSTON ST	13654
57 ST	13513
VERNON/JACKSON	12763
EXCHANGE PLACE	12571
116 ST-COLUMBIA	12201
175 ST	11815
ST. GEORGE	11516
5 AVE-BRYANT PK	10645
33 ST/RAWSON ST	10121
TWENTY THIRD ST	7295
WHITEHALL ST	7089
LACKAWANNA	6742
LEFFERTS BLVD	6718
WINTHROP ST	6414
HUNTERS PT AVE	5612
BROAD ST	5541
PARK PLACE	5449
FRANKLIN ST	5134
FRESH POND ROAD	4889
AVE M	4637
CORTLANDT ST	4293
DYRE AVE	4241
NEWARK HW BMEBE	4206
NEWARK C	4195
FOREST AVE	3570
BAYCHESTER AVE	3473
BUHRE AVE	3299
MURRAY ST-B'WAY	3072
CENTRAL AVE	2800
ZEREGA AVE	2598
MIDDLETOWN ROAD	2542
GREENWOOD-111	2262

SENECA AVE	2159
MORRIS PARK	1868
55 ST	1751
OXFORD-104 ST	1383
PATH WTC 2	435

This information helps us know the entry and exit points of travelers. Additionally, we could segment turnstile data into morning entries and evening entries to get a sense of the patterns of use, and better distinguish the stations that are used by commuters headed to (9-5) jobs.

What else we could do:

Citi Bike has a lot of public information about their bike sharing system, such as trip starting and ending locations, trip duration, and user age and gender.
We can use this data to get an idea of how citibikes are used for workday commutes, and the actual paths that commuters follow during workday commute hours.
We can also use it to find the best places to place WPB stations, e.g., if two metro stations have the same volume of daily commuters, but the Citi bikes are more heavily utilized around one station over the other, we can focus our resources there.

Conclusion:
Through our research we realized that Citi Bike is in fact not an optimal way to travel for the daily commuter. We look forwarding to implementing our ideas and making your service the go-to for every New Yorker.

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Metropolitan Transportation Authority
MTA New York City Subway
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MANHATTAN
QUEENS
BROOKLYN
Long Island Sound
Hudson River
East River
Jamaica Bay
LAGUARDIA AIRPORT
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Key
Part-time line extension
Local service only
All trains stop (local and express service)
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Free out-of-system subway transfer (excluding single ride ticket)
Station Name
Normal service
Additional express service
Station Name
Terminal
Accessible station
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