

## BU CAS 504 Project Report

The purpose of this project is to do the hubway challenge (2011 ~ 2013) using updated datasets. The initial thought is that the MBTA stops would discourage people from installing a new hubway station since the hubway stations should be established at places with poor transportations. Some possible locations for the hubway station can also be found by using the dataset of the parking meter location since people tends to travel by bike if there are not enough parking spots in the area. Some other datasets like street light locations, crime reports and even some rodent accident locations might also be useful to find possible places for the hubway station since these datasets are helpful for finding places with less incidents and therefore safer for people to travel by bike.

### Datasets Used:

1. Hubway Stations

<http://hubwaydatachallenge.org/>

The dataset contains information about the hubway stations in Boston.

2. MBTA Stations/Stops

<https://api-v3.mbtta.com/>

The dataset contains information regarding the MBTA stops in the Boston area.

3. Street Light Locations

<https://data.boston.gov/dataset/52b0fdad-4037-460c-9c92-290f5774ab2b>

The dataset contains information about the street light locations in Boston.

4. Crime Reports Boston

<https://data.boston.gov/dataset/6220d948-eae2-4e4b-8723-2dc8e67722a3>

The dataset contains information about the crime reports in the Boston area in the past

few years.

#### 5. Parking Meter Locations

<http://bostonopendata->

[boston.opendata.arcgis.com/datasets/962da9bb739f440ba33e746661921244\\_9](http://bostonopendata.arcgis.com/datasets/962da9bb739f440ba33e746661921244_9)

The dataset contains information about the parking meters in Boston.

#### 6. Analyze Boston

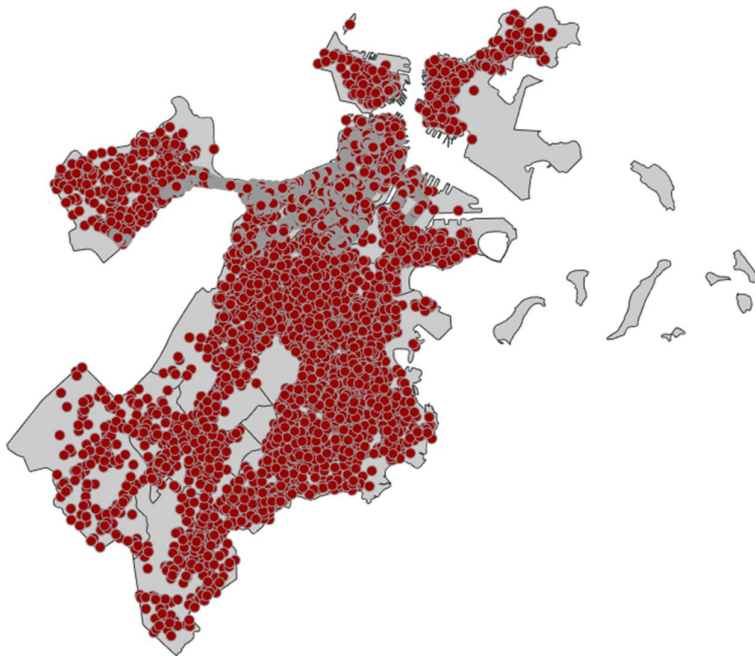
<https://data.boston.gov/>

General source for large and minor datasets like 311 data and rodent incident reports that might be helpful to the project.

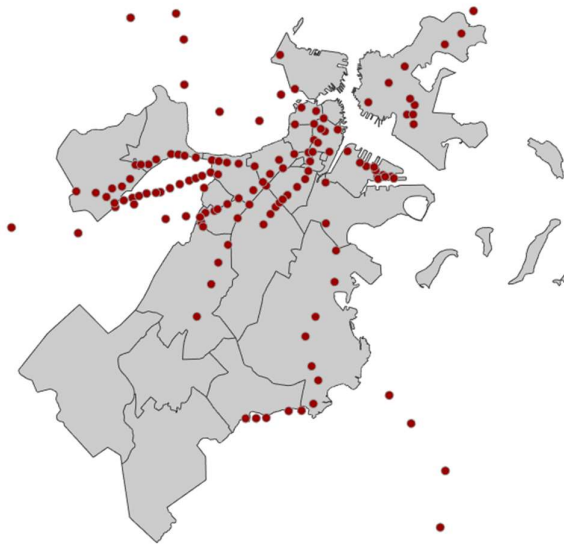
Plotting the data:

The D3 library is used for the data visualization. Majority of the datasets is converted to the Geojson object for the convenience of data visualization.

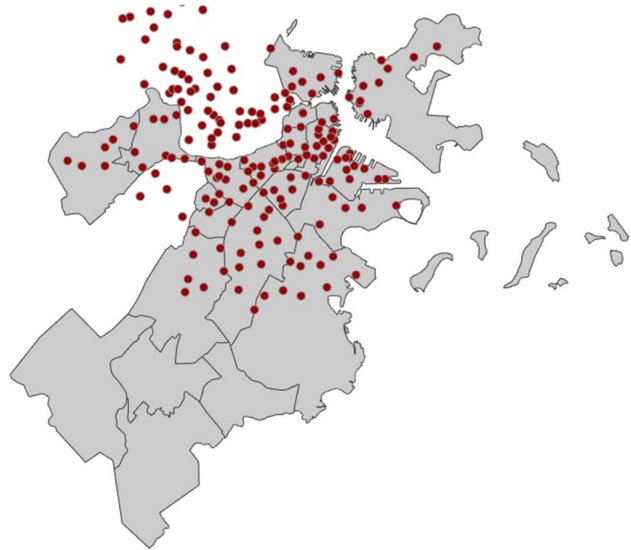
### **Crime and Parking Meter Locations**



**MBTA Stations**



**Hubway Stations**



### Conclusion:

There are no valid conclusions can be made based on the current information. I was working with another team on a different project during the period of project 2 but I was not able to continue working with them on project 3 due to my concentration on another project from a mobile application development course. So there is no statistical analysis for this specific project when I returned. Given the time I had to complete the project 3, I was not able to make a valid conclusion. But it could be a topic for the future work.