

Project objective: derive insights through exploratory data analysis of (Formerly Hubway) or Bluebikes data

Submission date: when completed, no fixed deadline

The Latest data from the year 2019 can be downloaded from

<https://s3.amazonaws.com/hubway-data/index.html>

Data Set summary and project objectives

The Hubway trip history data is collected every time a Hubway user checks a bike out from a station, the system records basic information about the trip. Those anonymous data points have been exported into the spreadsheet. Please note, all private data including member names have been removed from these files.

What can the data tell us?

The CSV file contains data for every Hubway trip from the system. The file contains the data points listed below for each trip. We've also posed some of the questions you could answer with this dataset - we're sure you will have lots more of your own.

Duration - Duration of trip. What's the average trip duration for annual members vs. casual users?

Start date - Includes start date and time. What are the peak Hubway hours?

End date - Includes end date and time. Which days of the week get the most Hubway traffic?

Start station - Includes starting station name and number. Which stations are most popular? Which stations are the most popular origin/destination pairs?

End station - Includes ending station name and number. Which stations are the most asymmetric - more trips start there than end there, or vice versa? Are these stations located in any specific Geographic location which make them unique (research on Google to explore Boston's Geography)

Bike Number - Includes ID number of bike used for the trip. Can you provide some insights on the frequency of usage of each bike per day?

Member Type - Lists whether user was an Annual or Casual member. Find the proportion of customers who are Annual and Casual members.

Some example EDA insights you can derive

1. Which bike stations get the most tourist traffic in Boston? You can develop some insights on the basis of popular touristic destinations in Boston.

2. List the most popular zip codes annual members of Hubway usually frequent
3. What is the expansion potential of Hubway? What are the factors considered for Hubway expansion
4. Segment the Annual and Casual members of Hubway by Gender, Age and list down any key insights you can derive.
5. What is the estimated Revenue generated from Casual Members of Hubway? Research on Ticket pricing from bluebikes website