

A Story about the Citi-Bike Trips Visualization

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About

Aim of this visualization is to show report about Citi-Bike trips. This visualization is giving answers of some questions like average trip duration, start time for different user types, most popular start stations, most popular end stations.

Dataset

This data has been processed to remove trips that are taken by staff as they service and inspect the system, trips that are taken to/from any of our “test” stations (which we were using more in June and July 2013), and any trips that were below 60 seconds in length (potentially false starts or users trying to re-dock a bike to ensure it's secure). Trip count and mileage estimates include trips with a duration of greater than one minute.

Link for dataset:- <https://s3.amazonaws.com/tripdata/201306-citibike-tripdata.zip>

Summary

from this visualization, we can see most popular start and end station represented with different shades of blue colours. Dark blue coloured spot is showing most popular start station with 5983 bikes as well as end station with 5742 bikes. Average trip duration is visualized using bar charts. Also it is divided into customers and subscribers category with their genders. From visualization, we can conclude that average trip duration of male customers is 1753.2 and average trip duration of male subscribers is 1789.9.

The average trip of female subscribers is 1063.5 and average trip of other subscribers is 1233.2. Start time and end time user types are showing hour based count of trips by customers and subscribers. Customer trip count is visualized with blue colour and subscriber trip count is visualized with yellow colour line.

Design Decisions

I first sifted through the dataset and roughly thought about which variables I was interested in exploring and which were outside the domain of my exploration.

I wanted my Tableau story to have a purpose, to show to those who are interested in the facts about the trips. My focus was to answer some of the questions like average trip duration, start time for different user types, most popular start stations, most popular end stations.

- I have used symbol maps to show most popular start and end stations.

- Horizontal bars to show average trip duration for each user type as a customer and subscriber.
- Line plots to show hour-based counting of trips for each category customer and subscribers.
- In the final Estimate and Actual dashboard I have combined all the visualizations and showed comparative study of all visualization .