

# Final Project of Group 50

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We chose this dataset to deal with the issue of global warming and answering governments' efforts in promoting sustainability. Bike sharing has been an economical, ecological, and popular choice in dense city areas where the distance of traveling is relatively short. As this service is not yet popular in the La Jolla area, we would like to dig more into this topic and discover some facts from our visualizations.

The data is downloaded from Kaggle through <https://www.kaggle.com/benhamner/sf-bay-area-bike-share>.

## Visualization 1:

Goal:

Explore the trend of trips number in the past year monthly

Blue is the default color we used throughout this project

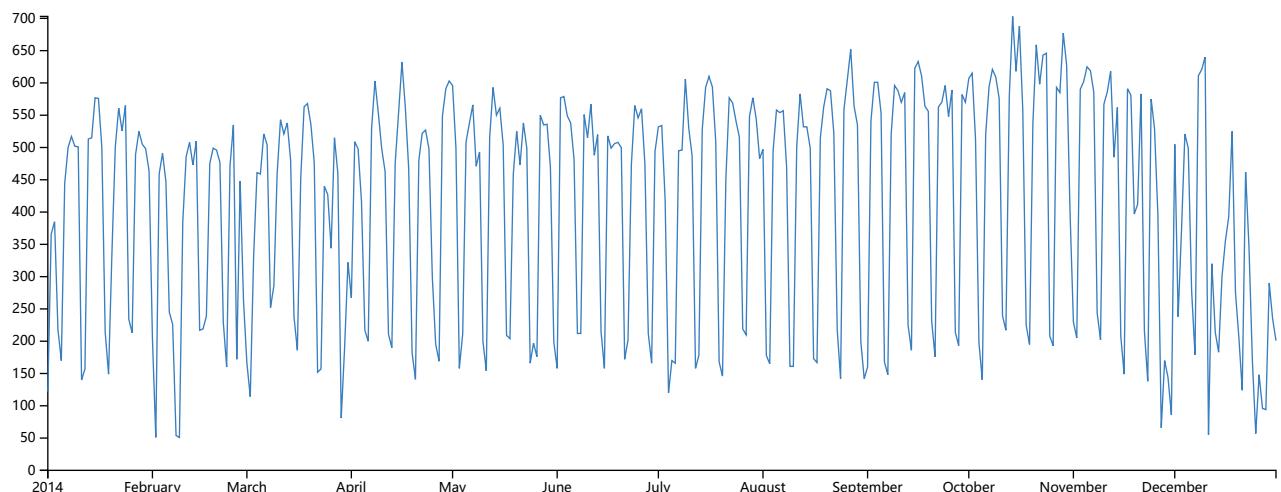
Marks: lines

Channels: horizontal and vertical positions, Tilt

### Plot:

All Year ▾

Number of Trips Throughout 2014



## Visualization 2:

Goal:

Explore the relation between the temperature of the day and time duration of the bike rides

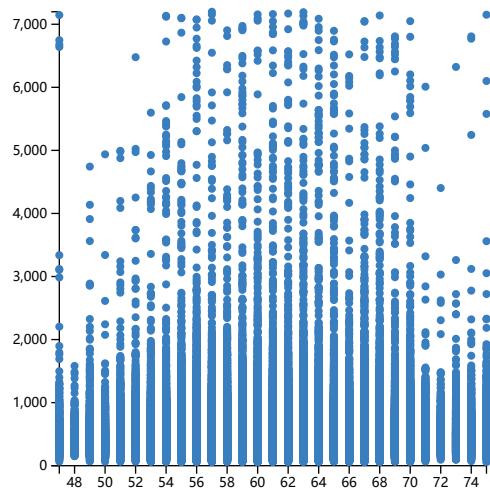
Blue is the default color we used throughout this project

Marks: points

Channels: horizontal and vertical positions

### Plot:

Mean Temperature vs. Trip Duration



### Visualization 3:

**Goal:**

Explore the busyness of each station at different time of a day:

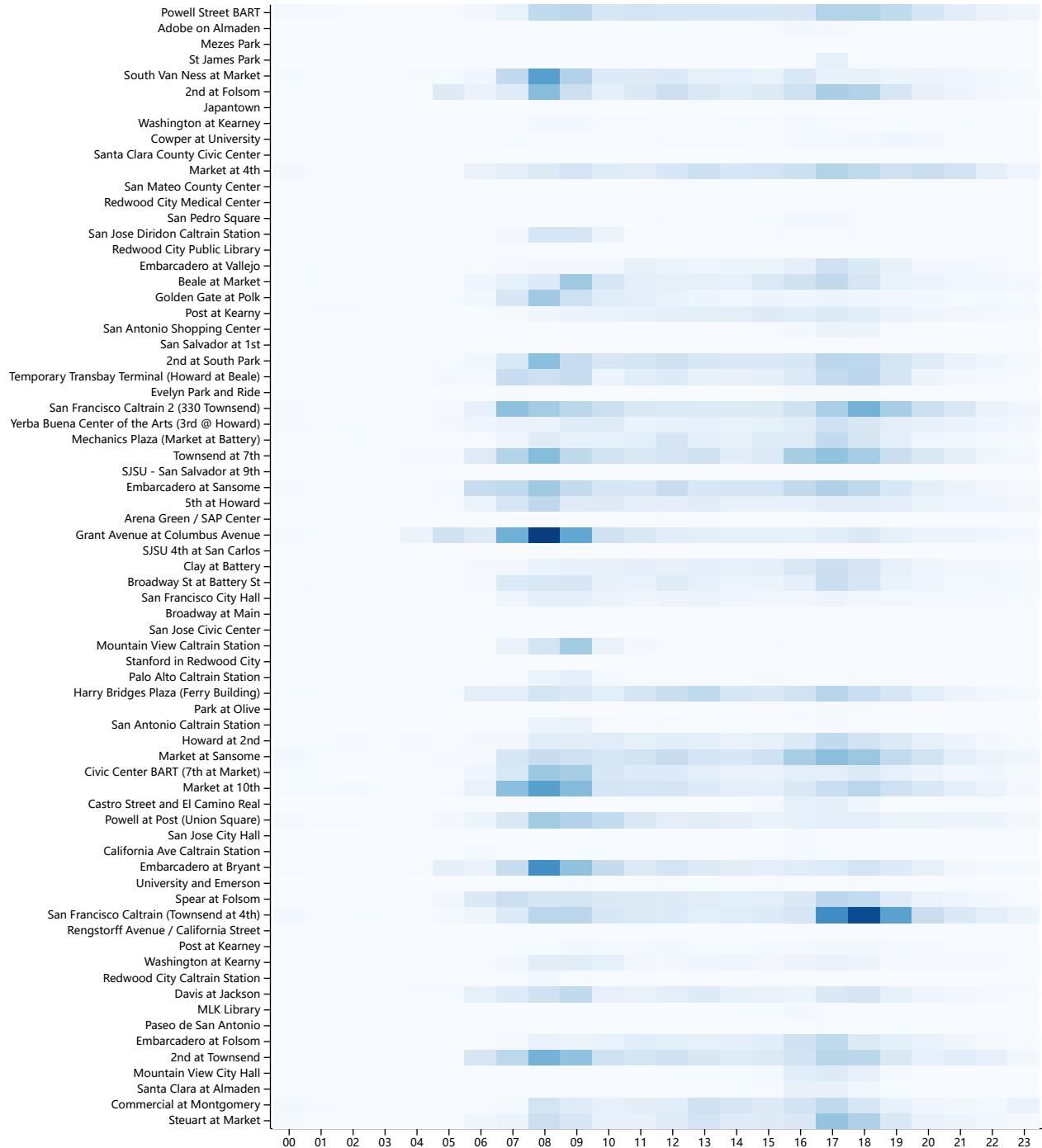
Blue is the default color we used throughout this project, and the darker blues indicates more trips and lighter blue indicates less trips. This is intuitive and blue will be friendly to color-blind community

Marks: Area

Channels: Horizontal and vertical positions, color

**Plot:**

**Number of Trips of Different Stations at Different Time of a Day**



#### Visualization 4:

Goal:

Explore the number of trips by different users (subscribers and casual customers)

We used blue and orange to be color blind friendly.

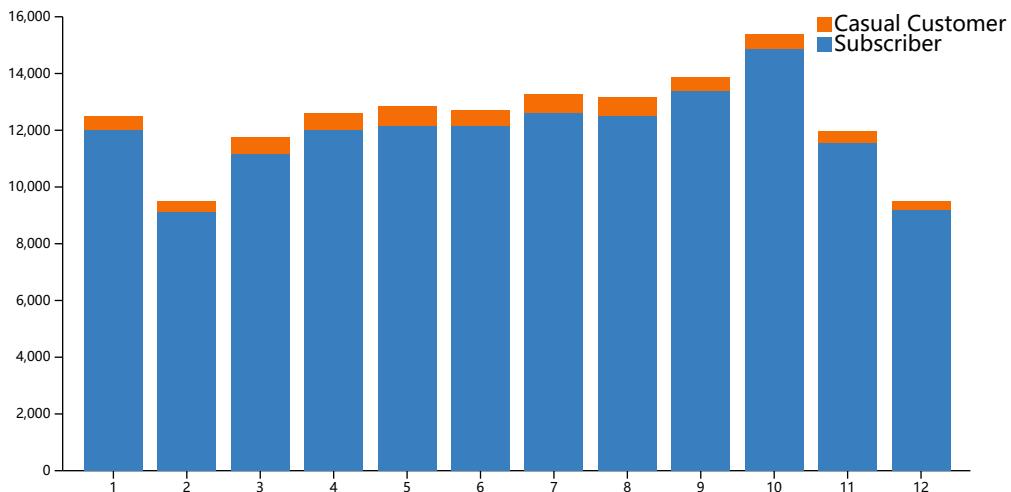
Marks: Lines

Channels: Horizontal and vertical positions, color

**Plot:**

- All Users
- Customers
- Subscribers

Trips Among All Users



### Visualization 5:

Explore the distribution of duration of most hot 7 stations at SF on 01/01/2014

The color I choose is low in hue and light which reduce the feeling of eyesore and give user a good experience of reading the graph. Here the marks are lines and areas, the channels are sizes and positions.

We used blue to be color blind friendly and this is the default color in this project.

Marks: Lines(three kinds of lines, one for each color bar, one for the median line inside each color bar, and one for the two lines extended from each color bar)

Channels: Horizontal and vertical positions for all three lines

#### Plot:

