

## **A plan for the dashboard**

Elements I would like to have on my Dashboard when analysing Citibike trips as well as weather events to help solve the bike company's expansion problem may include:

1. **An analysis of when bike stations are most heavily in use. Assuming that it is important to have bikes are available when customers want them** – Visualised via:
  - a. A line graph of bike-use and time, to determine the busiest time-of-day, busiest day-of-week. Are weekends different from weekdays?
  - b. A bar chart of which are the most heavily-used stations to determine if some stations are more in use than others.
  - c. A time-lapse of usage over time on a choropleth graph may be able to show geographically which areas are being used the most effectively over time.
  - d. Is there a one-directional flow of bikes where bikes are taken in one direction and not equally distributed – i.e. taken to work, then left there as customers choose different ways to move around?
2. **How does weather impact bike usage? Visualisation could include:**
  - a. Temperature and average bike usage on a scatterplot, does increased or decreased temperature correlate with usage?
  - b. Precipitation and bike usage – do customers stop using bikes in the rain? Does chance of precipitation correlate with bike usage?
  - c. Do seasons affect bike-usage? Visualisations could include a binning of times to represent the seasons and a calculation of difference in bike usage – visualised via a bar chart/ histogram with significance calculations