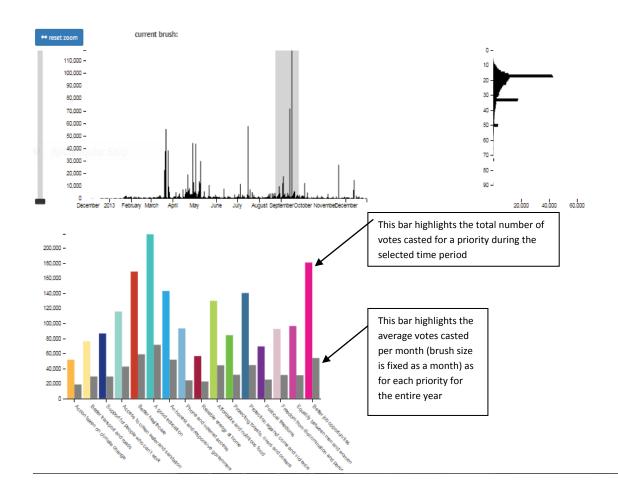
## CS-5630 / CS-6630 Homework 4 - MyWorld 2015 Data Visualization

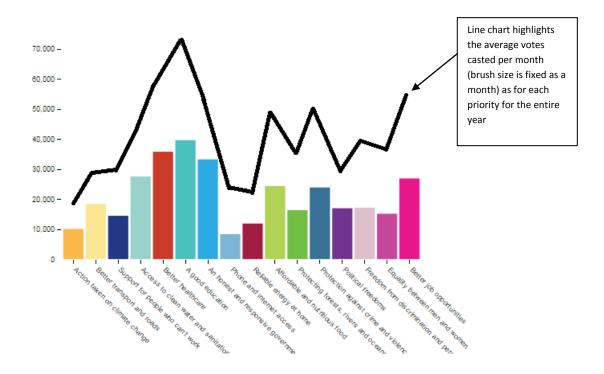
## 1) Alternative design for Priority Issue Visualization:

I have compared the selected data against their overall averages. The Priority Visualization will be a grouped bar chart with two bars for a particular issue with different color. First Bar will show the aggregate of the votes casted for the given priority during the period selected by the Brush in the count Visualization. Every priority will have different color according the color scale given to us. Second bar for a given priority will display the average number of vote casted on that priority. Average bar for a priority will be coloured as gray. This bar highlights the average votes casted per month (brush size is fixed as a month) as for each priority for the entire year. It becomes really easy for the viewer to make the comparison in the below visualization.

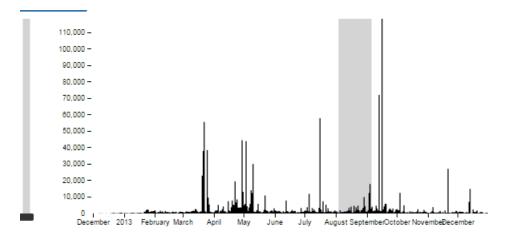
Formulae for the average bar = (total number of votes casted for a priority x Brush Width) / (Total number of Days)

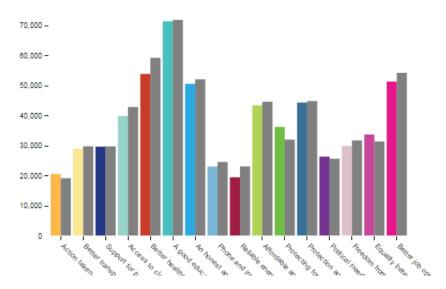


2) Instead of showing the average bar and aggregate bar side by side, we can display the average votes casted for a priority by using a **line chart.** Total number of votes casted for a priority will be shown by the bars and average will be shown by the line. Viewer can easily compare these two values.



## 3) Some interesting Patterns:





I found that the difference between the number of votes casted for a priority during a selected period and the average vote casted is the least for the selection period early August to early September. As we can see in the graph that for the selected period, the average bar and the total bar is very close.