Dear Designer of NY Times Visualization,

I am a graduate student of University of Maryland studying Computer Science. I’m taking Information Visualization this semester, which gives me the chance to appreciate these well-designed impressive interactive visualizations. Among these interesting visualization, I like the “Four Ways to Slice Obama’s 2013 Budget Proposal” (http://tinyurl.com/6mu8h63) visualization in particular and I’m writing to express appreciation as well as offering some suggestions on possible improvements on it.

After clicking the link, the first thing appears is a straightforward GUI and a nice overview of bubbles that represents all budget proposals.

Four Ways to Slice Obama’s 2013 Budget Proposal
Explore every nook and cranny of President Obama’s federal budget proposal.

The whole floating animated graph is intuitively color-coded, with legends showing the meaning of each type of color and each size of bubbles. The amount of budget for each purpose, coded in forms of the size of the bubble, is clearly shown and easy to perceive. The hollow dashed bubble on the side shows the forecasted deficit. Bubbles are sorted with those with the most increase at the top and those with the highest cut at the bottom. When hovering the cursor on each bubble, more
detailed information on that entry is demonstrated, including amount and change in percentage. All these features allow the user to quickly grasp the overall status of President Obama’s budget plan, as well as drawing attention to details in the meantime.

By clicking the “Types of Spending” button, the bubbles are then divided into mandatory budgets and discretionary budgets, with both categories arranged in a consistent way of sorting as the overview.

This could draw the attention of users’ to the difference in trends in these two categories.

“Changes” button leads to a diagram of changes for discretionary spending. The discretionary budget entries are spread out and sorted.
And finally, when clicking on the “Department Totals” button, bubbles are divided according to which department it belongs to. Empty circles show the income in that department.

Unfortunately, there’re some issues that I have noticed in this visualization. In the “Changes” view, if you hover your cursor over the two bubbles in the upper left corner, it doesn’t show the details as intuitively it supposes to. Besides, some overlapping might happen when the user adjusts the font size in the page.

Explore every nook and cranny of President Obama’s federal budget.

Changes to Discretionary Spending

Discretionary spending is controlled by the annual budget process. The White House and Congress agreed to a cap in spending in August, so proposed increases in categories like education and energy require cuts in other areas.
Also, there are some possible ways of improvements that could make this visualization better. For example, since this visualization is intended for people to better understand the budget plan, it is important to enable the user to locate a specific budget entry. In this visualization, it is particularly hard to locate certain entry if the user wants to do so. A search box with auto completion that highlights the bubble the user is searching for might help. Moreover, since the bubbles are to scale in size, some times it is hard to point to the small bubbles. Maybe a threshold for the smallest bubble should be set, or some way of snapping to nearby bubbles could be developed. Furthermore, in the “Changes” view, it seems that the horizontal axis isn't made best use of yet. It might be better if the horizontal axis are divided in meaningful areas like departments. Last but not least, since the budget plan consists of numerous entries, meaningful ways of filtering them could help a lot for users with particular interest. Possible ways of filtering includes categories like mandatory or discretionary, by departments, change range, amount range, etc.

Again, I really appreciate the design of this visualization. I would be great if this visualization could made better use of by making improved version in the future. Congratulations on such a great design.

Sincerely,
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