September 13, 2012

Dear Sir or Madam,

I wanted to provide some feedback on the New York Times’ “Mapping America, Census Bureau 2005-9 ACS” interactive visualization [1] that you published this past year.

Overall, I feel that you’ve done a good job of striving for consistency of the interface. Regardless of the map selected, common menus and prompts are provided to the end user. You also adhere to the general principal of overview first, zoom & filter, and details on demand, whereby a user can zoom to the desired level and instantly hover over a county or census block to receive detailed information about that element. Good work.

This visualization also makes great use of colors to quickly allow the user to spot trends at a glance, amplifying cognition. The colors utilized are distinct enough to provide the user an easy way to recognize patterns in the data placed on the maps.

You also make good use of dynamic aggregation techniques to aggregate data depending on the level of zoom. A good example of this is the Household Income Distribution map. When you zoom in or out, each dot will represent a different count of households, which helps the user recognize patterns, clusters, and outliers over different sized areas (county versus state).

However, there are also several improvements that you may want to consider. First, there is no way to use the back button to return to the previous map you were on. This is a common web convention and allowing easy reversal of actions is a well-established design principle, which could be partially supported by a workable back button.

Two, I feel as though the zoom in/out feature should be more prominent. In this visualization, it is a critical interaction lever and currently it feels small, insignificant, and difficult to find, especially when used from a mobile device. Perhaps it would be possible to place this lever directly on the map itself.

In addition, it would be nice to have a gazetteer service in the search box to help users choose from different place names and locations. There are many good official ones, such as the one from USGS. [2]
As well, I think your **default zoom level should be set broader than NYC.** This is debatable, as I’m sure your decision reflects your primary readership, but in general as a principle, you should strive for broad overview first.

Lastly, there is **no way to compare datasets from the perspective of a single or set of census blocks**, and switching between maps is less than optimal. Currently, to look at a set of Census block data at once, you have to click on “view more maps”, then select a map, and then hover over the same census block again to get those details. This increases short-term memory load because you have to mentally keep track of where the existing census block is as you move to a new map.

Instead, perhaps you may look at the ability to highlight a Census block or set of Census blocks to use as a placeholder. Or, perhaps you could create a pop-able side bar that provides additional coordinated map views for additional correlation.

I hope that these suggestions for improvement have been helpful. I certainly don’t know how hard any of these changes are to make, but I’d love to discuss the ideas further if you are interested!

Kindest Regards,

Chris Musialek