Local Causes, Public Amenities, and Poverty Level

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The research questions that I would like to address with my analysis are: what local causes and public amenities are people in different cities most passionate about? At the local level--within a city or a neighborhood--what types of causes do people rally around and take action on? Does the poverty level of a city have any effect on the priorities of the citizens of a city as a whole?

Neighborland.com is a website that allows people to publicize and support ideas for improving their city. Topics range from food to education to urban design. I would like to provide a quick way to visualize the topics that have garnered the most support and discussion within a city.

Initially, I wanted to compare cities by political affiliation (are liberal cities really more green?) but unfortunately the available dataset did not contain enough information from conservative cities. I also considered comparing cities by income level, but I realize that would not necessarily produce meaningful results, because of the difference in cost of living in different cities. Instead, I decided to compare cities by the percentage of citizens below the poverty line. My analysis looks at how much the topics that gain support differ between cities with a high poverty level (greater than 20%) and a low poverty level.

Although my research has numerous limitations, including the small size of the dataset and the possibility that the users of the website are not representative of their cities, I think it has surfaced interesting results.

My program pulls data from the Neighborland.com API (https://neighborland.com/docs), as well as data from the 2009 census on household income by city (http://www.census.gov/compendia/statab/2012/tables/12s0708.xls).

For the analysis, I will first look at the number of users for each city represented on Neighborland, and use those counts to identify the 10 most active cities on the website. These are the cities that will be considered for my analysis. For each city, I looked at the ideas proposed, the number of support counts each idea got, and the topic that each idea falls in. I used this to create weighted percentages of how many of the ideas proposed in a city are related to a certain topic.

Next, I summed the percentages of support for cities with a high poverty level and a low poverty level. Interestingly, as the stacked bar chart shows, there is not a significant difference.

The program will be executed by typing in the name of one of the ten cities being used in my analysis. When the city name is entered, a bar chart will show with percentage of ideas that related to each topic, weighted by the support they got, as well as a stacked bar chart for all the cities.

I plan to work on my own for this project. My goal with this project was learn more about the visualization libraries available for Python.