CMPS 165 Fall 2016

Programming Assignment 6 **Population Density Map (7 points)**

Due Date: Nov 4, Friday, 8:00pm No late submission; No need to demo

Your task is to create a population density map of one of the 49 states of the United States (other than California) for the latest year the data is available on US Census.

You have chosen or been assigned one of the states in class (see enclosed StudentStateAssignment.pdf)

Visualization will be similar to the CA Population Density example created by Mike Bostock with following additions/variations:

- 1. You will use exactly the same normalization for population density as used in California Population Density, and same color binding/legend and same data quantization, so that the visualization of the population density of your state could mesh seamlessly with California Population Density map. (3 points)
- 2. You will create a variation where a different color binding and color legend is chosen (different shades of one color where deeper shade is more dense) so that it brings out the variations of population density within your state better. Either you will provide this color option as a commented out code (1 point) or you will additionally provide a clickable button (unobtrusive button under the legend with something like "Different Color" on the visualization) that will flip between the two visualizations. (2 points)
- 3. You will create a variation where the visualization will display (or not display) state-boundary and census tract boundaries. County boundaries will always be shown. Either you can create these variations as commented out code (1 point) or you will provide two on-off buttons: State Boundary on-off button and Census Tract Boundary on-off Buttons (2 points).

In addition,

- 1. Host above visualization on github.
- 2. Add a Bold Title at the top something like, "Arizona Population Density, 2016".
- 3. Add your name and affiliation with the class at the bottom as follows:

Your Name

Instructor: Suresh Lodha

CMPS 165: Data programming for Visualization

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Submission Requirements

Submit the following on ecommons:

- 1. stateabbreviation.json (for example, az.json)
- 2. StatePopDensity.html (for example azPopDensity.html)
- 3. An inline clickable weblink for visualization
- 4. An inline clickable weblink for github