

Background

Data viz for a paper, analyzing trends shaping people's lives, charts, graphs, and interactive elements to help readers understand your findings.

Feature stories about the health risks facing particular demographics. information from the U.S. Census Bureau and the Behavioral Risk Factor Surveillance System.

2014 ACS 1-year estimates:

<https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml>,

but you may investigate a different data set.

Rates of income, obesity, poverty, etc. by state. MOE stands for "margin of error."

Level 1: D3 Dabbler

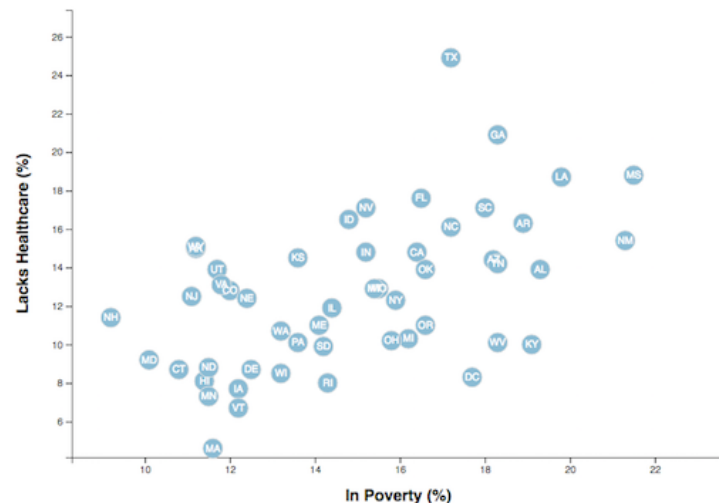
Create a scatter plot between two of the data variables such as Healthcare vs. Age or Smokers vs. Poverty.

Using the D3 techniques in class, create a scatter plot: each state by circle elements.

Code this graphic in the app.js file of your homework directory—

Pull in the data from data.csv by using the d3.csv function.

- Include state abbreviations in the circles.
- Create and situate your axes and labels to the left and bottom of the chart.
- Note: You'll need to use `python -m http.server` to run the visualization. This will host the page at `localhost:8000` in your web browser.



Assessment

Your final product will be assessed on the following metrics:

Completion of all steps in chosen level
Coherency of scatter plot (labels, ticks)
Visual attraction
Professionalism

Level 2: Impress the Boss (Optional)

1. Include more demographics and more risk factors. Place additional labels in your scatter plot and give them click events so that your users can decide which data to display. Animate the transitions for your circles' locations as well as the range of your axes. Do this for two risk factors for each axis. Or, for an extreme challenge, create three for each axis.

Hint: Try binding all of the CSV data to your circles. This will let you easily determine their x or y values when you click the labels.

2. Incorporate d3-tip

While the ticks on the axes allow us to infer approximate values for each circle, it's impossible to determine the true value without adding another layer of data. Enter tooltips: developers can implement these in their D3 graphics to reveal a specific element's data when the user hovers their cursor over the element. Add tooltips to your circles and display each tooltip with the data that the user has selected. Use the d3-tip.js plugin developed by Justin Palmer—we've already included this plugin in your assignment directory.

Check out David Gotz's example to see how you should implement tooltips with d3-tip.

