Class #1 -- 2 Feb 2017

• To Do (in class)

- Syllabus, inspiration & geospatial demos
- Assess students' backgrounds (informally)
- Show them the d3-force isfiddle/github demo
- o Get them going with a github account, jsfiddle, tools
- Let's make a bar chart (Part 1): Put the HTML chart in jsfiddle

• Inspiration from the master

- Examples from New York Times: http://bost.ocks.org/mike/
- Visualizing data with Web standards: http://mbostock.github.io/d3/talk/20111116/
- Time series visualization: http://bost.ocks.org/mike/cubism/intro/

Geospatial demos

- https://bl.ocks.org/mbostock/5593150 -- vector tiles
- o https://bl.ocks.org/mbostock/3711652 -- projection transitions
- Earthquakes on a google map with brush
- o 3-D aquifer data

D3 Examples

- http://bl.ocks.org/mbostock -- Mike Bostock (the master)
- https://github.com/mbostock/d3/wiki/Gallery -- Gallery (the community)

• Resources -- authoritative documentation

- o http://chimera.labs.oreilly.com/books/123000000345/ -- Textbook
- https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/HTML5 -- HTML5
- https://developer.mozilla.org/en-US/Learn/JavaScript -- JavaScript (MDN)
- http://www.w3.org/TR/html5/ -- W3

Resources -- for problem solving

- google -- great for well-phrased questions
- stackoverflow -- ranked answers (and questions)
- w3schools -- introductory reference & tutorials (but scoffed by the pros)
- other students -- forum participation (part of your grade)

• Tools

- o Browser (console), github, jsfiddle, gists, blocks
- o http://github.com/umbcvis -- software repository for this course

• Let's make a bar chart: Part 1

http://bl.ocks.org/mike/bar/ & http://bl.ocks.org/mbostock/7322386

• For the next class....

- Be ready to discuss how this class relates to your favorite tools, or things like...
 - ESDA -- http://gispopsci.org/exploratory-spatial-data-analysis/
 - GeoDa -- https://github.com/GeoDaCenter/geoda/
 - QGIS -- http://www.ggis.org/
- Create your own github account. Fork the block/gist from Part 1 of the bar-chart tutorial. Find it on bl.ocks.org. Creatively modify the styling, add a title, etc.
- Adapt your modified gist so that it loads in jsfiddle from your github account.