## **Assignment: Visualization Critique**

**Purpose:** The purpose of this assignment is to apply the guidelines of good visualization to visualizations that you may encounter in your personal and professional lives. The goal is to be able to recognize good and not-as-good visualization when you see it. This enables you to make nuanced judgments on how much to rely upon a graphic in your interpretation of the reality it represents.

What you need to do: Explore some visualizations for one area of personal interest and one area of professional interest. Select one "good" visualization and one "not-as-good" visualization for each of the two areas. (That's a total of four visualizations.) Using the guidelines we have discussed in class (Tufte, Cleveland, Evergreen, etc.), explain your evaluations. A visualization will most likely not be completely effective nor completely ineffective; however, select ones that seem to have characteristics that make it primarily effective or ineffective.

- What is the category of your personal interest? This can be something related to politics (try <u>this site</u>, and there are many others!), food, fitness, art, crafts, education, self help, hobbies, laundry, music, puzzles, sports, etc.
- 2. What is the category of professional interest? This can be something related to technological advances in your field, the job market, financial forecasts, product growth, market analysis, etc.
- 3. For each category, provide an example of a "good" and a "not-as-good" visualization. It's probably helpful to think of it as an "effective" or "ineffective" visualization.

**What to submit:** Submit one Word (or similar) document. The document should be named critique-hw-*yourname*.docx. For each visualization:

- 1. Include a copy of the visualization.
- 2. Include a link to the site. If this is a hard copy, include the reference.
- 3. What is the visualization trying to achieve? Is it exploration of data? Is it trying to persuade the reader of a perspective? Is it trying to summarize large quantities of data? Is it explaining a trend over time? Is it clear what the visualization is trying to communicate or achieve?
- 4. Explain why you have classified the visualization as effective or ineffective. There are many ways you can do this. You may want to create a matrix where the columns are

your criteria for evaluation and the rows are the four visualizations that you are evaluating. You can rank each visualization on a scale of 1 - 5 for each criterion. In addition, briefly explain your rankings. Be sure to include the use of color, choice of graphic, preattentive processing, as well as many of the guidelines that are appropriate to your choice of graphics.

- 5. Submit everything in one file (Word, pdf or similar). Upload on Sakai.
- 6. You may work in teams of two, one submission per team. Each team member must submit something on Sakai. If you are submitting on behalf of your team, be sure to include a comment "I am submitting on behalf of Bob" in the assignment box on Sakai. If someone else is submitting for your team, be sure to include a comment "Bob is submitting on behalf of our team".

You may select one interactive/animated visual. However, for this assignment, most of the visualizations should be static.