## MIS 0855 – Data Science (Section 006) – Fall 2017 In-Class Exercise (Day 14) – Finding Data Distortion

**Objective:** Identify how data visualization can distort messages and mislead readers

## Learning Outcomes:

- Discover the way in which data visualization distorts main messages
- Suggest modifications to avoid data distortion

## Part 1: Explore - individual (10 minutes)

- 1) Open <a href="http://images.google.com/">http://images.google.com/</a> and find data visualization that conveys misleading messages.
- 2) Find at least four examples with different ways of data distortion such as
  - a. a vertical axis without zero,
  - b. axes with unequal intervals,
  - c. incorrect graphic size, or
  - d. misleading use of colors.
- 3) Think about what misleading message each visualization delivers and how to correct it.
- 4) <u>Copy and paste the URL where you found the visualization from your browser into a Word</u> <u>document</u>. You can also use the document to make some notes.

## Part 2: Discuss – group (10 minutes)

- 1) In a group of three or four, discuss misleading data visualization you found.
- 2) Select the <u>four</u> most misleading visualization.
- 3) Write in a note (i) what misleading message each visualization delivers and (ii) how to correct it.

Send your group's note to minspang@temple.edu by 11:00 AM.