Data Visualization & Design

Week 11

Expectations—
Assignment #4

1. Tell a clear story
2. Source your own data
3. Use a visualization type you have not used previously
4. Use interactive techniques to identify relationships

1. **Tell a clear story**
2. Source your own data
3. Use a visualization type you have not used previously
4. Use interactive techniques to identify relationships

Start with a **question.**

Do:

- Source your data *after* deciding on a direction
- Use separate visualizations to build a broader narrative
- Help the viewer understand what to focus on

Do not:

- *Do not* build a narrative out of analyses
- *Do not* present unrelated data explorations side-by-side
- *Do not* look “inside” the dataset only: think about connections, hypotheses, related datasets, and context

1. Tell a clear story
2. **Source your own data**
3. Use a visualization type you have not used previously
4. Use interactive techniques to identify relationships

Open data sources:

- **U.S. Government open data — data.gov**
- **U.S. Census Bureau — census.gov/data.html**
- **UNICEF — unicef.org/reports**
- **World Health Organization — who.int/gho/en/**
- **Google Public Data Explorer — google.com/publicdata/directory**
- **NOAA (Climate) — ncdc.noaa.gov/data-access/**
- **Pew Research Center — pewinternet.org/datasets/**

1. Tell a clear story
2. Source your own data
3. **Use a visualization type you have not used previously**
4. Use interactive techniques to identify relationships

Less-conventional visualization resources:

- **RAWGraphs — http://rawgraphs.io/**
    - Alluvial diagrams, Sankey daigrams, Dendrograms, etc..
- **Gephi — https://gephi.org/**
    - Network diagrams
- **Tilegrams — https://pitchinteractiveinc.github.io/tilegrams/**
    - Cartogram hexmaps

1. Tell a clear story
2. Source your own data
3. Use a visualization type you have not used previously
4. **Use interactive techniques to identify relationships**

Interactive techniques

- **Brushing —** Highlight data to focus a single view, or highlight that data in other views
- **Linking —** A change in one view produces a change in the other
- **Sorting —** Enable the viewer to *order* values for familiarity, readability, and easier identification of clustering and trends
- **Filtering —** Enable the viewer to drill down to specific data dimensions, and subsets of dimensions

Mock up your designs if you cannot implement them live.