

Tips for Visually Presenting Data

Charts and graphs are great ways to show your data. You don't have to be a graphic artist or use fancy programs to create visuals that communicate what you found in the data. These simple guidelines can help you create useful visuals.

- 1. Tell them what they are looking at.** Use a clear, accurate title on the chart or graph, and use labels that specify what “units” are represented. If there is a “headline” worth noting, consider giving your chart a headline that helps them see the story. Note: Be sure it is an accurate reflection, not a judgement or attention grabber.
- 2. Choose a chart type that tells the story clearly and simply.** Cole Nussbaumer Knaflic, author of “Storytelling with Data,” famously recommended NEVER using pie charts. Maybe that is extreme, but that type of chart frequently makes it hard for people see what you are trying to show. In her work, she has come to rely on just a few types of charts. Some that may be particularly useful for outcome data include:
 - a. Tables – when people need to see and compare individual, precise values, and when the quantitative information has multiple units of measure
 - b. Graphs – to show patterns or trends, rather than precise values
 - c. A simple number – if the main point is one number
 - d. Line graph – to show trends over time
 - e. Scatter graph – to show interesting patterns with multiple numeric variables.
- 3. Make sure the chart tells the truth about what the data says.** While we do want to draw attention to the story we see in the data, we should not manipulate our graphs to exaggerate what we found. Here is a [fun website with examples of misleading graphs](#).
 - a. For line and bar charts keep the base on the Y axis to 0. This avoids making a slight increase look like a giant leap!
 - b. Use the “headline” to say what the data said, not for shock and awe.
- 4. Draw attention to what's important.** Limit the number of categories that you represent in a single visualization. Check out this [transformation](#) from storytellingwithdata.com.
- 5. Eliminate clutter.** Here is a [FABULOUS transformation](#) from storytellingwithdata.com. Go and do likewise!
 - a. Avoid 3D, exploded graphs, and other effects that muddy it up
 - b. Avoid using images, icons or pictures just for decoration
 - c. Use color to draw attention to what's important, not just to make it colorful.