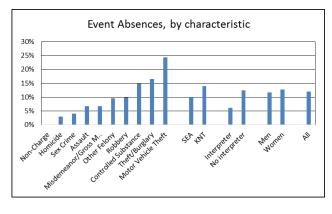# Top Data Visualization Tips for Success
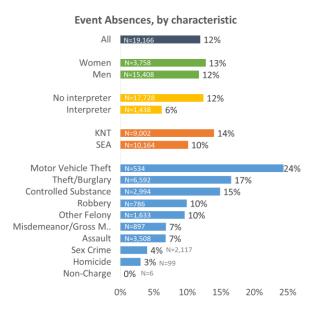
1. Keep it simple

- Remove lines you don't need that distract the reader from immediately focusing on the information (i.e, chart border, gridlines).
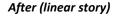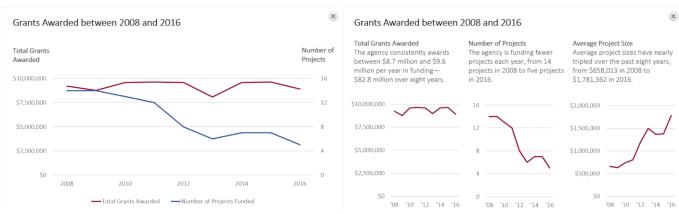
Before (uses grid lines and borders)   *After (uses data labels and color)*

- Avoid putting more than one or two types of data on the same chart, especially if it would require separate axes. Can use a series of smaller charts to accomplish the same goal of comparing lots of different information.

Before (multiple y-axes)   *After (linear story)*

Source: http://annkemery.com/doubley/
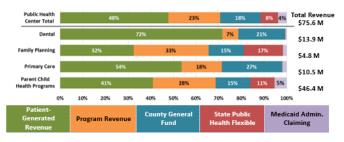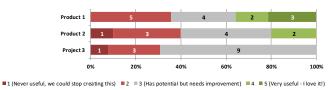
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2. Colors

- "Group" data visually by making like things shades of the same color, and emphasize (or de-emphasize) things by graying out or desaturating less important information (if it can't be deleted).
  See first page again for a good example of Grouping

- Only use gradient color schemes if the data being graphed are scalable. Otherwise, use opposing colors.
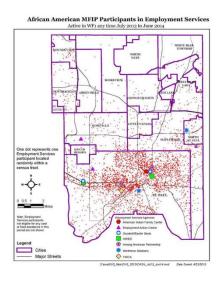
Opposing Colors for Different Data Categories

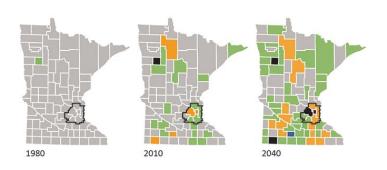***Gradient Colors for Ordered Data Categories***

- Be mindful of color usage with positive/negative connotations, particularly when working with data related to equity and social justice. For example, refrain from using reds, browns, or other colors with "negative connotations" to represent communities of color. Conversely, refrain from using greens, blues, or other colors with "positive connotations" when referring to dominant communities (i.e. White communities). Because these colors have been socialized in other contexts to be good/bad, using those colors to represent communities infers those same value beliefs onto those communities represented. Similarly, be mindful of color blindness – red and green shades, when used together, can be difficult to distinguish for colorblind individuals.
  - Avoid the phrase "target areas" when describing areas of inequities. Instead, flip the script and talk about priority areas.

Problematic (red is used here for MFIP participants)
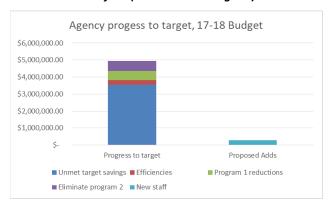

Better (use of neutral colors)

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3. Axes and Labels

- As often as possible, keep text horizontal and as physically close as possible to what it's describing (i.e., use text boxes rather than legends, data point labels rather than relying on axis + gridline interpretation).
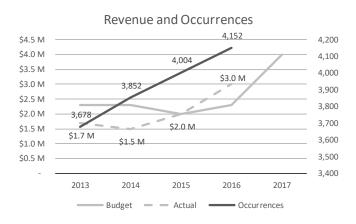
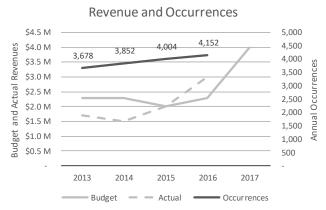| *Before (uses standard legend)*	*After (uses text boxes to identify categories)*

- Do not use axis proportions to highlight or exaggerate changes over time, especially if using multiple Y axes.

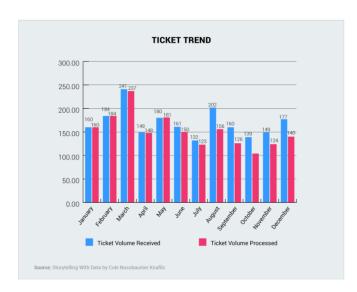| *Before ("rapidly rising" occurrences correlate with revenue increase)*	*After (actually, revenue has gone up by a higher percentage than occurrences)*

4. Use graphs to tell a story

- Always think about the story you want to tell when choosing what data to present, what type of chart to use, how to organize data on the charts, colors and labels, etc.
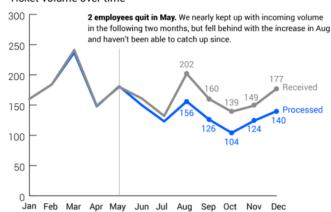
Before   *After*

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Before   *After*

Source http://blog.visme.co/data-storytelling-tips/

5. Ownership

- Include data owner, data source, and last update.

Other Resources

- Adobe Color: https://color.adobe.com/create/color-wheel/

- Canva.com

- Piktochart.com

- Infogram.com

- Nounproject.com

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