

Guidelines for Informing Without Misleading

Refer to this list of best practices as a way to design visualizations with visual principles and human perception in mind.

Best practice guidelines

Review the visualization for Gestalt principles to make sure it reflects the groupings and patterns you intend.

Encode length, width, and size so that an increase in visual area reflects an increase in value.

Avoid encoding negative values with visual area.

Avoid truncating axes for mark types that represent entire values (such as bars).

Consider whether to truncate axes for mark types that represent change rather than entire value (such as lines).

Use axes that conform to standard orientation, with X and Y values that increase as you move right and up, and that decrease as you move left and down.

When you have an independent and dependent variable, put the independent variable on the X axis and the dependent variable on the Y axis.

If a dual axis chart includes the same units on each axis, synchronize the axes and hide one of the axes, if possible.

When a view changes due to an interaction, such as a filter or parameter, fix the axis to maintain a consistent scale.

Consider meaningful associations your users may already have about the colors in your visualization.

Use colors consistently throughout a visualization, particularly across views on a dashboard.

Consider color hue palettes that give equal weight and independence to all categories.

Make a thoughtful decision about what to include and what to omit from the initial visualization. Consider adding interaction so users can view additional information (for example, visual overview charts, tooltips, filters or parameters, dashboard actions, or additional dashboards).