Which Graph Should You Choose?

Data visualizations are powerful tools to convey data graphically. Below, we categorize some of the commonly used types, used among varying communication purposes, according to their primary functions.

Correlation

Shows relationships (not causation) between 2+ variables.

Scatterplots



Bubble Charts



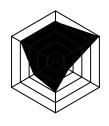
XY Heatmaps



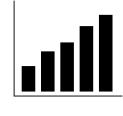
Magnitude

Compares sizes (whole or relative).

Radar Graphs



Ordered Columns/Bars



Pictograms



Concepts

Methods that help explain and show ideas or concepts.

Concept Maps

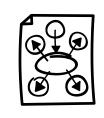
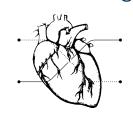


Illustration Diagrams



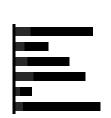
Venn Diagrams



Part-to-whole

Breaks down a single entity into components.

Stacked Bars/Columns



Waffle Charts



Pie/Donut Charts



Deviation

Variations (+ or -) based on a fixed point.

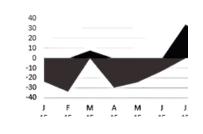
Diverging Bar Graphs



Diverging Column Graphs



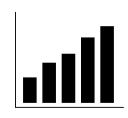
Deficit/Surplus Area Graphs



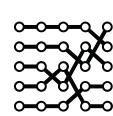
Ranking

Presents entities in order of importance.

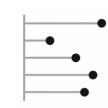
Ordered Columns/Bars



Bump Charts



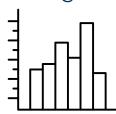
Lollipop Charts



Distribution

Depicts how often a value occurs and how uniform the data is.

Histograms



Boxplots



Violin Plots



Spatial

Presents patterns in location-based data.

Choropleth Maps



Equalized Cartograms



Point Maps



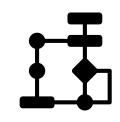
Flow

Shows sequence of events, movement or intensity.

Sankey Graphs



Flowcharts



Flow Maps



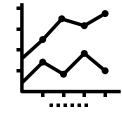
Time

Depicts changing trends and events overtime.

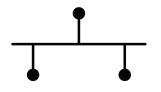
Area Charts



Line Charts



Timelines



Adapted from: True ft.com/vocabulary

Want to learn more? rds@library.ucsb.edu

