Methodology

Step 1: Pick the right chart type for your data.

Step 2: Arrange data for chart type selected
Tip: for large data sets, summarize your data using pivot tables.

Resources

Introduction to Excel charts. https://www.gcflearnfree.org/excel2013/charts/1/

“Create a chart from start to finish” at https://support.office.com/en-us/article/Create-a-chart-from-start-to-finish-0baf399e-dd61-4e18-8a73-b3fd5d5680c2 (http://tinyurl.com/jfp77bj).

Format elements of a chart.
For more on advanced chart types, see:

Advanced Excel Charts - Introduction.

Sunburst Chart

Ideal for displaying hierarchical data. Each level is represented by one ring or circle with the innermost circle as the top of the hierarchy.

Butterfly Chart

Used to represent two data series side by side for comparison purposes, such as displaying positive vs. negative opinions, presenting election results (e.g. republicans vs. democrats), etc.


Resources:

Combination Chart

Combine two or more charts, such as a line graph with a column chart. Band chart is particular subtype. A Band chart combines a line graph with added shaded areas to display the upper and lower boundaries of the defined data ranges.

Resources:

Create a combination chart.

Create Excel Charts with Bands or Threshold in the background.
Datasets for Teaching and Learning

The following resources can be useful starting points for locating relevant datasets:

- **Sage Research Methods Datasets** - This collection of practice datasets contains over 120 datasets using data from real research. The collection is designed to support the teaching and learning of data analysis techniques and research methods.
- **Tableau Sample Data Sets** - A changing sample of datasets for use in teaching and learning.
- **Awesome Public Datasets** - This curated list of datasets is arranged by discipline; the majority of the datasets are free.
- **Data.gov** - The home of the U.S. Government’s open data.
- **FedStats** - This site provides access to the full range of official statistical information produced by the U.S. Government without having to know in advance which Federal agency produces which particular statistic.
- **North Carolina Office of State Budget and Management (OSBM) Facts and Figures** - This is a portal to various North Carolina socioeconomic, population, business, and other types of data.
- **Raleigh Open Data** - Data portal containing City of Raleigh datasets with API access in a variety of categories based on services that the City manages such as crime, building construction, road closures.
- **NOAA Storm Events Database** - The Storm Events Database contains records documenting significant weather phenomena and meteorological events.
- **CORGIS Datasets Project** - Real-world datasets for subjects such as politics, education, literature, and construction.

Source: [https://www.lib.ncsu.edu/teaching-and-learning-datasets](https://www.lib.ncsu.edu/teaching-and-learning-datasets)