









# Guidelines for Charting

The ability to create effective charts is an important skill for both oral presentations and printed text. Understanding effective charting methods allows you to present the charted information in a visually appealing way. A chart's effectiveness depends on its ability to generate a sense of orientation and accessibility, and you can do so with the help of these charting guidelines.

## Chart Summary

Excel 2007 offers several types of charts, each with its own unique functions. Be sure to choose the type of chart that best serves your purposes. The following table provides a quick summary of all the chart types available to you, as well as their functions:

Chart Type	Example Image	Description
<b>Column</b>		Shows data changes among many data series over a period of time
<b>Line</b>		Indicates the relationship of one variable to another over time in equal intervals
<b>Pie</b>		Proportionally compares the items in one data series
<b>Bar</b>		Shows data changes between many data series
<b>Area</b>		Displays the highest value or total value of items in a data series over time
<b>X Y (Scatter)</b>		Displays the relationship of several data series on a coordinate plane, marked by points
<b>Stock</b>		Illustrates fluctuation or stability in certain data series, not necessarily only for stock prices
<b>Surface</b>		Displays combinations of two sets of data, each with a common data series, in a three-dimensional coordinate plane

**Doughnut**

Proportionally compares the items in two or more data series

**Bubble**

Displays the relationship of two data series on a coordinate plane, marked by points, and a third data series that influences the size of the point

**Radar**

Compares multiple values of multiple data series

## General Hints

Consider the following when charting:

**Choose the correct chart**

The different chart types are designed to communicate information in different ways. Be sure to choose the correct chart format for your information. You can decide which chart is appropriate by referring to the Chart Summary or by creating the chart and, depending on how you prefer to display the information, changing the chart type as you see fit.

**Chart necessary information:**

Consider the purpose of your chart when deciding what information to put into it. If you want to chart several data series, create multiple charts. This will allow you to focus on specific data series per chart, which will increase each chart's readability.

**Maintain consistency:**

When creating multiple charts, be sure that they are similar in style and formatting. Informational content, not their stylistic differences, should be the focus when you have multiple charts. Excel can help keep your charts consistent with preformatted layouts and styles.

**Add emphasis:**

To indicate significance in certain chart items, you may use one of many different formatting options.

**Maintain simplicity:**

Simple charts are easy to read. Since clarifying and communicating information is the goal of charting, complicated or "busy" charts (i.e., charts displaying too much information, charts with distracting formatting) are not advised.

**Edit the plot area:**

When creating your chart, you may find excess space in the *plot area* (i.e., the chart area containing graphical information).

**Use labels:**

Labels help your audience understand chart information. You may add chart titles, axis titles, legends, data labels, data tables, or gridlines to increase its readability.

## Using Pie Charts

Pie charts are unique from other charts. Pie charts display one data series (unlike other charts that display at least two data series). Therefore, pie charts do not have axes, plot areas, or points. Instead, they display one data series, divide it into pieces, and compare the pieces to each other. Keep in mind the following when using pie charts:

**Limit the number of slices:**

Keep the number of slices to a minimum by combining smaller categories. Too many slices will decrease your chart's readability.

**Use labels for slices:**

Try to place labels within slices whenever possible; this helps create clearer and more readable charts.

**Compare Multiple Pie Charts:**

If you need to compare multiple pie charts to each other, you can consolidate them into one chart by creating a doughnut chart. These charts, like pie charts, compare the items in one data series, but can do so with more than one data series.

**Focus attention:**

If necessary, draw your audience's attention to the particular slices you are discussing by exploding it to make it appear separate from the pie or by selecting an attractive color, pattern, shadow, or 3-D effect. For more information on enhancing pie charts, refer to *Formatting Your Chart*.

These documents are based on and developed from information published in the LTS Online Help Collection ([www.uwec.edu/help](http://www.uwec.edu/help)) developed by the University of Wisconsin-Eau Claire and copyrighted by the University Of Wisconsin Board Of Regents. Used by permission.