

Communicate Effectively Using Graphs and Tables

Graph Types

There are five basic types of graphs that are used most frequently:

- **Area** - shows the relationship of different parts to a whole over time.
- **Column** - shows the differences in individual values vertically. Can be used to show the differences between values in different time periods or other data groupings.
- **Bar** - shows the differences in individual values horizontally. Is not a good choice for showing values in different time periods. Works better for showing the results of one or two data series.
- **Line** - shows values at different points in time. It is usually best to have equal time intervals along the horizontal axis of the graph.
- **Pie** - shows the proportions of each segment of a whole. This graph only handles one data series.

Key Graph Elements

- **Colors** – make sure the background color and the color of each data series are set so that there is enough contrast to be seen clearly.
- **Depth** – refers to whether the graph is 2-D or 3-D. There is almost no value to the third dimension; graphs should be 2-D.
- **Axes** – all of the listed graph types except the pie graph have two axes. One is for the data values and the other is for the time scale or how the data is separated. Set the scale of the axes to be appropriate to the data being shown.
- **Data Labels** – a text box that contains the actual data value. It should be placed close to the graphical representation of the data point, whether it is at the end of a bar or column, above a data point on a line graph or inside the pie section in a pie graph.
- **Title** – should focus on the interpretation of the data, not the data itself.
- **Legend** – if more than one data series on a graph, add text labels to indicate each series instead of using a legend on the graph.

