Tools of the Trade:

PIE CHARTS and PICTOGRAPHS

In "Line Charts", we stated that a line chart is used when a large number of points are to be plotted, when several series are being compared, or when emphasis is on movement and not on actual amounts.

Now, we would like to discuss the use of pie charts and pictographs. A pie chart is a simple yet effective way of presenting data. Data are presented in the form of a pie cut into slices. Usually it is used to show what percentage of a given whole falls into different classes. Each slice shows what percentage or part of the whole contains specific characteristics.

To assure clarity of the pie chart be sure to use a complete title of the data being shown, a simple pie broken into appropriate slices with each slice labeled to identify its characteristics, and the source of the data. Color or shading is also quite effective.
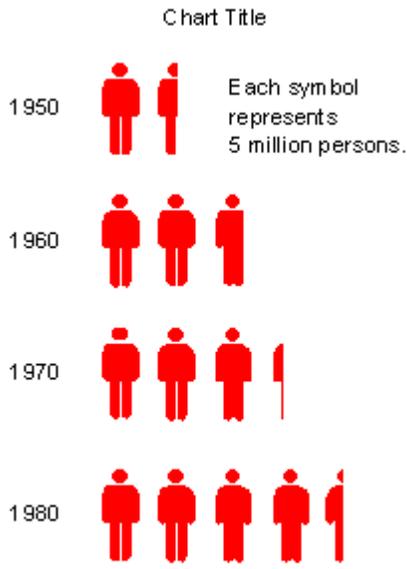
The pie chart does have some limitations. One of the limitations is that data can effectively be presented for only a few groups - no more than four or five. When the number of groups is more than five it becomes difficult to notice the differences in magnitude; thus, the pie chart loses its simplicity and impact.

A pictograph is used to present statistics in a popular yet less statistical way to those who are not familiar with charts that contain numerical scales. This type of chart presents data in the form of pictures drawn to represent comparative sizes, scales or areas.
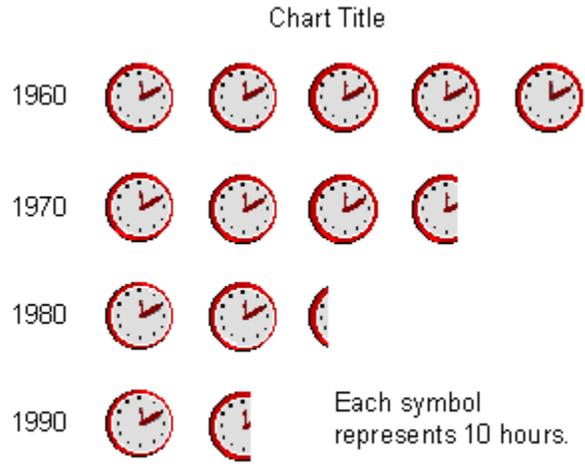
Again as with every chart, the pictograph needs a title to describe what is being presented and how the data are classified as well as the time period and the source of the data.

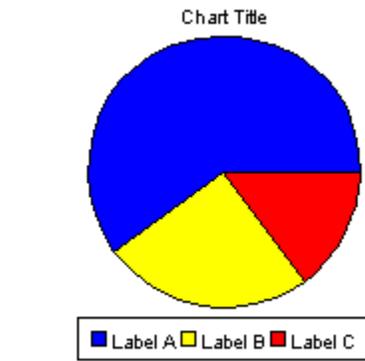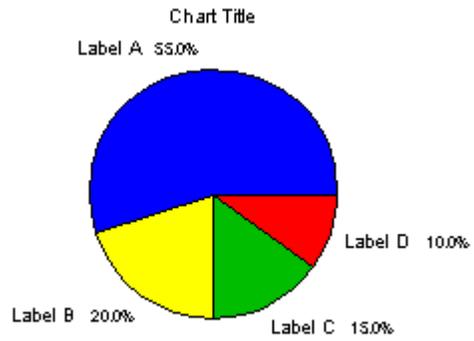Examples of these types of charts appear below.

Pictographs

Chart Title

1950 — Each symbol represents 5 million persons.

1960

1970

1980

Source:

Chart Title

1960

1970

1980

1990 — Each symbol represents 10 hours.

Source:

PIE CHARTS

Chart Title

Label A — Label B — Label C

Source:

Chart Title

Label A 55.0%

Label D 10.0%

Label C 15.0%

Label B 20.0%

Source: