

Bar Graphs and Histograms

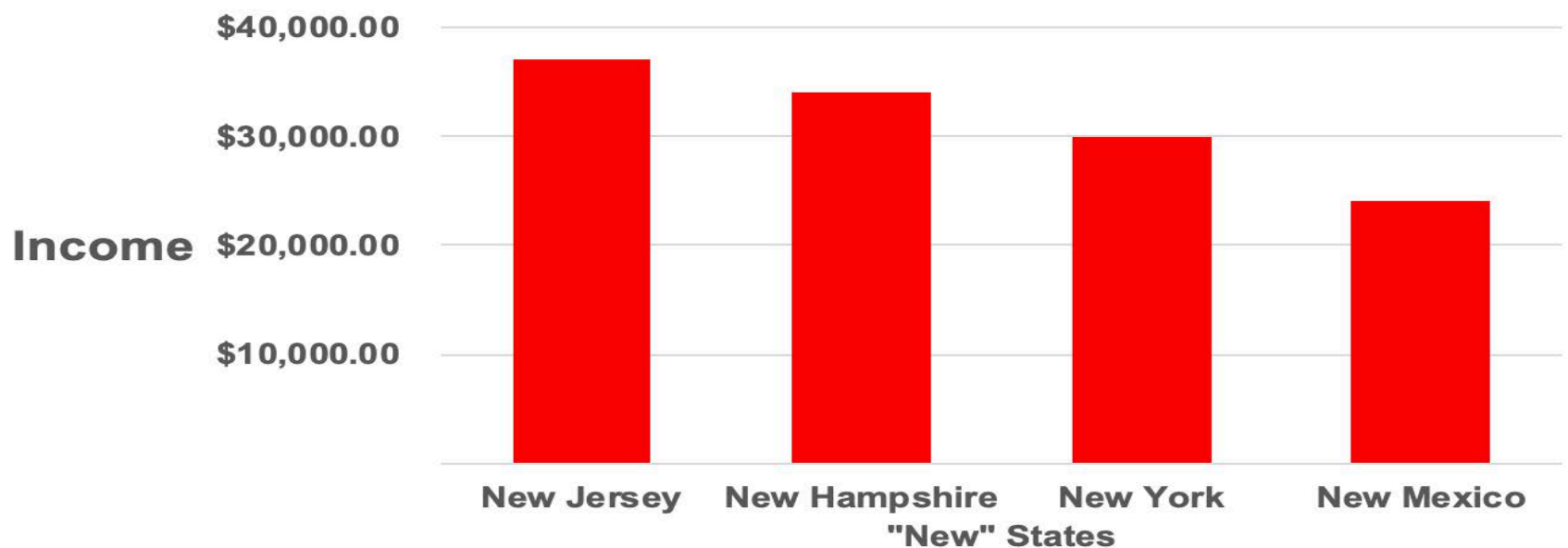
Bar graphs and histograms are used to compare the values of different categories.

Bar Graphs

A bar graph is made up of bars - columns - plotted on a chart. Here is how to read a bar graph.

- The bars **represent discrete data**.
- The height of each bar indicates the value of that bar as defined by the y-axis Axis Label.

The bar graph below shows average household income for the four "New" states: New Jersey, New York, New Hampshire, and New Mexico.



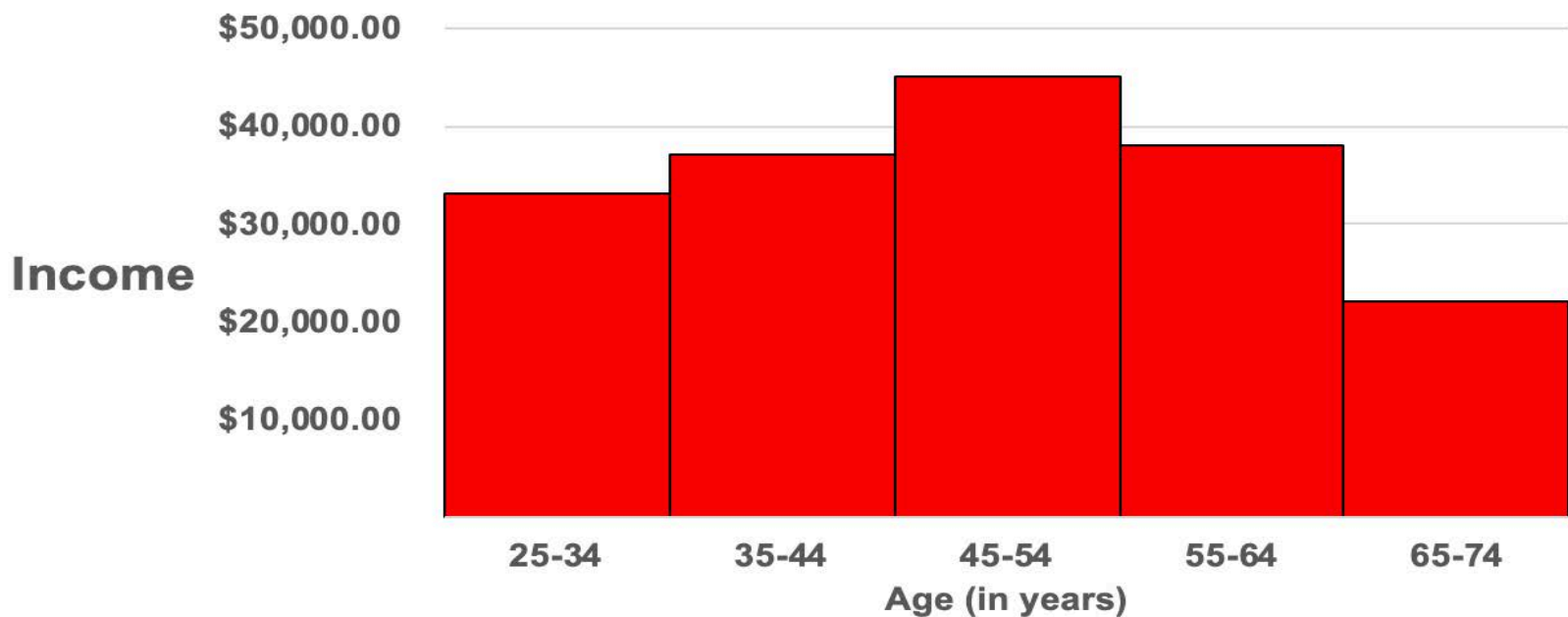
The above bar graph shows that average household income is highest in New Jersey; lowest, in New Mexico.

Histograms

Like a bar graph, a histogram is made up of columns plotted on a graph. Unlike a bar graph, in a histogram there is usually no space between adjacent columns (but sometimes there is). Here is how to read a histogram.

- The columns **represent continuous data**.
- The columns can be a single value or a range of values (with a minimum and a maximum).
- The height of each column indicates the value of that column as defined by the y-axis Axis Label.

The histogram below shows average household income for five age groups.



You can see from the histogram above that average household income is greatest for people in the 45 to 54 year-old age group.

The Difference Between Bar Graphs and Histograms

Here is the main difference between bar graphs and histograms. With bar graphs, each column represents a group defined by a discrete measurement; with histograms, each column represents a group defined by a continuous measurement.