**Transcript: Pie Charts and Bar Charts in R Commander**

The next thing we're going to do is go over some data visualizations that can be used on one categorical variable. So again, as a review, a categorical variable is anything that is in distinct categories rather than on a numerical scale. It can be ordered or unordered, and in this case if we look at our data set, the only categorical variable we have is region. And this region is an unordered variable because there's no inherent order to the different regions in the United States.

The first data visualization we're going to be going over is a pie chart. We go to “Graphs” and select “Pie chart...”. You'll see here already that the only variable we can select is “region”, and this is because this is the only categorical variable in our data set. We don't actually have to change anything here. Although again, if you wanted to change the axis labels or the title, you could do that. You can also change the colour palette and you could select whether you want percentages or frequency counts. We're going to leave that all as is and click “OK”. And that will give us this pie chart of the different states in the different regions. So, we could go and see what percentage of states are in different regions.

Another way that we could visualize this information is using a bar graph. We can go back to our R Commander window and go to “Graphs” and “Bar graph”. You'll see here that there's a similar window. “region” is our only option and we can select “OK”. Sometimes our data visualization gets kind of stuck behind everything else, so you just have to go look for it. In this case, we're seeing the numbers here. We could have changed it to percentage in the options, but we're seeing the frequency of states within these different regions. You can see here that these are organized alphabetically, which is perfect since this isn't an ordered variable anyways.

So those are just two really quick ways that you can visualize categorical data within R Commander and see what percentage or what number of your data points are in various categories.