Free Training Transcript: Maps in Tableau

Welcome to this video on Maps in Tableau. You can download the Exercise workbook to follow along in your own copy of Tableau.

Geographic Roles

Often analysis involves geographic data – whether it's what countries a student body represents, or flight delays in different cities. Tableau has a robust internal database that can recognize common geographic field names such as Country, State, City, and the data pane will automatically label these fields as geographic roles with a globe icon, like here.

If Tableau doesn't automatically recognize a field as containing geographic data, it's very easy to set that. Simply click on the icon, select Geographic Role, and select the correct type of geographic information contained in the field.

Once a field has that globe icon, Tableau will generate latitude and longitude coordinates for the geographic data.

Plotting Geographic Data

By default, when we double click on a geographic field, Tableau will plot it on a map, automatically putting the generated Longitude and Latitude fields on Columns and Rows respectively. Adding State is as easy as dragging it out and dropping it on the map.

Symbol and Filled Maps

Both of the fields we've mapped so far defaulted to symbol maps. Symbol maps are where a mark, in this case a circle, is used to indicate the location. These marks can be modified, here we can change the mark type to Shape. Click on the shape shelf and choose our desired shape. We can adjust the size, and bring something Market to Color... These marks are just like the marks on, say, a scatterplot. They just happen to be plotted on a map.

Some geographic types, such as City, can only be represented by a symbol. However, geographic types like States or Postal Codes can be represented as filled maps, in addition to symbol maps. We'll switch the mark type to Filled Map, and it's as easy

as that. Filled maps can be created by changing the mark type, like we just did, let's undo that, or by bringing a measure, such as Profit, to Color. The mark type has to be automatic for Tableau to switch to the filled map automatically when using a Measure on Color. Filled maps cannot encode anything by size, as the sizes of the areas are established by the geographic data.

Map Layers

Tableau's default maps are greyscale. However, we can customize maps. Go to the map menu and click map layers. The map pane comes up covering the data pane. We can control the background: style, here, can be normal, which is that blue water style, light like we see here, or dark; we can control the washout; ws well add the map layers, let's turn on Coastline. Several options, such as Streets and Highways, are currently greyed out, this is because we're zoomed out too far. We'll search for, say, Dunedin, in New Zealand – and we could zoom in using the zoom tool. Now "streets and highways" is available and now we can turn it on.

Map Options

By default, panning and zooming is turned on in maps. The view toolbar has zoom controls, the ability to pin or unpin the map, and controls for a zoom selection, the pan feature, and various ways to select marks.

However, we may not always want these options to be available. To customize map options, click on the map menu and select Map Options. Here we can turn on or off pan and zoom, the search option, and the view toolbar. If we don't show the toolbar, the mouse behavior is whatever we last selected—here, radial select. Make sure you set what the mouse should do before you hide the toolbar. Note that hiding the toolbar doesn't turn off pan and zoom via keyboard controls, such as shift dragging to pan. If you want to fully disable those features, make sure you specifically turn them off in the map options. Map Options allow you to fully control how users can interact with your map.

Conclusion

Thank you for watching this mapping training video. We invite you to continue with the Free Training videos to learn more about using Tableau.