Free Training Transcript: Expanding Tableau's Mapping Capabilities

Welcome to this video on Expanding Tableau's Mapping Capabilities.   You can download the Exercise workbook and additional files to follow along in your own copy of Tableau.

It's possible to expand the mapping capabilities of Tableau and map data that goes beyond what is automatically available. For example, if we want to look at global branches for Bank of China, these can be mapped using coordinate data.

Joining or Blending Geocoded Data

If our data has Latitude and Longitude coordinate information, that's all we need. Here, for example, we have branch information for Bank of China branches outside of China itself. I pulled the addresses from boc.cn, then ran them through a batch geocoder, using the link available under the video. (http://www.findlatitudeandlongitude.com/batch-geocode/) Now the data has the geocoded information for each branch.

We have these fields, Latitude and Longitude, from the data set directly. We'll plot these by double clicking, let's bring Branch to Label, and now each record from the data set is plotted, and we see a dot for every branch. If we had banking data for these locations, we could blend or join in that data as long as there's a shared field with our Geocoding data set, such as branch name or address.

Polygon Maps

One of the big distinctions between using geocoded data directly and importing custom geocoding is the ability to use polygons, or filled shapes. If we connect to a data source with polygon information, it's easy to map custom polygons. I'll run through a quick example here, but for more information on the necessary data formatting and detailed steps, please refer to the video on Polygon Maps.

We'll change the mark type to polygon; bring Park Name to detail; point ID to the new shelf Path; Polygon and Sub Polygon ID to Detail; and for the big reveal, plot Latitude and Longitude.

That's two examples of using data that contains Latitude and Longitude within the dataset, both for points and polygons.

Custom Geocoding

If we don't want to deal with latitude and longitude in the data every time, we can import custom geocoding into Tableau. The basics are fairly simple. First, we need to create a custom import CSV file (or files), containing the geocoding information. These files need

to be set up very carefully. Please see the video Custom Geocoding or the online help for more information. Next, we import the folder containing the CSV files into Tableau. And last, we assign the geographic role to the field within Tableau.

Importing Custom Geocoding

Importing the file is easy. Go to Map > Geocoding > Import Custom Geocoding. The zipped folder is available for download under the video. Browse to the folder and select Import. Note that Tableau will import all CSV files in that folder.

Now our geocoding has been imported, and every time we create a workbook on this machine with a dataset that includes Branch, all we need to do is set the geographic role and we can map it. Here we're connected to some simple dummy data that contains the Bank branch name and some made up information about employee counts and Manager – and there's no latitude and longitude directly in this data set. Tableau has not automatically recognized this field as a geographic role, but we can assign it. Click on the ABC in front of Branch and change the geographic role to the new one, Branch. Now this field has a globe icon with a symbol indicating this is a custom role. We'll plot country, then Branch. And here's our map, done without latitude and longitude in the dataset itself! Maybe we'll color by number of employees, and add Manager to label.

Conclusions

Thank you for watching this video on expanding Tableau's mapping capabilities. To learn more about the requirements for the custom geocoding import file, and consideration to bear in mind, please continue to the video Custom Geocoding.