



Free Training Transcript: Custom Geocoding

Welcome to this video on Custom Geocoding. This video builds on the concepts in the Expanding Tableau's Mapping Capabilities video. You can download the Exercises workbook and additional files to follow along in your own copy of Tableau.

Creating a Custom Geocoding Import File

There are three main types of custom geocoding: Extending an existing role, adding new roles to an existing hierarchy, or adding new hierarchies. Regardless of the type of custom geocoding, the CSV import file must be created very carefully. It must have consistent spelling, capitalization, and column names. For example, Latitude and Longitude must be spelled out fully and be capitalized.

Extending an Existing Role

Extending an existing role would be the option for adding towns that Tableau doesn't automatically recognize. Here's an Excel file which adds in some small towns from my home state of Florida. I have to indicate every level of the hierarchy above the cities, so state and country, then provide the Latitude and Longitude for these new cities. Because all three levels of the hierarchy are existing roles already in Tableau, I have to name my columns exactly as Tableau knows these roles – the online help has a table with the columns to include.

Adding New Roles

Adding New Roles creates new levels within an existing hierarchy, such as adding Bank of China branch locations under the level of Country. If we also had both state and city information, we could nest Branch under the city level. However, if for example we don't have State information, we can't simply go Country > City because that's not an existing hierarchy. To add a new role in an existing hierarchy, I have the Country, then the Branch, then the Latitude and Longitude. Once this is brought into Tableau, "Branch" will show up as a new geographic role.

Adding New Hierarchies

Adding new hierarchies would be useful for a situation such as mapping custom sale regions, covering Theater and Region. These are not existing roles so it's a brand new hierarchy. To create this, we'd need to make a CSV file for each level of the hierarchy.

Because we can individually map any level, we need Latitude and Longitude coordinates for each level. If we look at Region down at the bottom, we see we see that it contains all the levels above it so Tableau knows where precisely each piece goes. Make sure to save all of the CSV files for the various levels of the hierarchy in a single folder.

Importing the Folder

To bring in multiple custom geocoding files simultaneously, it's necessary to save all custom geocoding CSVs in the same folder. Let's import those two CSVs we were just looking at. Go to the Map menu > Geocoding > Import Custom Geocoding. The folder can contain as many CSV files as necessary, but the entire folder will always be imported as a single entity and, if a workbook is packaged, all custom geocoding data will be bundled with the packaged file. Packaged workbooks that contain custom geocoding can have their custom geocoding imported into the local repository, but they will replace any existing custom geocoding on that system. To import the custom geocoding from a packaged workbook, we'd select Import from the current workbook.

But we'll import from a folder. This may take some time, so I'm going to pause the video. To use custom geocoding, the dataset simply has to have the same field that's been added to the custom geocoding. Here we have Florida Small Towns – and the end user interacts with these fields as if they were any other automatically recognized geographic role. Note the icon indicating custom geocoding. We'll double click city, and add description to label. These towns are too small for Tableau to have recognized without that custom geocoding information.

Conclusion

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