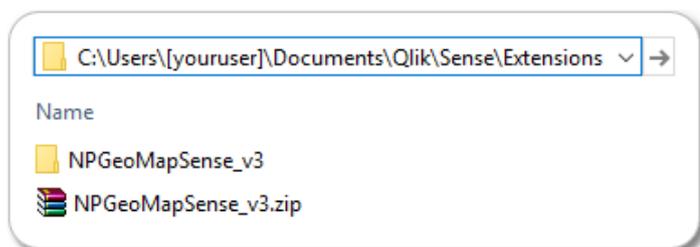# 10 Steps

to your first *NPGeoMap for Qlik Sense* map

Step 1 - Installation

Installation: Unzip and save the NPGeoMap-Extension ZIP file in the default Qlik Sense extension directory:
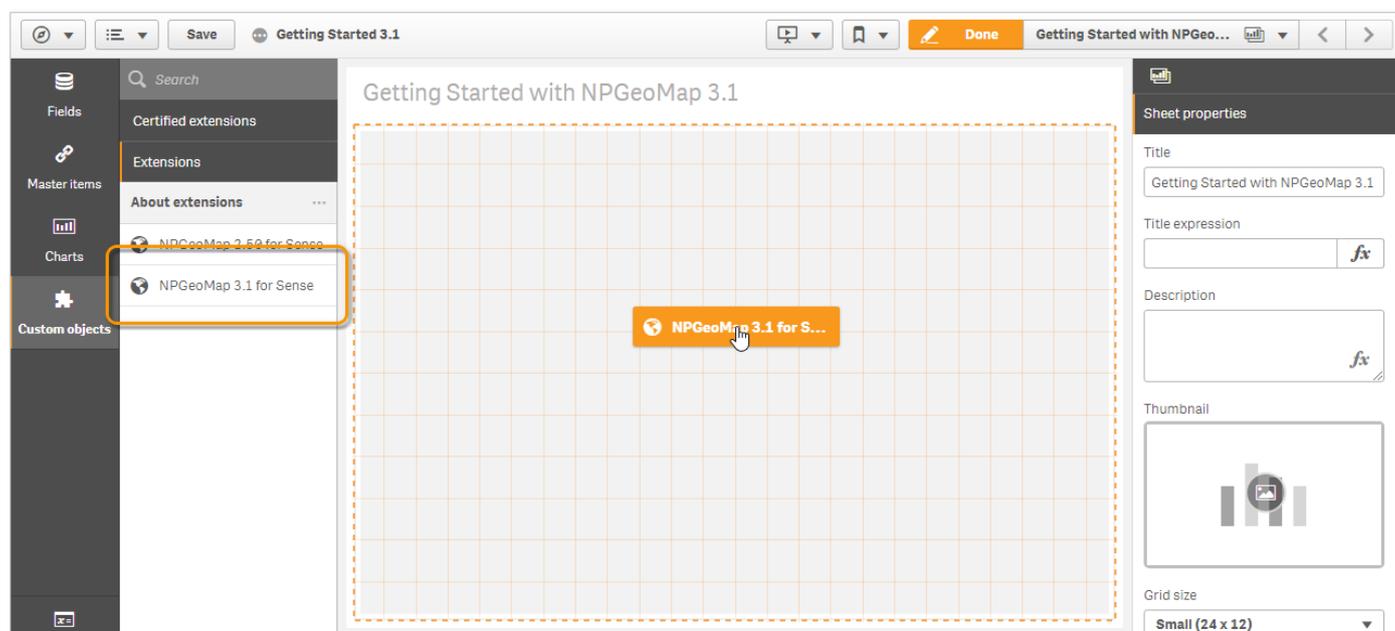
C:\Users\[user]\Documents\Qlik\Sense\Extensions

Step 2 – Create Sense App

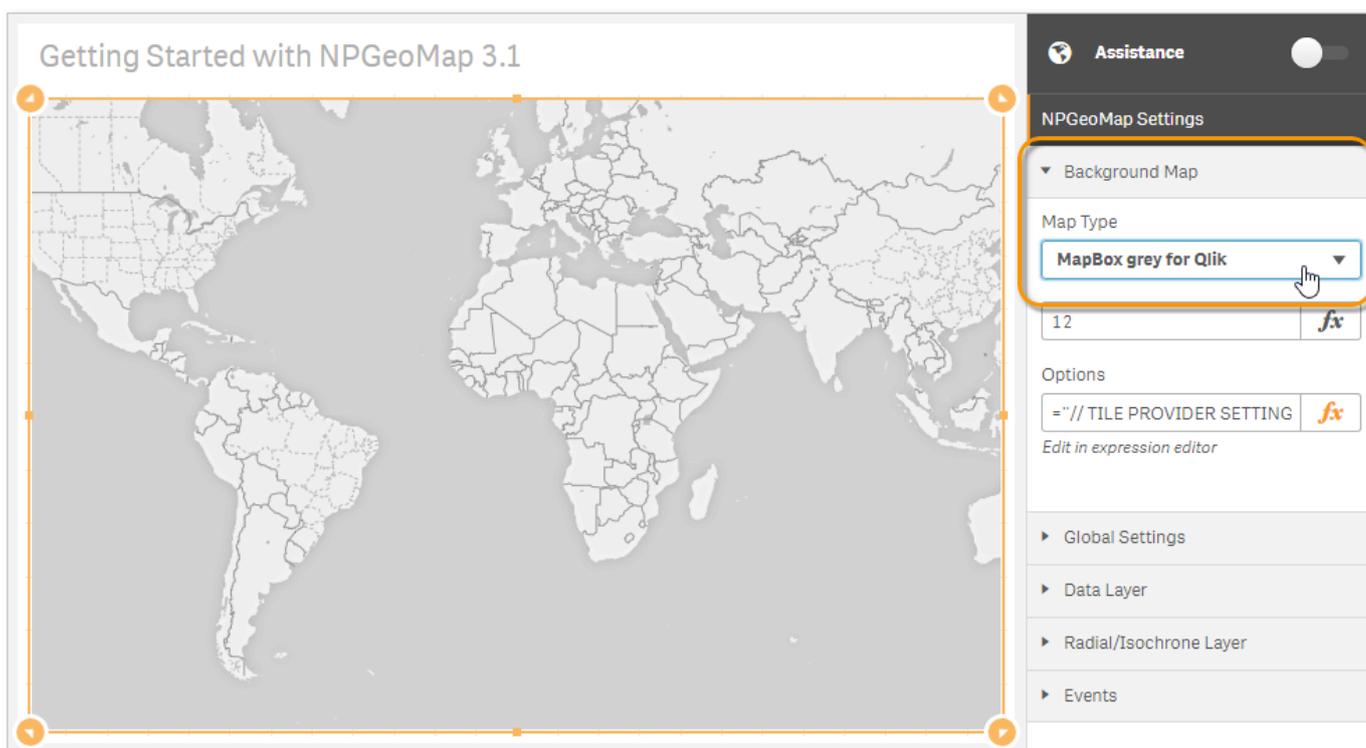Create a new Qlik Sense App and load the file US.xlsx

Step 3 – Add NPGeoMap Object

Open a new sheet in Qlik Sense and drag a NPGeoMap object on the work space.

Step 4 – Set Background Map

Open the first menu tab "Background Map" and choose the Map Type "MapBox grey for Qlik".


Step 5 – Add Point Layer

Let's picture the capital cities as Markers (points) and the States as Polygons (areas).

Open the menu tab "Data Layer" and click on "Add Layer".
To start with Markers, set the Field "Capital" as a Dimension and choose the Layer Type "Point Layer".
A small *wizard* appears to help you set the coordinates – in this case they are in the Field "GeoCoordinates". Click on "Close" and the Points appear on the map.
For your convenience you may enter a caption for the layer.
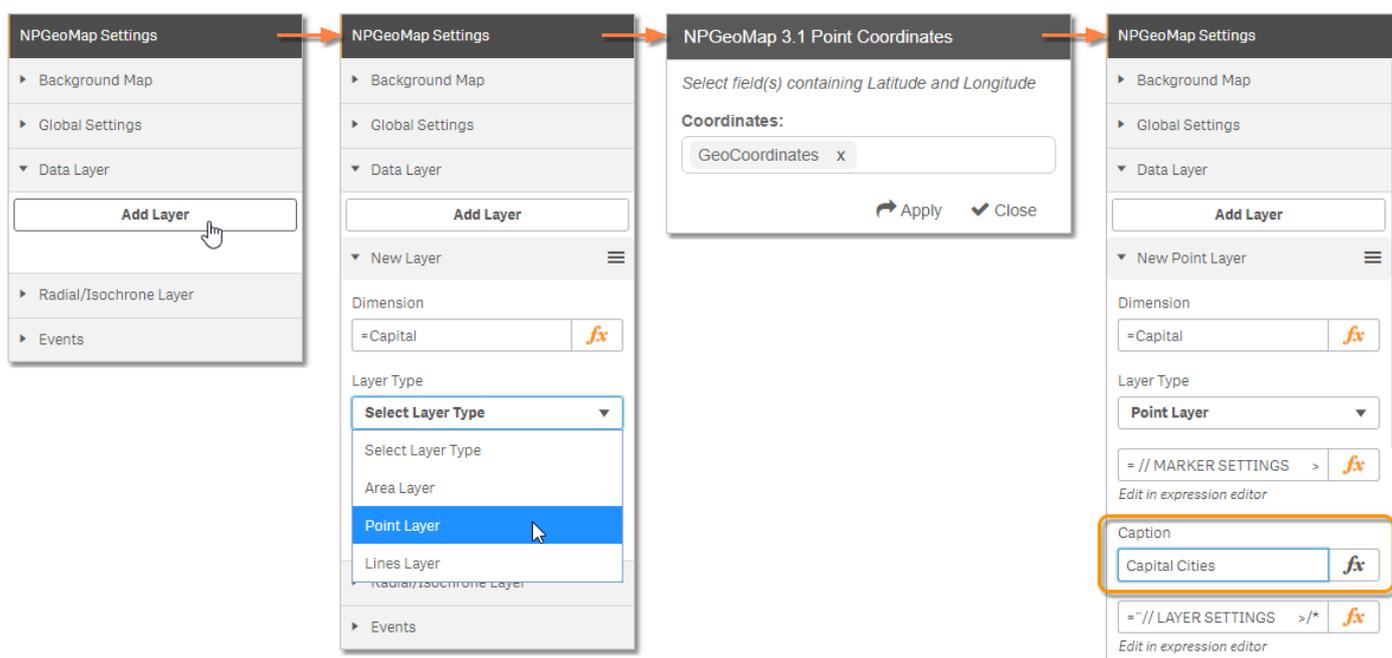
Step 6 – Enrich Markers

Now open the Expression Editor of the "MARKER SETTINGS" with a click on the "*fx*" symbol on the right.

"Activate" the respective settings in the dialog by deleting the double slashes at the beginning of each row and set the following configurations:

```
& '#Color%=' & Sum(PopulationCapital)  // color of the points per population by the use of classes
& '#Size%=' & Sum(PopulationCapital)  // size of the points per population by the use of classes
& '#BorderColor=' & 'white'
& '#Tooltip=' & Capital &': '& sum(PopulationCapital)  // tooltip for the points, showing the name of
the city and their population
```

Close the editor with "Apply".

Now you see all the capitals of the US states as Markers in different sizes and colors, each depending on their population. If the cursor hovers over a Marker, you see the name of the capital and the number of people living there. You can select single Markers with a double click or use the selection menu in the upper right corner for analytic selections.
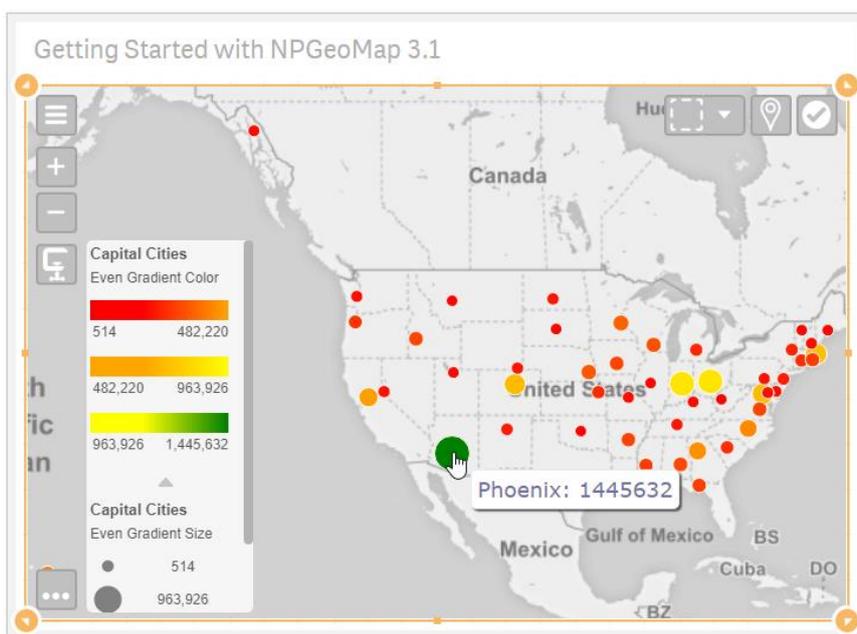
Step 7 – Add Area Layer

Now go back up and click again on "Add Layer".

For displaying the States as areas on the map set the Field " State" as a Dimension and choose the Layer Type "Area Layer".

Again, the *wizard* appears but this time it already auto detected the coordinates you need – in this case the Map File "US_1.GEO". Click on "Close" and the Polygons (Areas) appear on the map.

If you want to, you may enter a caption for this layer as well.
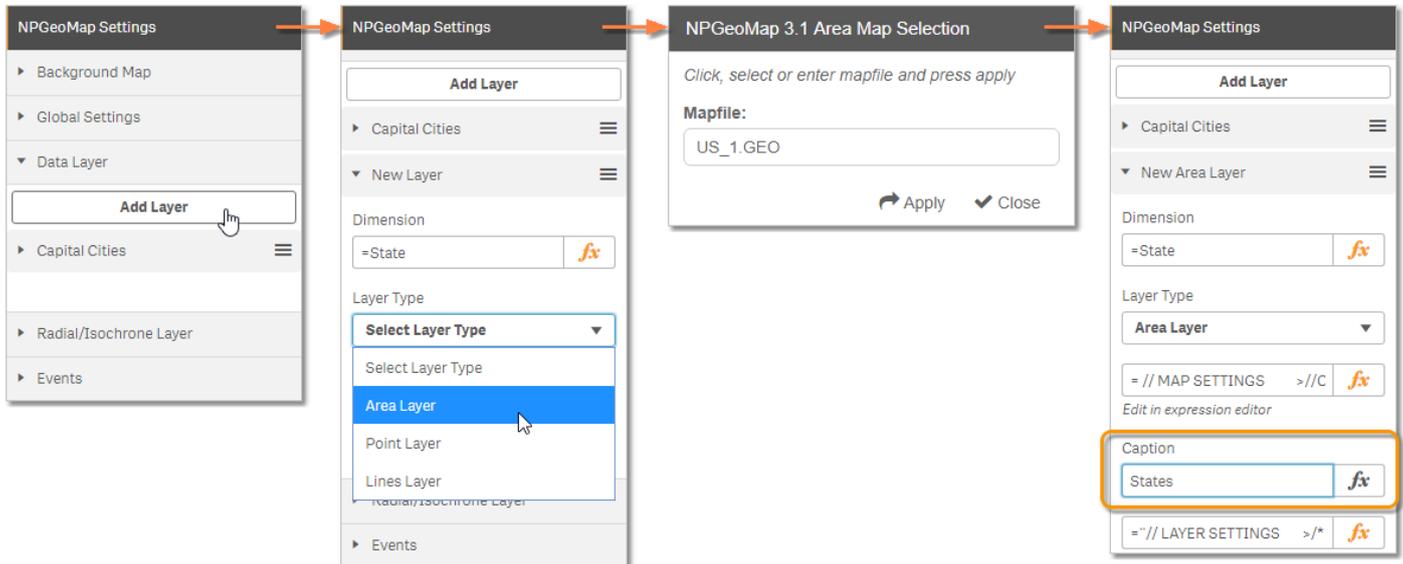
Since we made the Markers at first, the Polygons now overlap them.

Hence we need to switch the order of the Layers – click and hold the Layer Tab at the ☰ symbol on the right and drag it to the position you want.
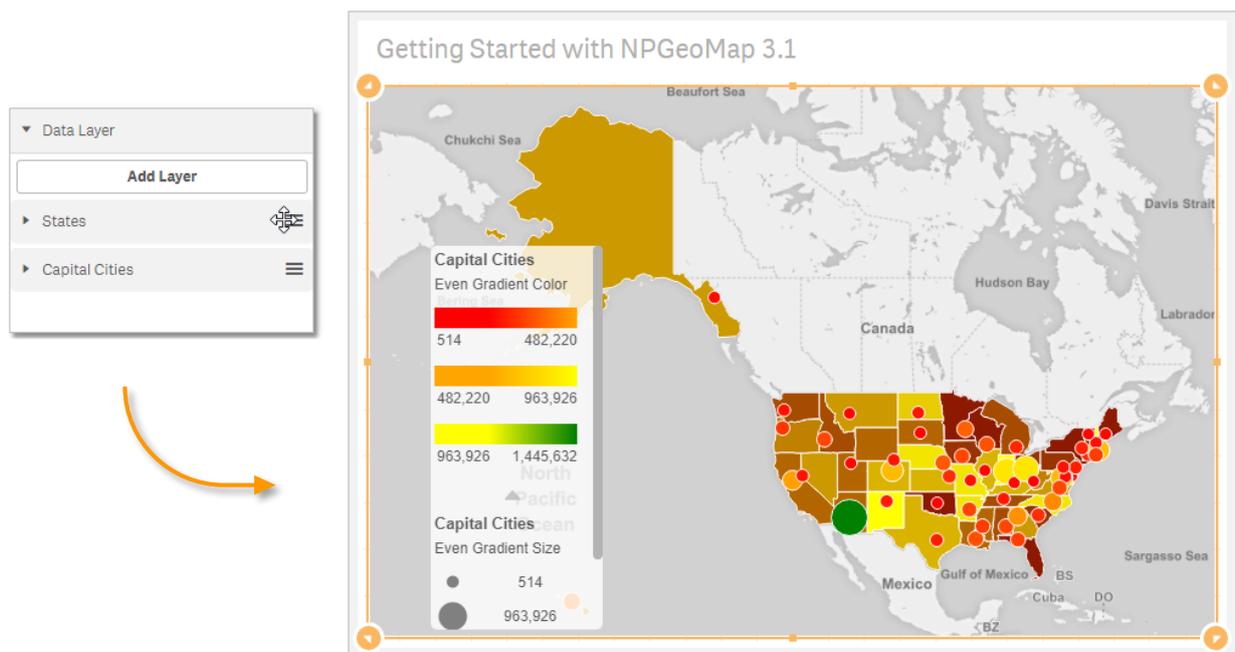

Side note regarding the map files provided by NPGeoMap:

NPGeoMap map file names always use the ISO2 code, an underscore "_" and 0, 1 or 2 for the organizational level of the respective country (0 = country/state, 1 = region/state/province/..., 2 = district/municipality/... - that's why US states = "US_1.npgp")

Step 8 – Enrich Polygons

Open the Expression Editor of the "MAP SETTINGS" with a click on the "*fx*" symbol on the right.

"Activate" the respective settings in the dialog by deleting the double slashes at the beginning of each row and set the following configurations:

```
& '#Color%=' & Sum(Sales)  // color of the Polygons (states) per sales by the use of classes
& '#Opacity=' & 50  // transparency of the Polygons to 50%
& '#Popup=' & ' <div style="font-size:20px;font-family: Arial, Helvetica, sans-serif;">
'& '<b>' & State &'</b>'& '<br>' &'Sales: '& Sum(Sales) & '<br>' &'Population: '&
Sum(PopulationState) & '</div>'  // HTML formatted content of PopUps, which opens up when clicking on a state
```
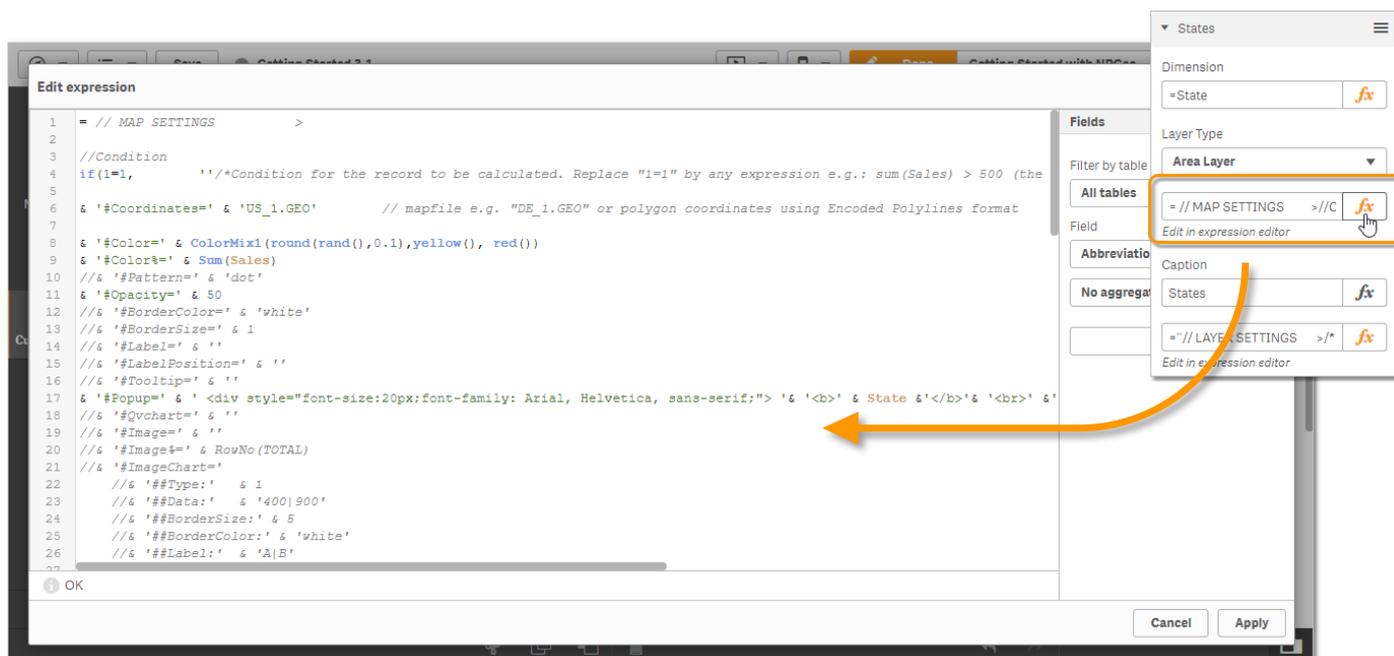

Now the map looks like this:
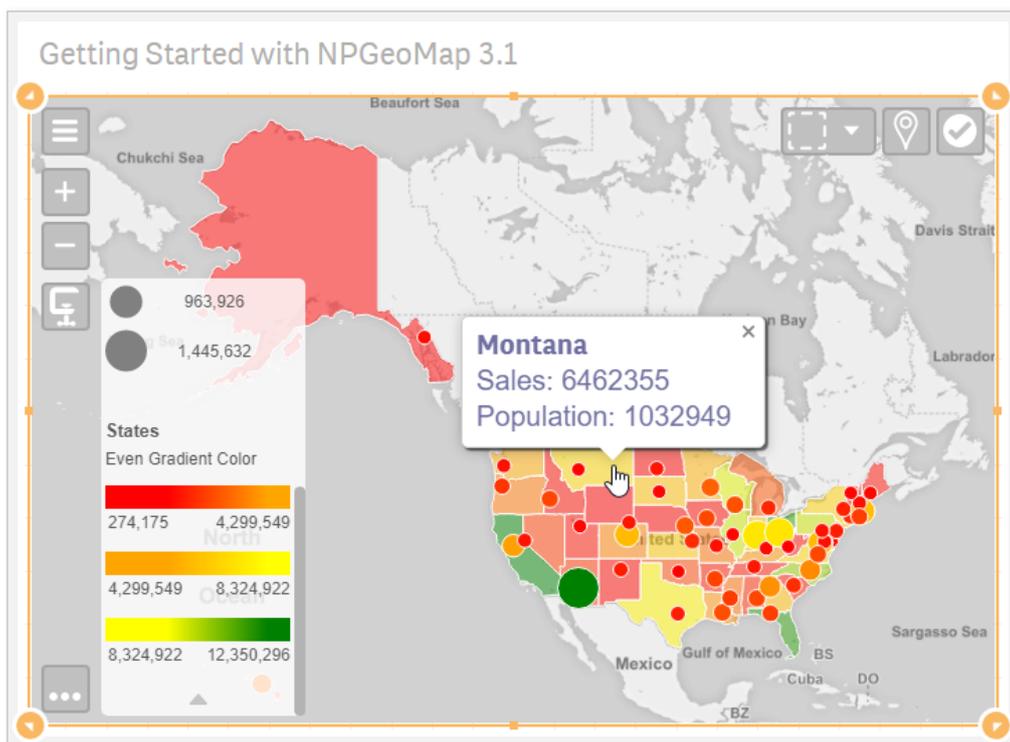
Step 9 - Finetuning

For some little extra settings open the expression editors "SCALE CLASSES" of the Marker and the Polygon Layer to configure the Legend(s) and modify the colors and sizes of the Classes.

Step 10 – Finish!

Now enjoy exploring the data on a sophisticated map and select areas and cities with the selection menu.

But this is just the beginning, NPGeoMap can do much more for you! Distances and relations, railways, flight routes, tooltips with HTML content, PopUps with QlikView visualizations, charts, cluster, Heatmaps, Radial Spheres (circles), Isochrones (travel time area around a location) and many many more...