## Maps and tooltips with Tableau

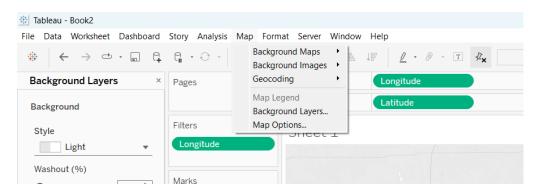
Use the data in Fortune\_500\_Corporate\_Headquarters.csv.

Complete the following steps:

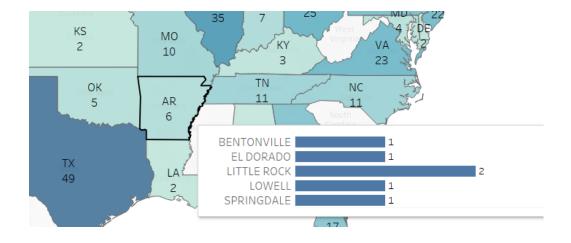
- 1. Create a **map chart** to show all headquarter locations using the latitude and longitude from the data file (not the generated values).
  - a. Add the company name, revenue, and rank to the tooltip.
  - b. Update the tooltip to show "company name has \$## in revenue and is ranked ##/500." For example, Walmart's tooltip should show as



- c. Have cities and streets shown on the map (from Map->Background Layers). Can we find the Lawrence Starbucks locations?
- d. Explore more of the Background Map and Background Layers options.



- 2. Create a **bubble map** to show the number of headquarters per city.
  - a. Observe the results. Is there an error message on the bottom-right corner? How should we fix that?
  - b. If there are any errors remaining, filter out the results or hide the indicator. Never let such errors show on your plots.
  - c. Update the tooltip to something more meaningful.
- 3. Create a **choropleth map** that shows the number of headquarters per state.
  - a. Display the state abbreviation and count on each state.
  - b. De-emphasize the background map so people can more easily focus on the states that are included in the data.
- 4. Create a bar chart to show number of headquarters per city.
- 5. Replace the tooltip on the choropleth map with the bar chart from step 4.
  - a. Update the size of the tooltip window to maximum 500 by 700.
  - b. See if there are any styling changes you can apply to the bar chart to make it more readable as a tooltip pop-up window. Try to make it look like this screenshot.



- 6. Create e **choropleth map** to show the total (or average) revenue per state.
  - a. Style it to make it more interesting and to practice updating tooltips.

## **References:**

https://help.tableau.com/current/pro/desktop/en-us/viz\_in\_tooltip.htm