**Tableau Assignment Population Change in West**

Data available at [https://www.ers.usda.gov/data-products/county-level-data-sets/download-data.aspx (Links to an external site.)](https://www.ers.usda.gov/data-products/county-level-data-sets/download-data.aspx)

Use the dataset “Population Estimates for the U.S., States, and counties, 2010-20” to look at five states and their population in 2020, the change in their population from 2010 to 2020, and the percentage change that represents (this is the initial business question).  (HINT: you will need to create calculated fields for the last two data items.) We will look first at the state level. Then we will examine just Idaho at the county level to see which counties had the highest percent change in population as well as highest population change (a deeper dive into the business question). On a high level we are looking for areas of growth or shrinkage.  I made a short [video (Links to an external site.)](https://boisestate.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=de8388d2-9fec-46b4-a1da-ac0e01750935) to go over a few things that may be helpful in doing the homework (NOTE: I used a different dataset than you will be using).

Please create the following work products that will answer the questions above:

1. Create a worksheet that shows the percent change in population for 2010 to 2020 for Idaho, Nevada, Oregon, Utah and Washington state. Display the population for 2020, the change in population from 2010 to 2020 and the percentage growth for each of the five states. You will need to use calculated fields to create those. Use color to distinguish the percent change in population and display that filter. See example below.
2. In a new worksheet, for Idaho only, show the percent population change by county for 2010 to 2020 (use horizontal bar graph for this visualization). Display by percent of population change in descending order. Use appropriate title.
3. In a new worksheet, for the counties in Idaho, show with a horizontal bar graph the population change from 2010 to 2020. Use appropriate title.
4. Create a dashboard displaying the graphs from parts 2 and 3.
5. In comparing chart 2 and 3, what did you learn about the percent change of population and the change in population? What conclusion can you draw from that information? What additional business questions come to mind (list at least two), and what, if any, additional data would you need? For example (and you can't use this one now :-)), has there been a change in the median home value for counties with the most increased population when compared to the median home value for counties with little, or no, increased population? To answer this question we would need median home values for every county from 2010-20.

Please save your assignment with the map worksheet, dashboard, and answers to part 5 questions in PowerPoint format for submission (in other words, you will have three slides not counting the one Tableau automatically adds that you may delete).

Map

Description automatically generated

Example of color to help distinguish different % change in population in part 1 above.

Rubric