**Insight 1: Which states have the most poverty?**

*Summary*
[This visualization](#) allows the viewer to see at a glance which states have the highest rates of poverty. Both the map and the bar graph show that Texas, Georgia and Puerto Rico have higher rates of poverty than the other states. The user can filter the information by state or multiple states using the checkboxes on the right. The user may also click on a state or set of states in the visual map to get filtered results.

*Design*
The use of blue-only was a design choice. Red-green was avoided due to a common color blindness condition, and the use of multiple colors was avoided, because it would only serve to distract.

*Resources*
https://help.tableau.com/current/pro/desktop/en-us/filtering_global.htm
http://breaking-bi.blogspot.com/2013/01/filter-actions-linking-and-highlight.html


**Which counties in Texas have the most poverty?**

*Summary*
Following up on the finding from the previous insight, [this visualization](#) focuses on Texas and its counties. Here, one can see that the highest levels of poverty are clustered in the southernmost and westernmost counties of the state. Actual poverty numbers may be seen by hovering the cursor over the map or the bars in the bar graph.

*Design*
Similar to the previous visualization, the blue-only color is used as there isn't a reason to use multiple colors, which would be distracting. The shades of blue make it possible to see at a glance the areas with highest numbers of poverty. Clicking away from Texas retains the last filtered grouping.


**Insight 2: Do unemployment and income levels correlate with poverty?**

Summary:
[This visualization](#) shows that there is a strong positive relationship between unemployment and poverty: as unemployment increases, so does poverty. And it also shows a strong negative relationship between income and poverty: as income increases, poverty declines. The more densely the data points are clustered around the trending line, the stronger the correlation. The filter on the right allows the user to view these relationships for each state or any subset of states, for the 2 scatter plots simultaneously. The user can see that for Texas and Georgia, the two states with the highest poverty numbers, strong correlations exist across these two

measures. However, looking at Puerto Rico, the income and poverty correlation is still strong, but unemployment and poverty become much less densely clustered around a line, showing a much weaker correlation. Looking at Massachusetts and Connecticut, 2 states with low poverty, we see that the correlations are also present.

*Design*
These visualizations are done simply in blue as there is no reason for additional color or shapes to draw the reader to understanding the correlations. Additional markings like these would likely be confusing as they would not be added information that contributes to the main message. The tooltip features allows the user to confirm the specific state, poverty, income/unemployment numbers for each point.

*Resources*
https://community.tableau.com/s/question/0D54T00000C5cb5/simple-xy-plot-how-to-display-values-not-sum


**Insight 3: Is racial diversity linked to poverty?**

*Summary*
Finally, this visualization takes a look at the racial diversity in the 8 states with the most poverty and 8 states with the least poverty. This is a difficult comparison, because many of the states with very little poverty are also very small with smaller populations.  However, in looking at the top 3 in each category, we can see that the high poverty states of Texas, Georgia and North Carolina do appear to have higher proportions of people of black and hispanic races as compared to the low poverty states of Massachusetts, Connecticut and New Hampshire.

*Design*
In this graphic, blue is used to represent the typical majority race in each state, while the colors red, brown, orange, aqua and green are used to show the minority races. This makes it easy to see at a glance the relative diversities among the states being compared.

*Resources*
https://knowledge.udacity.com/questions/445767


**Links to all Visualizations**

Which states have the most poverty?
https://public.tableau.com/views/Whichstateshavethemostpoverty/Whichstateshavethemostpoverty?:language=en&:display_count=y&publish=yes&:origin=viz_share_link


Which counties in Texas have the most poverty?

https://public.tableau.com/views/PovertyinTexas_16105909545020/Dashboard2?:language=en&:retry=yes&:display_count=y&:origin=viz_share_link


Do poverty and unemployment correlate? Do poverty and income correlate?
https://public.tableau.com/views/UnemploymentIncomeandPovertyintheUS/Dashboard4?:language=en&:retry=yes&:display_count=y&:origin=viz_share_link


Is racial diversity linked to poverty?
https://public.tableau.com/views/PovertyandRacialDiversity/ComparingRacialMakeup?:language=en&:retry=yes&:display_count=y&:origin=viz_share_link