Project 5: Build a Data Visualization

Data: US Census Demographic data (*Exploring the 2015 Census Data for the United States of America*)

Tool: Tableau Public

Introduction:

This data set is about the 2015 census for the United States of America, which has over 50 states with over 1900 counties across the states. A few insights will be drawn from the data available on the data set.

Insights

Research Questions 1: **Which is the most populated state in the country?**

Links: Bubble Plot

Summary: The Bubble plot shows California is the most populated state, followed by Texas. Here we are able to clearly see the most populated state in the country using the size of the bubbles.

Research Questions 2: **Which state in the country has the highest rate of unemployment?**

Links: Bubble Plot, Bar Plot, Map

Summary: From the visualizations, it shows Puerto Rico has the highest rate of unemployment across states in the country. It also seen in a very small area on the map just below Florida.

Research Questions 3: **Which state has the highest poverty rate?**

Links: Bar Plot

Summary: The data shows through the visualization that Puerto Rico also has the high rate of poverty.

Research Questions 4: **Is there a relationship between unemployment and poverty across the country?**

Links: Scatter Plot

Summary: The Scatter plot shows there is a positive correlation between poverty and unemployment across the country.

- This other two links contain the dash board and the story for the whole visualization.

Design

- **There are six different links in this document containing six different visualizations, 4 worksheets, 1 dashboard and 1 story.**
- Used a sharp color for the visualization so that information the audience needs, will be captured at first glance and one which insight stated can easily be captured by the viewer. The colors used were different shades of orange.
- For the first visualization a bubble plot was used, with details of the population of each state represented by the size of the bubbles also the color intensity on the bubbles shows the states which has the highest and lowest rate of unemployment.
- The map visualization used just show the area on the map where the states are located, the color intensify encoding included indicates which parts of the state has the highest rate of unemployment.
- The Bar plot was needed also to display the percentage rate for poverty for all states across the country.
- The scatter plot used, was effective in showing the relationship between two measurable variables, in this case (poverty and unemployment) across all the states in the country.
- A dashboard that shows an overview of all the plots done.
- A story that includes all individual plots and the plots merged on sheet, showing a rundown on how each visualization was done.

Resources: [Mr. Josh's Project Walk Through](#)