Telling Stories with Data

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Link 1 Income vs Poverty | Tableau Public

Link 2 Employment vs Unemployment | Tableau Public

Link 3 Occupation per State | Tableau Public

Link 4 Income, Poverty and Employment Dashboard | Tableau Public

Link 5 How Income, Employment and Occupation Effect Poverty Levels | Tableau Public

Summary: This data visualization project is focused on the correlation between income, employment, and occupation have on poverty in the United States.

1. One of the first insights that I gathered from my first visual was the relationship between median income and the average poverty level of each county and state. The territory of Puerto Rico had the highest level of poverty and it also had the lowest median income. However, the District of Columbia had the lowest poverty levels and the highest median income.

   This visualization was designed as a scatter plot with the average poverty level as the Y-axis and median income as the X-axis. The filter option allows the graph to be filtered by state and farther aggregated by county. The was done so it would be easy for the reader to see the correlation between the two variables. No other resources were used for this worksheet.

2. The next worksheet concentrates on the employment and unemployment rates of each state. Maneuvering through the visual the reader will notice an association between employments rates and poverty. The higher the unemployment in a state and county the higher the poverty level.

For this visualization I decided to construct a shaded map of the United States that permits the reader to click on any state and see the average employment and average unemployment of that state. The filters allow the reader to further aggregate to the county level if the reader would like to take a deeper dive. The color used in this visualization is blue scale to not distract the reader and to be inclusive to those readers that are colorblind. No other resources were used for this worksheet.

3. The final worksheet presents different types of occupations per state to depict what type of work is most represented in each state. The reader can go through the visualization and see which states have more of a construction industry, service industry, family work or professional jobs. The states with a higher concentration of professional jobs i.e. District of Columbia have the highest median income and the lowest poverty. While the states or territories that have more service jobs have a higher poverty level than those of any other group.

   A bar graph was made to let the reader see the difference between the states and the level of each occupation or industry. I tried to do this visualization using a line graph. However, that was not the best visual to convey the insight found. No additional colors were used but an occupation filter was placed in the worksheet so the reader can compare each occupation to each state. The occupation filter was produced by creating a parameter and then making calculated field using a case formula. The reader can also filter by state and aggregate to county. A YouTube video titled " Creating Parameters in Tableau" by InterWorks at http://www.youtube.com/@Interworks was used as a resource for the visualization in this worksheet.

4. The dashboard is comprised of the Income VS Poverty and Employment visuals. I chose these two visuals as they are the strongest examples of the theory presented.

5. The story includes all the worksheets and dashboard to give the reader a cohesive narrative to follow and allow them to see all of the insights provided.