PROJECT 4: BUILDING DATA DASHBOARDS

US Population Distribution Overview

https://public.tableau.com/profile/ivey.cunningham#!/vizhome/Project4-RaceState/RaceState

This visual shows the breakdown of race per state. From this pie chart, we can interpret that the White Race makes up over half of the entire country's population with a count of 197,280,207 people out of 320,098,094. The Hispanic Race has the next highest population with 57,770,317 people.

The least majority is the Native Race with just 2,084,744 people in the US.

Design choice: I went with a pie chart for this visualization because it was a convenient and easy way to quickly view a comparison of the distribution of each race. I added in mark labels for the sum of each population so that viewers can quickly get a more detailed summary of the break down. To get the populations for each race, I had to create calculated fields for each race. This consisted of multiplying the rows for each race column by .01 and then multiplying that by the total population. To create the "Other Pop", I subtracted the total of all the other races per county/state by 100, multiplied that by .01, and then multiplied that by the total population.

Child Poverty and Average Unemployment Overview

https://public.tableau.com/profile/ivey.cunningham#!/vizhome/Project4-ChildPovertyvsUnemployment/ChildPovertyvsUnemploymentState

From this chart, we can compare the correlation between child poverty and the average unemployment for each state. Based off of this chart, it appears that there is a positive trend associated between these two fields. Puerto Rico appears to have the highest average unemployment at 19.37 and the highest child poverty at 60.21 among its population.

North Dakota is on the opposing end of the chart with an average of 2.68 unemployed residents and an average of 13.61 child poverty.

Design choice: I chose a scatter plot for this visualization because it showed the trend associated between average child poverty and average unemployment per state.

Child Poverty and Average Income Map Overview

https://public.tableau.com/profile/ivey.cunningham#!/vizhome/Project4-ofChildPovertyvsAvgIncome/ofChildPovertyvsAvgIncome

This map gives a visual of the percentage of child poverty of the total population of the state compared to the average income per state. It appears that the greater the average income, the lower the child poverty percentage. For example, Puerto Rico has one of the highest percentages of child poverty with 0.271% of their children living in poverty and the lowest average income in the US at $17,920. Montana and Nebraska also have high percentages of child poverty and lower average incomes.

Connecticut, New Jersey and District of Columbia rank in as having some of the lowest percentages of child poverty as well as some of the highest average incomes.

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Design choice: I chose a symbol map for this visualization to show the association between the average child poverty and average income per state. With this map, viewers can easily depict the correlation between the two fields based off of the size of the marks and the stepped color palette. I increased the size of the markers to make the differences in child poverty in each state more noticeable. Based off of input from the reviewer, I changed the color scheme from red-green-gold diverging to green-blue diverging to accommodate any viewers with colorblindness.

Dashboard

https://public.tableau.com/profile/ivey.cunningham#!/vizhome/Project4-Dashboard_16025584227760/Dashboard1

This dashboard creates an interactive view of several different charts. Here, you can examine the child poverty versus unemployment, the average percentage of child poverty per state versus the average income per state, and counties with average incomes greater than the national average. The national average for incomes in 2015 was $46,130.

Resources

N/A