Insight 1:

How does the average household income look like in the United States from the census demographic data in 2015?

Summary:

The highest average household income of \$73,014 is in New Jersey while the smallest average household income is in Puerto Rico only \$17,920. The bar chart highlights exact values for average household income per state.

https://public.tableau.com/views/Project6_1_16222578820120/Dashboard1?:language=en-US&:display_count=n&:origin=viz_share_link

Design:

The bar chart easy presents value for average household income and sorting it in descending order highlight the states with higher values. Adding a state filter allows reader to pick state of their choice to se a detail information.

Insight 2:

Is there any relationship between child poverty count and average income per state?

Summary:

There is a relationship between child poverty and average income. The scatterplot shows that relationship is not linear. At this point relationship looks like negative exponential but it will require further investigation.

https://public.tableau.com/views/Project6_2_16222638784030/Dashboard2?:language=en&:display_count=n&publish=yes&:origin=viz_share_link

Design:

Map:

In this situation a map shows that there is maybe even some geographical influence on the percentage of children under poverty level not just linear relationship with the average household income. Here the size of the points is adding new information to the plot. Adding state filter allows reader to pick one state of his/her choice to see values for that state.

Scatterplot:

I chouse a scatterplot for this plot since a scatterplot best represent relationship between two quantitative variables. A state filter allows readers to choose certain states and compare its values to the national trend. The single color-blend in this case covers enough information, and it matches colors on the map making the dashboard look professional.

Insight 3:

Is there any relationship between the unemployment rate with child poverty?

Summary:

There is a strong linear relationship between the number of unemployed with the number of child poverty cases per state. District Columbia with the smallest number of unemployed citizens (26) has the smallest number of child poverty (1). The highest number of child poverty per state is in Texas (6067) where the number of unemployed is the highest (254) among other states.

https://public.tableau.com/views/Project6_3_16222651234710/UnemploymentChildPoverty?:language=en-US&:display_count=n&:origin=viz_share_link

Design:

I chouse a scatterplot for this plot since a scatterplot best represent relationship between two quantitative variables. The trendline easy highlights the direction and magnitude of correlation. A state filter allows readers to choose certain states and compare its values to the national trend. The single color-blend in this case covers enough information, adding colors for every state will not add any new information to the plot.