Insight 1:

https://public.tableau.com/profile/pphoebe#!/vizhome/Project_15611687144260/Poverty-D?publish=yes

The table on the right shows the average poverty rate of each state across America in 2015. Connecticut had the lowest poverty rate (9.4%) while Puerto Rico had the highest (49.4%).

The scatter plot shows that there is a strong positive relationship between unemployment rate and poverty rate. The states with higher unemployment rates tend to have more people living under poverty level.

I chose average (AVG) as the aggregate measure calculating the state level rates. I also added a linear trend line and did some formatting to make the visualization easier for users to understand.

... ...: Awesome!

... ...: Suggestion :: In your design choices for this insight , you can also explain why you have chosen a scatterplot for this visual over other chart types. For example :: Scatterplots are ideal chart types when we have numerical data and when we want to see if one variable impacts the other. In this case , i wanted to visualize the relationship between Unemployment and Poverty and so i shortlisted this chart type.....

Insight 2:

https://public.tableau.com/profile/pphoebe#!/vizhome/Project_15611687144260/Income-D?publish=yes

The dashboard shows the median household income of each state. From the map, we can see that the northeast coast states had higher income in 2015. Among the Top 10 income states, eight are located in the northeast coast, except for Alaska and Wyoming. District of Columbia had the highest median household income of $70,848.

On the other hand, southeast states and New Mexico had lower household income.

I chose Green-Blue Diverging color, put state name and income (formatted in thousands) in the Label Mark, and edited the Tooltip to help users quickly get the information I would like to convey.

... ...: Fantastic!

... ...: Suggestion :: Same as above, In your explanation of "design choices" for this insight , you can also explain why you have chosen a Map for this visual over other chart types. For example :: I used a Filled area Map because i had to plot geographical data --"States" .Maps are a great way to detect spatial patterns or the distribution of data over a geographical region. So i thought a Map would be the best chart type for this purpose.

Insight 3:

https://public.tableau.com/profile/pphoebe#!/vizhome/Project_15611687144260/Dashboard32?publish=yes

The left box plot shows the county level median income for each of the top 10 income states. The plots for Rhode Island and Hawaii are quite compact but both have outliers. Maryland had the largest range and interquartile of income values which means the county level income are more diverse and widely spread in this state.

The right bar chart shows that on average, over half employed people were working in Professional and Services sectors in 2015 for each of the ten states with the highest median household income. District of Columbia had 60.9% people working in Professional and 17.4% in Services. New Jersey, Rhode Island, Connecticut, Maryland, Massachusetts also had around 40% people employed in the Professional field. On the other hand, fewer people were working in Production and Construction.

Following the second insight, I created a Top 10 Income State Set based on the median household income level to conduct further analysis. I created the box plot by unchecking

... ...: Great use of your Tableau skills to obtain these insights. Your observations are 100% correct.

Aggregate Measures in the Analysis Tab and using the Set as a filter. I also added County into the Detail Mark in order to show more information in Tooltip.

I got two new columns (the Industry, and the % employed in each industry) by pivoting the five columns (Professional, Services, Office, Construction, and Production). Then I used AVG (% employed) as the measure and the Top 10 Income State Set as a filter creating the stacked bar chart for these states.