Contents

Objective:

Create visualizations to reveal insights from 2015 US Census Demographic Data utilizing Tableau.

Questions Explored:

1. What was the distribution of the average reported income in 2015?
2. Which location has the highest percentage of unemployed residents?
3. Which location has the highest percentage of private and public workers?
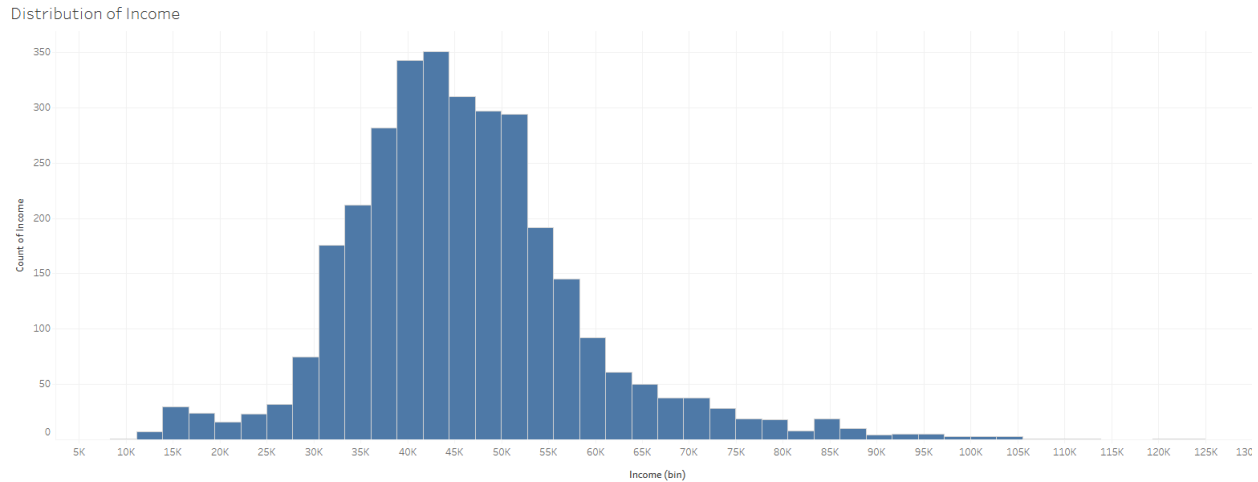
Data Manipulation:

After importing the dataset from Tableau, I made the following adjustments for better clarity and analysis:

- Renamed the `State` column to `State/Territory` to account for Puerto Rico's inclusion.
- Created two calculated fields:
  - Total Unemployed
    [Total Pop] * ([Unemployment (%)]/100)
    Calculated the number of unemployed residents in each county

  - Unemployment Percentage (State Level)
    ({ FIXED [State/Territory] : SUM([Total Unemployed]) / SUM([Total Pop]) } * 100)
    Determines the unemployment for each state/territory

Question 1

What was the distribution of the average reported income in 2015?

Screenshot of Worksheet

Distribution of Income

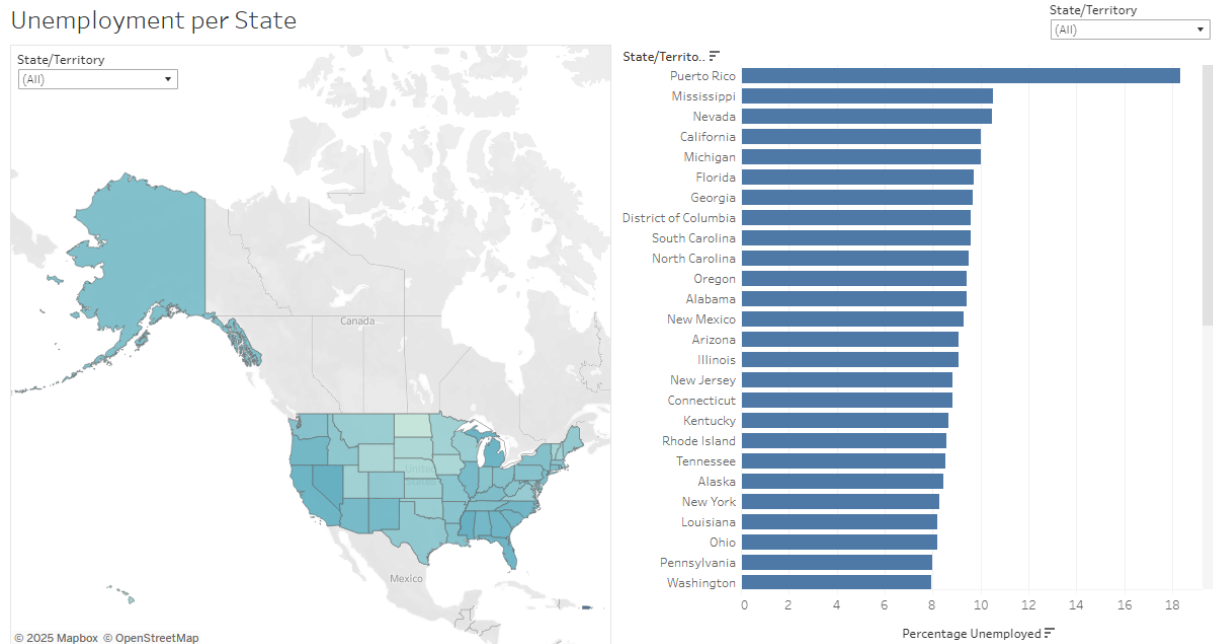[Link to Distribution Chart](#)

Summary

The dashboard features an interactive distribution chart of the reported incomes in 2015. The income appears to be evenly distributed with the exception of a few outliers. The range is $8,000 to $122,000.

Question 2

Which location has the highest percentage of unemployed residents?

Screenshot of Dashboard

Summary

The dashboard features interactive map and bar chart that compares the percentage of residents per state. This visualization reveals that Puerto Rico has the highest unemployment rate at 18%, significantly ahead of Mississippi, which has the second-highest rate at 10%.
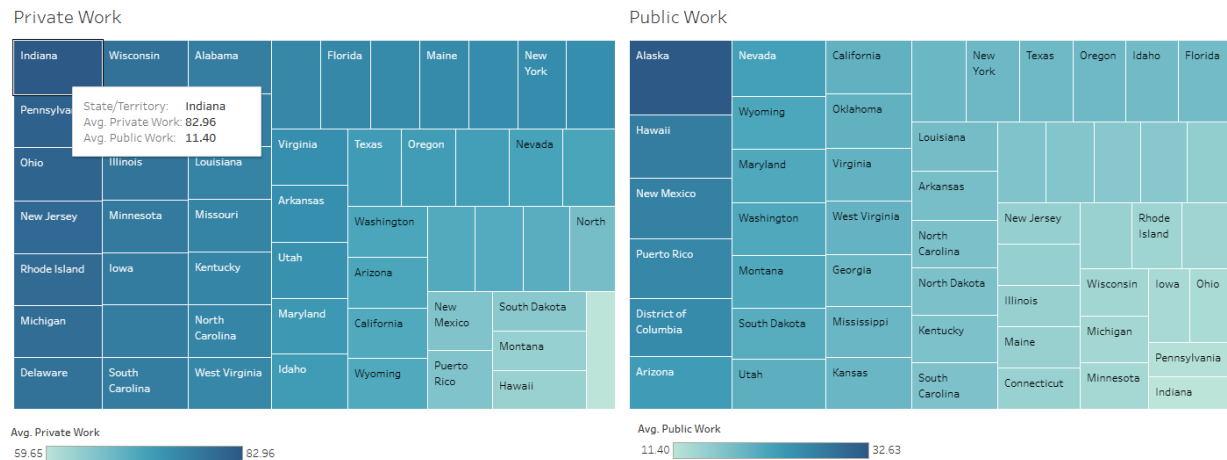
Design

For both worksheets, I applied a filter on unemployment percentage to improve readability and focus for the viewer. Additionally, because Puerto Rico and Hawaii are geographically detached and smaller that other states, I implemented a state-level filter on the bar chart to emphasize that Puerto Rico has the highest percentage of unemployment while also letting the user explore each individual state easier.

Question 3

Which location has the highest percentage of private and public workers?

Screenshot of Dashboard

Summary

The dashboard features highlight tables with the percentages of the average private and public work within the different state's population. It appears that Indiana has the highest percentage of private workers and Alaska has the lowest.

Design

I used the state as a color mark to make the comparisons more prominent. I added the average private/public work percentage as color details for their respective charts for extra knowledge of the remainder of the population.

Resources

https://www.kaggle.com/muonneutrino/us-census-demographic-data/data