

Carlese Kennedy Data Visualization Project

Link	Visualization 1 How does total population and ethnic/racial composition compare across states?
Summary	<p>The interactive dashboard provides insights on the total population and ethnic/racial composition across states. California has the highest total population among all states, with approximately 38 million residents. Other highly populated states include Texas (26 million), New York (19.67 million), and Florida (19.64 million). Conversely, Vermont and Wyoming have the lowest populations, with 626,604 and 579,679 people, respectively.</p> <p>In most states, the majority of the population is composed of the white ethnic group. However, California and New Mexico deviate from this trend, with California having a nearly equal representation of white and Hispanic populations, and New Mexico having a larger Hispanic population compared to other ethnic groups.</p>
Design	<p>In designing the dashboard, two visualizations were selected to present the insights effectively. A map was chosen to showcase the breakdown of the total population and the percentage of each ethnic group in each state. Additionally, a bar chart was included to facilitate a comparison of the proportions of different ethnic groups. The choice of blue tones was considered fitting for this design, as it successfully conveyed the desired story without requiring additional colors to highlight the data.</p>
Resources	No resources were used for this insight.

Link	Visualization 2 How does income look across the 2 most and 2 least populated states?
Summary	<p>This visualization comparing the 2 most populated states (California and Texas) with the 2 least populated states (Vermont and Wyoming) makes it easy to compare the income across each state. It is interesting that despite California and Texas being the two most populated states, there isn't a significant difference in their median incomes compared to the least populated states, Vermont and Wyoming.</p> <p>The median income represents the middle income within each state's income distribution. Despite being one of the most populated states, out of the 4 compared states, Texas has the lowest median income (44,674). California has the highest median income (53,075), followed by Vermont (52,005) and Wyoming (56,569). This observation challenges the assumption that higher population size directly correlates with higher median incomes.</p> <p>Another important observation: Tableau recognized a null value within Texas' dataset; the decision was made to filter that value so as not to include it.</p>
Design	<p>A box plot was chosen to visualize this data for several reasons:</p> <ul style="list-style-type: none">- The summary statistics provide a concise overview of the income distributions, allowing for quick comparisons and insights across the states.- By placing the boxplots side by side, one can easily observe differences in median incomes, ranges, and the spread of incomes within each state.- Each county's income info is also present for further insight.- A dropdown box allows for easy comparison across any state(s) of interest.
Resources	No resources were used for this insight.

Link	Visualization 3: How does poverty look across America?
Summary	<p>This dashboard shows the relationship between the number of individuals below the poverty level and population. The scatterplot shows a positive trend, indicating that as the total population increases, the poverty rate tends to be higher. For example, the 2 highest populated states, California and Texas, are toward the top right of the trend line (with 4.59M and 6.26M individuals below the poverty line, respectively) while the 2 least populated states, Vermont and Wyoming, are toward the bottom left (with 72,240 and 67,004 individuals below the poverty line, respectively). This suggests a potential relationship between population size and poverty.</p> <p>Because the points are tightly clustered around the trend line, it indicates a strong correlation between population and poverty. Though there is a strong correlation, that does not suggest causation.</p>
Design	<p>Two visualizations are present on this dashboard: a scatterplot showing the relationship between the poverty level and total population and a bar chart showing the poverty level across states, sorted in order from greatest to least.</p> <p>The scatterplot allows one to gain insights into the relationship between total population and poverty rate, enabling further analysis and exploration of potential underlying factors. The bar chart is provided to easily visualize the states with the most and least number of individuals below the poverty level.</p>
Resources	No resources were used.