

Project 4: US Census Demographic Data

Q1: Which states have the best transportation?

Links:

https://public.tableau.com/app/profile/mennatullah.fahmi1590/viz/Dashboard1_17353367034720/Dashboard1?publish=yes

Summary: This dashboard explores transportation efficiency across U.S. states, focusing on transit use and mean commute times. New York leads in transit use, followed by California and Illinois, while states like Alaska and South Dakota have the shortest average commute times. The scatterplot reveals a potential trade-off between high transit usage and longer commute times.

Design: The dashboard combines a map, bar charts, and scatterplots to effectively analyze and display trends.

- The map highlights geographical patterns in transit use.
- The bar chart ranks states based on transit use, making it easy to compare usage by state.
- The scatterplots juxtapose commute times and transit use to reveal relationships between these factors.
- A cool blue color palette was chosen for a clean and professional appearance, aiding readability and focus.

Resources: N/A

Q2: How does income and poverty look across America?

Links:

https://public.tableau.com/app/profile/mennatullah.fahmi1590/viz/Dashboard2_17353415387400/Dashboard2?publish=yes

Summary: This dashboard analyzes how income and poverty vary across the United States. States like New Jersey and Connecticut have the highest average incomes, while a negative correlation is evident between poverty levels and average income. Unemployment strongly correlates with poverty levels, and construction-related jobs are linked to both income and poverty, suggesting economic disparity within this sector.

Design: A combination of bar charts and scatterplots was used for clarity.

- The **bar chart** displays average income by state, emphasizing top performers.

- The **scatterplots** provide insights into correlations, such as poverty vs. income and unemployment vs. poverty.
- To ensure accessibility, the palette uses **blue for income** and **orange for poverty**, which are distinguishable for color-blind individuals. This approach ensures clarity for all viewers while maintaining a professional look.

Resources: N/A

Q3: How Do Population, Racial Composition, and Unemployment Vary Across U.S. States?

Links:

https://public.tableau.com/app/profile/mennatullah.fahmi1590/viz/Dashboard3_17355646174330/Dashboard3?publish=yes

Summary: The dashboard explores the relationships between population, racial composition, and unemployment across U.S. states. States like California and Texas have the largest populations, which also contribute to higher unemployment figures. The racial composition varies significantly, with states such as Texas and Georgia showing greater diversity. Additionally, the data highlights a positive correlation between population size and unemployment, suggesting that more populous states tend to experience higher unemployment rates.

Design: The dashboard integrates a map and scatterplots for a comprehensive view.

- The **map** provides a spatial perspective of population distribution.
- The scatterplots compare unemployment and racial composition against population, showing relationships clearly.
- An orange-brown color scheme complements the theme of demographic data while maintaining a professional tone.

Resources: N/A