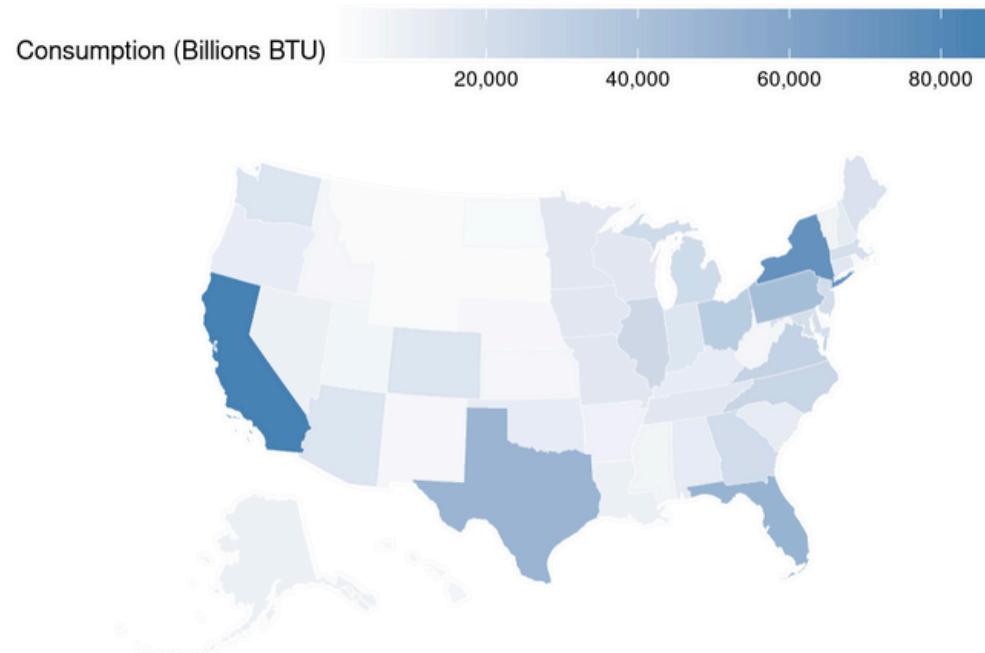


# Energy Consumption in the USA

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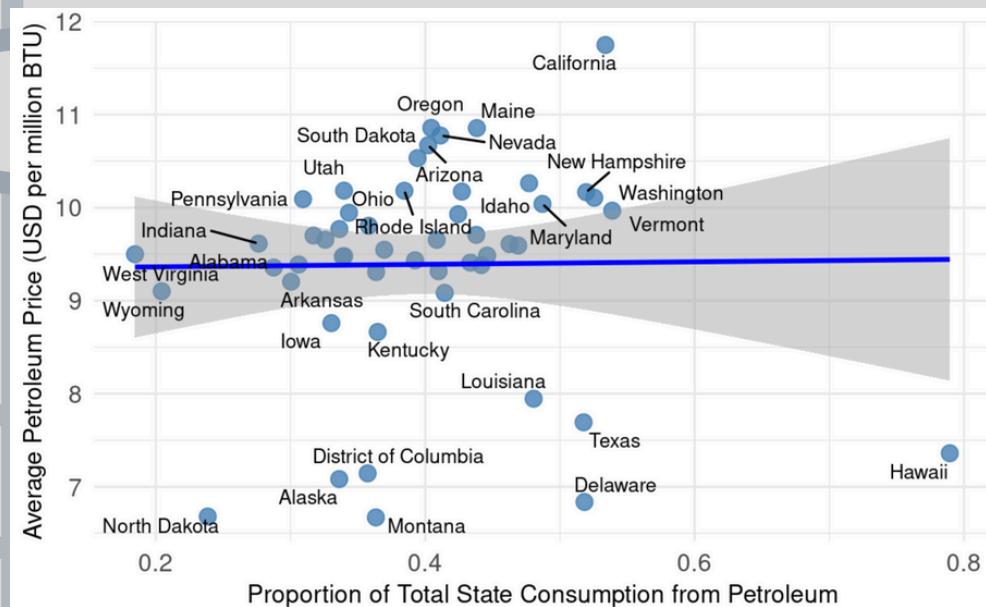
Our project explores the research question: What are the overall trends that are shown in US energy consumption, expenditure, and price? Our data comes from the US Energy Information Administration showcasing the these variables across different forms of energy in 2019 broken down by state. We focus our analysis on state's interactions with petroleum as this is a major energy source for all states across the U.S.

## Commercial Petroleum Consumption by State Across U.S.A.



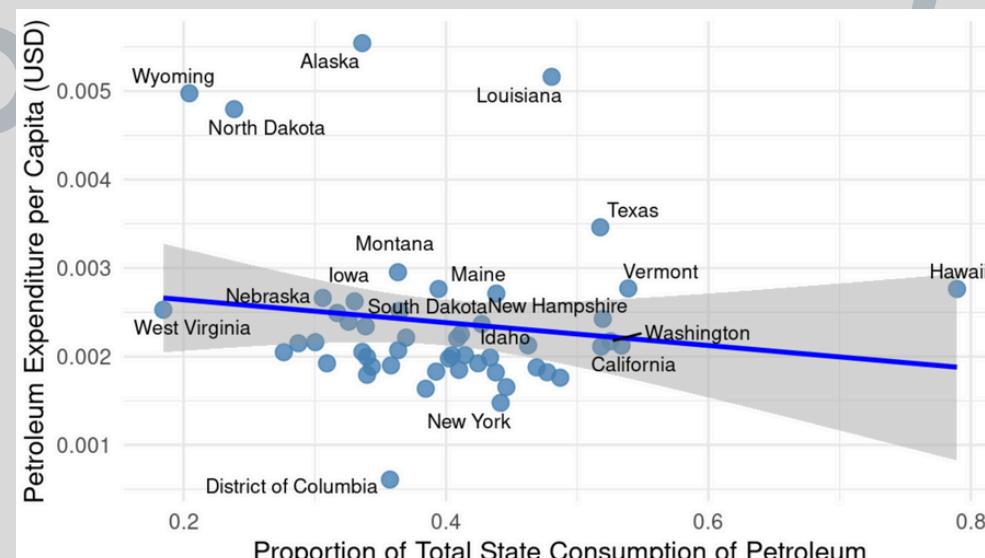
The heat map of commercial petroleum usage across the US indicates that the majority of commercial petroleum consumption occurs in regions with high population which are also large industrial regions. States like California, Texas, and New York stand out as places with the largest consumption as indicated by darker blue coloring. A similar map with per capita consumption indicates that states such as Maine, New Hampshire and Vermont are among the top per capita consumers.

## Petroleum Price vs Petroleum Dependance



This scatter plot explores the correlation between a state's dependance on petroleum as an energy source and a state's expenditure per capita. This relationship investigates how people in states with high dependance on petroleum spend their money on energy. The plot has a negative slope indicating that the people in high dependance areas utilize energy efficiently and spend less per person than those in low dependance states.

## Petroleum Expenditure Per Capita vs. Petroleum Dependance



Our visualizations indicate that population size and industry drive total consumption but per-capita data reveals smaller states are some of the top consumers at the individual level. Petroleum dependence is inelastic as petroleum price shows minimal correlation to state dependence. Expenditures per capita decline as reliance increase, suggesting efficiency and lower spending in high-use states. Overall, our analysis indicates that petroleum usage is unevenly distributed across states with major variation in expenditure and use at both the total and per capita level.