



Fueling California: What Makes California Different?

Overview

“California has historically seen some of the highest, and most volatile, gasoline prices in the United States. The reasons for the striking differences in the behavior of California gasoline prices, as compared to those in other parts of the United States, are numerous . . . Several major factors contribute to the problem.”

- **Statement of John Cook, Director, Petroleum Division, Energy Information Administration, U.S. Department of Energy, before the Subcommittee on Energy and Resources, Committee on Government Reform, U.S. House of Representatives, May 9, 2005**

Key Factors

- California has among the most demanding set of environmental fuel policies in the world, leading to a myriad of distinct fuel standards
- Californians pay between five and fifteen cents extra per gallon in gasoline according to the California Energy Commission and California Air Resources Board just due to the increased refining costs for special blends required in California
- California has the highest state fuel taxes in the country. California state gasoline taxes are 43% higher than the national average of state gasoline taxes

Key Factors

- California is isolated and lies a great distance away from other supply sources (e.g., 14 days travel by tanker from the Gulf Coast)
- California is a “fuel island” and has no pipelines linking it to out-of-state petroleum or crude oil supplies
- California’s refining capacity has stagnated for decades despite a rapidly growing demand for gasoline
- California’s “differentiated” fuel standards cause a continual risk of “supply outages”

Previous Studies and Reports Have Come to Similar Conclusions

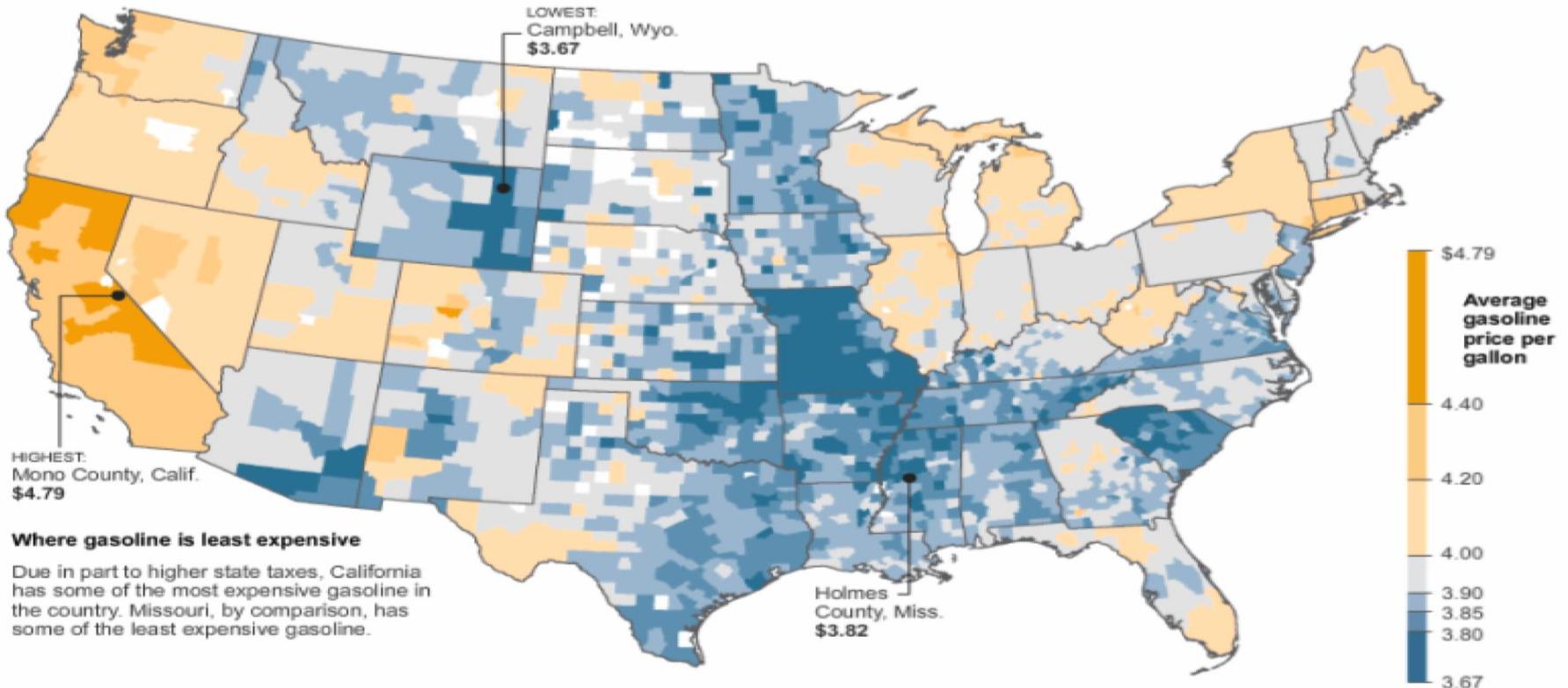
- Governor Gray Davis asked the California Energy Commission (CEC) to examine the causes of rapid gasoline price increases in California in the years 1999, 2001, and 2003, respectively. The final report, “Causes for Gasoline & Diesel Price Increases in California,” **(2003 CEC)** was released on March 28, 2003
- Responding to the same constituent concerns, on March 27, 2003 Congressman Doug Ose, Chairman, House Government Reform Subcommittee on Energy Policy, Natural Resources & Regulatory Affairs, asked the Energy Information Administration (EIA) to examine causes of the 2003 increase in the price of California gasoline. The final report, “2003 California Gasoline Price Study Final Report,” **(2003 EIA)** was released November 2003

Previous Studies and Reports Have Come to Similar Conclusions

- In 2005, responding to requests from Senators Jim Jeffords and Barbara Boxer, the U.S. Government Accountability Office (GAO) examined how boutique gasoline blends affect prices, focusing on conditions in California. The final report, “Gasoline Markets: Special Gasoline Blends Reduce Emissions and Improve Air Quality, but Complicate Supply and Contribute to Higher Prices”, **(2005 USGAO)**, was released on June 17, 2005
- On April 24, 2006, Governor Arnold Schwarzenegger directed the California Energy Commission (CEC) to investigate the prices of gasoline and diesel fuels, with particular emphasis on retail motor fuel prices. The final report, “Spring 2006 Petroleum Fuels Price Spike: Report to the Governor,” **(2006 CEC)**, was released August 2006

2008 Gasoline Prices by County in U.S.

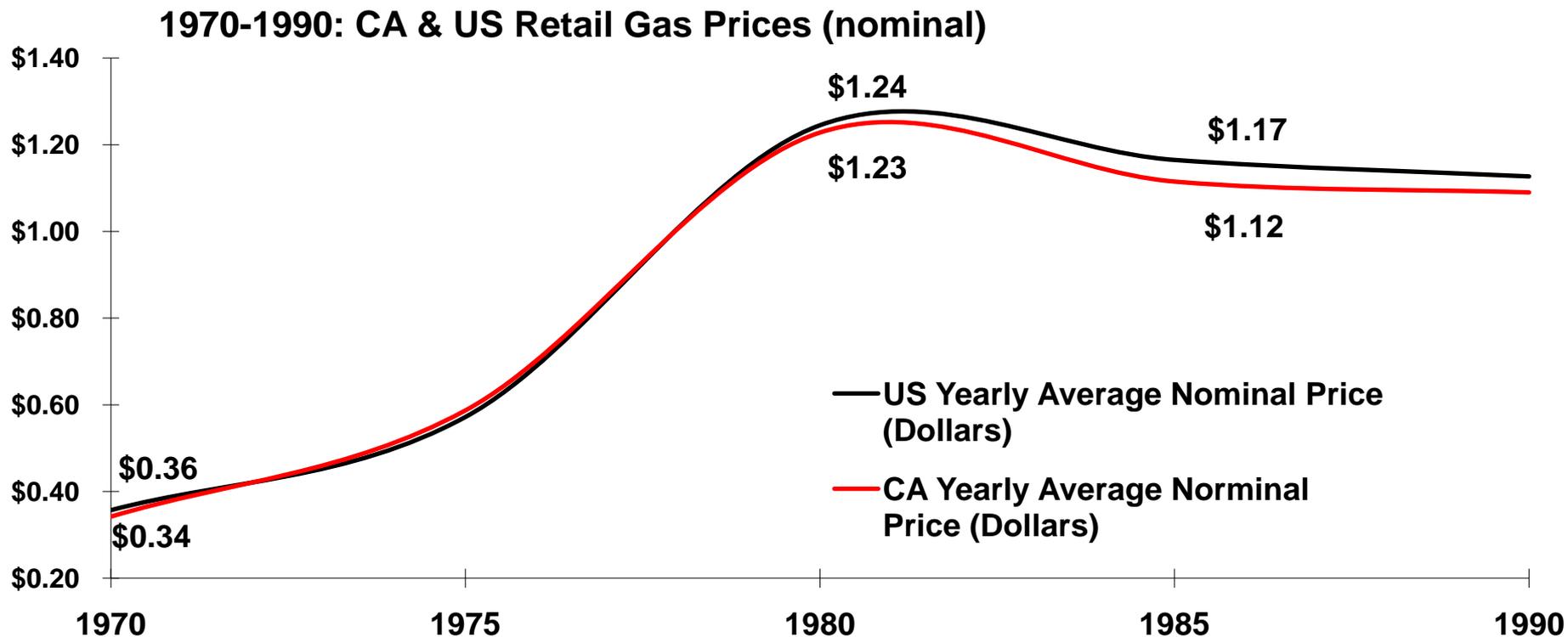
Gasoline Prices by County



Source: Oil Price Information Service, U.S. Census;
Kevin Quealy / New York Times

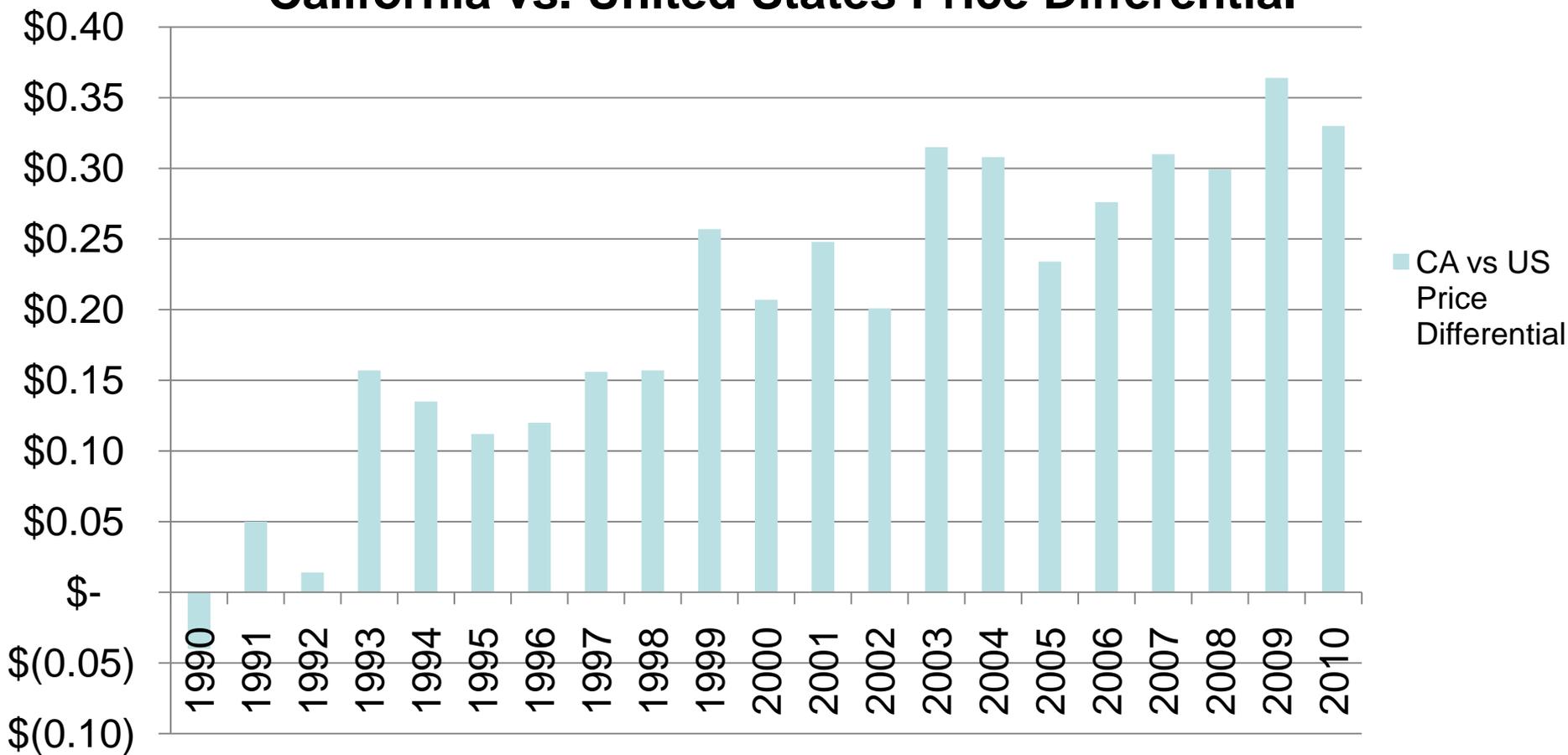
California Gasoline Prices Approximated U.S. Average, 1970-1990

Historically, Californians fuel prices mirrored the U.S. average



California Gas Prices Higher Than U.S. Average Since 1991

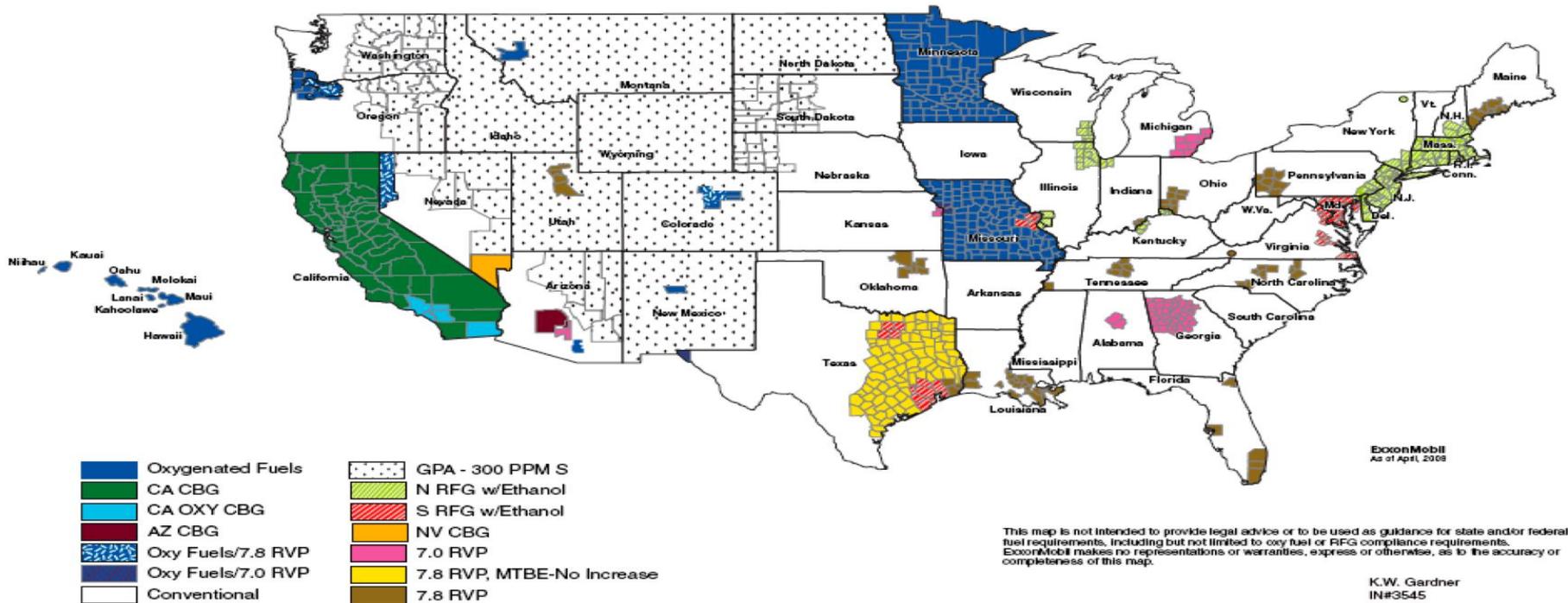
California vs. United States Price Differential



Proliferation of Fuel Blends

- Fuel requirements vary tremendously across the United States based on different Federal and State mandates. Some specific blends are only required during certain seasons of the year.

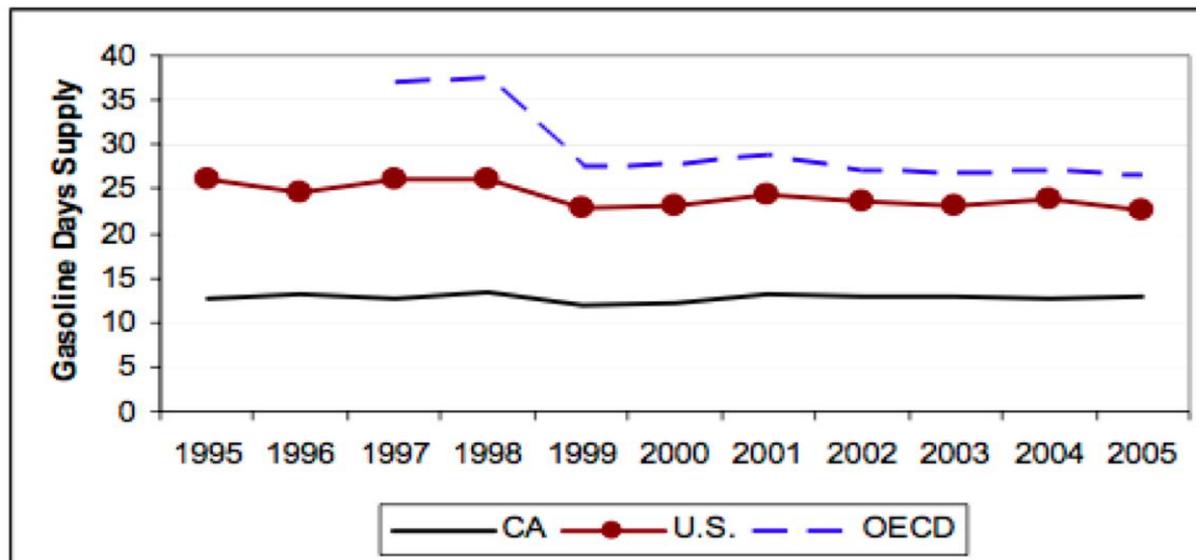
U.S. Gasoline Requirements



California Has the Lowest Gasoline Days Supply

- California has only a ten days supply while the US has an average of twenty-five days and the OECD (an average of most developed nations) has slightly more at about a thirty days supply.

Exhibit 37. California, U.S. and OECD Gasoline Days Supply

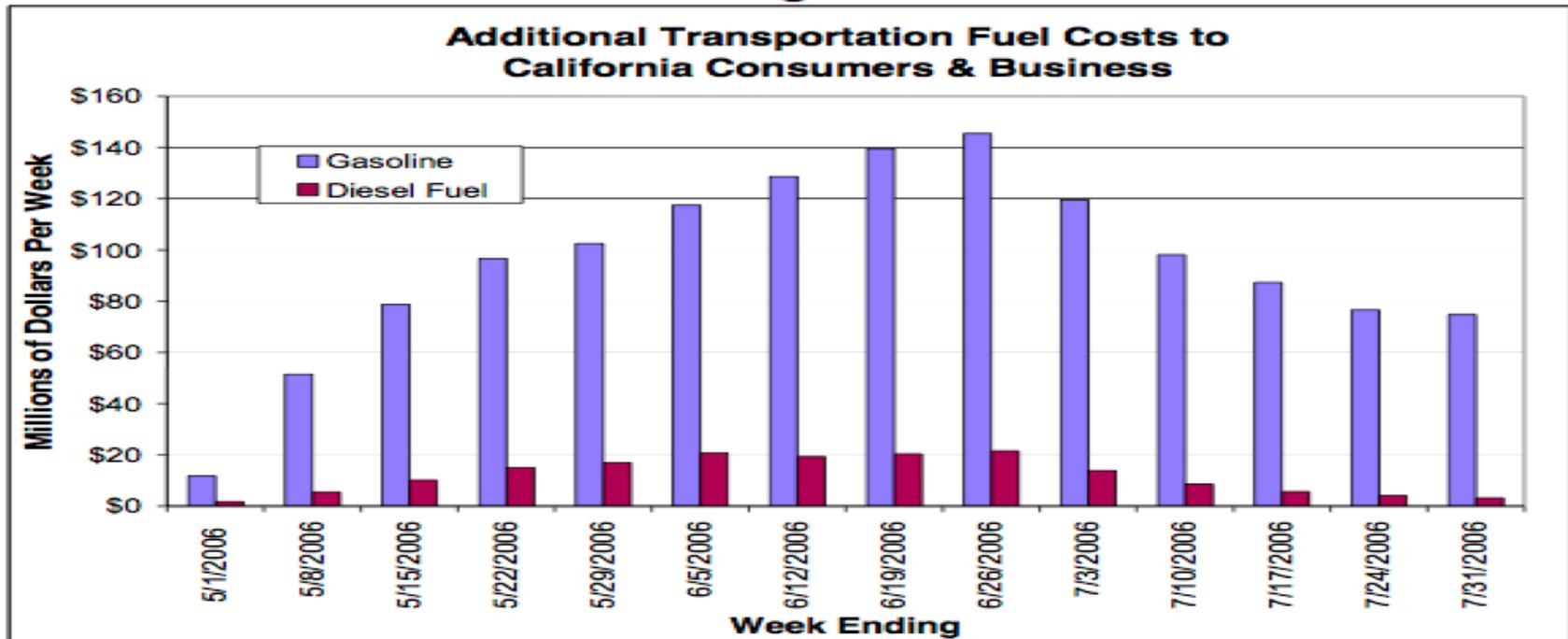


Source: EIA Petroleum Navigator Stocks, Product Supplied and Prime Suppliers data, CEC Weekly Fuels Watch Report, CA BOE Taxable Motor Fuels Sales, IEA Monthly Oil and Gas Survey, and IEA Oil Market Report.

Higher Fuel Costs Leaves California Businesses Less Competitive

- Higher operating costs for many businesses mean California's economy is not as competitive as it could be. The state misses out on sales taxes/other revenues that might better the state's current budget deficit.

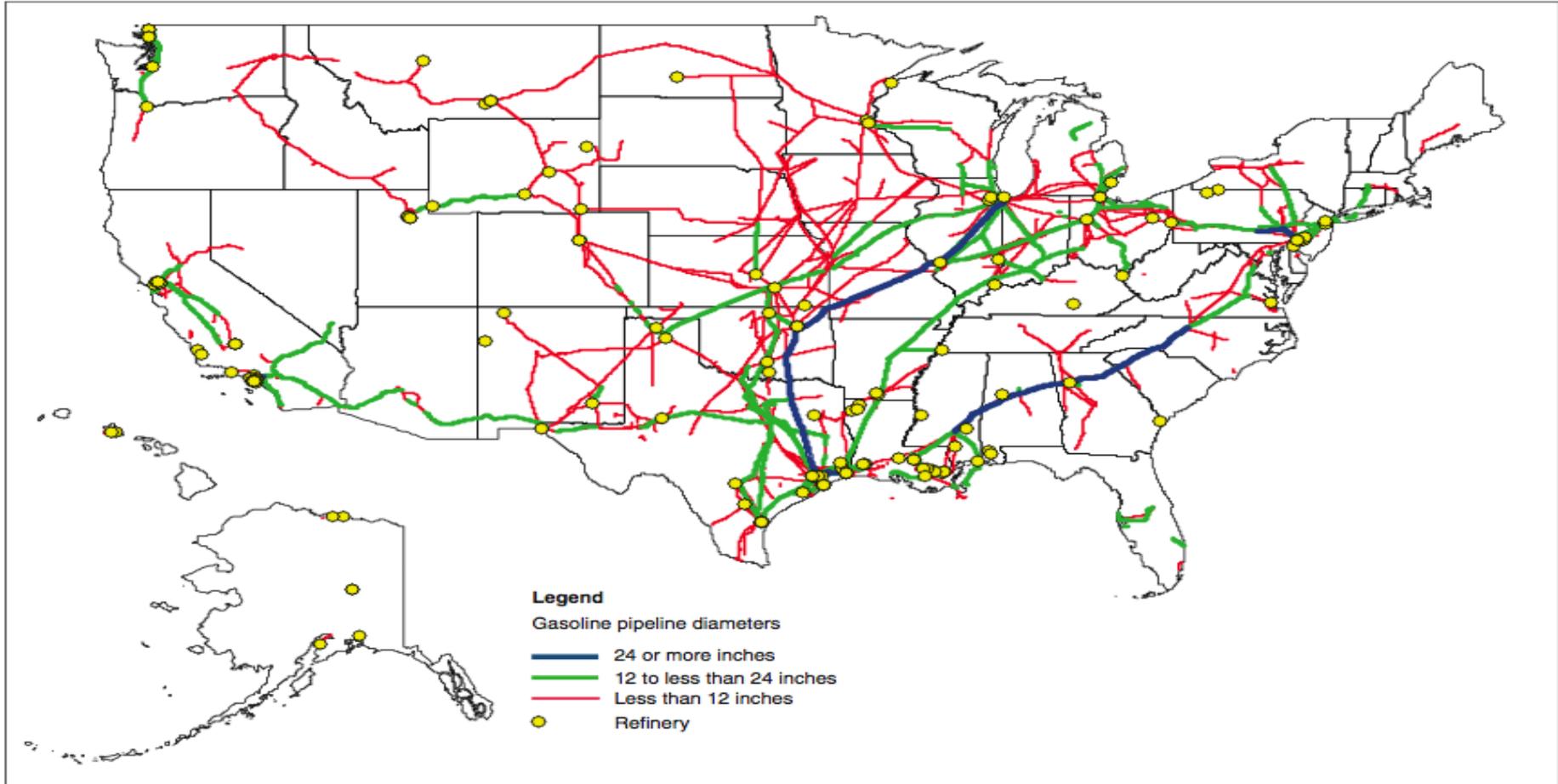
Figure 3-3



Sources: Energy Information Administration (EIA) – California retail prices. CA BOE – taxable gasoline and diesel fuel sales. Alaska crude oil prices – Wall Street Journal.

Fuel Pipeline Networks

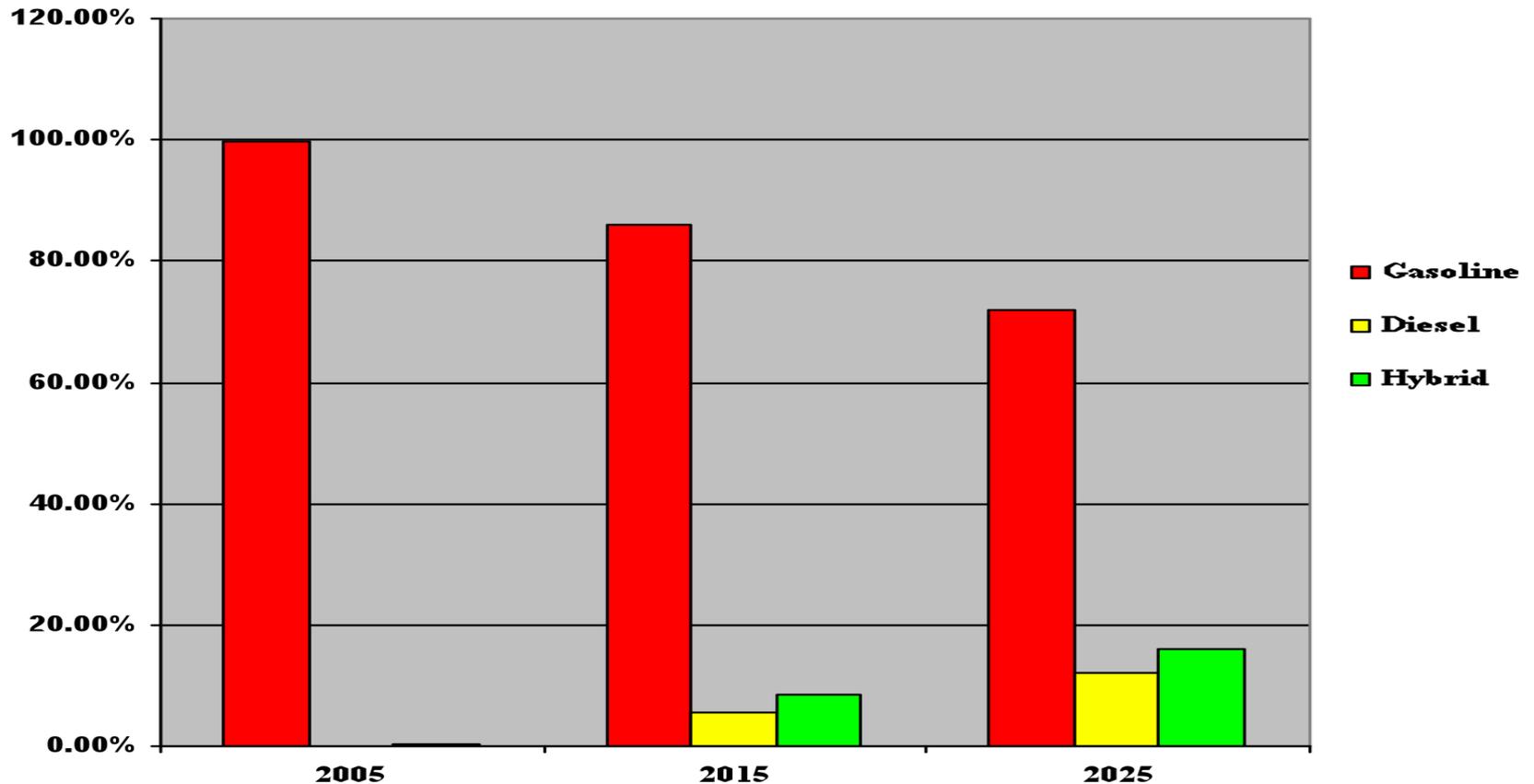
Figure 2: Map of Key Pipelines and Refineries, 2004



Sources: GAO analysis of Department of Transportation and the Energy Information Administration data.

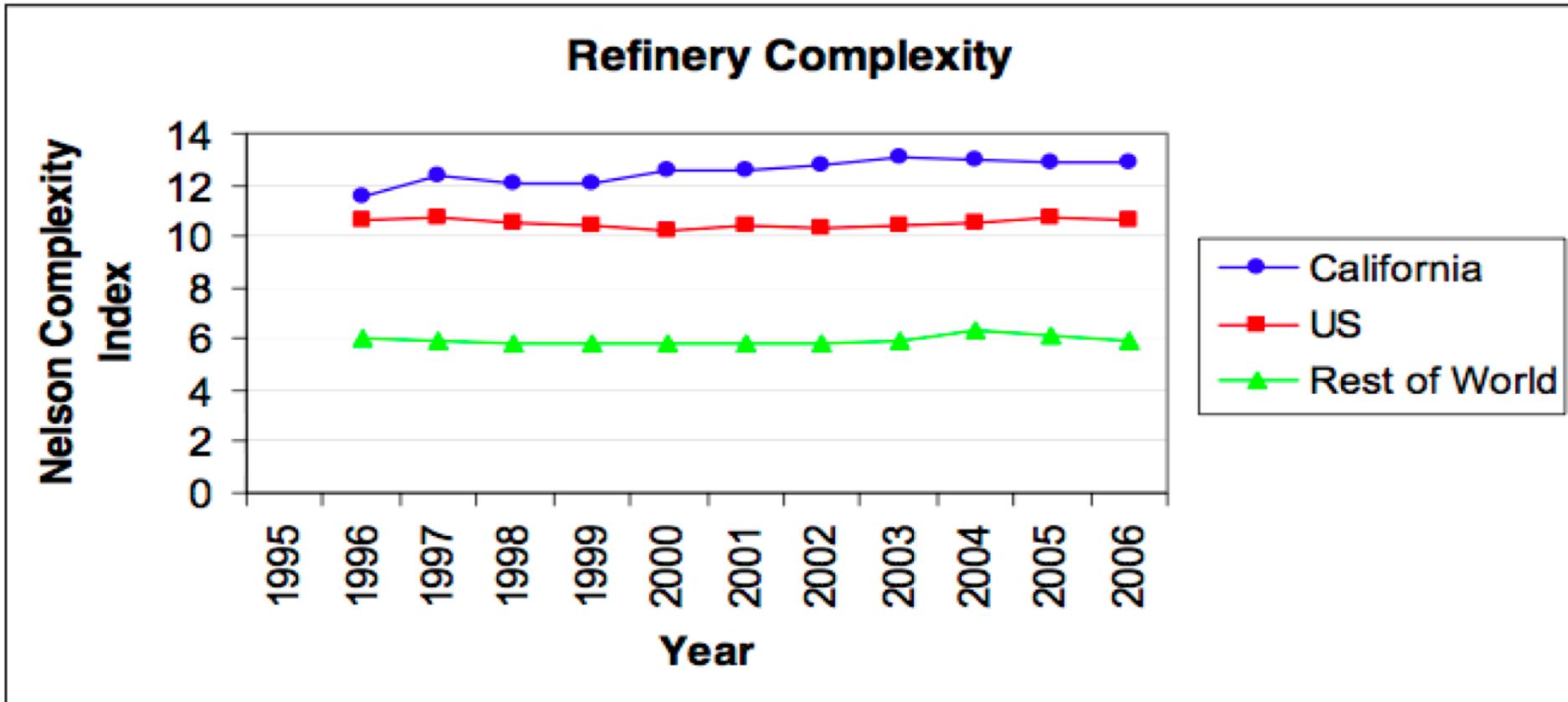
Composition of CA On-Road Vehicles

Composition of CA On-Road Vehicles from 2005 to 2030



California's Fuel Blends Require Refinery Complexity

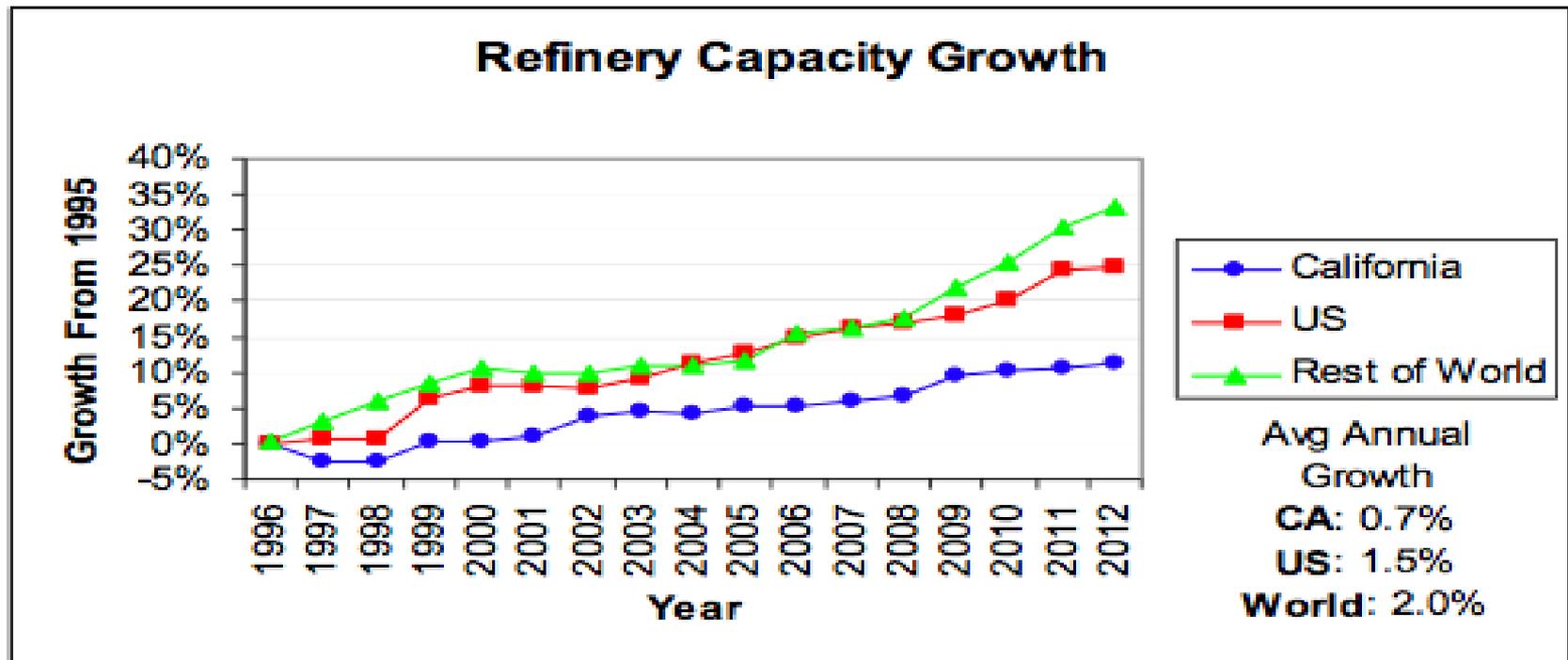
Figure 1-8



Source: Oil and Gas Journal Worldwide Refining Survey. ICF graphic.

California Refinery Capacity Growth has Lagged

Exhibit 45. Global Expansion vs. United States and California



Sources: Historical: EIA Petroleum Supply Annual, EIA Refinery Capacity Report, and Oil and Gas Journal. Worldwide Refining Survey. Forecast based on ICF Estimates. Note that the EIA did not collect data for the years 1996 and 1998. The refinery counts and capacity for 1996 and 1998 have been estimated using the previous year's data.

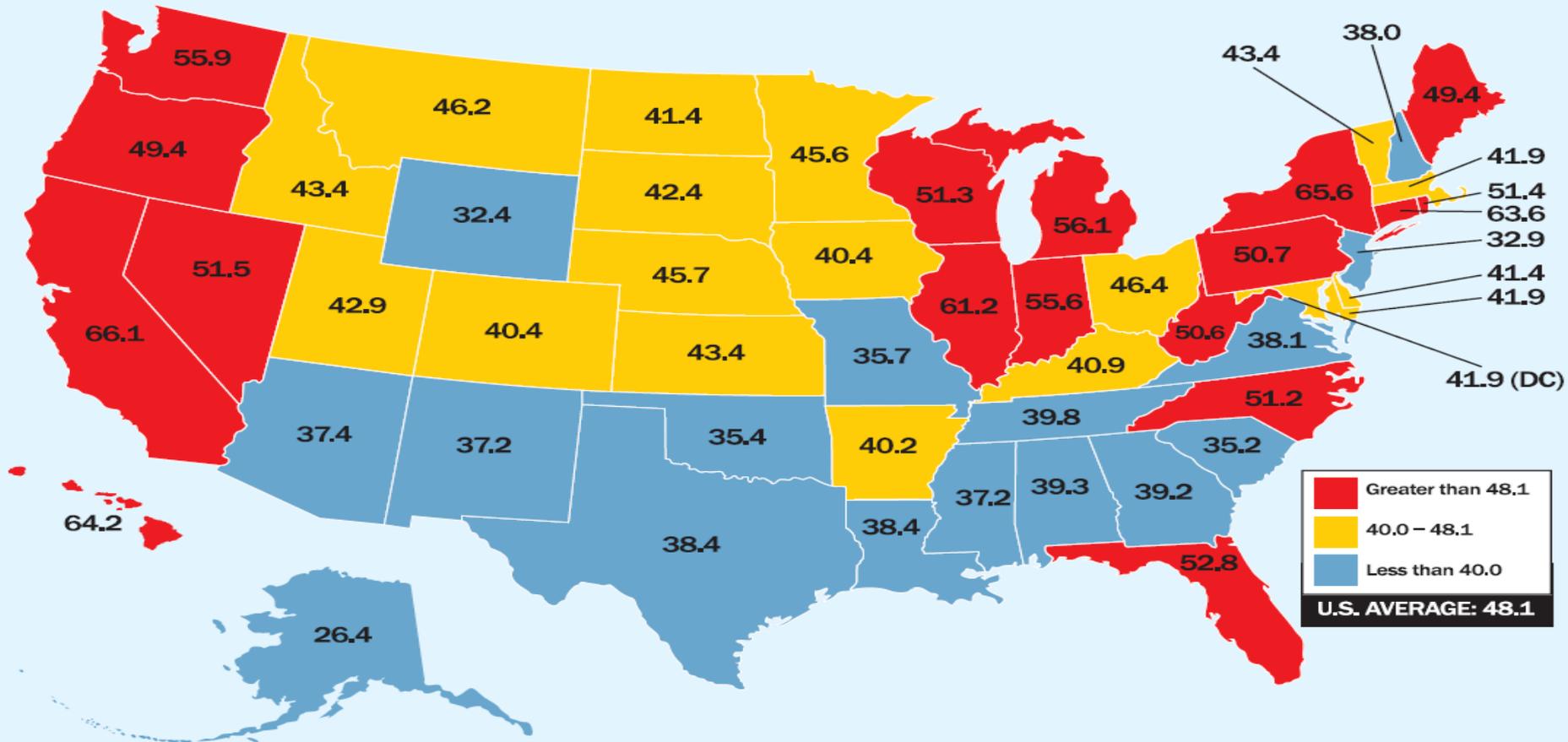
U.S. Gasoline Taxes Compared by State



AMERICAN PETROLEUM INSTITUTE

GASOLINE TAXES

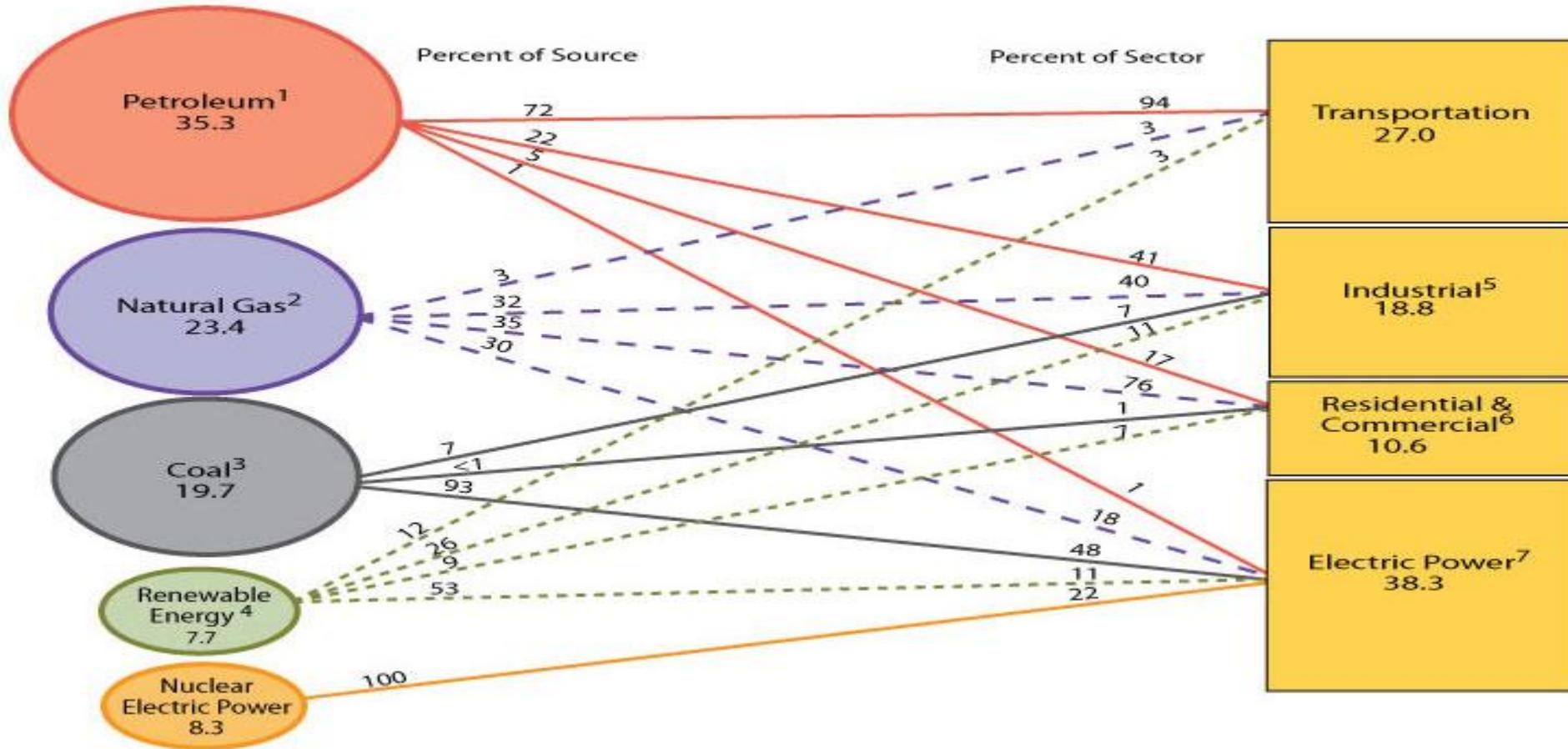
COMBINED LOCAL, STATE AND FEDERAL (CENTS PER GALLON)
JANUARY 2011



U.S. Primary Energy Consumption by Sector

Supply Sources

Demand Sectors



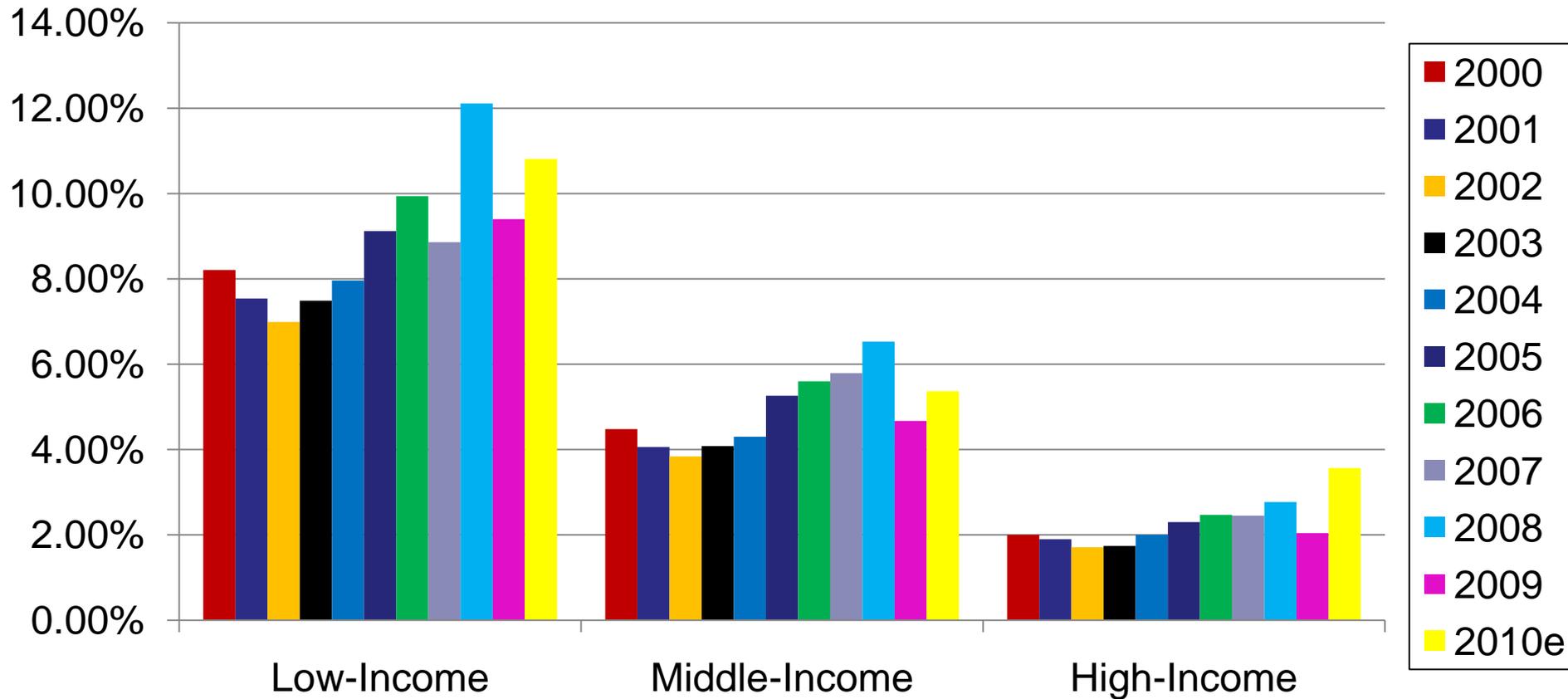
Source: EIA Annual Energy Review 2009

Unwanted Consequences to Higher Fuel Prices

- Higher fuel prices cause:
 - Increased worker commute costs
 - Higher worker compensation demand to cover commute costs
 - Increased cost to transport (plane, train, truck, ship) raw materials, finished products, tourists
 - Overall costs and price drive-ups
 - Increased costs for operations
- California can ill afford to have even minor decreases in key sectors such as tourism, wholesale trade and warehousing with unemployment doubling between 2005 and 2011.

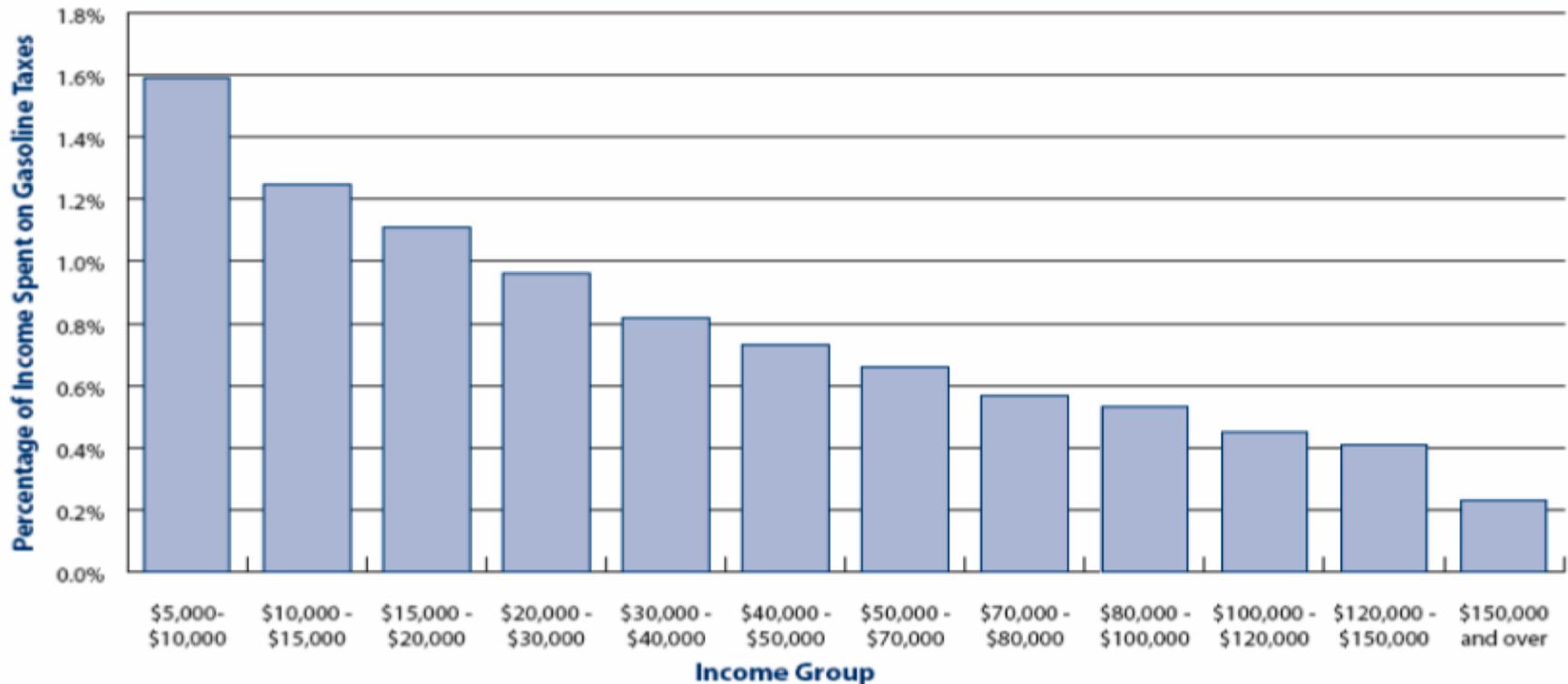
Higher Fuel Prices Hit Lower Income Motorists Hardest

Annual Household Expenditures on Gasoline and Oil as a Percent of Income (US) by Income Group



Higher Gasoline Taxes Impact Lower Income Households Most

Percentage of Income Spent on Gasoline Taxes (US)



Source: Tax Foundation, Bureau of Labor Statistics

Conclusion

- Volatile and higher than average gasoline prices make California less competitive and burden residents with higher living expenses. Prices are high in CA because:
 - California is a “fuel island” and has no pipelines linking it to petroleum or crude oil.
 - California has regulations that require special blends of gasoline and has some of the highest state taxes in the country.
 - The state’s refining capacity has stagnated for decades.
 - California’s “differentiated” fuel standards cause a continual risk of “supply outages.”
 - Policies can change to help improve these factors while still maintaining environmental policy initiatives and ensuring that California government has sufficient revenue.

Thank You!

- For more information on our organization, please visit our website at www.fuelingcalifornia.org.