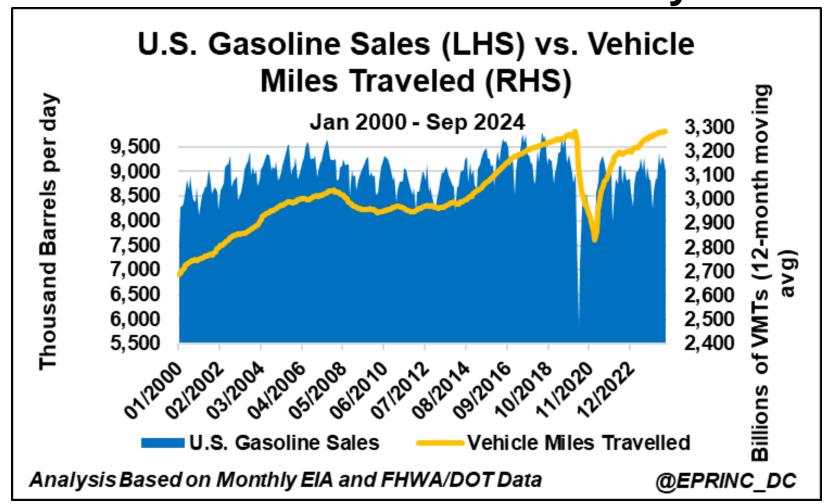


U.S. Gasoline Sales, Vehicle Miles Traveled, and Motor Vehicle Fuel Efficiency Revisited



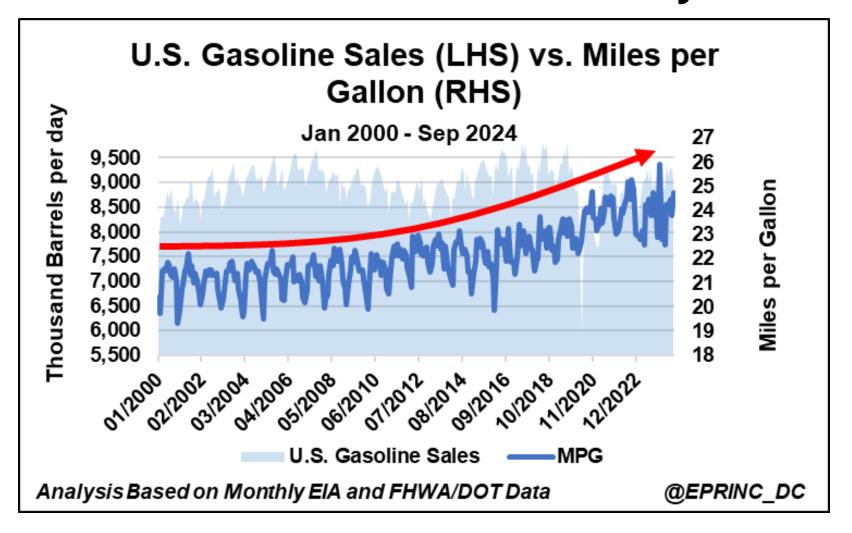


In 2000, the U.S. consumed 8.5 million barrels per day (MBD) of gasoline, or almost 130 billion gallons per year (BGY); by 2022, consumption rose to 8.95 MBD (137 BGY), an annualized increase of 0.25%.

Despite minimal long-term growth in U.S. gasoline consumption, mobility increased as measured by vehicle miles travelled (VMTs) from 2,700 billion VMTs in 2000 to 3,210 in 2022, an annualized rate of almost 1%.

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This implies an efficiency gain from 21 miles per gallon (MPGs) in 2000 to 24 MPG in 2024.

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- In the U.S., gasoline is the dominant fuel for light-duty motor vehicles (LDVs). LDVs are primarily used for commuting, shopping and other personal errands, and leisure travel.
- Currently, the number of motor vehicles in the U.S. is estimated at 283 million, having risen from 226 million in 2000 (an implied annual rate of almost 1%). Of the 283 million, 270 are LDVs primarily fueled by gasoline (n.b. there are approximately 2.7 million electric-powered registered vehicles, less than 1% of total).
- A distinct portion of efficiency gains are attributable to the U.S. Corporate Average Fuel Economy (CAFE) standards. The CAFE standards are one of the programs enacted through the 1975 Energy Policy and Conservation Act, legislation that was passed in reaction to the 1973 Arab Oil Embargo.
- As with most things, as utilization of the resource input becomes more efficient, the use of an application increases. This is variously described as the Jevons Paradox, the Rebound Effect, and the consumption of efficiency. With improved MPGs, VMTs increase.
- It is important to note that some deterioration in both VMT growth and gasoline consumption took place following the 2008 financial crisis. In addition, there was a huge downward spike due to the COVID pandemic in 2020. Nevertheless, mobility demand recovered, surpassing previous levels.
- This slide deck is available at: https://eprinc.org/chart-of-the-week/
- For more information on these charts, please contact Max Pyziur (maxp@eprinc.org).