



# **VTrans2035: Examining the Long-Term Viability of the Motor Fuels Tax and Possible Alternatives**

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## Study Purpose

**To examine the long-term viability of the fuels tax and its alternatives**

- **State and national studies**
- **Oregon's pilot VMT fee program**
- **Sales trends for hybrid, electric, and alternative fuel vehicles**
- **Trends in fuel efficiency and taxable gallons sold**
- **Viability of a VMT fee for Virginia**

## National and State Studies of Fuels Tax and Its Alternatives

- Colorado Transportation Finance and Implementation Panel (2007)
- National Surface Transportation Policy and Revenue Study Commission (2007)
- 15-state federal pooled fund study of VMT fees (2004)
- TRB Committee for the Study of the Long-term Viability of Fuel Taxes (2006)
- Oregon's VMT Fee Pilot Program (2007)
- National Evaluation of a Mileage-based Road User Charge (ongoing University of Iowa study)

## Findings of Previous Studies

- **Significant increases in transportation investment needed now**
- **Fuels tax thought to be viable revenue source until at least 2025**
- **Uncertainty after 2025 warrants looking at revenue alternatives now**
- **Conversion to a national system of mileage fees**  
“...would have profound impacts on every aspect of the management of transportation programs”

## Why Consider VMT Taxes and Other Alternatives to the Fuels Tax?

### Issues with per-gallon fuels tax

- **Not responsive to rising costs of highway maintenance and construction**
- **Does not apply to all fuel types**
- **Not adjusted often enough to keep up with inflation**
  - **Many highway-related costs increasing much faster than overall inflation**
- **Rising vehicle mpgs = same amount of travel for less tax paid**
- **Tax evasion**

## Advantages of VMT Fees

- **Directly related to highway use**
- **Can be equitably applied to any fuel type**
- **Rates can be adjusted in response to congestion**
- **Encourages use of more fuel-efficient, cleaner vehicles**
- **Different rates can be charged for vehicles responsible for more highway damage (e.g., heavy trucks)**
- **Greater balance between highways and transit in urban areas possible**

## Disadvantages of VMT Fees

- Numerous questions still unanswered about VMT fees
  - Which technology? How reliable?
- How long would the transition take?
- Drivers' privacy concerns
- Security and enforceability
- Collection cost and administrative burden
- Many complex transition details to be resolved, for all levels of government

# Oregon VMT Fee Pilot

## Overview:

- 12-month pilot program backed by legislative mandate
- Revenue neutral by design
- Extensive public outreach campaign throughout
- Mileage data transfer and fee collection both occur at fuel pump

## Assessment:

- 91% of participants would continue VMT fees if given option
- Feasibility and revenue potential favorable
- Collection costs relative to fuels tax favorable
- Accuracy of technology satisfactory for pilot
- Reliability and security need improvement
- More information needed about startup and O&M costs

## Market Penetration of Alternative Fuel Vehicles

- **Forecasts of future trends based on recent data likely unreliable (fuel price spikes a contributing factor)**
- **Hybrid-electric (HEV) vehicle sales growing rapidly, much faster than light duty vehicles overall**
- **Recent situation (HEV production lagging demand) is not a stable condition**
- **About 1 million HEVs sold in the U.S. by end of 2007**

# Trends in Fleet Fuel Efficiency, Fuel Sales, and Tax Revenues

- Revenues reflect average fuel economy and average VMT/vehicle/year
- Average fuel economy
  - Significant increases in 1970s and 1980s
  - Slight decreases after 1989
  - Small average annual increases projected (0.4%)
  - Assumes no government policy intervention
- Recent VMT growth trends imply future annual growth of 1.76%
- U.S. fuel consumption increases since 2000 averaged 2.30% per year (exceeded projections)
- Persistent increases in gasoline prices have potential to decrease consumption

## Summary

- National study commissions believe fuels tax is viable until at least 2025
- Despite success of Oregon VMT fee pilot, a number of major questions need to be resolved
- Experts recommend a national research initiative on VMT fees to address unresolved issues
- A large study of user acceptance of VMT fees is underway at 6 sites, including NC and MD
- Experts caution that any future transition to VMT fees would be a lengthy process (~20 years)
  - Older non-equipped vehicles would still pay fuels tax
- National coordination of standards and policies would need to occur