



**OFFICE OF INNOVATIVE
PARTNERSHIPS and
ALTERNATIVE FUNDING**

**Road User Fee Task Force
(RUFTF)**

RUFTF Pilot Project

**THE OREGON MILEAGE FEE CONCEPT: DISCOVERIES
2003-2004**

INTRODUCTION

Since the 2003 Legislative Report, the Road User Fee Task Force and ODOT have further refined the Oregon Mileage Fee concept. This outline details our understanding of factual developments in the marketplace and policy developments within the Oregon Mileage Fee concept.

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Road User Fee Task Force

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MARKETPLACE DEVELOPMENTS

- Greater market penetration of hybrid electric vehicles.
- Heavier standard vehicles embrace hybrid technology (e.g. SUVs such as Ford Escape, Lexus and Highlander)
- Rising gasoline prices and volatile oil market

ADMINISTRATIVE IMPROVEMENTS TO MILEAGE FEE CONCEPT

Integration of Gas Tax Collection System with Mileage Fee Collection at Service Stations

Issues addressed:

- Offset of gas tax paid by mileage fee payers
- Assuring stability of mileage fee collection system
- System redundancy

Integration Strategies:

1. PAVMT (Predictive Adaptive Vehicle Miles Traveled) – Predictive vehicle miles traveled that adapts to real driving experience rather than based upon a fuel mileage rating or upon retroactive experience.
2. VMTCAR (Vehicle Miles Traveled Collected At Retail) - Integrating gas tax and mileage fee with periodic “true up” by service stations.
3. Merging PAVMT and VMTCAR – Collaborating with service stations and distributors to determine strategy to execute “true up” at the distributor level rather than at service stations.
4. Continuing the existing gas tax collection system

Functional Purposes of Gas Tax Continuance:

1. As primary road tax system for motorists driving vehicles not containing the necessary technology (e.g. out-of-state vehicles; older vehicles; vehicles with technology interruption).
2. As underlying collection system for mileage fee (Note: Individual service stations will only remit to ODOT the differential between gas tax reimbursed to distributor and additional mileage fees paid, if any.)
3. As redundant system should there be widespread tampering or systems failure.

Advantages of Integration via VMTCAR:

- Less risky - Mileage fee gradually replaces gas tax over time resulting in greater stability of mileage fee collection
- Bulk of revenue stream remains at the distributor level resulting in fewer taxpayers
- Retention of current multi-state anti-evasion processes
- Retention of fuel tax as redundant system to guard against system failure and tampering

TECHNOLOGY ENHANCEMENTS

On-Vehicle Display

Addition of an on-vehicle mileage information display for motorists. This display will provide the ability to show the current miles traveled and the current pricing of the zone of travel. The display will indicate which zone current mileage is occurring for purposes of applying various mileage fee rates (e.g. basic mileage rate in Oregon (i.e. 1.25 cents per mile); zero mileage fee rate for out-of-state travel; a peak period pricing rate for driving in congestion zones during periods of congestion).

Self-Calibration

Enabling electronic odometer and GPS component to check and calibrate each other.

Enhanced Device Capabilities

Greater on-vehicle computer processing power to enable more complex area boundaries (i.e. “polygons”) to allow a precise outline of Oregon and potentially other states. Ultimately, will also allow creation of defined smaller zones within urban areas to facilitate precision in designing congestion pricing strategies.

Motorist Satisfaction

These technology enhancements will allow greater motorist satisfaction with the technology for the mileage fee by creating a “user friendly” system.

Improved Connectivity

Better connectivity at the gas pump. The sensitivity of vehicle positioning will not be a significant issue.

FINANCE

Retrofitting

Retrofitting of existing vehicle fleet is too expensive. On-vehicle devices should only be installed on new vehicles entering the marketplace. Device specifications will be supplied to automobile manufacturers who would be responsible for integrating appropriate technology into the newly manufactured vehicles.

Industry Technology Development

The technology being used for the pilot is already offered in many new vehicles today, making the incremental cost for new vehicles very low.

Marginal Cost of Technology

The cost of on-vehicle devices will be \$209 apiece for the pilot project and likely to decline substantially when produced on a mass production basis and manufactured within the vehicle.

Administrative Cost

State auditing function for mileage fee is same as for gas tax (i.e. about \$1 million annually).

MOTORISTS PRIVACY

The envisioned concept and technology configuration prove existing privacy concerns to be a red herring.

- No vehicle location data stored in vehicle
- No vehicle travel location points are transmitted. Only VMT data by zone is transmitted. No motorist's movements can be tracked.
- Mileage data transferred only at time of fueling via short-range radio frequency.
- ODOT would not be involved with installation or repair of on-vehicle devices nor would ODOT receive mileage fee payments from motorists.
- Device specifications will be available for audit and inspection. Actual manufacture of devices will be by multiple auto manufactures. Government will have no role in the installation of devices in the car.

CONCLUSIONS

All system policy requirements set by the Road User Fee Task Force are met without compromise.

System Affordability: Will not require a significant bump in the mileage fee rate.

System Accuracy and Reliability: Data is secure and cannot be altered.

Differentiation of Boundaries: No charge for out-of-state miles.

Technology is:

- ✓ Feasibility
- ✓ Reliability
- ✓ Security

Protection of Motorist Privacy: Assurance of no invasion of privacy.

Minimization of Evasion Potential: Non-access to fuel is the consequence for non-payment, assuring minimal evasion of mileage fee.

Minimization of Private Sector Burden: Burden not significantly greater than gas tax because no employee involvement with mileage fee collection and payment except service station bookkeeper.

Seamless Transition: No revenue lost during transition.

Public Acceptability: Easy for consumers to use. No change of payment behavior required for new mileage fee system vis-à-vis gas tax payments.

OREGON MILEAGE FEE CONCEPT
(NOTE: 2004 REVISED CONFIGURATION)

- A per mile charge based on VMT data within state
- VMT data collected electronically by zone through a combined GPS & Odometer device. GPS element differentiates zones and electronic odometer counts miles.
- Only VMT data transmitted electronically from vehicles to readers at fueling stations outfitted with the necessary technology.
- Communication is short range radio frequency.
- VMT data will enter the point-of-sale system for application of mileage fee transaction.
- Mileage fee imposed as part of fuel purchase for vehicles equipped for mileage
- Fuel tax deducted from fuel purchase price for vehicles equipped for mileage
- On-vehicle technology designed into only new vehicles during manufacturing according to provided specifications
- Fuel tax maintained for non-equipped vehicles and system redundancy
- Mileage fee integrated with fuel tax collection system
- Facilitates peak period pricing
- Retain Oregon's weight-mile tax for heavy trucks

POLICY ISSUES REMAINING

Setting the Mileage Fee Rate: Considerations

1. Flat rate per mile
2. Rate graduated for fuel efficiency
3. Social equity (i.e. newer, more fuel efficient vehicles will be purchased by more affluent motorists while less fuel efficient older vehicles will be purchased by less affluent motorists)

Interstate System Standardization and Revenue Allocation: Integration with federal and other states' solution to erosion of gas tax owing to fuel efficiency improvements.