Exploratory Study: Vehicle Mileage Fees in Texas

Ginger Goodin
Richard T. Baker
Texas Transportation Institute

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Background

- Fuel taxes are problematic as a long-term funding source
  - Fuel taxes are primary source of state transportation funding
  - Fuel consumption is declining
  - The fuel tax will become a less sustainable and less equitable proxy fee for road use into the future
Estimated Fleetwide Fuel Efficiency of Gasoline Powered Vehicles in Texas

Source: Transportation Revenue Estimator and Needs Determination System (TRENDS), Texas Department of Transportation
Composition of the Vehicle Fleet by Vehicle Technology

Projected Fuel Tax Revenues

Source: Transportation Revenue Estimator and Needs Determination System (TRENDS), Texas Department of Transportation

- Gasoline Tax Revenues
- Diesel Tax Revenues
Background

• Research and testing underway at state and national levels to explore mileage fee applications
• Vehicle mileage fees are considered a more sustainable and equitable approach
  – Reflects actual use
  – Not affected by increases in fuel efficiency
• Represents a significant change over current system
Purpose and Scope of Study

Purpose of Study
To explore vehicle mileage fees as a possible funding mechanism for Texas

Study Scope
• Document the state-of-the-practice in mileage fees
• Gather input and perspectives from Texans, both driving public and stakeholders
• Engage a panel of technology experts to provide input on possible deployment options
Study Scope - Focus Groups

*Yoakum – Dallas – Laredo – Abilene - Corpus Christi*

- Recruitment and composition
- Topics discussed
  - Transportation funding and fuel tax basics
  - Mileage fee concept
    - Technology options - low, medium, high tech
    - Payment and transition
- Focus group findings
  - Lack of knowledge of fuel tax and transportation funding
  - Negative reaction to mileage fees
  - Consistency in concerns raised: privacy, cost, enforcement
  - Preferences: low tech, no single annual payment, pay-at-the-pump
Preliminary Findings

Challenges: Public Acceptance Barriers

• Most view implementation as unworkable
  – Privacy
  – Cost of administration
  – Enforcement

• Rationale has not been adequately established with the general public
  – No value proposition

• New funding mechanism raises fairness concerns
  – Perceived burden on rural and low income drivers
  – Perceived penalty to fuel-efficient vehicles
Preliminary Findings

Opportunities/Potential Application

- Vehicle mileage fees are seen as logical and sustainable for a long-term solution.
- Mileage fees support a “pay for use” principle more effectively than the fuel tax.
- Simple solutions have greater support (i.e., low tech preferred over high tech).
- Demonstrations are valuable in showing how the concept might work, particularly demonstrations that address public concerns.
Preliminary Findings

Technology Panel

• Public policy design plays a significant role in addressing public concerns over technology applications
  – Define privacy standards
  – Establish operating standards and parameters, specifically with respect to the use of data
  – Define public and private sector roles

• With clear policy direction, deployment systems can be designed to address public concerns over privacy, administration and enforcement
Preliminary Conclusions

• Mileage fees are viewed as a logical replacement for the fuel tax, but public resistance is significant

• Primary recommendation:
  
  *Test mileage fees as a long-term funding approach through an electric vehicle implementation*
  
  – Small percentage of vehicle fleet
  – Electric vehicles fall outside the fuel tax collection system
  – Public feedback: a logical user group to test
Preliminary Conclusions

• Advantages of implementation on electric vehicle fleet
  – Captures a road usage fee from a vehicle group that will not pay fuel taxes
  – Allows testing of the full range of privacy, system administration and enforcement aspects
  – Serves as a demonstration for potential phase-in of other vehicle groups

• Suggested deployment concept
  – Base system of odometer readings from vehicle inspection
  – Experimental opt-in system with GPS-based device to allow discounting of out-of-state mileage