

Moving Beyond the Gas Tax: *A Look at What Other States Are Doing*

Florida Transportation Commission & TEAMFL
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Agenda

1. Opening Remarks
2. The Gas Tax
3. Benefits & Risks of Mileage Based Pricing
4. A Look around the Country
5. Oregon Study Results
6. Concluding Remarks

Shortcomings of the Gas Tax

- Consumption based not usage based
- Revenues are tied to volume not price
- Increased fuel economy
- Incentives available for alternative fuels
- Does not address
 - Vehicle Emissions
 - Vehicle Size
 - Time of Travel
 - Level of Congestion
- Declining Purchasing Power

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Shortcomings of the Gas Tax

- Bottom Line:
 - Declining revenue source while costs are increasing

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Benefits of Mileage Based Pricing

- Links roadway use with price and capacity
- Links price paid with the cost of capacity
- Ability to “price” factors such as:
 - Actual Miles Traveled
 - Time of Day of Travel
 - Location of Travel
 - Level of Congestion
 - Vehicle Type

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Benefits of Mileage Based Pricing

- Bottom Line:
 - All roadway capacity is not the same

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Risks of Mileage Based Pricing

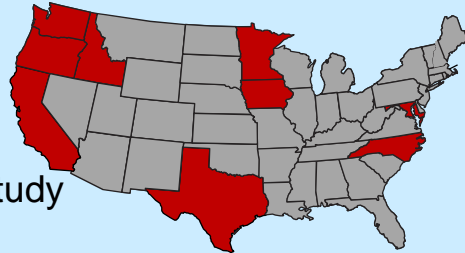
- Reliance on technology
- Privacy issues
- Equity issues
- Start-up and Operational costs
- National compatibility
- Compliance and Ability to Audit

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A Look Around the Country

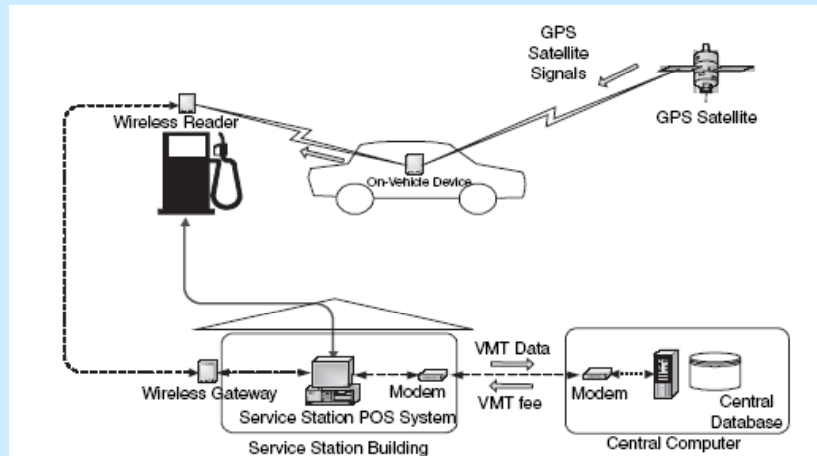
- Research & Development Efforts

- Minnesota
- Washington State
- Oregon
- University of Iowa Study
 - Texas
 - Maryland
 - Idaho
 - Iowa
 - North Carolina
 - California



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Field Test Concept Mileage Based Pricing



Source: The Fuel Tax and Alternatives for Transportation Funding; Transportation Research Board, 2006

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Washington State Puget Sound "Traffic Choices"

- Study completed in 2005
- Detailed analysis of road user choice and behavior based on pricing
 - 400 participants
 - GPS based tolling
 - Tolled all major roads on Puget Sound
 - Time of day and type of road charges
 - Behavior Incentives
- Key Question: How react to network tolls?

Source: Washington State Transportation Commission, Nov. 2006

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Washington State Puget Sound "Traffic Choices"

- Findings
 - No fatal flaws
 - Satellite-based technology for tolling is viable
 - Pricing can influence driving behavior
 - Must still demonstrate that a toll network charging system will be technically verifiable and legally enforceable
 - Large scale U.S. deployment of a GPS based tolling solution depends on a viable business model and public acceptance

Source: Washington State Transportation Commission, Nov. 2006

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University of Iowa Study

- National evaluation for mileage based charging
- Funded by FHWA and 15 states
- Two Part Study
 - Phase 1
 - Develop field test concept
 - Specify technology
 - Completed in Sept 2002
 - Phase 2
 - Refine Approach
 - Conduct Field Test
 - Collect and assess data
 - Started October 2005

Source: University of Iowa, Project Overview, July 2007

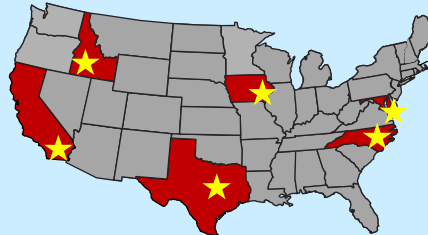
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University of Iowa Study

- **Field Test**

- Six sites to be field tested:

- Austin, Texas
- Baltimore, Maryland
- Boise, Idaho
- Eastern Iowa
- Research Triangle Region of North Carolina
- San Diego, California



- 2 year field test
- 450 participants at each site
- Awaiting federal clearance to start participant selection

Source: University of Iowa, Project Overview, July 2007

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Oregon Road User Fee Study

- **Goal – Provide a system that meets these challenges**
 - Users pay for infrastructure use
 - Provides sufficient revenue to replace gas tax
 - Understandable and enforceable
 - Gain public acceptance and support
 - No additional burden to government or taxpayers in administrative fees

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Oregon Road User Fee Study

- GPS Based Field Test
 - 280 participants
 - GPS unit in vehicle
 - Pay per Mile vs Gas Tax
 - Flat \$0.012 per mile vs \$0.24 per gallon
 - Mileage or gas tax “recorded” at Service Station twice a month
 - 1 year test completed in June 2007

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Oregon Road User Fee Study

- Results
 - Preliminary
 - James Whitty, who led the study – “91% of those surveyed said they would pay a mileage fee if the program were expanded statewide”
 - Final Report to be available by December 1

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Oregon Study Results

- Key Findings
 - The concept is viable
 - Paying at the pump works
 - Mileage fee can be phased in
 - Integration with current systems is possible
 - Allows a variety of pricing options (flexibility)
 - Privacy can be protected
 - Minimal burden on business
 - Default gas tax would discourage evasion
 - Implementation cost lower than expected

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Oregon Road User Fee Study

- Goal – Provide a system that meets these challenges
 - ✓ Users can pay for infrastructure use
 - ✓ Can provide sufficient revenue to replace gas tax
 - ✓ Understandable and enforceable
 - ✓ Public acceptance and support
 - ✓ No additional burden to government or taxpayers in administrative fees

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Oregon Road User Fee Study

“ODOT concludes that the Oregon road user fee pilot program tested the critical elements of the Oregon Mileage Fee Concept and yielded the result – **Concept Proven.**”

-James Whitty

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Concluding Remarks

- Research indicates that the current gas tax is not a viable alternative in the future
- Privacy issues can be resolved
- Many states are conducting R&D efforts
- Transportation should be viewed like any other utility (water, electric)
- Technology is not the obstacle
- Future generations will be more receptive to this approach

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