#### Florida Transportation Commission Meeting December 6, 2007

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



#### Mathew Click, AICP Director of Government Affairs

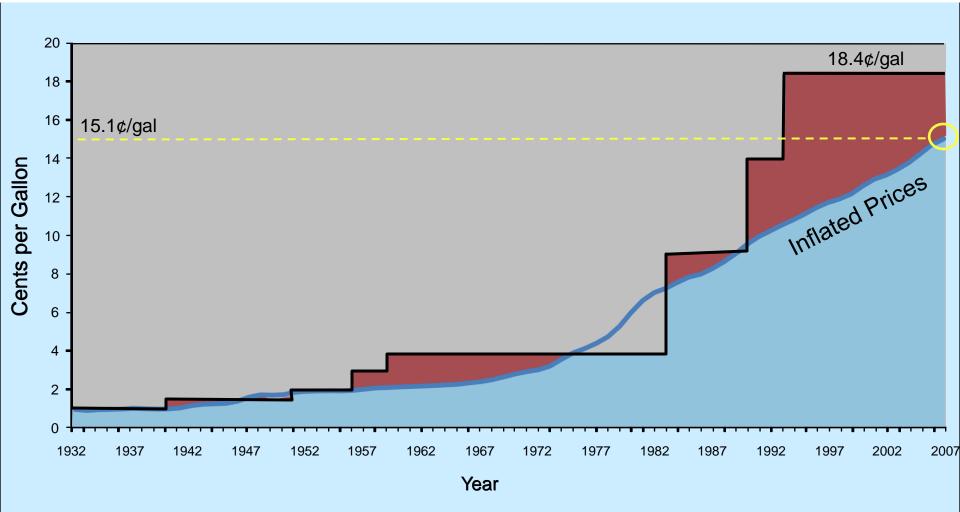
## Agenda

- 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

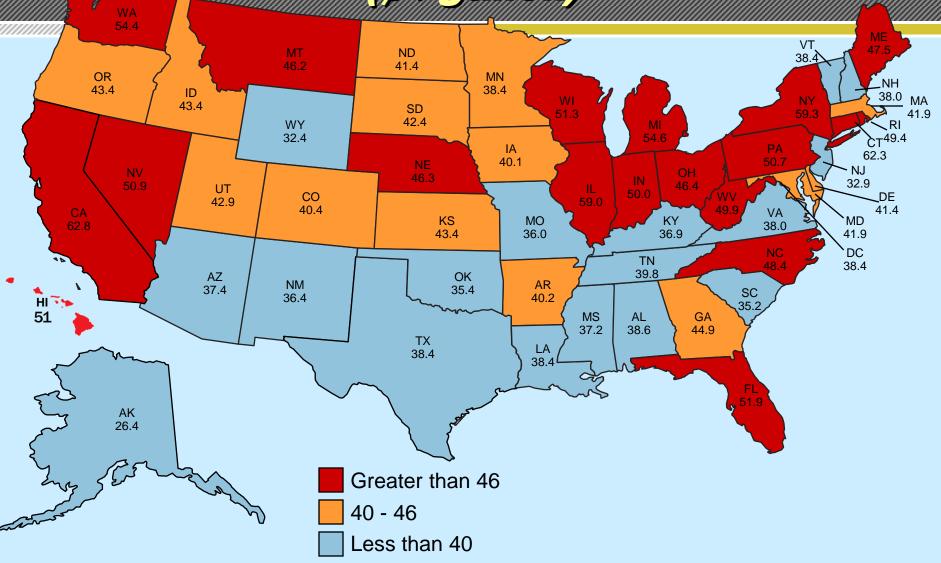
## Shortcomings of the Gas Tax

- Bottomptime based not usage based
- Redeclines greetied to solure white toos are
- Indreaseaingel economy
- Incentives available for alternative fuels
- Does not address
  - Vehicle Emissions
  - Vehicle Size
  - Time of Travel
  - Level of congestion
- Declining Purchasing Power

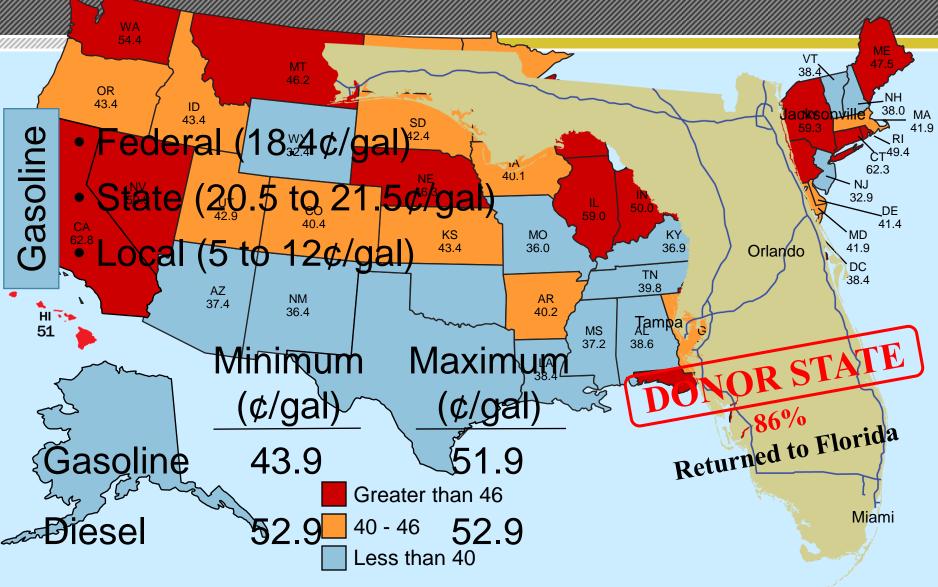
#### Federal Gasoline Tax 1932 - 2007



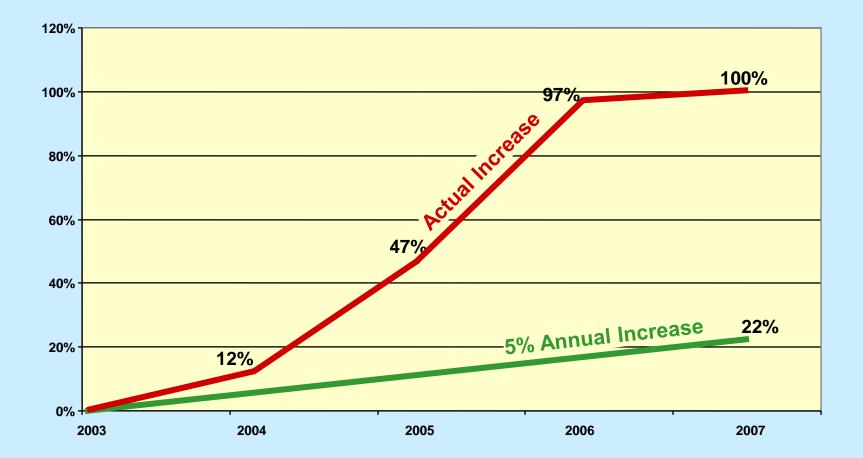
#### Gasoline Taxes *Combined Local, State and Federal* (\$1 gallon)



#### Florida's Fuel Taxes



#### FDOT Cost Increases



## Benefits of Mileage Based Pricing

- Biottomobiological use with price and capacity
- · Links proceparty in end of the property
- Ability to "price" factors such as:
  - Actual miles traveled
  - Time of day of travel
  - Location of travel
  - Level of congestion
  - Vehicle type

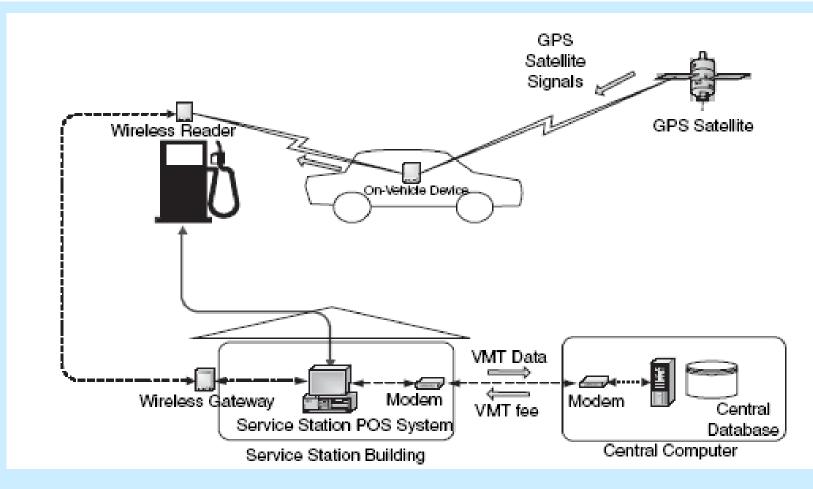
## Risks of Mileage Based Pricing

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

## A Look Around the Country

- Research & Development Efforts
  - Minnesota
  - Washington State
  - Oregon
  - University of Iowa Study
    - Texas
    - Maryland
    - Idaho
    - Iowa
    - North Carolina
    - California

### Field Test Concept Mileage Based Pricing



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

### 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 tools?

### Washington State Puget Sound "Iraffic 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

# University of Jowa 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

# University of Jowa 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

- 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

- 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

- 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

## 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

• Goal – Provide a system that meets these

challenges DOT concludes that the Oregon road user Users can pay for infrastructure use fee bilot program tested the critical elements ax of the deregonal deerge field concept and y laber festance concept Proven." No additional burden to government or taxpayers in administrative fees -James Whitty

## 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