

# The Impact of New Technology Motor Vehicles on Virginia Highway User Fee Revenues

Presentation to the Joint Subcommittee Studying Long-  
Term Solutions for Transportation Funding Not  
Dependent Upon Revenue From a Motor Vehicles Fuels  
Tax; Ways to Promote Use of Fuel Efficient Vehicles

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# What's Coming in the Next Five Years?

- More diesels in light vehicles
- Plug-in electric hybrids
- More full hybrids

# What's Coming in the Next Five Years? Cont.

- Mild hybrids
- New technology gasoline engines
- More "A" and "B" class small vehicles



# Fuel Efficiency Has Momentum

- Diesel
- Full Hybrids – relative prices should fall; currently, hybrid tax credits apply to too few units to make difference

# Fuel Efficiency Has Momentum, Cont.

- Plug-in/Electric Hybrid – future dependent upon viability of lithium-ion battery
- Mild-Hybrids

# Fuel Efficiency Has Momentum, Cont.

- More-Efficient Gasoline-Operated Vehicles
- New smaller vehicle automotive segments: entry of class "A" and "B" cars in U.S. markets



# “Model” Highway User Tax System

- Components

- 1. Fixed Fee/mo for right to drive in VA  
(equivalent to current registration fee/license plates)

# "Model" Highway User Tax System

- Components

- 2. Variable fee/based on miles driven/mo (equivalent to current motor fuels tax)
  - Fee could vary by region of state
  - Fee could vary by type of road taken
  - Fee per mile charge could vary with weight
  - Designed to cover the variable maintenance cost/mile



# “Model” Highway User Tax System

- Components

- 3. Variable Congestion – user tax

- Fee would vary by time of day and day of use
    - Designed to better utilize existing roads & cover cost of capital for new roads where excess demand exists
    - Line-itemized by date, time, location with suggested alternative routings and times to lessen or eliminate this component

# “Model” Highway User Tax System

- Such a highway user fee system would be GPS satellite-based
- Motor vehicle owners would be billed monthly much like current cell phone statements

# Implications...

- For Motor Fuels Tax Collections;
- For Registration Fees on New Technology Vehicles; and
- For Other User Taxes.