IntelliDrive(sm) for Safety, Mobility and User Fees

Symposium on Mileage Based User Fee: Moving Forward
April 20, 2010
$5,000,000 is for a pilot project to demonstrate technologies that will allow for the future replacement of the gas tax with a fuel-neutral mileage charge.
Project Progress

- Phase 1 Complete
  - Concept of Operations
  - High Level Requirements
  - Implementation Scope of Work
  - Preliminary Evaluation Plan

- Phase 2 Implementation and Evaluation
  - Negotiating Implementation Contract
What is Unique?

- Consumer Devices
- Implement MBUF alongside IntelliDrive(sm) Apps
- Manual Odometer Reading for Transition
  - Separates MBUF Decisions from Gas Tax Decisions
MBUF Requirements

- 500 Vehicles
- Vendor Proposed Method for Measuring Miles
- Fees by Zone and Time of Day
- Transmit Accumulated Categorized Miles
  - Combination of Country, State, Local Jurisdiction, Congestion Zone, Peak/Non-Peak Time
  - Option to record trip details on-board
MBUF Requirements

- Monthly Billing
  - Pay with Cash, Check or Credit
- Display Current Rate
- Wright County for Zone evaluation
- Enforce Using Vehicle Registration
In-Vehicle Signing Requirements

- School Zones
- Work Zones
- Speed Zones
- Intersection Warnings
  - 5.9 GHz Dedicated Short Range Communications
  - Demo DSRC with 5 vehicles
- Optional Feature
Traveler Info / Probe Data Requirements

- Location Specific Traveler Information to Vehicle
- Travel time probe data from vehicle
  - Probe Data Detailed but Anonymous, Versus
  - MBUF Data Personal but Not Detailed
- Probe Data is Optional Feature
Evaluation Goals

- Document Implementation experience
- Assess Technical performance
- Assess customer satisfaction
- Investigate safety impacts
- Investigate mobility impacts
- Assess potential and feasibility
Vendor’s Proposed Approach

- TomTom Go 630 + Cell Phone + Power Management Device
- GPS Measurement of Miles
- On-board Accumulating of Miles
- Cellular Data Communications
- DSRC For Intersection Warning Demo Only
- Off-The-Shelf Traffic Info and Points of Interest
Deployment Approach Considerations
Eliminate the Gas Tax?

- Unthinkable to Not Tax Gasoline?
- Easy and Inexpensive to Collect
- User-Friendly Vs. MBUF
- Complements Other Taxes and Fees
- Keeping Gas Tax Could Enable “Pure” MBUF
  - MBUF Reflecting Use of Road Vs. Fuel Use
Charge By Jurisdiction?

- **State administered roads**
  - 10 percent of all lane miles
  - 58 percent of VMT

- **Township roads**
  - 40 percent of all lane miles
  - 2 percent of VMT

- **We Already Know the VMT Distributions**

- **Privacy, Technology, Driver Behavior**
Congestion Charging By Road?

- **Driver behavior**
  - Push traffic to local roads not intended to carry high traffic volumes? Can be good or bad

- **Revenue distribution**
  - Provide higher per mile rate for roadways with the greatest VMT per lane mile?

- **Public perception**
  - Charge most for the poorest service?
  - Opposite of HOT lanes
For More Info:


http://www.dot.state.mn.us/funding/mileage-based-user-fee/

ray.starr@state.mn.us
coryj.johnson@state.mn.us