



History of Road User Fee Task Force and Oregon's Mileage Fee Concept

Presented to
The Road User Fee Task Force

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Road User Fee Task Force

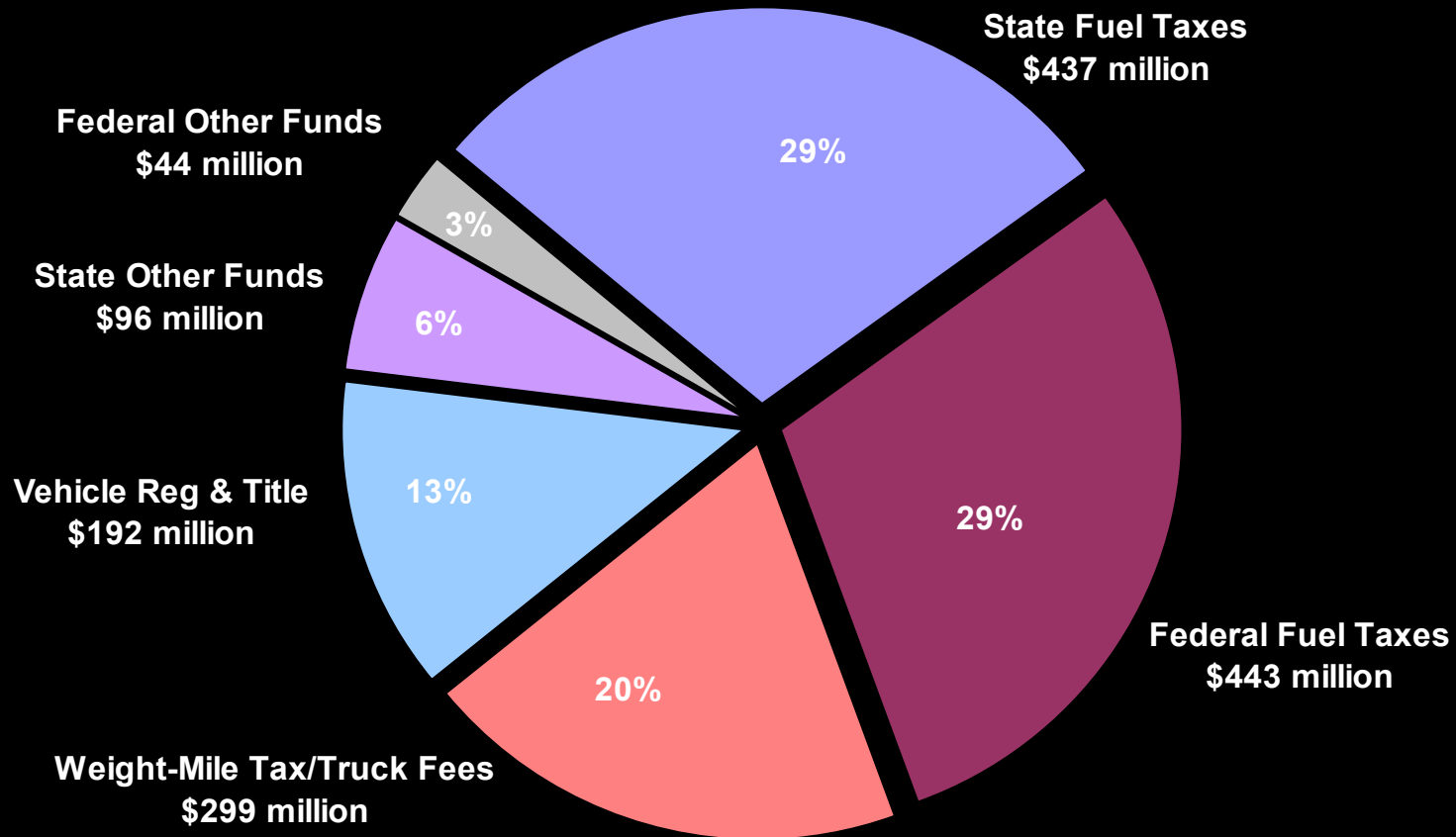


Legislative Mandate

“To develop a design for revenue collection for Oregon’s roads and highways that will replace the current system for revenue collection.”



Oregon Road Revenue Sources 2009-2011 Legislatively Approved Budget (\$1.511 billion for FY 2010)





Road User Fee Task Force's Recommended Road Revenue Program (2003)



- Studded Tire Tax
- Tolling New Highway Capacity
- Congestion Pricing
- Mileage Based User Fee



Progress on RUFFT Recommendations

- **Studded Tire Tax:** Attempt to enact legislation failed in 2003
- **Tolling New Capacity:** Attempt for three toll projects stalled in 2007
- **Congestion Pricing:** Planning for legislatively mandated attempt for congestion pricing project in Portland currently underway
- **Mileage Fee:** Successfully completed Nation's First Mileage Fee Pilot Program, including a congestion pricing component



Oregon's History on Distance Based User Charges

- 1919: Oregon enacts gas tax as a surrogate for a distance-based user fee
- 1996: Oregon's Governor John Kitzhaber proposes tax on Vehicle Miles Traveled
- 2000: University of Iowa's 15 state consortium begins study of VMT charges
- 2002: Oregon's Road User Fee Task Force proposes mileage fee for replacing gas tax



Two Purposes for the Mileage Fee

1. Creation of reliable, broad based charge to *replace* fuel tax as principal road funding mechanism
2. Creation of an electronically collected charge to assist management of road congestion levels



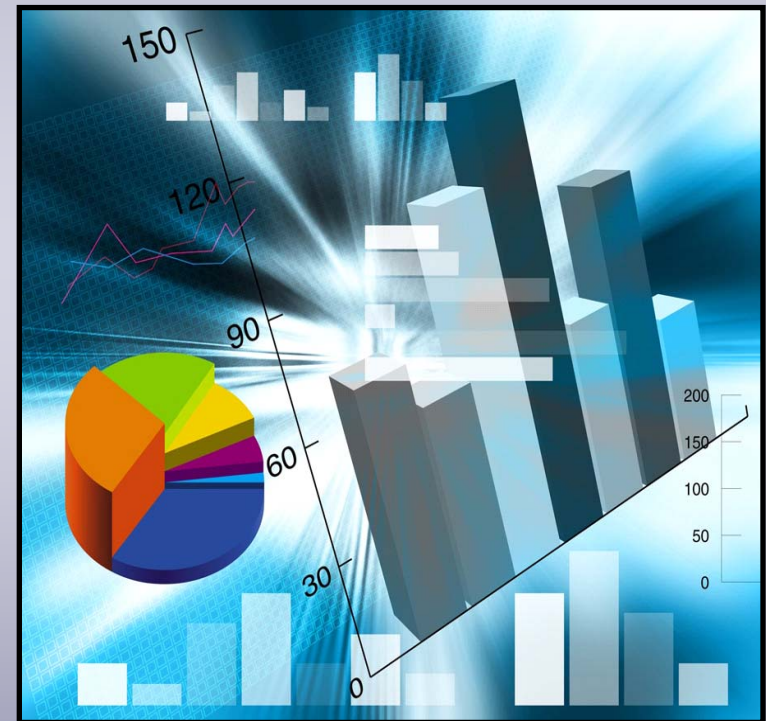
Policy Directives to ODOT

Statutory Directives

- Reliability
- Ease of motorist use
- Enforceability
- Low capital costs
- Low relative operating costs

Road User Fee Task Force Directives

- Not charge out-of-state travel
- Protect motorist privacy
- Provide gas tax credit
- Seamless transition
- Minimal private sector burden
- Allow congestion pricing
- Allow local option

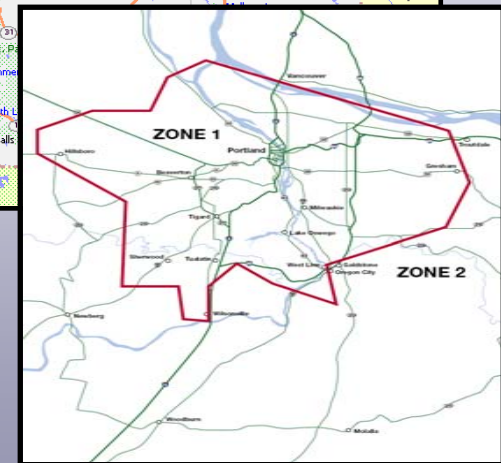




Creation of Electronic Zones

Charge on miles driven within Oregon by zone

- Zone 1 = in state
- Zone 2 = out of state
- Zone 3 = local option
- Zone 4 = rush hour





Structural Issues for Mileage Based Fees

- Administration
- How to credit gas tax
- Integration with existing systems
- Reliability and back up system
- Managing nonpayment and fraud
- Operating costs relative to revenue
- Transition management
- Overall system risk





Fundamentals of Mileage Charging

Six Things A Mileage Charging System Must Do

1. Calculate miles driven
2. Access mileage data
3. Apply mileage charging rates
4. Provide a billing
5. Collect payment
6. Enforce payment



[300 miles x 1.2 cents = \$3.60]

Quantity	Item Code	Description	Unit Price	Quantity	Total	Tax
1	Hardware/Coorl...	Door knobs 3rd	30.00	30.00	30.00	Tax
1	Hardware/Coorl...	Brass hinges	1.00	6.00	6.00	Tax
1	Wood/Coorl...	Entror	120.00	120.00	120.00	Tax
1	Wood/Coorl...	Interse	72.00	144.00	144.00	Tax
1	Hardware/Coorl...	1/4 Doorknobs	38.00	76.00	76.00	Tax
12345	Concep Discount		-37.60	-37.60	-37.60	Tax
Shipping	Ground Parcel Shipping		10.00	10.00	10.00	Non
Tax @ 0.4%					23.30	
Total					368.70	





Data and Fee Collection System Options



Central Billing

- + Covers all vehicles
- High operational & enforcement costs

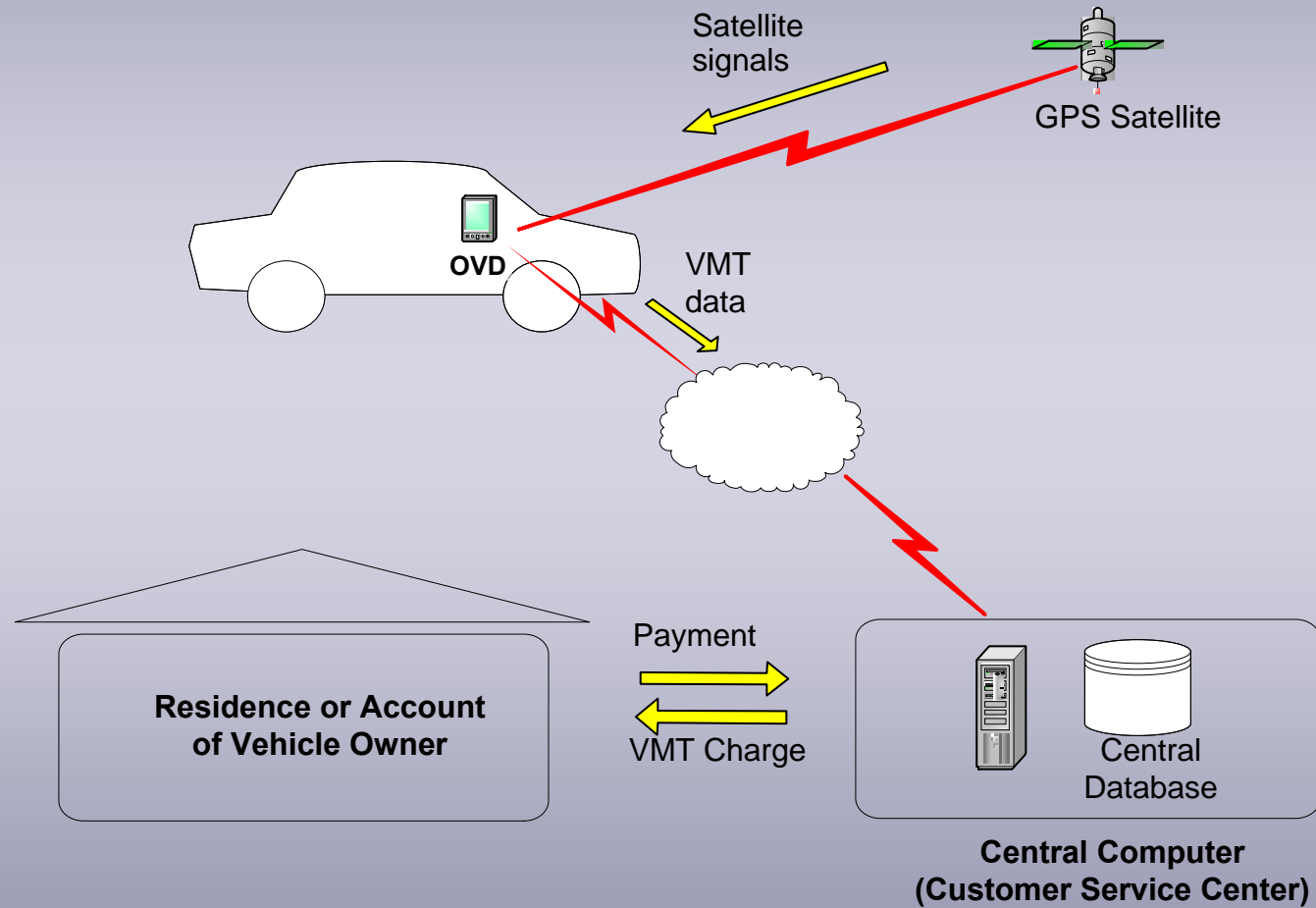


Pay-at-the-pump

- + Inexpensive to operate
- No electric vehicles

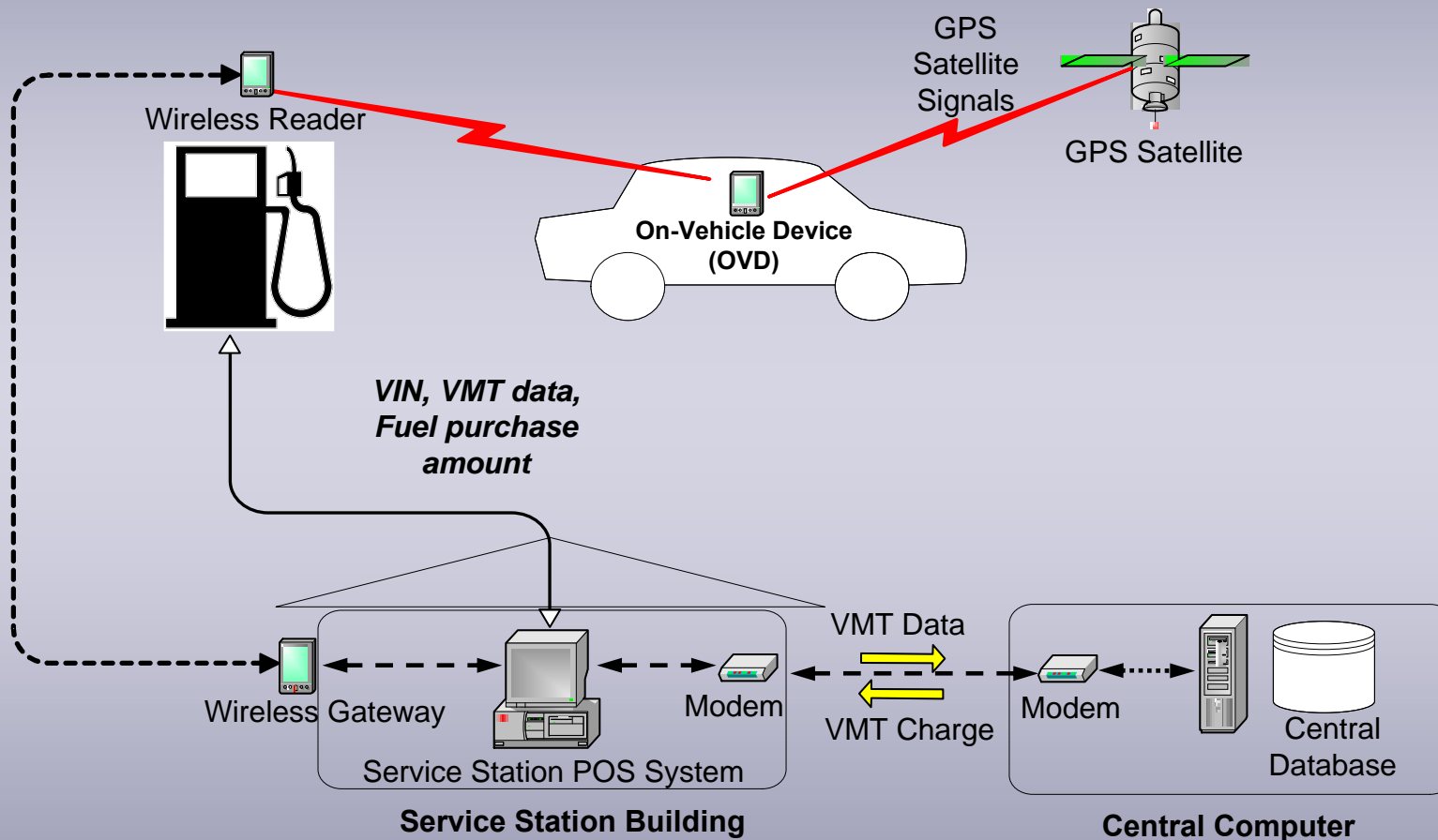


Central Billing Model





Pay-at-the-Pump Model





CSF
R# 1 S# 1 T# 882316 10:55 AM
06/09/06

Leathers Fuels
11421 SE Powell Blvd
Portland, OR 97266

Pump# 1 Unleaded		
19.50 @ 2.549		49.71
ST Fuel Tax @ .24		(4.68)
VMT Fee :		5.12
Rush Hour :	40	
In-Oregon :	28.6	
Non-Oregon:	0	
No Signal :	0	
	Subtotal	50.15
	Total	50.15
	Cash	50.15
Thank You !		

The Receipt

Fuel tax deducted from fuel purchase price

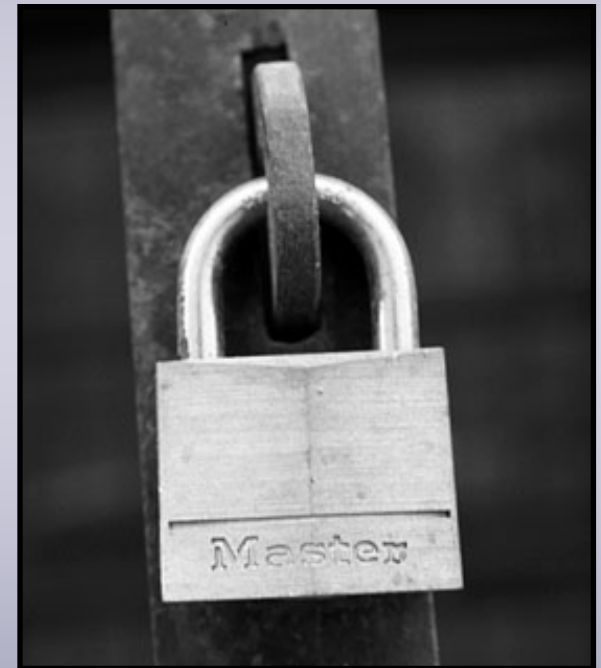
Mileage fee imposed as part of fuel purchase



Protection of Motorist Privacy

Principal Issues:

1. Vehicle tracking
2. Detailed data versus summary data
3. Travel history versus mileage tallies
4. Data encryption





Privacy Protection for VMT Fees

On Board Unit (OBU) Variations:



Oregon's Pilot

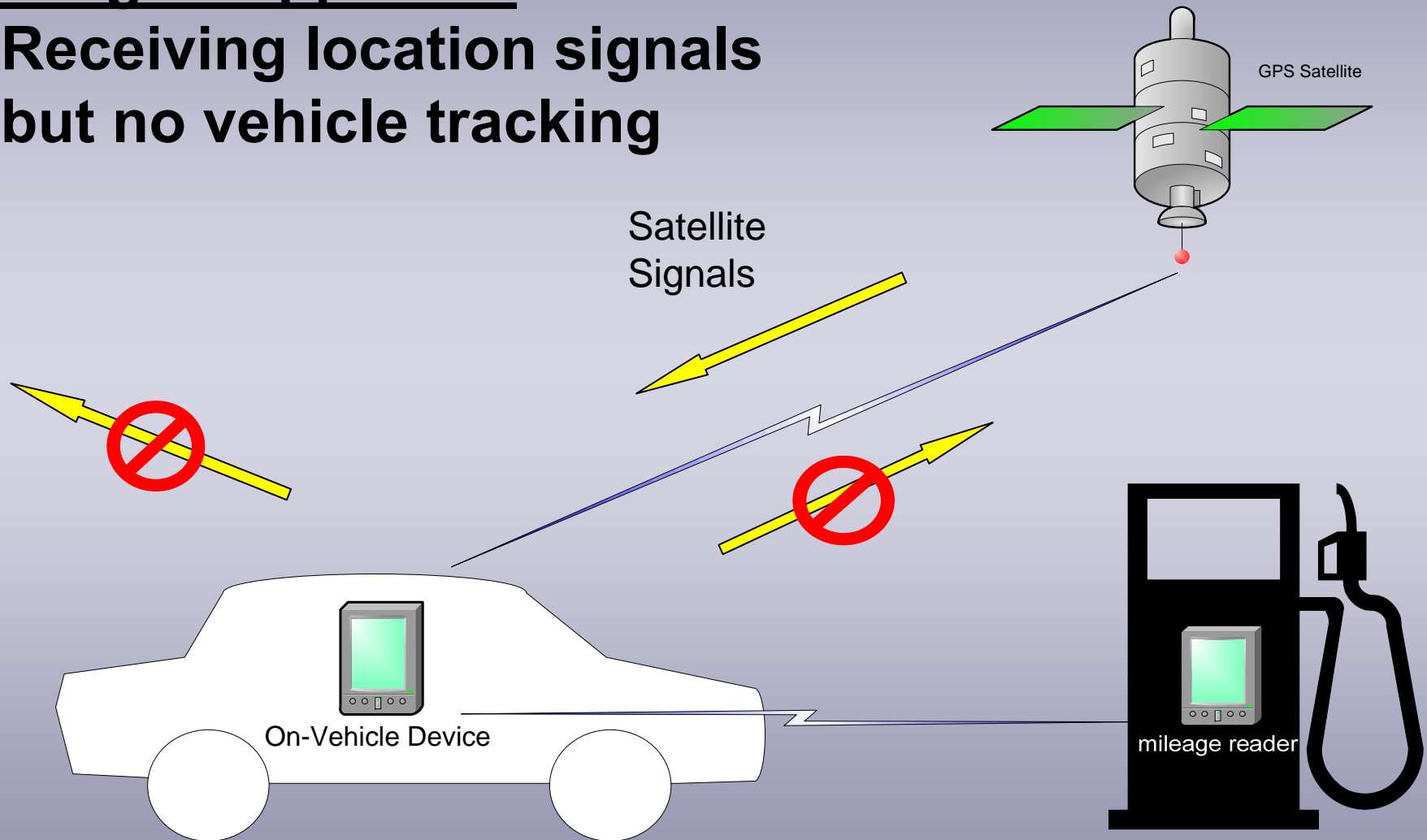


- No travel coordinates transferred
- Mileage calculations occur on-device
- Only summary data transferred
- May or may not have GIS map

- Travel coordinates transferred
- Mileage calculations occur at central computer
- No GIS map



Oregon Approach: Receiving location signals but no vehicle tracking

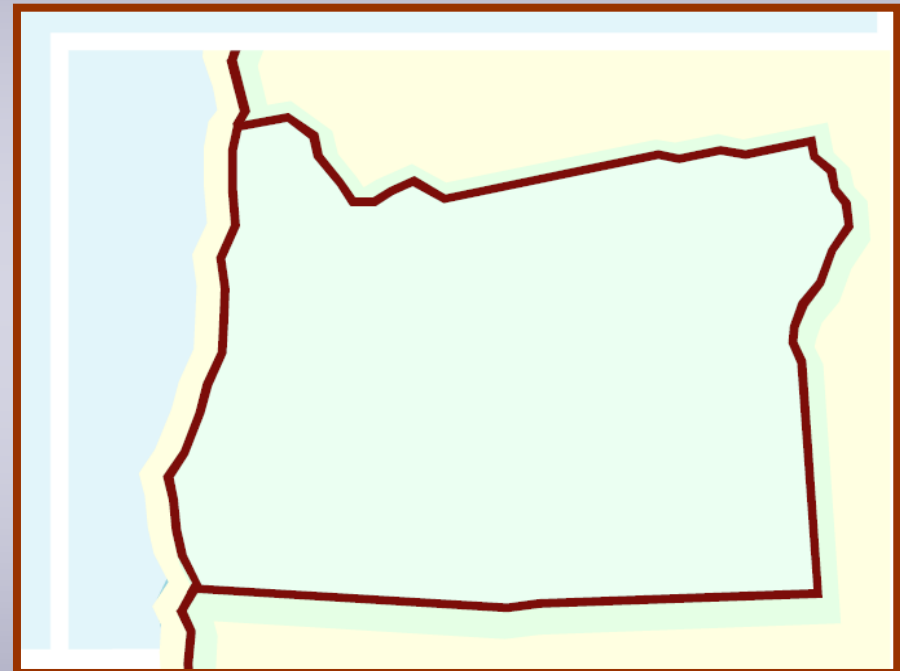




Location Detail Options



GIS Digital Map



Zones by Coordinates
The Oregon Approach



Travel History Options



Detailed Travel History

RUSH HOUR :	8.9
IN OREGON :	193.0
NON OREGON:	0.0
*NO SIGNAL :	

VMT Totals within Zones
The Oregon Approach



Oregon Pilot Program Field Test

- 285 participant passenger vehicles
- Compensation \$300 per vehicle
- Control phase & experiment phase

Three zones:

- *In Oregon*
- *Not in Oregon*
- *Rush Hour*

Three test groups

- **Control group** paid state gas tax
- **VMT group** paid 1.2 cents per mile but no state gas tax
- **Rush hour group** paid 10 cents per mile in congestion zone and .43 cents per mile for regular travel but no state gas tax

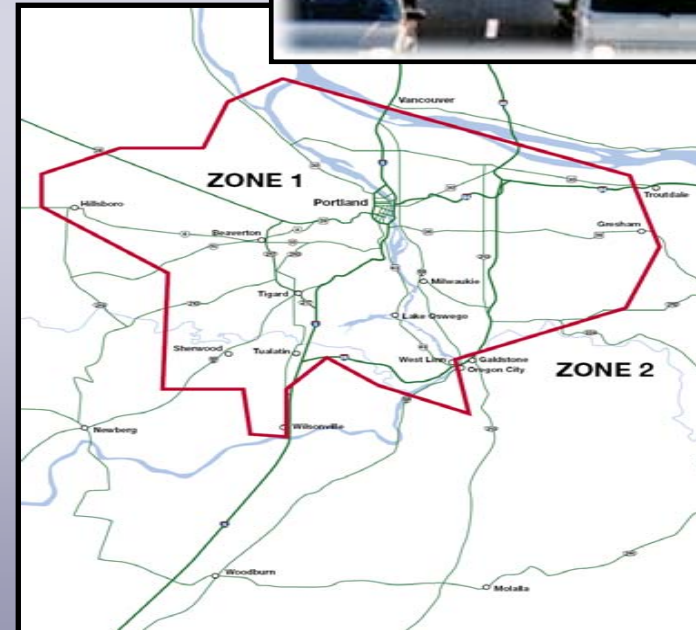




Oregon's Congestion Pricing Field Test

Area Pricing

- Identified temporal *rush hour* zone
 - 7 to 9 a.m.
 - 4 to 6 p.m.
 - On work days
- Higher rates during peak periods
 - 10 cents per mile for peak
 - 1.2 cents for regular travel





Oregon Field Test Final Results

Successes

- Zone differentiation
- Mileage counting
- Vehicle identification with fuel pump
- Transmission accuracy
- Transaction administration
- Reduced Peak Driving 22%
- Acceptance by Participants



Needs More Work

- Refinement of technology for commercial application

Fundamental Lesson

- Retrofitting extremely difficult



Assessment of Oregon's Pay-at-the-Pump Model

Pluses

- Meets most policy objectives
 - Provides gas tax credit
 - Covers all roads
 - Charges only in-state travel
 - Easy for all motorists to use
 - Protects motorist privacy
 - Cost effective operations
 - Reliable
 - Enforceable
 - Seamless transition
 - Minimal private sector burden
 - Allows congestion pricing
 - Reduces overall system risk

Minuses

- Long period for development and implementation
- Slow technological evolution
- Does *not* cover vehicles not visiting commercial fueling stations
- Public concerns about privacy and how system would work



Public Concerns

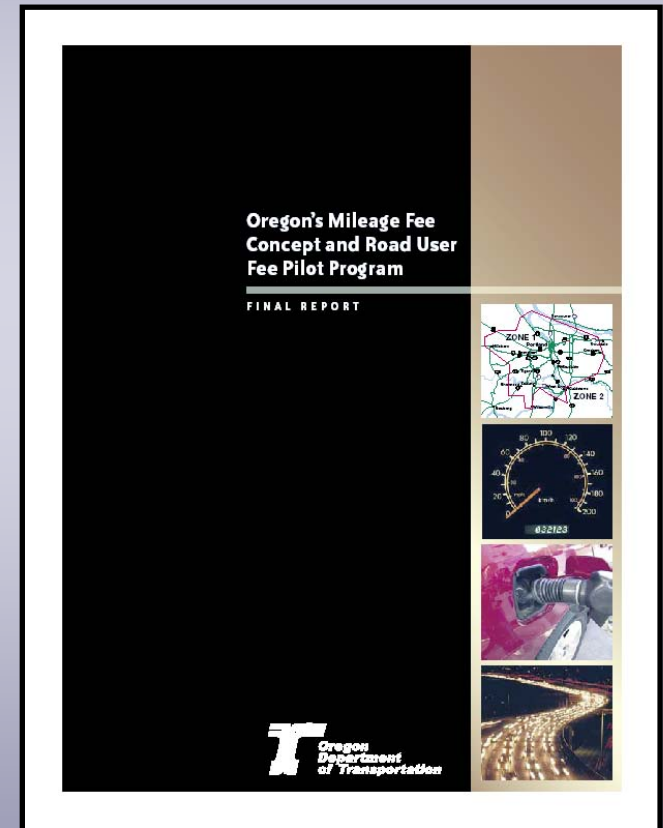
- Confidence in system
 - Efficiency
 - Fairness
 - Perceptions of large and costly bureaucracy
- Privacy & fear of technology
 - A government mandated device
- Motorist class wars
 - Rate structure
 - Rate equity
 - Rural driving
- Flexibility of Road Pricing





Final Report for Road User Fee Pilot Program

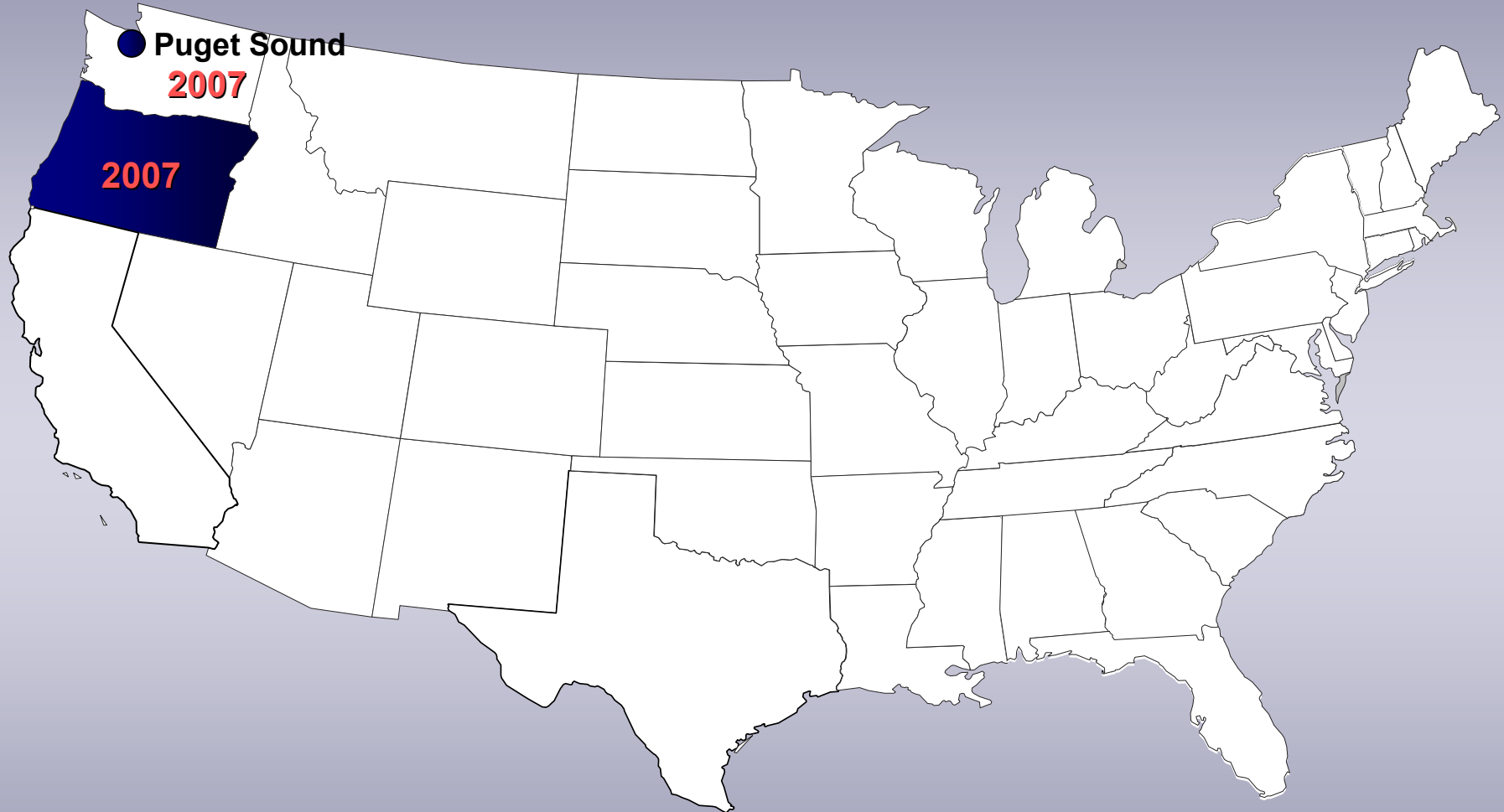
- Widely read in the United States, Europe, New Zealand and Australia
- Cited in every national report and paper on the subject of mileage based charging
- Cited by two national commissions created by the US Congress
- Cited by the Bipartisan Policy Commission



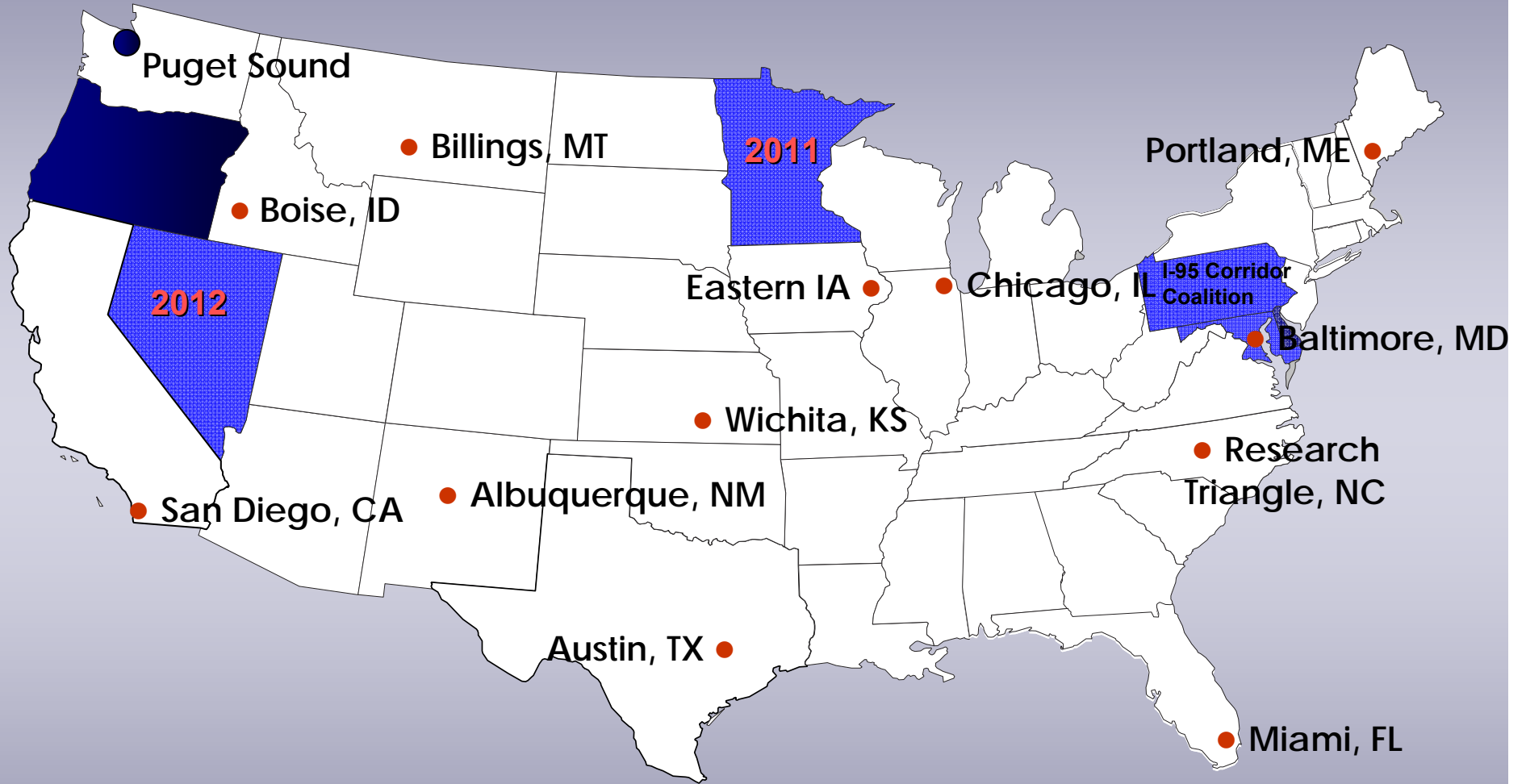


Alternatives to Road Use Metering Charge

- Tolling high capacity highways
- Land value capture
- Higher registration fees for all-electric vehicles and plug-in hybrids
- Taxing electricity use
- Taxing gasoline/diesel by percentage of sale price
- Charging by time rather than distance



***Nation's Initial VMT
Charge Pilot Programs***



● University of Iowa Field Tests (*completed 2010*)

■ Pilot projects under development

