



The Oregon Road Usage Charge Program

Washington Transportation Commission
December 10, 2013



Senate Bill 810

Oregon Road Usage Charge Legislation

- 5,000 volunteer light vehicles
- Rate of 1.5 cents per mile
- Rebate of fuel tax paid
- Mandates choices for motorists
- At least one reporting choice must not use GPS
- Open market for reporting technologies
- Private sector administration option
- Penalties for false statements, non-payment and tampering with vehicle metering system
- Protection of personally identifiable information





Per-Mile Charge Work Completed in Oregon

- 1st Pilot Program Development and Operation (2003-07)
- Policy Reports to Oregon Legislature (2002, 2003, 2005, 2007)
- System Architecture (2010)
- Strategic Plan (2011)
- Preliminary Concept of Operations (2011)

- 2nd Pilot Program Development and Operation (2012-2013)
- System Requirements Specifications (2012)
- Interface Control Document (Standard Mileage Message) (2012)
- Pilot Evaluation Report (2013)
- Economic and Financial Cost Model (2013)
- Urban Rural Analysis (2013)
- Focus Groups (2013)
- Risk Matrix (2013)
- Economic Viability (2013)
- Pre-Legislative Concept of Operations (2013)
- RUC Program Implementation Plan (2013)



History of user pays policy in Oregon

Nation's first gas tax: 1919

Nation's first weight mile tax
for heavy vehicles: 1933

Nation's first cost allocation
study completed: 1937



Gas tax increases in 1921,
1923, 1930, 1933, 1949,
1967, 1982, 1984, 1985,
1986, 1987, 1988, 1989,
1990, 1991, 1992, 1993
and 2011



Initial Legislation in 2001

Road User Fee Task Force

House Bill 3456



- Develop policy recommendations for new revenue system based on road use to replace current system
- Directs DOT to administer RUFTF
- Directs DOT to develop and implement pilot programs based on RUFTF policy recommendations
- Allows for fuel tax refund for pilot participants paying mileage fee



Oregon's Weight Mile Tax for Heavy Vehicles

- Applies to vehicles at 26,000 pounds and above
- Based on four factors
 - 1) Declared weight
 - 2) Configuration
 - 3) Number of axles
 - 4) Distance traveled
- Manual reporting
- Electronic reporting pilot testing





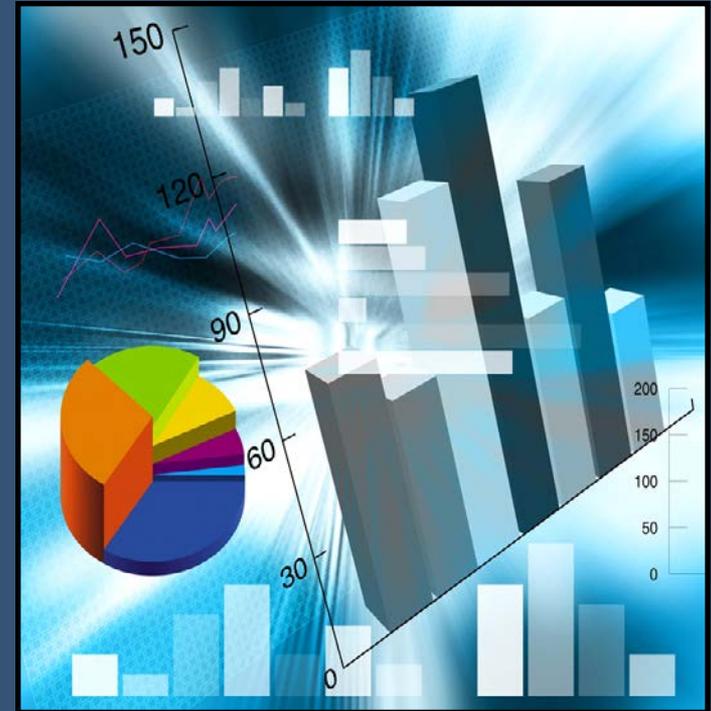
Policy Directives to ODOT

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





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





The Basics

Key policy issues for per-mile charge system

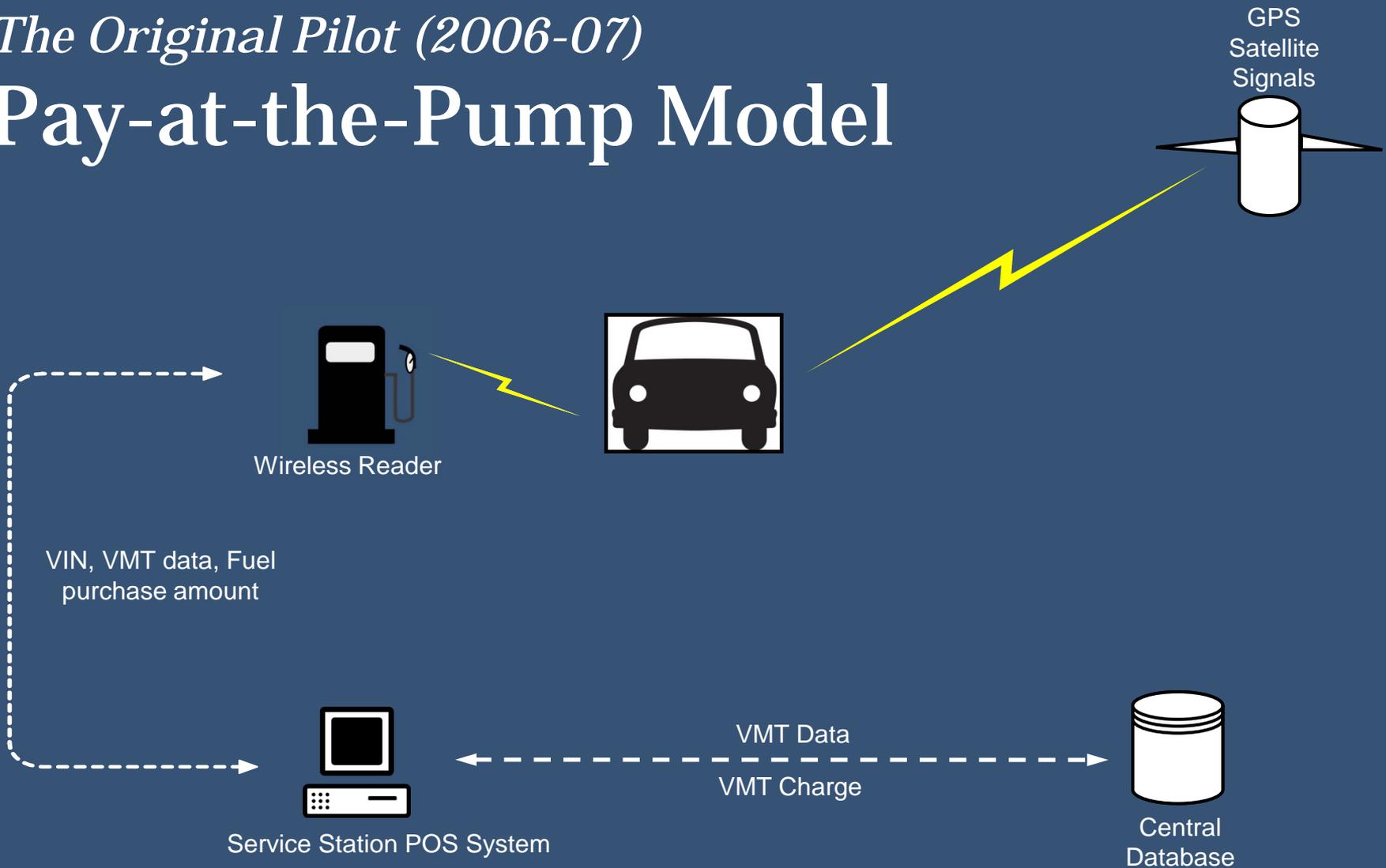
- Augment or replace fuel tax
- Manual data collection or electronic data collection
- One method of reporting or multiple choices for reporting
- Basic mileage reporting or location based mileage reporting
- Government selected technology (closed system) or market selected technology (open system)
- Government operations or private sector operations
- One method for billing or multiple methods

First Pilot



The Original Pilot (2006-07)

Pay-at-the-Pump Model





Original Pilot Program Technologies





National Review & Support

Report of the
National Surface Transportation Policy and Revenue Study Commission
Transportation for Tomorrow
December 2007

TRANSPORTATION FOR TOMORROW
National Surface Transportation Policy and Revenue Study Commission

AASHTO
TRANSPORTATION—Are We There Yet?
Creating America's Future
Transportation System—2009

transportation
future

Report of the National Surface Transportation Infrastructure Financing Commission

PAYING OUR WAY

*A New Frame
for Transportation*

**MILLER CENTER
of PUBLIC AFFAIRS**
LEXINGTON, VIRGINIA

WELL WITHIN REACH
America's New Transportation Agenda

**David R. Goode National
Transportation Policy Conference**
*Norman Y. Mineta and Samuel K. Skinner, Conference Co-Chairs
and former Secretaries of Transportation*
Jeffrey N. Skane, Conference Director



Public concerns about the pilot

Privacy

Confidence in
system

Rural driving

Rate structure





Problem

Pay-at-the-pump was a closed system

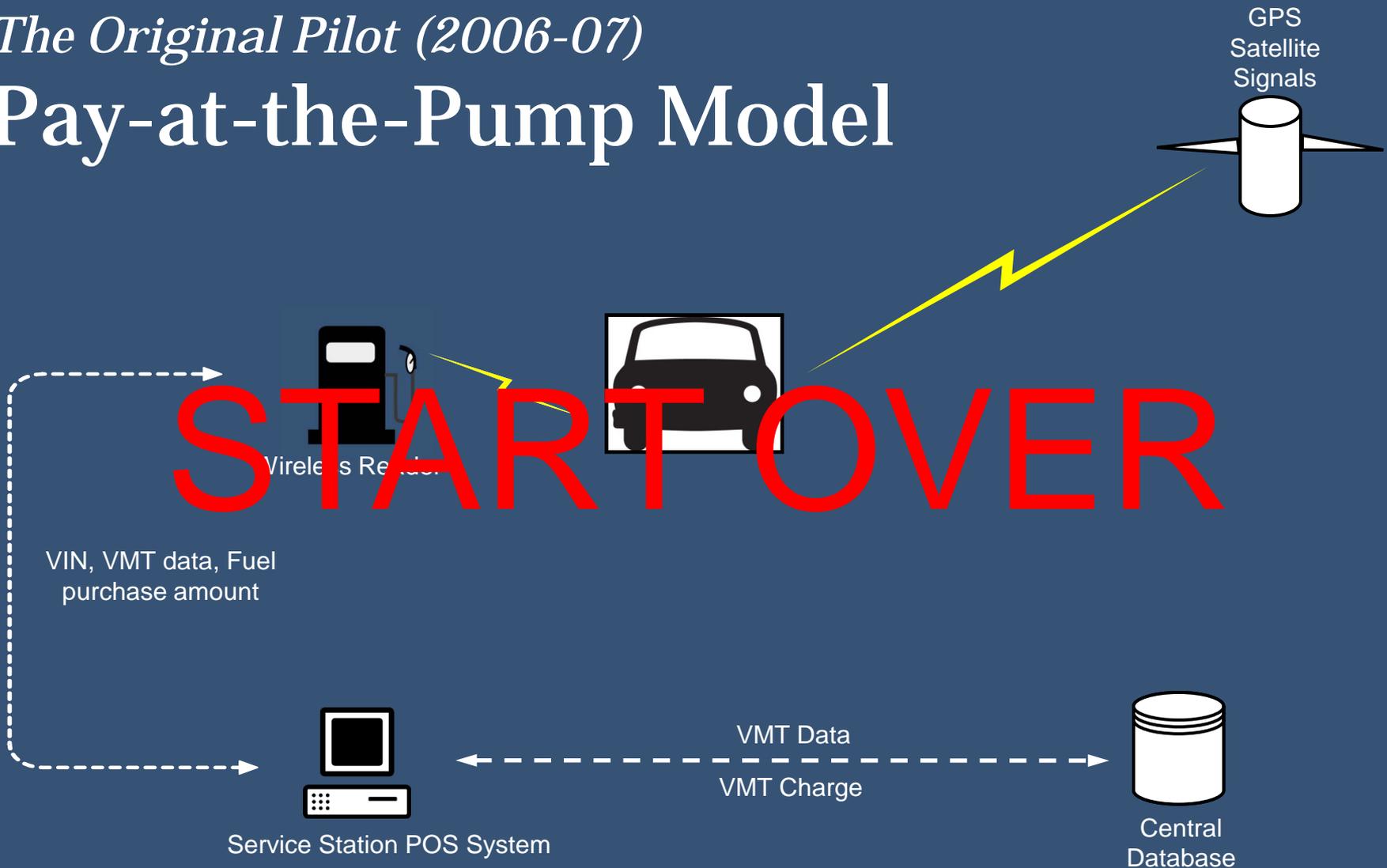
“A *closed system* is an internally integrated system controlled by a single entity with essential components that cannot be substituted by other external components which could perform the same functions”

There is only one way to do it



The Original Pilot (2006-07)

Pay-at-the-Pump Model





Observations Concerning Mobile Technologies Circa 2007-2010

- Citizens around globe apprehensive about government mandates for GPS in vehicles
- *Internet of Things* economy begins to thrive
 - Internet access in smart phone includes GPS
 - Smart devices in passenger vehicles
 - Mobile phone/computer technologies swiftly evolving with consumer demand





The Basics

Categories of Mileage Reporting

1. Basic: Report all miles driven
 - Manual reporting
 - Electronic mileage reporting with no GPS
2. Advanced: Report miles by location
 - Electronic mileage reporting with GPS
3. Switchable: Changeable reporting of miles
 - Switching between basic and advanced by preference
4. Simplified: Assume maximum annual mileage
 - No reporting of actual miles traveled



The Basics

Options for electronic mileage reporting

1. Activate metering device within vehicle
2. Install metering device into vehicle



In-vehicle Telematics or Infotainment System



PAYD Insurance Dongle



Navigation Unit



The Basics

Payment of Road Usage Charge

Invoice

- Receive by mail or email or automatic account access

Options for payment

- Cash
- Check
- Credit
- Debit
- Electronic Funds Transfer

From: Sanef S.A. 30, Boulevard Gallieni 92 130 Issy les Moulineaux France		On behalf of: Oregon Department of Transportation 3700 SE 92 nd Ave Portland Oregon 97216		 Invoice No: SI1012-1234 Invoice Month: October 2012 Issue Date: Nov 5 2012
To: A Customer 123 Main Street Portland Oregon 97201				
Item Description	Amount	Rate (\$)	Subtotal	
VRM: YG59RZW Vehicle: BMW Mini Clubman D VIN No: MWWWNS2080TW95921 OBU No. 050701104400022 Plan: BASIC				
Mileage Tax	1123 miles	\$0.0156	17.52	
Fuel Tax Refund	15.51 gals	\$0.30	-4.65	
			Subtotal for Mini Clubman YG59RZW	
			12.87	
VRM: SL58RZJ Vehicle: Volvo V70 SE LUX D5 VIN No: YV1BW714191088570 OBU No. 0507011218500921 Plan: ADVANCED / SMARTPHONE				
Mileage Tax Total Mileage 1485 miles				
		845 miles	\$0.0156	13.18
		28.17 gals	\$0.30	-8.45
				Subtotal for Volvo V70 SL58RZJ
				4.73
TOTAL Mileage Tax Due				
Total Mileage Tax Due / You are owed a credit of				\$17.60
Payment Date				Dec 05 12
To pay your Mileage Tax, please visit https://odot.sanefolling.co.uk and follow the on-screen instructions.				



Operational objectives for new version of per-mile charge system

1. Choices for mileage reporting with no government mandated technologies
2. Access to open market for mileage reporting technologies
3. Private sector administration option as alternative to DOT administration



Reconstituted 2010

Road User Fee Task Force

Purpose

Consider revenue options for the emerging fleet of electric and plug-in hybrid electric vehicles that will pay no or only a small amount of fuel tax



Policy Directives for Second Pilot

Statutory Directives

- Reliability
- Ease of motorist use
- Potential for evading accurate reporting
- Low cost implementation & administration
- Public acceptance

RUFTF Directives (2011)

- No GPS mandate
- Motorist choice
- Open system
- Public private partnerships
- Protect motorist personal information
- Provide fuel tax credit





Oregon's Platform for Per-mile Charge

- Machine to machine communications via standard mileage message
- DOT certifies private sector entities under an open system for:
 - 1) Mileage reporting technologies
 - 2) Tax processing
 - 3) Account management
- Scalable, flexible and geographically unlimited



Mileage message decoded

Vehicle identification number

Reporting device identification number

Timestamp for installations and removals
of mileage reporting device

Total mileage during reporting period

Fuel consumption during reporting period

For advanced plans, mileage by zone





The Basics

Key policy issues for per-mile charge system

Second Pilot

- Augment or replace fuel tax
- Manual data collection or electronic data collection
- One method of reporting or multiple choices for reporting
- Basic mileage reporting or location based mileage reporting
- Government selected technology (closed system) or market selected technology (open system)
- Government operations or private sector operations
- One method for billing or multiple methods



What is an open system?

“An integrated system based on common standards and an operating system accessible to the marketplace whereby components performing the same function can be readily substituted or provided by multiple providers”

There are multiple ways to do it



Oregon's Second Pilot

Road Usage Charge Pilot Program

- November 1, 2012 to February 28, 2013
- 44 volunteer participants from Oregon
 - 8 state legislators
 - Others with policy interest
- Paid road usage charge, received fuel tax credit
- Private sector firms provide
 - Mileage reporting technologies
 - Tax processing and account management
- Washington DOT and Nevada DOT managed 44 additional participants



Option 1: The Basic Plan (without GPS)



MRD provided by IMS



On Line Payment
Credit Card Payments
Debit Card Payments

Option 2: The Smartphone Plan



MRD and App provided by Raytheon

Option 3: The Advanced Plan (with GPS)



MRD provided by IMS



Mail
Pay by Check

Option 4: The Basic Plan (without GPS)



MRD provided by IMS

Option 5: Flat Rate Plan

		1025
		DATE <u>November 2012</u>
PAY TO THE ORDER OF	<u>Oregon Department of Transportation</u>	\$ 135.00
<u>One Hundred Thirty Five Dollars and 00/100</u>		DOLLARS  <small>Security Features Prevents Checks or Bank</small>
MEMO	<u>Joe Motorist</u>	
⑆000000000⑆ ⑆000000000⑆		⑆1025

No MRD



Participant sign up - choose a plan

Choosing your plan

To activate your account, you must choose a charging plan. Your charging plan will include a road usage charge service provider – either ODOT or a private provider, Sanef – and a method to report the miles you drive (click on the plan title in the table below).

Need help? Call toll-free 855-797-1265 or RUCPP@odot.state.or.us

Plan Options

	Miles Reported	Invoice	Payment	Online account management	Uses GPS?
ODOT Basic Plan	All	Mailed Monthly	Check	No	No, does not report where miles are driven
ODOT Flat Rate Plan	N/A	Once, at start	Check	No	No device
Sanef Basic Plan	All	Emailed Monthly	credit/debit card	Yes	No, does not report where miles are driven
Sanef Advanced Plan	Public roads in Oregon only	Emailed Monthly	Credit/debit card	Yes	Yes
Sanef Smartphone Plan	With application running, only roads in Oregon; without application running, all roads	Emailed Monthly	Credit/debit card	Yes	Yes, when the application is running

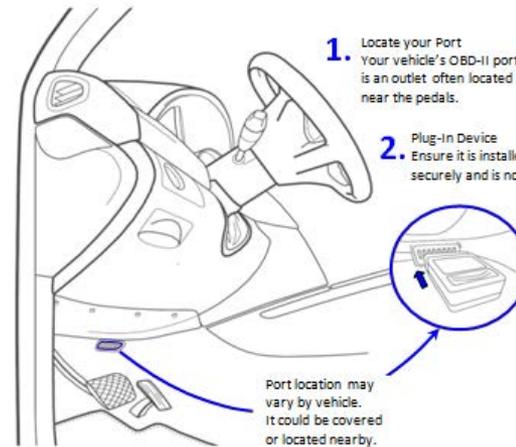


Participant onboarding

MRDs mailed to participants
with installation instructions



HOW TO INSTALL THE MILEAGE REPORTING DEVICE



Once installed, it is important you wait 1-2 minutes before starting your vehicle to allow the Device to configure.

Your mileage data will be automatically recorded and sent for processing.

It is important to ensure that the Mileage Reporting Device does not interfere with your ability to safely enter, exit, or operate the vehicle. If so, contact the Help Desk.

If your OBU becomes disconnected for any reason, simply repeat these steps.

DOC-000032-800

Help desk contact
information provided



Invoicing

Invoice by mail or email

Summarized totals

- chargeable miles
- fuel tax credits
- balance due

Payments via check or credit/debit

<u>From :</u> Sanef S.A. 8130 SW Beaverton-Hillsdale Hwy Portland, Oregon 97225	<u>On behalf of :</u> Road Usage Charge Pilot Program 355 Capitol St. NE MS 32 Salem, Oregon 97301-3871		
<u>To :</u> Chuck Larsen 2262 37th place NW Salem, Oregon 97304	<div style="border: 1px solid gray; padding: 5px;"> <p>Invoice No: S11210-19</p> <p>Invoice Month: September 2012</p> <p>Issue Date: Oct 25 2012</p> </div>		
<u>ROAD USAGE CHARGE PILOT PROGRAM</u>			
<u>CUSTOMER INVOICE</u>			
Item Description	Amount	Rate (\$)	Subtotal
Vehicle: Ford Mustang			
License Plate Number: 687 CGT			
PLAN: ADVANCED			
Mileage Tax			
Total Mileage	176.30 miles		
Oregon Taxable Miles	176.30 miles	\$0.0156	2.75
Fuel Tax Refund	7.65 gals	\$0.3000	-2.30
		Subtotal	0.45
TOTAL Mileage Tax Due			
	Total Mileage Tax Due		\$0.45
	Payment Due Date		Nov 25 12
	Your account balance		\$0.45



Pilot Participant Experiences

“It was extremely easy to get started; directions were clear and help was available if needed.”

– Terry Beyer, State Representative

“Selecting a plan and signing up was fairly easy. I read information about the plans, selected the one I was most comfortable with, and completed the process in less than 20 minutes.”

– Martin Callery, North Bend resident

“Making a change from something we’re used to is always a bit nerve wracking, but paying the bill for our Road Usage Charge was pretty easy.”

– Tobias Read, State Representative



Critical Issues



Privacy solutions

- Choices of Reporting Method and Provider
 - Basic reporting from odometer
 - Advanced reporting using vehicle location technology
 - Manual reporting option for mileage driven off Oregon public roads
- Selection of Mileage Reporting Device from marketplace
- Legal requirements for protection of Personally Identifiable Information



SB 810, Section 9

Protection of personally identifiable information

Constraints on use of PII

- Limits who has access to PII

- Imposes obligation to protect PII

- Exception – Express approval for entity to receive PII

Data destruction within 30 days after later of

- Payment processing

- Dispute resolution

- Noncompliance investigation

Exceptions to data destruction requirement

- Consent by vehicle owner/lessee

- Monthly summaries of metered use

- Aggregation of mileage data after PII removed



Rate structure issues for mandatory road usage charge

- Fairness versus Simplicity
- Totally or Partially Replacing Fuel Tax
- Low Entry Rate or Average Rate
- Single Rate or Multiple Rates
- Complete Policy or Multiple Steps



Additional Thoughts, Recommendations and Lessons Learned



Oregon Road Usage Charge Summit

- November 13-15, 2013
 - Seminar for 15 state DOTs from across USA
 - Workshop for 30+ vendors
 - One-on-one meetings with vendors



What's Next in Oregon

- Implementing SB 810 by July 1, 2015
 - Establish reporting methods and administrative practices
 - Establish business rules, standards and certification processes for vendors
 - Two procurements for RUC collection services
 - #1: RFQ for Commercial market opportunity
 - #2: RFP for Government system
 - Marketing to volunteers
 - Develop geographically relevant messages supporting RUC policy



Western Road Usage Charge Consortium



- Research multi-jurisdictional issues
- Research issues of common interest
- Multiple state pilots
- Potential for regional system



“... the unfamiliar, the vaguely perceived, the mysterious, the hidden, the unexpected are all apt to be threatening.

One way of rendering them familiar, predictable, manageable, controllable, i.e., unafrightening, and harmless, is to know them and to understand them.”

Abraham Maslow



Recommendations to Other States

- Adopt legislation to
 - Create a transportation funding policy entity
 - Operate pilot programs to demonstrate RUC policies
 - Allow for rebate/offset of fuel tax for those paying RUC
- Access Oregon Platform for Pilot Programs
 - Use Oregon's standard mileage message
 - Access vendors hired by Oregon DOT
 - Access back end capabilities of Oregon consulting team
 - Advantages:
 - 1) Save time
 - 2) Save money
 - 3) Design program elements desirable and acceptable in your state



Building Political Support

- Legislative involvement in RUC policy and pilot program development
- Appearance before legislative committees
- Governor, DOT and Commission leadership
- Extensive interaction with key interest groups
- Pilot participation of persons with policy interest in road usage charging



Communications

Three Steps to Public Acceptance

1. Determine public attitudes and expectations
2. Design mileage charging system for public needs
3. Implement education and communications program





Following Slides Reserved for Q&A



Fuel Tax Revenues and Lost Revenues

