WASHINGTON STATE ROAD USAGE CHARGE

Pilot Project Update

Presentation to Washington State Transportation Commission
October 17, 2017
Olympia, Washington
STSFA ROUND 2 GRANTS

• Washington’s Round 2 award
• Other states’ Round 2 awards

Jeff Doyle,
Project Manager
D’Artagnan Consulting
FHWA administers STSFA grant program

- $95 M over 5 years (2016-2020)
- Round 1 (October 2016): total of $15 M awarded to seven states
- Round 2 (October 2017): total of $15.5 M awarded to six states

Round 1 WA RUC Pilot Project award

- Fully funded Stage 1 (Final Design & Set-up, $3.874 M)
- Did NOT fund Stage 2 (12-month live pilot) and Stage 3 (evaluation and reporting)
WASHINGTON’S ROUND 2 STSFA AWARD

WSTC’s request for $4.6 M was granted
  • All stages of the Pilot Project are now fully funded

WA RUC project scope was enhanced:
  • Added the Mileage Permit option to test in the pilot
  • Privacy Impact Assessment will be conducted; intent is to develop a model for future RUC systems
  • Proof-of-concept to test a multi-jurisdictional clearinghouse (“Hub”) that can securely and efficiently collect and distribute RUC revenue between states
  • Expand the pilot to include drivers from Idaho – a non-RUC state
  • Research and analysis on all 18 identified (but unresolved) RUC policy issues
Six other grants were made (Colorado was the only new applicant):

- **Caltrans** ($1.75 M): will explore ways to collect revenue at retail gas and EV charging stations
- **Colorado DOT** ($500k): will explore data collection mechanisms
- **I-95 Corridor Coalition** ($975k): Delaware will lead research into equity and privacy issues along the I-95 corridor
- **Missouri DOT** ($2.77 M): will conduct outreach on concerns related to equity and data security issues
- **Oregon DOT** ($2.32 M): will examine ways to improve their existing RUC program
- **RUC West Consortium** ($2.6 M): Oregon DOT will lead a pilot between Oregon and California, with the intent of expanding their approach regionally (western US)
PUBLIC ATTITUDE ASSESSMENT

Baseline Statewide Survey
• Assess perceptions of transportation funding, views of the gas tax and familiarity with road usage charges

Statewide Focus groups
• Discussion of transportation priorities and road usage charging

Michelle Neiss, PhD.
Su Embree
DHM Research
METHODOLOGY
PHONE SURVEY METHODOLOGY

- 602 Washington residents. Telephone survey; cell and landlines called
- June 1 – June 7, 2017
- Quotas and weighting by age, gender, education, and area of state ensure participants are representative of state population
- ±4.0% Margin of error
PHONE SURVEY DEMOGRAPHICS

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>50%</td>
</tr>
<tr>
<td>Female</td>
<td>50%</td>
</tr>
<tr>
<td>18-24</td>
<td>15%</td>
</tr>
<tr>
<td>25-34</td>
<td>15%</td>
</tr>
<tr>
<td>35-54</td>
<td>24%</td>
</tr>
<tr>
<td>55-64</td>
<td>28%</td>
</tr>
<tr>
<td>65+</td>
<td>18%</td>
</tr>
<tr>
<td>High school or less</td>
<td>34%</td>
</tr>
<tr>
<td>Some college</td>
<td>36%</td>
</tr>
<tr>
<td>College grad</td>
<td>30%</td>
</tr>
</tbody>
</table>
FOCUS GROUP METHODOLOGY

• Five focus groups conducted in July 2017; N=45
  • Tri-Cities, Spokane, Bellingham, Seattle, Vancouver
• 2-hour sessions
• Mix of written exercises and group discussions
FOCUS GROUP DEMOGRAPHICS

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18</td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
</tr>
<tr>
<td>18-34</td>
<td>11</td>
</tr>
<tr>
<td>35-54</td>
<td>18</td>
</tr>
<tr>
<td>55+</td>
<td>15</td>
</tr>
<tr>
<td>&lt;$50k</td>
<td>21</td>
</tr>
<tr>
<td>$50-$100k</td>
<td>19</td>
</tr>
<tr>
<td>$100k+</td>
<td>5</td>
</tr>
</tbody>
</table>
TRANSPORTATION ATTITUDES
EDUCATION AND TRANSPORTATION ARE TOP PRIORITIES FOR WASHINGTON RESIDENTS

17% Transportation
16% Education

- 9% Reduce taxes
- 5% Healthcare
- 5% Homelessness
- 5% Political issues/corruption

Telephone survey
TRANSPORTATION IS A TOP ISSUE ACROSS COMMUNITIES

<table>
<thead>
<tr>
<th>Urban</th>
<th>Suburban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>22%</strong> Transportation</td>
<td><strong>21%</strong> Education</td>
<td><strong>18%</strong> Education</td>
</tr>
<tr>
<td>14% Homelessness</td>
<td>15% Transportation</td>
<td>15% Transportation</td>
</tr>
<tr>
<td>10% Reduce taxes</td>
<td>11% Reduce taxes</td>
<td>8% Reduce taxes</td>
</tr>
</tbody>
</table>

Telephone survey
MAINTAINING WASHINGTON'S EXISTING ROADS IS THE HIGHEST PRIORITY

Top Transportation Priority

- Maintain/preserve existing roads, highways, and bridges: 50%
- Invest in public transportation: 22%
- Build new road, highways, and bridges: 15%
- Promote alternative fuel vehicles: 6%
- Promote active modes of transportation: 5%

Telephone survey
ROAD MAINTENANCE IS TOP PRIORITY IN FOCUS GROUP DISCUSSIONS

Road maintenance
• Potholes, poor quality roads, snow removal and repairing winter damage.

Bridge repair and safety
• Several references to Skagit River bridge collapse.

Congestion
• “Especially in the Puget Sound region and along the I-5 corridor.”
• “New housing developments without adequate transportation planning and capacity.”

Public transportation
• Intra-city connection in urban areas, and inter-city connections in rural areas
TRANSPORTATION FUNDING
FOCUS GROUP DISCUSSIONS REVEAL LOW AWARENESS OF HOW TRANSPORTATION IS FUNDED IN WASHINGTON

There is low awareness of how Washington transportation is funded.

- Only about one-half of focus group participants listed the gas tax as a funding source.
- Many were only able to name “taxes” generally, but not a specific mechanism or level of government responsible.

Few know the Washington gas tax rate, or the proportion of funding that comes from the gas tax.

Few know how much they pay in gas taxes annually.

Most believe transportation funds are increasing.
PROMPTED, FOUR IN TEN ARE AWARE OF THE CURRENT GAS TAX AMOUNT; HALF SAY IT IS TOO MUCH

How does the 49 cent gas tax compare to how much you thought you were paying?

<table>
<thead>
<tr>
<th>Opinion about amount of tax</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too much</td>
<td>52%</td>
</tr>
<tr>
<td>About the right amount</td>
<td>35%</td>
</tr>
<tr>
<td>Too little</td>
<td>8%</td>
</tr>
<tr>
<td>Don't know</td>
<td>6%</td>
</tr>
</tbody>
</table>

Telephone survey
ROAD USAGE CHARGING (RUC)
HALF ARE FAMILIAR WITH THE CONCEPT OF A ROAD USAGE CHARGE (RUC)

Very/Somewhat Familiar with RUC

53%

Telephone survey
FOUR IN TEN WASHINGTONIANS BELIEVE A ROAD USAGE CHARGE IS LESS FAIR THAN THE GAS TAX

How does the fairness of a RUC compare to the gas tax?

- More fair: 23%
- About the same: 21%
- Less fair: 41%
- Don’t know: 16%

Telephone survey
RESIDENTS ARE CONCERNED ABOUT PEOPLE PAYING THEIR FAIR SHARE AND ONLY PAYING ONE TAX

<table>
<thead>
<tr>
<th>Most Important Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyone pays their fair share for road use</td>
<td>28%</td>
</tr>
<tr>
<td>Ensure that I not pay both a per-mile charge and a gas tax</td>
<td>26%</td>
</tr>
<tr>
<td>Protect my personal information</td>
<td>20%</td>
</tr>
<tr>
<td>Visitors from out of state pay their fair share</td>
<td>8%</td>
</tr>
<tr>
<td>Having a choice in how I report and pay</td>
<td>7%</td>
</tr>
<tr>
<td>Don't know</td>
<td>11%</td>
</tr>
</tbody>
</table>

Telephone survey
INITIAL REACTIONS TO ROAD USAGE CHARGING IN FOCUS GROUPS

Most frequent questions about RUC

• What is the cost per mile and how does it compare to the gas tax?
• Will it replace or be an addition to the gas tax?
• How will miles be tracked and reported?
• How will state protect against fraud?
• Will all vehicles and all types of trips be charged the same?

Other questions

• When and how frequent is the payment schedule?
• What happens when drivers do not pay their bill?
• What is the cost of administering the system?
• Will the per mile charge be consistent for all vehicles and trip types?
• Are out-of-state miles charged?
• Are out-of-state drivers charged for using Washington roads?
A majority oppose implementing a road usage charge in Washington to fund transportation.

Support: Somewhat 32%, Strongly 21%
Oppose: Strongly 40%, Somewhat 18%
Don't know 10%

Telephone survey
COMMUNICATIONS ABOUT RUC
## RESIDENTS FIND OPPOSING ARGUMENTS TO BE GOOD ONES

### Reasons to Oppose

<table>
<thead>
<tr>
<th>Reason</th>
<th>Very good</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>It will not properly identify those who should be paying a road usage charge</td>
<td>39%</td>
<td>22%</td>
</tr>
<tr>
<td>It’s really just another way for the government to tax people more</td>
<td>32%</td>
<td>29%</td>
</tr>
<tr>
<td>It will collect some personal information, like how many miles you drive</td>
<td>31%</td>
<td>28%</td>
</tr>
<tr>
<td>It will be too much of a hassle for drivers to report mileage data and pay</td>
<td>29%</td>
<td>37%</td>
</tr>
<tr>
<td>People who drive more miles pay more than people who drive fewer miles</td>
<td>24%</td>
<td>32%</td>
</tr>
<tr>
<td>It is unfair to people who buy fuel efficient vehicles</td>
<td>23%</td>
<td>27%</td>
</tr>
</tbody>
</table>

*Telephone survey*
REASONS TO SUPPORT A ROAD USAGE CHARGE ARE GENERALLY LESS CONVINCING

<table>
<thead>
<tr>
<th>Reasons to Support</th>
<th>Very good</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>The gas tax is unfair to people who can't afford newer vehicles</td>
<td>31%</td>
<td>29%</td>
</tr>
<tr>
<td>Because it is based on road use, not fuel use, it is a more stable funding model</td>
<td>21%</td>
<td>36%</td>
</tr>
<tr>
<td>Each driver pays their fair share based on how much they use the roads</td>
<td>19%</td>
<td>34%</td>
</tr>
<tr>
<td>Electric and hybrid vehicles pay very little to maintain the roads</td>
<td>15%</td>
<td>27%</td>
</tr>
</tbody>
</table>
REACTIONS TO PILOT PROJECT
INITIAL REACTIONS TO PILOT PROJECT

- Focus group participants were broadly positive about the pilot project and interested in volunteering.

- Participants generally estimated that it would take about one hour per month of their time.

- Participants expected to be able to choose their reporting method.
TRUSTED MESSENGERS ABOUT PILOT

Agencies and officials who provide legitimacy to the pilot
- Washington Department of Transportation, Department of Licensing
- Local elected officials (e.g., state representative)

“Bipartisan” coalitions
- Democrats and Republicans
- Environmental groups and business groups
- Western interest groups and eastern interest groups

University researchers
- If from both sides of the state
KEY TAKEAWAYS

Transportation issues are on the minds of Washington residents
  • Residents identify transportation as a top priority for government to address
  • Maintenance of existing roads and bridges is a top priority

This issue will require an ongoing educational campaign
  • Residents are not familiar with how transportation is funded
  • About half of residents are familiar with the concept of road usage charging

Fairness may be a challenge in communications
  • Address fairness in a simple way
  • Fairness resonates with Washingtonians – but adding technical details and too many details complicates communications
NEXT STEPS

• Continue providing information about the pilot, with the understanding that it will be a long-term effort.

• Showing residents that their feedback is important to guide decisions will build goodwill.

• Start transportation conversations by addressing the public’s values, such as access to the outdoors, time with family, or access to work opportunities.
COMMUNICATIONS & RECRUITMENT UPDATE

- Project Communications
- Volunteer Recruitment

Ara Swanson, Communications Lead
EnvirolIssues
COMMUNICATIONS GOALS REMAIN

1. Inform and educate the public.
2. Recruit participants into the pilot project from across the state.
3. Generate broad understanding for the pilot project.
4. Cultivate balanced and accurate media coverage.
5. Assess public opinion before and throughout the course of the pilot.
COMMUNICATIONS AND RECRUITMENT ACTIVITIES

July 2017
- Communications and Recruitment Plans Finalized

August 2017
- E-newsletter
- Website update

September 2017
- E-newsletter
- Website update
- Earned media

October 2017
- Leverage partner communications networks
- Demographic Survey
## E-NEWSLETTERS

<table>
<thead>
<tr>
<th></th>
<th>Total Number of Recipients</th>
<th>Open Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2017</td>
<td>894</td>
<td>74%</td>
</tr>
<tr>
<td>August 2017</td>
<td>1,101</td>
<td>55%</td>
</tr>
<tr>
<td>September 2017</td>
<td>2,375</td>
<td>59%</td>
</tr>
</tbody>
</table>

We're putting the keys in the ignition and beginning to recruit pilot project drivers for the [Washington State Road Usage Charge Pilot Project](#). Interested in how you can have a hand in helping shape future state policy? Read on:

- [Join our interest list](#) to participate
- [Spread the word!](#)

State route 20, the North Cascades Highway.
WEBSITE UPDATES

• Aim to gradually add information and details about the pilot and to support recruitment

• September updates include a new sign-up page, updated FAQ and recruitment video
WEBSITE SIGN-UP PAGE: KEY FEATURES

HERE’S HOW IT WORKS

STEP 1: Let us know you’re interested in being a participant in the pilot by signing up here.

STEP 2: Complete the short interest survey, which will be emailed to you after you sign up for the interest list.

STEP 3: We will invite at least 2,000 drivers of a variety of vehicles to participate in the pilot from across Washington.

STEP 4: In January 2018, invited participants will select a mileage recording method.

STEP 5: Start recording your miles.

STEP 6: During the pilot, review mock invoices and complete quarterly surveys. We will recognize your efforts with periodic gift cards.

FROM NO-TECH TO HIGH-TECH WE’VE GOT YOU COVERED

Everyone is different, that’s why we’re offering four ways to record and report your miles. Choose the mileage reporting method that works best for you and your lifestyle!

- **MILEAGE PERMIT**
  - Mileage permit
  - Mileage permit

- **ODOMETER READING**
  - Odometer reading
  - Odometer reading

- **PLUG AND PLAY**
  - Plug and play
  - Plug and play

- **SMARTPHONE APP**
  - Smartphone app
  - Smartphone app

Pro-rate a stack of miles you anticipate using in three-month increments. Miles reported quarterly, either electronically or in person.

Submit a photo of your estimate mileage using your smartphone in a person at your RUC office.

Submit a photo of your estimated mileage using your mobile phone or in person at your RUC office.

Submit a photo of your estimated mileage using your mobile phone or in person at your RUC office.

Record your miles using your smartphone.

Pre-select a stack of miles you anticipate using in three-month increments.

Submit a photo of your estimated mileage using your mobile phone or in person at your RUC office.

Submit a photo of your estimated mileage using your mobile phone or in person at your RUC office.

Record your miles using your smartphone.

Average of 15 miles of your time a month:
- Quarterly, electronic submission
- Quarterly, complete feedback survey
- Quarterly, report updated estimate
- Quarterly, complete feedback survey

Average of 15 miles of your time a month:
- Quarterly, electronic submission
- Quarterly, complete feedback survey
- Quarterly, report updated estimate
- Quarterly, complete feedback survey

Average of 15 miles of your time a month:
- Quarterly, electronic submission
- Quarterly, complete feedback survey
- Quarterly, report updated estimate
- Quarterly, complete feedback survey

* Time estimates are based on electronic submission of miles. In paper reporting would require additional time.

Frequently travel out-of-state?
No problem! Some of the mileage reporting methods will automatically deduct miles you travel outside of Washington. Stay tuned for more details later this year.
EARNED MEDIA

• **Mid-August:** Reached out to key reporters and publications at traditional newspapers through Washington state

• **Results:** From August through early October, **40 media stories were published** (print, online radio, TV)
STATEWIDE SOCIAL MEDIA ADVERTISEMENTS

The gas tax pays for road, bridge and ferry repairs. But what if we paid by the mile, instead of by the gallons of gas we buy? Help us test a road usage charge – sign up today!

Join the Pilot Project
Test drive the road ahead.
WWW.WAROADUSAGECHARGE.ORG

Like Comment Share
31 11 Shares

Washington State Transportation Commission

October 2 at 4:38pm · 0

The gas tax pays for road and bridge repairs. But what if we paid by the mile, instead of by the gallons of gas we buy? Help us test a road usage charge – sign up today!

Join the Pilot Project
Test drive the road ahead.
WWW.WAROADUSAGECHARGE.ORG

Like Comment Share
3
LEVERAGING PARTNER COMMUNICATIONS NETWORKS

• Reaching out to targeted, statewide organizations to help share information about the WA RUC Pilot Project and drive interest list sign-ups

• Provide content to be shared, including newsletter text, social media content, website content, sample blog posts and more.
INTEREST LIST GROWTH – KEY DRIVER FOR PARTICIPANT POOL

- E-newsletter sent
- Website updated
- Targeted media engagement
- Demographic survey

### INTEREST LIST GROWTH

#### Key Driver for Participant Pool

- **E-newsletter sent**
- **Website updated**
- **Targeted media engagement**
- **Demographic survey**

#### Data

- **New Sign-ups Per Month**
- **Total Number of Subscribers**

### Graph

- **Dec-16**: 500
- **Jan-17**: 1000
- **Feb-17**: 1500
- **Mar-17**: 2000
- **Apr-17**: 2500
- **May-17**: 3000
- **Jun-17**: 1000
- **Jul-17**: 1500
- **Aug-17**: 2000
- **Sep-17**: 2500
- **Oct-17**: 3000

### Notes

- **Total Number of Subscribers**
- **New Sign-ups Per Month**
DEMOGRAPHIC SURVEY REGIONS
## INITIAL DEMOGRAPHIC SURVEY RESULTS

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Electric or Plug-In Hybrid</th>
<th>Hybrid, no plugs</th>
<th>Motorcycle</th>
<th>Gas</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>192</td>
<td>133</td>
<td>14</td>
<td>1,516</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>10%</td>
<td>7%</td>
<td>0.8%</td>
<td>82%</td>
<td>0%</td>
</tr>
</tbody>
</table>
## INITIAL DEMOGRAPHIC SURVEY RESULTS

<table>
<thead>
<tr>
<th>Identified Race or Ethnicity</th>
<th>African-American</th>
<th>American Indian</th>
<th>Asian</th>
<th>Caucasian</th>
<th>Hispanic/Latino</th>
<th>Indian</th>
<th>Native Hawaiian</th>
<th>None/Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>35</td>
<td>66</td>
<td>1,644</td>
<td>54</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>92</td>
</tr>
<tr>
<td>1.3%</td>
<td>1.9%</td>
<td>3.6%</td>
<td>89%</td>
<td>2.9%</td>
<td>0.6%</td>
<td>0.6%</td>
<td>0.6%</td>
<td>4%</td>
</tr>
</tbody>
</table>
## Initial Demographic Survey Results

### Income Distribution

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $30K</td>
<td>85</td>
<td>5%</td>
</tr>
<tr>
<td>$30K – $60K</td>
<td>364</td>
<td>20%</td>
</tr>
<tr>
<td>$60K - $120K</td>
<td>807</td>
<td>44%</td>
</tr>
<tr>
<td>$120K - $200K</td>
<td>387</td>
<td>21%</td>
</tr>
<tr>
<td>More than $200K</td>
<td>128</td>
<td>7%</td>
</tr>
</tbody>
</table>
COMMUNICATIONS AND RECRUITMENT NEXT STEPS

• Continue analyzing results from communications activities and demographic survey to inform future strategies

• Target media in key geographic regions to help recruit additional volunteers

• Broaden advertising campaign to other online sources and specific publications

• Publish Spanish-language web page, fact sheet and launch Spanish-language advertisements
RUC MILEAGE REPORTING UPDATE

- RUC Reporting Options
- System Components
- Vendors
- System Development
- Participant Signup

Matthew Dorfman, Technical Lead
D’Artagnan Consulting
RECAP OF TECHNICAL DESIGN & SETUP
STATUS OF TECHNICAL DESIGN & SETUP

Completed or nearing completion:

- Technical specifications and test plans
- Setup of service providers, reporting systems, accounting systems, etc.
- Design and programming of smartphone application
- Designing the multi-jurisdictional RUC clearinghouse function (Hub)

To be completed by mid-November:

- Help desk and participant support
- Partnerships with DOL agents/subagents to provide in-person odometer verification
- Finalize the evaluation plan
- System testing

Scheduled for later (after January 1):

- Organizational design (potential roles for government, private sector in a future RUC system)
- Testing and launch of financial interoperability testing with OReGO
RUC REPORTING OPTIONS
WA RUC PILOT: FROM THE PARTICIPANT’S PERSPECTIVE

**Goal:** provide enough information for people to make a realistic assessment of their interest in a 12-month research project.

### FROM NO-TECH TO HIGH-TECH WE’VE GOT YOU COVERED

Everyone is different, that’s why we’re offering four ways to record and report your miles. Choose the mileage reporting method that works best for you and your lifestyle!

<table>
<thead>
<tr>
<th>MILEAGE PERMIT</th>
<th>ODOMETER READINGS</th>
<th>PLUG AND PLAY</th>
<th>SMARTPHONE APP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-select a block of miles you anticipate using in three-month increments</td>
<td>Quarterly odometer reading, completed using your smartphone or in person</td>
<td>Automated mileage meter connected to your car’s OBD-II port</td>
<td>Record your miles using your smartphone</td>
</tr>
<tr>
<td>Submit odometer photo using your smartphone or in person at Department of Licensing (DOL) offices</td>
<td>Submit odometer photo using your smartphone or at select DOL offices</td>
<td>Mileage reports automatically submitted</td>
<td>Submit odometer photo using your smartphone</td>
</tr>
</tbody>
</table>
| Average of 10 minutes of your time a month  
  - Monthly: review mock invoice  
  - Quarterly: complete pilot survey  
  - Quarterly: report updated odometer reading  
  - As needed: obtain new permit when miles are used up | Average of 5 minutes of your time a month  
  - Monthly: review mock invoice  
  - Quarterly: complete pilot survey  
  - Quarterly: report updated odometer reading | Average of 10 minutes of your time a month  
  - Monthly: review mock invoice  
  - Monthly: report updated odometer reading  
  - Quarterly: complete pilot survey | Average of 10 minutes of your time a month  
  - Monthly: review mock invoice  
  - Monthly: report updated odometer reading  
  - Quarterly: complete pilot survey |

**Travel out-of-state? No problem!** Some of the mileage reporting methods will deduct miles you travel outside of Washington. Stay tuned for more details later this year.
MILEAGE PERMIT

• Participant pays for 1,000, 5,000, or 10,000 miles in advance
• Odometer reading by participant phone or by subagent
• Odometer image required at signup, every quarter, and every time a new permit is purchased
• Receipt provided with every purchase; Invoice provided every quarter
• All miles charged
ODOMETER CHARGE

• Participant pays for miles traveled at the end of each quarter
• Odometer reading by participant phone or by subagent
• Odometer image required at signup and every quarter
• Invoice provided every quarter
• All miles charged
AUTOMATED DISTANCE CHARGE: MILEAGE REPORTING DEVICE WITH NO LOCATION DATA

- Participant pays for miles traveled at the end of each month
- Odometer reporting by OBDII device
- Invoice provided every month
- All miles charged
- Non-location-based value-added services available
AUTOMATED DISTANCE CHARGE: MILEAGE REPORTING DEVICE WITH LOCATION DATA

- Participant pays for miles traveled at the end of each month
- Odometer reporting by OBDII device
- Invoice provided every month
- Only miles on public roads in WA, ID, BC, OR will be charged
- Many value-added services available
AUTOMATED DISTANCE CHARGE:
SMARTPHONE WITH LOCATION DATA

• Participant pays for miles traveled at the end of each month
• Odometer reporting by smartphone; mileage traveled estimated if no odometer image provided each month
• Invoice provided every month
• All miles in WA, ID, BC, OR charged
SYSTEM COMPONENTS
INTEROPERABILITY PARTNERS

- Oregon
- Surrey, BC
- Idaho
ACCOUNT MANAGERS

• Vendors who provide RUC management services to participants

• Using two vendors simulates the Open Market

• Participants will have the opportunity to switch vendors
RPM (RUC Participant Management)

- Database for participant personal and vehicle data
- Stores participant personal data (name, address, phone) and vehicle data (VIN, license plate)
- Available to Account Managers and to Pilot Customer Service
- Secure PII storage
- Allows for pilot-wide Single Sign On
RUC ACCOUNTING (RUCA)

- Database containing monthly pilot travel reports with PII
  - Simulates State/Provincial RUC oversight agencies for Washington, Idaho, and British Columbia

- Data shared only with state for which participant is registered

- Verify compliance of all participants

- Secure PII storage
RUC ACCOUNTING

- Database containing monthly pilot travel reports with PII
- Verify compliance of all participants
- Data shared only with state for which participant is registered
- Secure PII storage, but no PII
INTEROPERABILITY HUB

• Database containing monthly pilot travel reports without PII
• Supports quarterly monetary reconciliation between states
• Summary level data shared with all participating states
• Secure storage, but no PII
RUC SERVICE & TECHNOLOGY PROVIDERS
A CLOSER LOOK AT RUC ACCOUNT MANAGERS AND SERVICE PROVIDERS

<table>
<thead>
<tr>
<th>WA RUG Services for Pilot Participants</th>
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<tbody>
<tr>
<td>IMS</td>
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<tr>
<td>✓</td>
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</tbody>
</table>

OPERATIONAL CONCEPTS

- Mileage Permit
- Odometer Charge
- Automated Distance Charge (location)
- Automated Distance Charge (no location)
- Smartphone Location Application
EMOVIS

• Experience as Account Manager for OReGo

• Supports Mileage Permit, Odometer Charge, and Mileage Reporting Device with Location Data

• Supports interface to DOL subagents

• Uses a commercially available mileage reporting device from Automatic
Experience as Account Manager for OReGo and in California Road Use Charge Pilot

Supports all operational concepts (no interface to DOL subagents)

Provider of their own Mileage Reporting Device
VEHCON

• App (MVerity) and System developer
• Experience in California RCPP
• Provides RPM, Interoperability Hub, RUCA, MVerity on Demand (process for verifying odometer readings)
SYSTEM DEVELOPMENT
DEVELOPMENT APPROACH

• System defined by requirements and interfaces
• Requirements and Interfaces reviewed by vendors; some comments accepted
• Unit testing – bench testing of individual system components by Account Managers
• Integration testing – testing communication system links and data transfers between system components
• End-to-End testing—testing the whole system at once
SCHEDULE

• Development: August-October (95% complete)
• Unit Testing: August-October (90% complete)
• Integration testing: October (80% complete)
• End-to-End testing: November 6-17
• Address issues/bugs (as needed): November 17 - January 1
• Live Pilot: starts January 2
UPDATE ON PROJECT PARTNERS

• OReGO RUC Program
• City of Surrey, BC
• Drivers from Idaho

Jeff Doyle,
Project Manager
D’Artagnan Consulting
OREGON DOT’S OReGO PROGRAM

- Oregon DOT seeks a formal MOU between their program and the WA RUC pilot
  - MOU reviewed and signed by WSTC; under review by OReGO program staff
- Primary challenge: how to ensure Oregon laws and policies are followed in the transfer of mileage data and tax collections for the WA pilot test
- OReGO leading the effort to establish a western state RUC system
- Oregon legislature enacts law allowing EVs to pay RUC instead of flat annual fee on EVs
Approximately 200 drivers selected by the City of Surrey will be offered one RUC reporting method (automated distance charge) to test.

Special section of WA RUC web site will support ~200 drivers selected by the City of Surrey to participate in the pilot.

“Pitch packet” will be provided to Surrey to inform potential volunteers.

City of Surrey is one of several participants in the greater Vancouver region’s Mobility Pricing Independent Commission initiative.
IDAHO DRIVERS

- Idaho Department of Transportation will recruit about 50 drivers from areas along the ID-WA border to participate in the WA RUC pilot.

- Special web page and packet of information will be provided to support the Idaho drivers.

- Idaho drivers will have all mileage reporting options available to them, except in-person support for odometer readings (no DOL subagents in Idaho to support this).
PILOT PROJECT EVALUATION PLAN

Allegra Calder,
Principal
BERK Consulting

• Introduction
• Guiding Principles & Purpose
• Pilot Evaluation Methods
• Next Steps
GUIDING PRINCIPLES & PURPOSE

Established by RUC Steering Committee
<table>
<thead>
<tr>
<th>Guiding Principle</th>
<th>Evaluation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency</td>
<td>1. Change in participant understanding of gas tax rate, collection method, and use&lt;br&gt;2. Change in participant understanding of RUC rate, collection method, and use</td>
</tr>
<tr>
<td>Complementary policy objectives</td>
<td>3. Impact of pilot on driving habits of participants&lt;br&gt;4. Impact of pilot on stated vehicle purchasing preferences of participants</td>
</tr>
<tr>
<td>Cost-effectiveness</td>
<td>No measures established</td>
</tr>
<tr>
<td>Equity</td>
<td>5. Total and per-mile RUC vs. gas tax paid by urban, suburban, vs. rural status of participant&lt;br&gt;6. Total and per-mile RUC vs. gas tax paid by participant income&lt;br&gt;7. Total and per-mile RUC vs. gas tax paid by in-state vs. out-of-state participants&lt;br&gt;8. Participant expectations and before-and-after perceptions of RUC equity relative to gas taxes</td>
</tr>
<tr>
<td>Privacy</td>
<td>9. Participant perception of privacy protection, including any changes in perception during the pilot&lt;br&gt;10. Relative ability of mileage reporting methods to protect participant privacy</td>
</tr>
<tr>
<td>Data Security</td>
<td>11. Participant perception of data security, including any changes in perception during the pilot&lt;br&gt;12. Relative ability of mileage reporting methods to provide data security</td>
</tr>
<tr>
<td>Simplicity</td>
<td>13. Time and indirect costs expended by participants to comply with pilot tasks&lt;br&gt;14. Participant understanding of compliance requirements</td>
</tr>
<tr>
<td>Accountability</td>
<td>15. Description of assignment of responsibility and oversight for Washington agencies and other entities involved in pilot&lt;br&gt;16. Accuracy of reported road usage, revenue collected, and revenue distributed</td>
</tr>
<tr>
<td>Enforcement</td>
<td>17. Participant perceptions of relative effectiveness of enforcement methods in maintaining compliance&lt;br&gt;18. Reasons for non-compliance expressed by participants (e.g., confusion, negligence, fraud)&lt;br&gt;19. Participant-stated locations of fuel purchases (potentially only for interoperability participants)</td>
</tr>
<tr>
<td>System Flexibility</td>
<td>No measures established</td>
</tr>
<tr>
<td>User Options</td>
<td>20. Participant overall satisfaction and relative satisfaction with choices available in the pilot project&lt;br&gt;21. Reason for participant preferences of various mileage reporting methods</td>
</tr>
<tr>
<td>Interoperability and Cooperation</td>
<td>22. Description of assignment of responsibility and oversight for Washington agencies and other jurisdiction agencies involved in pilot&lt;br&gt;23. Participant understanding of interoperable RUC&lt;br&gt;24. Relative ease of compliance for interoperability test participants vs. others</td>
</tr>
<tr>
<td>Phasing</td>
<td>No measures established</td>
</tr>
</tbody>
</table>
EVALUATION PURPOSE

• A means of addressing outstanding policy, public acceptance, and technical questions and issues in a rigorous manner.

• Pilot operations will generate data, experiences, and opinions, the key will be to extract that information and make it useful.
PILOT EVALUATION METHODS

How will the pilot be evaluated?
EVALUATION METHODS

1. Participant Surveys
   1a. Participant Pop Quizzes

2. Participant Focus Groups

3. Pilot Data Analysis

4. Agency Interviews

5. Participant Case Studies

6. Scofflaw Test

7. Fuel Purchase Log Analysis

8. Policymaker Interviews

9. Steering Committee Facilitated Discussion
1. PARTICIPANT SURVEYS

- **What:** Online surveys about RUC pilot experiences – mandatory as a pilot participant
- **Who:** All pilot participants
- **Purpose:**
  - To learn about participant experiences with account set-up and other pilot components, as well as opinions and perceptions related to policy questions
  - Should allow for cross-tabs by geography and participant demographics
1a. PARTICIPANT POP QUIZZES

- **What:** 1-2 quick online questions – voluntary participation
- **Who:** Pilot participants
- **Purpose:**
  - To get a snapshot of what participants understand about various aspects of RUC policy, and transportation funding more broadly
2. PARTICIPANT FOCUS GROUPS

• **What:** Guided group conversations with participants about their pilot experiences

• **Who:** Select group of pilot participants (same group each time)

• **Purpose:**
  • To learn about participant experiences and perceptions in more detail, and to measure changes in understanding over time
3. PILOT DATA ANALYSIS

- **What**: Anonymized data collection
- **Who**: All pilot participants
- **Purpose**: To analyze RUC participants driving by geography and other factors
4. AGENCY INTERVIEWS

• **What:** Conversations with partner agencies about RUC pilot

• **Who:** DOL; WSTC; WSDOT; ODOT; Surrey, BC

• **Purpose:**
  • To learn about accountability, interoperability, and cooperation issues from the agencies
  • Help evaluate responsibility and oversight questions
5. PARTICIPANT CASE STUDIES

- **What:** One-on-one conversations with participants about their pilot experiences
- **Who:** Select group of pilot participants from different locations and with different vehicles/driving habits
- **Purpose:**
  - To document and communicate individual stories of participant experiences
  - Learn about changes in perception or behavior over time

**TIMING**

Check-ins throughout (exact # TBD)
6. SCOFFLAW TEST

- **What:** Examination of the pilot design from a participant perspective to identify ways to evade RUC

- **Who:** Researchers

- **Purpose:**
  - To learn about compliance and enforcement in a controlled environment without disrupting the pilot
7. FUEL PURCHASE LOG ANALYSIS

- **What:**
  - Fuel purchase analysis based on pilot participant-provided information

- **Who:**
  - Select group of participants who live near Oregon border

- **Purpose:**
  - To study “fuel tax arbitrage” (when residents near a border purchase fuel on one side and mostly drive on the other)
8. POLICYMAKER INTERVIEWS

- **What:**
  - One-on-one conversations about the RUC pilot experience

- **Who:**
  - Commissioners and elected officials at state and local levels who participated in the pilot

- **Purpose:**
  - To gather detailed feedback from policymakers about the pilot
9. STEERING COMMITTEE FACILITATED DISCUSSION

• What:
  • Focused discussions about RUC pilot with Steering Committee members

• Who:
  • Steering Committee members

• Purpose:
  • To gather feedback from members on their perceptions of the pilot experience and discuss policy questions
EVALUATION PLAN NEXT STEPS
EVALUATION PLAN NEXT STEPS

• DRAFT Evaluation Plan to be presented to the Steering Committee at its November 9, 2017 meeting

• Review and discussion

• FINAL Evaluation Plan issued before December 31, 2017

• Some items may be scaled according to available budget

• Evaluation tasks begin in early 2018
PROJECT TIMELINE & UPCOMING ACTIVITIES

• Key milestones and dates
• Other notable activities

Jeff Doyle,
Project Manager
D’Artagnan Consulting
SNAPSHOT OF PROJECT DELIVERY SCHEDULE

2017

Spring/Summer

- Pilot project final development
  - Pilot project setup
  - Baseline public attitude assessment and information gathering
  - Broad awareness-building

Fall

- Participant recruitment
  - Pilot system testing
  - Recruitment of volunteers
  - Outreach to general public continues

Winter

- Participant selection
  - Final participants selected
  - Set up participant accounts

2018

Winter

- Pilot test launch
  - Pilot test launches in early 2018
KEY PROJECT MILESTONES, SEPTEMBER – DECEMBER 2017

- Decision by FHWA on Round 2 STSFA Grant Funding – AWARDED -- (funds live pilot, evaluation and reporting)
- Web site refresh goes live
- Launch participant recruitment activities
  - Provide active assistance to British Columbia and Idaho participants
  - Testing of all devices, account services and customer interface/support
  - Establish partnerships with DOL agents/subagents located near participants that choose in-person odometer validation method
OTHER NOTABLE ACTIVITIES

• Continued coordination with Oregon DOT to establish parameters for financial interoperability test
• Outreach to stakeholders, responding to media requests
• Organizational design concepts for a future RUC system in Stage 2
• Outlining scope of 18+ policy issues for research and analysis in Stage 2
• Steering Committee meeting: November 9, 2017
THANK YOU

Consultant support provided by: