

A stylized graphic of a road with a dashed yellow center line and solid blue edges, curving upwards against a light green background.

WASHINGTON STATE ROAD USAGE CHARGE ASSESSMENT

Pilot Project Implementation Plan Final Report

Prepared for Governor Jay Inslee and
Washington State Legislature

Consulting team:



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The appendices can be found along with an electronic version of this Final Report on the WSTC website: <http://www.wstc.wa.gov>.

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For more information about the Road Usage Charge Assessment, please visit the Transportation Commission’s web site at: www.wstc.wa.gov, or the project web site: <http://waroadusagecharge.org>.

2017 Steering Committee

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Representative Judy Clibborn, Mercer Island (D) 41 st District	Washington State House of Representatives, JTC Seat	Rob Johnson, Seattle City Councilmember	Puget Sound Regional Council
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Representative Linda Kochmar, Federal Way (R) 30 th District	Washington State House of Representatives, House Republican Seat	Neil Strege, Washington Roundtable	Business
Amy Arnis, Chief Financial Officer	WSDOT	Ted Trepanier, INRIX	User fee technology
Curt Augustine, Alliance of Automobile Manufacturers	Auto and light truck manufacturers	Brian Ziegler, Pierce County Public Works	Counties
Rod Brown Jr., Cascadia Law Group PLLC	Environmental		

INTRODUCTION

This report is the culmination of work conducted between July and December 2016 at the direction of the Legislature, which required the Transportation Commission to develop a road usage charge pilot project implementation plan. The specific requirements contained in Section 205 of ESHB 2524 are as follows:

- “(4)(a) \$500,000 of the motor vehicle account—federal appropriation is provided solely to advance the work completed since 2011 in evaluating a road usage charge as an alternative to the motor vehicle fuel tax to fund future investments in transportation by completing the work necessary to launch a road usage charge pilot project, with all implementation details for a pilot project identified and incorporated into a pilot project implementation plan.
- (i) Pilot project implementation preparation must include identification of all essential agency roles and responsibilities for the pilot project, a selection of the technologies and methodologies to be included, a target number of participants and participant characteristics, rigorous specific evaluation criteria by which the pilot project will be assessed, a communication plan for the pilot project that consists of a participant recruitment plan and a plan for communicating information about the launch and ongoing progress of the pilot project, and pilot project expenditure and revenue estimates.
- (ii) In developing the road usage charge pilot project implementation plan, the commission shall consult and coordinate with the department of transportation, the department of licensing, the department of revenue, and the office of the state treasurer to establish participation and coordination parameters for the project.
- (b) The commission shall coordinate with the department of transportation to jointly pursue any federal or other funds that are or might become available to fund a road usage charge pilot project. Where feasible, grant application content prepared by the commission must reflect the direction provided by the road usage charge steering committee on the preferred road usage charge pilot project approach. One or more grant applications may be developed as part of the road usage charge pilot project implementation plan development work, but the pilot project implementation plan must nevertheless include any details necessary for a full launch of the pilot project not required to be included in any grant application.
- (c) The commission shall reconvene the road usage charge steering committee, with the same membership authorized in chapter 222, Laws of 2014, as well as the addition of a representative from the Puget Sound regional council, and may obtain guidance from the steering committee when it reaches key pilot project implementation plan development milestones. The commission must provide a report on the road usage charge pilot project implementation plan that includes all implementation details for a road usage charge pilot project to the governor's office and the transportation committees of the house of representatives and the senate by November 1, 2016.”

Following the Executive Summary, the main body of this Implementation Plan report contains the following sections:

Section 1 Project Background summarizes the work conducted from 2012 through mid-2016. This section also contains a high-level summary of the federally funded Washington State Road Usage Charge Pilot Project that is scheduled to begin in fall 2017.

Section 2 Pilot Project Goals, Objectives and Evaluation Measures details WSTC's principles for evaluation of the RUC pilot project; the process that will be used to develop and implement evaluation measures; and the final evaluation measures as adopted.

Section 3 Mileage Reporting Options in the Pilot Project describes the operational concepts that will be tested in the pilot project, including how mileage will be recorded and reported, and how the road usage charge will be calculated.

Section 4 Agency Roles and Interests in the Pilot Project identifies the primary functions that must be carried out in the pilot project and which state agencies and/or private firms are best positioned to carry out these functions.

Section 5 Identifying and Recruiting Volunteers provides background information on the demographics of Washington residents (age 18 and older) and outlines the ideal number and geographic distribution of participants in Washington's 2,000 vehicle pilot project. It also includes a recruiting strategy to enlist voluntary participants in the pilot project.

Section 6 Communicating with the Public and Key Stakeholders about the Pilot summarizes the communications plan to support the launch of the pilot project. It provides overall guidance on the goals, principles, audiences, and platforms for communications efforts in the pre-launch period (October 2016 through Fall 2017).

Section 7 Proposed Pilot Project Schedule summarizes the main work streams, primary tasks and anticipated schedule for Stage 1 Pilot Preparation and Setup leading up to Stage 2, the launch of the 12-month Live Pilot Test to begin in fall 2017.

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Washington's RUC assessment work since 2012 results in federal funding for a statewide live pilot test

For the past five years, the Washington State Transportation Commission (WSTC) and a specially-appointed Steering Committee have investigated a per-mile charge, or road usage charge (RUC), as a potential replacement for the state gas tax. Leading Washington's efforts to research and evaluate RUC, WSTC and the Steering Committee found the concept feasible as a potential state policy. Accordingly, they adopted principles and a policy framework to guide development of a RUC system. They then developed operational concepts to show how mileage could be recorded, reported, and paid by drivers. WSTC and the Steering Committee also conducted a financial analysis of RUC as a stable revenue source. To take the next steps, they developed a comprehensive list of fiscal and policy issues to be addressed before RUC could be implemented as a gas tax replacement.

During the last two years, WSTC and the Steering Committee focused on preparing for a statewide public demonstration (or pilot) project. In mid-2016 the US Department of Transportation announced the award of \$3.847 million in federal funds for a 2,000-vehicle statewide, live pilot test of a RUC system in Washington, thus ensuring adequate funding for pilot preparations and set up. WSTC expects to apply in the first quarter of 2017 for the remaining funding necessary to launch and conduct the pilot test.

Main features of the live pilot test

- ▶ Yearlong, statewide live pilot test with 2,000 volunteers from geographically diverse areas of the state to begin in late 2017. Participants will choose from among various mileage reporting options, ranging from no-tech to high-tech methods.
- ▶ The project will test how RUC might be collected for travel between Washington and Oregon, and test international interoperability of a RUC system with help from British Columbia. Drivers of plug-in electric vehicles will test how RUC compares to the current flat registration fee.
- ▶ A RUC "innovation challenge" will be held to develop a smartphone application ("app") as a possible mileage reporting method.

2016 implementation plan readies Washington State for 2017 pilot

Utilizing \$500,000 in federal funds and pursuant to legislative direction, from July through December 2016 the WSTC developed a RUC pilot project implementation plan that:

- ▶ Identifies essential agency roles to be performed in the pilot (see Section 4: Agency Roles and Interests in the Pilot Project).
- ▶ Finalizes the mileage reporting approaches, technologies, and services to be tested (see Section 3: Mileage Reporting Options and Special Features in the Pilot Project);
- ▶ Establishes the target number of voluntary participants/vehicles in the pilot project (see Section 5: Identifying and Recruiting Volunteers);
- ▶ Sets forth specific pilot evaluation measures and the process for evaluation (see Section 2: Pilot Project Goals, Objectives and Evaluation Measures);
- ▶ Establishes a pilot project expenditure plan;
- ▶ Provides plans that address:
 - > Recruiting volunteers that represent the geographic diversity of Washington to participate in the live pilot test (see Section 5: Identifying and Recruiting Volunteers); and
 - > Communicating with the public, stakeholders and participants about the project (see Section 6: Communicating with the Public and Key Stakeholders about the Pilot)

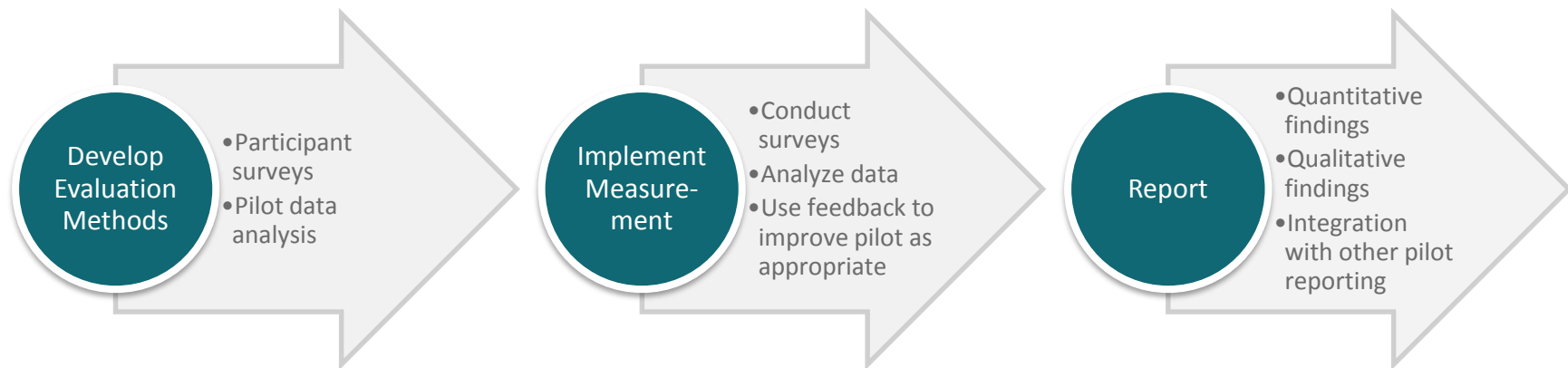
Throughout 2016, agencies that may have a role in the pilot project and other agencies with a specific interest in a future RUC system (Office of the State Treasurer, Department of Revenue, WSDOT and Department of Licensing) were consulted and will continue to be consulted throughout the course of the pilot project as it moves forward (see Section 4: Agency Roles and Interests in the Pilot Project).

The pilot project will be evaluated to measure how it performs against the adopted goals and objectives

A pilot project is an opportunity to gather information about and evaluate the performance of a prospective RUC system for Washington. To make the most of this opportunity, it is critical to develop and agree on evaluation measures that capture the key points of interest for members of the Legislature, the Governor, the Steering Committee, and the Transportation Commission. Evaluation measures will allow final pilot design, implementation, and ongoing operational decisions to reflect the priorities of decision-makers regarding information needs from the pilot.

Evaluation process

At a high level, the pilot evaluation process can be summarized in the tasks shown below:



Adopted pilot evaluation measures

Guiding Principle	Evaluation Measures
Transparency	<ol style="list-style-type: none"> 1. Change in participant understanding of gas tax rate, collection method, and use 2. Change in participant understanding of RUC rate, collection method, and use
Complementary policy objectives	<ol style="list-style-type: none"> 3. Impact of pilot on driving habits of participants 4. Impact of pilot on stated vehicle purchasing preferences of participants
Cost-effectiveness	<p><i>As a small-scale effort, the pilot project will not itself generate data that can be evaluated for cost-effectiveness. We recommend that information from the pilot be used to refine and update the RUC business case analysis.</i></p>
Equity	<ol style="list-style-type: none"> 5. Total and per-mile RUC vs. gas tax paid by urban, suburban, vs. rural status of participant 6. Total and per-mile RUC vs. gas tax paid by participant income 7. Total and per-mile RUC vs. gas tax paid by in-state vs. out-of-state participants 8. Participant expectations and before-and-after perceptions of RUC equity relative to gas taxes
Privacy	<ol style="list-style-type: none"> 9. Participant perception of privacy protection, including any changes in perception during the pilot 10. Relative ability of mileage reporting methods to protect participant privacy
Data Security	<ol style="list-style-type: none"> 11. Participant perception of data security, including any changes in perception during the pilot 12. Relative ability of mileage reporting methods to provide data security
Simplicity	<ol style="list-style-type: none"> 13. Time and indirect costs expended by participants to comply with pilot tasks 14. Participant understanding of compliance requirements
Accountability	<ol style="list-style-type: none"> 15. Description of assignment of responsibility and oversight for Washington agencies and other entities involved in pilot 16. Accuracy of reported road usage, revenue collected, and revenue distributed
Enforcement	<ol style="list-style-type: none"> 17. Participant perceptions of relative effectiveness of enforcement methods in maintaining compliance 18. Reasons for non-compliance expressed by participants (e.g., confusion, negligence, fraud) 19. Participant-stated locations of fuel purchases (potentially only for interoperability participants) Relative level of effort of enforcement methods (if tested) to implement and operate on a small-scale basis
System Flexibility	<p><i>In a short-term pilot project, long-term system flexibility cannot be effectively measured. We recommend outside policy analysis to address this principle.</i></p>
User Options	<ol style="list-style-type: none"> 20. Participant overall satisfaction and relative satisfaction with choices available in the pilot project 21. Reason for participant preferences of various mileage reporting methods
Interoperability and Cooperation	<ol style="list-style-type: none"> 22. Relative level of effort (staff time and direct costs) to achieve interoperability with (Oregon) and without (British Columbia) real money transactions 23. Participant understanding of interoperable RUC 24. Relative ease of compliance for interoperability test participants vs. others
Phasing	<p>Information from policy analysis, legal analysis, and business case analysis will inform this guiding principle.</p>

RUC mileage reporting will range from no-tech to high-tech options

Mileage reporting methods to be tested in the pilot project

1. Mileage Permit—Pilot Participants pre-pay for a fixed number of miles (in 1,000 mile increments) they expect to drive in a specific vehicle. Actual miles driven will be reconciled with the pre-purchased mileage permit at regular intervals (e.g., every 3 or 6 months). Mileage can be verified in-person at a vehicle licensing office, or by submitting a certified smartphone photo.

2. Odometer Charge – Pilot Participants use their vehicle odometer to measure and report the exact number of miles driven at the end of a reporting period (3 months is proposed), paying for those miles only after receiving an invoice. As with the Mileage Permit, actual miles driven can be recorded and reported at a vehicle licensing office, or by submitting a certified smartphone photo.

3. Automated Distance Charge with a Mileage Meter —Pilot participants plug a mileage meter into their vehicle to automatically record mileage directly to their RUC account. The mileage meter can be GPS-enabled, allowing non-chargeable miles (such as out-of-state travel) to be automatically deducted from the participant’s invoice, or the participant can choose a simple mileage meter with no GPS chip. With either mileage meter, recorded miles are automatically posted and an invoice generated and sent.

**** Smartphone-enabled Distance Charge** – While a smartphone may provide support for the Mileage Permit or Odometer Charge reporting (in both cases, transmitting certified smartphone photos of the vehicle odometer reading), a smartphone might also be configured to serve as a different form of a “mileage meter” itself, actually recording miles traveled. Whether this can be accomplished is the focus of a special RUC “innovation challenge”.

The pilot project will seek ways for drivers to use smartphones for accurate mileage reporting

Washington is eager to test how a driver’s own smartphone might be used as a mileage-recording device for a future RUC system. At a minimum, it may be a desirable tool for accurately deducting those miles not subject to the RUC – namely miles driven out of state or on private roads. There’s no smartphone app in the marketplace that can perform these functions without the assistance of a secondary device (such as a GPS based mileage meter, described above).

A small but important part of the federal funding will be used to sponsor an “innovation challenge” where technology researchers and innovators are invited to develop software or technologies that use only a smartphone and the vehicle to accurately report RUC miles driven. This event will begin in the first quarter of 2017. If a viable prototype is developed, it will be tested in the RUC pilot project.

Washington's pilot project will test interoperability with British Columbia and Oregon

International interoperability with Surrey, British Columbia



The City of Surrey, British Columbia agreed to partner in the Washington RUC pilot to test international interoperability to better understand how a RUC system might work when across international borders. Given British Columbia is also starting to examine road usage charging as a possible future funding mechanism, it will be important to understand how two countries would reconcile road charge obligations. At least 50 vehicles from Surrey and the surrounding area will participate, with maximum participation capped at 200. As with all parts of the pilot (except the OReGO portion – see below), no real money will be exchanged, but participants will receive illustrative RUC account statements.

To most accurately simulate this aspect of the pilot, Surrey will set its own test rates. Not all mileage reporting options will be available to Surrey participants (e.g., in-person manual odometer readings will not be available). Washington participants who use a GPS-enabled mileage meter and travel to Surrey will be charged the rates set for Surrey participants, and Surrey participants who travel to Washington will be charged the rates set for Washington participants. The currency exchange rates will be accounted for and appear on participant invoices.

Financial interoperability with OReGo (Oregon)



OREGO

The State of Oregon's road usage charge program, OReGO, has been in operation for 18 months. OReGO has agreed to partner in the Washington RUC pilot to test financial interoperability with real cash transactions. This will involve a limited number of Washington and OReGO participants.

The small number of participants from both Oregon and Washington will test how an actual transaction will be processed from start to finish so that there is a better understanding of how every dollar in road charges will be reconciled and transmitted to the collecting state, considering differences in administration and operations, treasury laws, accounting policies, etc. A joint Washington-Oregon working group will be established to determine the parameters for the financial interoperability test.

To support the use of real money in the OReGO portion of the pilot, a modest amount of seed funding will be provided to those participants selected to participate in this portion of the pilot to enable a true financial transaction test.

The pilot will assess how RUC compares to Washington's \$150 annual registration surcharge on electric vehicles

With the assistance of one of the largest electric vehicle (EV) associations in the US – the Seattle Electric Vehicle Association, or SEVA – and with the support of the nation's leading EV advocacy organization, Plug-in America, the Washington pilot project will undertake a targeted evaluation of how RUC would work for electric vehicles. Two specific issues that will be explored:

- ▶ Whether RUC (a user fee mechanism) is preferable to the state's current funding mechanism applied only to EVs, a fixed \$150 annual registration surcharge on electric vehicles.
- ▶ Whether replacing the annual registration surcharge on electric vehicles with a RUC will materially impair consumer adoption of EVs in Washington.

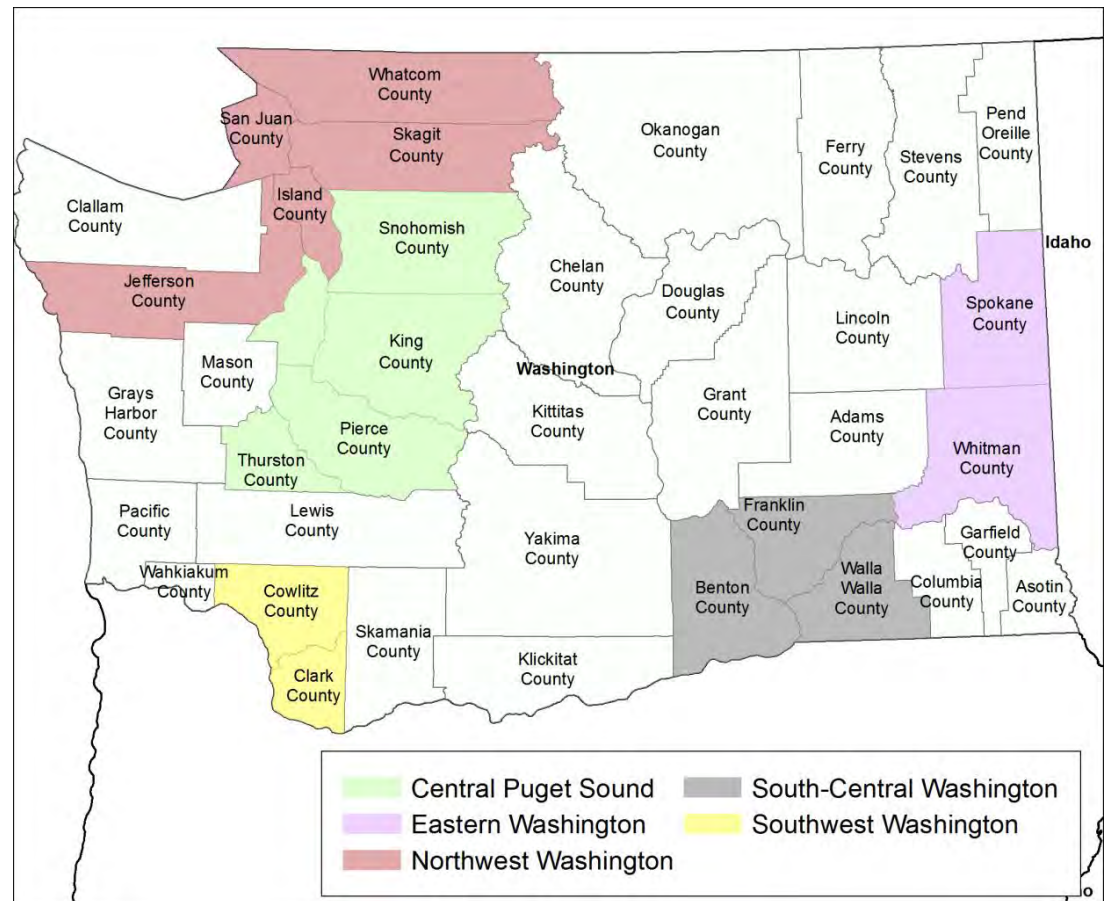
With input from SEVA, additional research questions will be developed and explored related to the fiscal and policy impacts RUC may have for emerging electric drive vehicle technologies.

2,000 Washington vehicles must be recruited to participate, representing the geographic diversity of the state

Statewide representation is needed to ensure the pilot project reflects the geographic, economic and demographic diversity of the state. Additional vehicles must be recruited from British Columbia (up to 200 vehicles) and Oregon (approximately 20 vehicles enrolled in the OReGo road usage charge program), bringing the total vehicles participating in the Washington pilot to an approximate maximum of 2,220.

Washington’s pilot participants may be from anywhere, but recruitment activities will be concentrated in five regions of the state.

There are three main reasons why recruitment activities will be heavily concentrated in the five geographic regions shown on the map. First, participants from these regions will ensure a representative geographic mix of urban, suburban, and rural drivers from all parts of the state. Second, a sufficient number of Washington drivers who travel across state borders are needed to conduct the interoperability tests with Oregon and British Columbia. Third, having participants concentrated primarily within these regions allows the pilot project to provide in-person assistance at vehicle licensing offices in the most economical manner.



A detailed recruitment strategy was developed that identifies the communication methods, key partners and sequence of recruiting activities

A key recruiting challenge is that the general population does not know how their roads are currently funded, that revenues are not sustainable, or what a RUC is. As demonstrated with other projects and initiatives, public participation and support will likely increase when the purpose and need is well understood.

The recruiting strategy calls for developing a “pipeline” of volunteers, creation of communications tools, and providing information through various channels (media, forums, etc.)

Recruiting pipeline: Recruiting participants into the pilot requires that individuals move through a series of stages, from becoming aware of the pilot, to developing an interest, to committing to participate. The number of people that successfully move from one stage to the next is referred to as the conversion rate.

Based on experience with other pilots, the conversion rate from “pool” to “participants” is expected to be around 30%.

Recruiting tools A wide range of paper and digital products support the recruiting effort. Items like the pilot website and interest list, newsletters, news releases, and presentations with talking points for recruiters are examples of tools. A core set of tools can be mixed-and-matched to create recruiting “tool kits” appropriate to a range of audiences.



Recruiting “streams”: Also known as communication channels, there are five recruiting streams that the pilot will leverage: traditional media (TV, newspapers, radio); digital media (website, blogs, social media); partner and stakeholder outreach (mailing lists, interest groups); public forums and meetings; and one-on-one briefings with key influencers in the community.

A Communications Plan provides guidance on the goals, principles, audiences, and platforms for communication efforts.

Communication about the Washington RUC pilot project will be through a variety of platforms, with key messages delivered in-person, digitally, and through the media.

The Communications Plan has five primary goals:

- ▶ **Inform and educate the public** on several topics related to road usage charging (what it is, why it's worth testing) and the pilot project.
- ▶ **Recruit pilot project participants** from across the state who represent diverse populations. The Pilot Project Participant Recruitment Plan addresses this most directly, but any communication material or story about RUC and the pilot project has the potential to aid in recruitment.
- ▶ **Generate broad understanding** of the pilot project among stakeholders, including the general public, the private sector and businesses, and other public and private agencies and organizations.
- ▶ **Cultivate balanced and accurate media coverage** about road usage charging and the WA RUC pilot project. The Media Strategy will broadly ensure coverage that introduces the RUC concept to a broader audience and reinforces recruitment efforts.
- ▶ **Assess public opinion** before and during the pilot to evaluate changes in perspective and acceptance regarding road usage charging and different ways to record mileage. The exact details are still to be worked out, but will likely include use of the WSTC Voice of Washington Survey panel.

Pilot project website is launched: www.waroadusagecharge.org

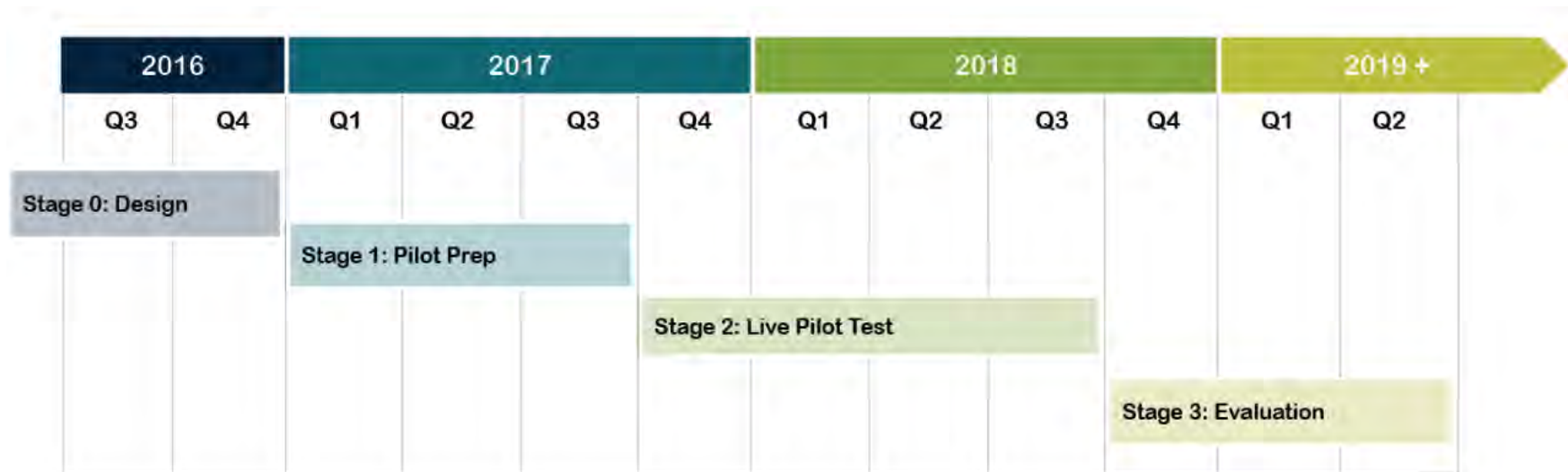
The pilot project web site serves as a resource for the public to learn more about RUC, the pilot project, and to sign up for project updates or to volunteer for the live pilot test. As the project progresses, the focus and content will evolve to meet the key objectives.

The website homepage:



Pilot project schedule: estimated launch of the live pilot test is fall 2017

The schedule below shows the likely start and end dates for each of the three project stages, and the interdependency between them.

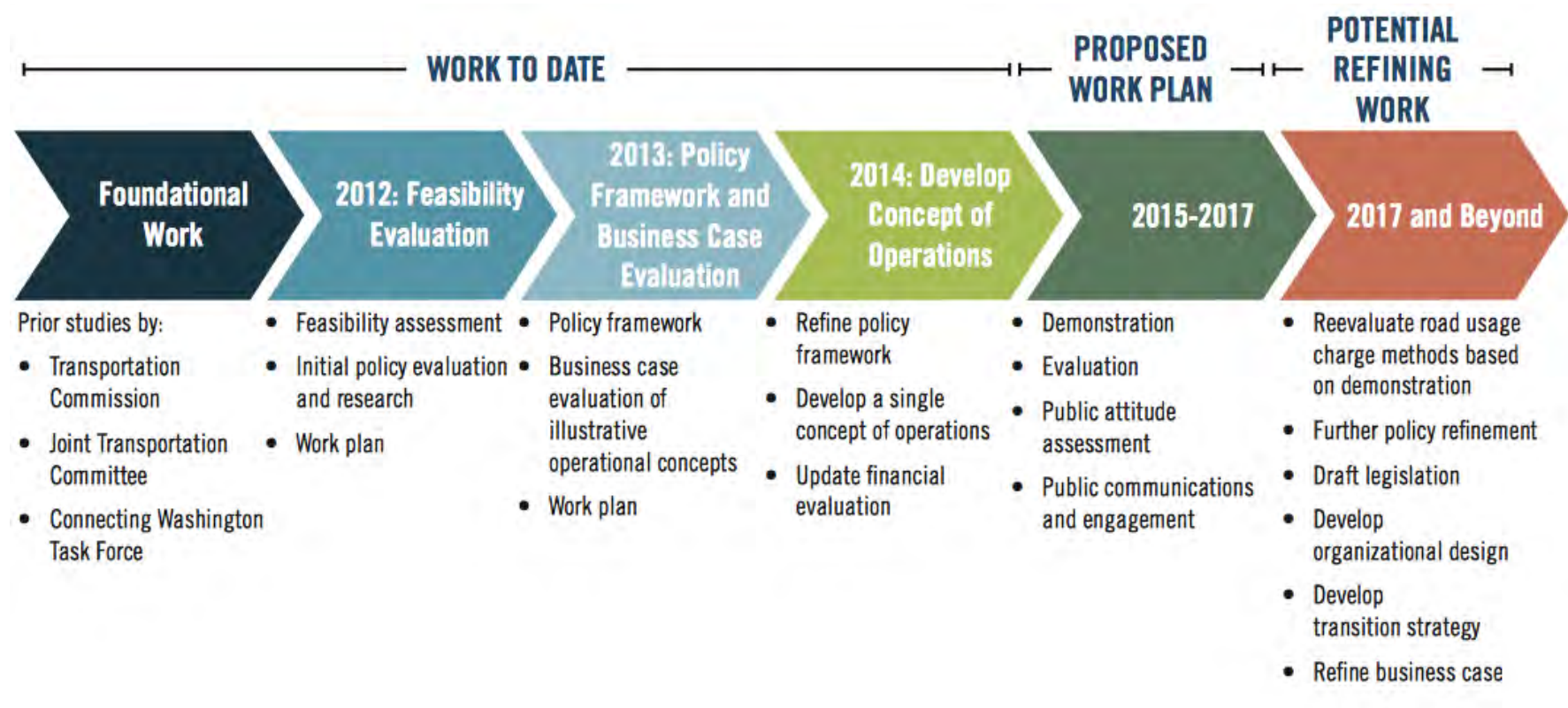


SECTION 1: PROJECT BACKGROUND

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Washington’s RUC Assessment work since 2012

Since 2012, the Washington State Transportation Commission has led the state’s investigation of a Road Usage Charge (RUC) as a potential future replacement for the state gas tax, built upon a record of thorough research, evaluation, and fact-based policy recommendations. The Commission is advised by the Washington RUC Steering Committee, a 25-member steering committee comprised of stakeholders representing a variety of transportation, business, environmental and consumer interests (see page 4 for a roster of 2016 Steering Committee members).



Washington's RUC Assessment work since 2012 (continued)

In prior phases of work (2012-13), the Commission has considered the feasibility and evaluated the business case for RUC in Washington, and addressed numerous policy issues, advising the Governor and Legislature of their recommendations.

The 2014 work developed an initial Concept of Operations (ConOps), which describes, at a high level, how a RUC system might work from the motorist's perspective. Based on the initial ConOps, a financial analysis was conducted, and several transition strategies were developed and evaluated to more fully consider which vehicles get charged and how those vehicles would transition into a RUC system. Work products developed by other agencies were also incorporated (notably, an analysis of a future RUC system on the state's current bond obligations and the capacity for future borrowing; and an assessment of the urban/rural impacts of a RUC in Washington).

As the 2014 work carried into 2015, the Steering Committee and Commission have focused on preparations to conduct a large public demonstration project (now referred to as a pilot project), an essential tool for gathering public input on the acceptance factors related to RUC. A pilot project will also provide an opportunity to test how a RUC system in Washington might be administered, and will help identify the fiscal and policy issues that must be addressed before RUC could be implemented in the future.

Progress: Investigating road usage charging, 2012 through 2015

Date	RUC Milestone	Actions
March 2012	Legislature funds and directs exploration of road usage charging as a potential future replacement for the state gas tax.	WSTC established 25-member Steering Committee to conduct fact-finding and make recommendations to the WSTC and legislature.
December 2012	Steering Committee and WSTC unanimously conclude that RUC is feasible in Washington.	WSTC developed a work plan for 2013-15 to investigate how such a system might work.
April 2013	Legislature provides funding and direction to WSTC and WSDOT for more detailed work.	WSTC evaluated the business case and operational aspects of a potential road usage charge.
December 2013	Steering Committee and WSTC finds that a road usage charge will provide greater and more stable net revenue over 25 years.	WSTC developed a policy framework for road usage charges; evaluated the financial risks, costs and net revenues for several operational concepts and scenarios; and identified many issues still to be resolved.
March 2014	Legislature funds continued Steering Committee and WSTC investigation, including input from State Treasurer.	Legislature directed examination of: potential impact on state bondholders of switching from gas tax; urban/rural equity issues; transition issues; and interstate issues.
December 2014	WSTC issues report and 2015-16 work plan recommending statewide RUC demonstration project.	Steering Committee developed a Concept of Operations; examined potential impacts on urban and rural drivers; considered alternate methods of implementation to avoid negative impacts to state bonding; and recommended a statewide RUC demonstration project.
December 2015	Steering Committee and WSTC develop parameters for a statewide public demonstration of RUC.	Demonstration project must be scalable, leverage outside funding, adequately reflect Washington's diverse demographics/geography, and avoid confusion regarding pending gas tax increase.

FHWA provides grant funding for Washington's demonstration project.

In its 2015 RUC report to the Legislature, the WSTC recommended a demonstration (pilot) project, to include registered owners of up to 2,000 vehicles recruited from five geographic regions of the state. The Legislature funded pre-implementation work in 2015 and again in 2016, and directed the Commission to actively pursue federal fund sources.

Congressional Matching Funds Made Available for RUC Pilot Projects

In December 2015, as part of the federal transportation reauthorization bill (FAST Act), Congress created a federal grant program as an incentive for states to test new transportation user-fee systems. This new Surface Transportation System Funding Alternatives (STSFA) grant program is administered by FHWA and provides funding for up to 50% of a state's pilot project costs. For federal fiscal year 2016, a maximum of \$15 million was made available to states on a competitive basis. Over the five-year federal reauthorization period, a total of \$95 million will be available for the STSFA grant program.

In August 2016, FHWA announced their selections for FFY 2016. \$14.235 million was granted, with direct funding to six states (WA, HI, OR, CA, MN, MO) and two multi-state consortia (Western RUC Consortium and I-95 Corridor Coalition).

Washington's Receives Full Funding for Stage 1 Activities for a Statewide Pilot Project

FHWA granted Washington \$3.847 million for FFY 2016, representing 100% funding for all Stage 1 (pilot preparation and set-up) activities. The only other state that proposed carrying out a large-scale pilot project was Hawaii. Washington will seek a second round of federal funding in early 2016 to fully fund the Live Pilot Test (Stage 2) and Evaluation (Stage 3) portions of the pilot project.

Washington's pilot project will involve about 2,000 statewide volunteers and include cross-border tests with Oregon and British Columbia

Main features of the pilot project include:

- ▶ Volunteer registered owners of up to 2,000 vehicles from Washington will test three different methods of recording miles (a mileage permit; an odometer charge; and automated mileage charge).
- ▶ The nation's first test of international interoperability with a RUC system (City of Surrey, British Columbia has agreed to participate).
- ▶ The nation's first test of exchanging funds (real money) between RUC systems in Oregon and Washington. A small number of Washington participants will be provided a stipend to test RUC system financial interoperability.
- ▶ Special recruitment of plug-in electric vehicle drivers to test RUC as an alternative to a flat-rate, annual vehicle registration surcharge (Seattle Electric Vehicle Association participation).
- ▶ Exploration of partnerships with vehicle licensing offices (DOL agents and subagents) to conduct manual odometer reads and reporting – a potential operating cost-savings in a future RUC system.
- ▶ Co-development of the RUC pilot in parallel with deployment of the Department of Licensing's new vehicle licensing IT system, allowing DOL to better map and accommodate changes for a future RUC system, and thus inform the nation on licensing system needs.
- ▶ An "innovation challenge" event to develop a smartphone application capable of deducting miles driven out of state from a driver's RUC account.

All final design and set-up activities (Stage 1) are funded with the federal grant. Stage 1 is expected to commence in early 2017, enabling a Live Pilot Test in fall 2017 (Stage 2). Funding required to conduct the live pilot test and post-pilot Evaluation (Stage 3) is approximately \$3.6 million.

Pilot implementation plan was developed August – December, 2016

The Washington State Legislature appropriated \$500,000 of unspent federal funds to WSTC to develop a pilot project implementation plan. The Implementation Plan must:

- ▶ Identify essential agency roles in a pilot (Section 4: Agency Roles and Interests in the Pilot Project);
- ▶ Review and finalize mileage reporting technologies and services to be tested (Section 3: Mileage Reporting Options and Special Features in the Pilot Project);
- ▶ Evaluate target number of pilot participants (Section 5: Identifying and Recruiting Volunteers); and
- ▶ Develop specific pilot evaluation criteria (Section 2: Pilot Project Goals, Objectives and Evaluation Measures)

Additional tasks included in the Implementation Plan:

- ▶ Develop plans to address:
 - > Recruiting volunteers that represent the geographic diversity of Washington to participate in the live pilot test (Section 5: Identifying and Recruiting Volunteers); and
 - > Communicating with the public, stakeholders and participants about the project (Section 6: Communicating with the Public and Key Stakeholders about the Pilot).

Consult with agencies that may have a role in the pilot, and other agencies with a specific interest, including Office of the State Treasurer, Department of Revenue, WSDOT and Department of Licensing (Section 4: Agency Roles and Interests in the Pilot Project).

SECTION 2:

PILOT PROJECT GOALS, OBJECTIVES AND EVALUATION MEASURES

SECTION 2: PILOT PROJECT GOALS, OBJECTIVES AND EVALUATION MEASURES

Road Usage Charge Pilot Purpose

A pilot project is an opportunity to gather information about and evaluate the performance of a prospective RUC policy for Washington. To make the most of this opportunity, it is critical to develop and agree on evaluation measures that capture the key points of interest for members of the Legislature and the Governor, the Steering Committee, and Transportation Commission. Evaluation measures will allow final pilot design, implementation, and ongoing operational decisions to reflect the priorities of decision-makers regarding information needs from the pilot.

Principles for evaluation

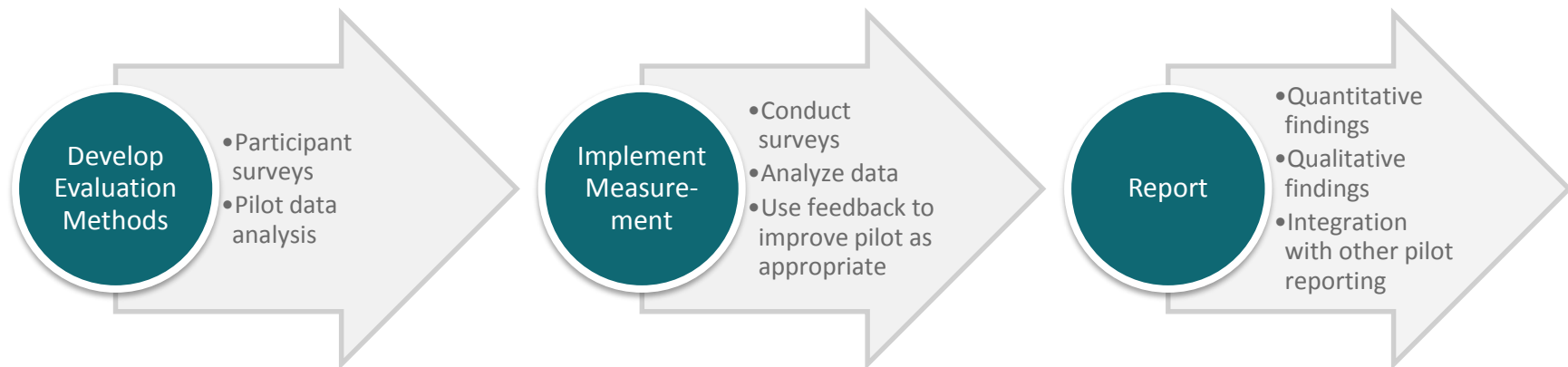
Below are three principles that were applied in developing the evaluation measures:

- ▶ **Address the Steering Committee's Guiding Principles.** The guiding principles (listed on page 33) are broad policy statements agreed to at the outset of the Steering Committee's work in 2013 and reaffirmed in 2015. Conveniently, there is a strong alignment between the Steering Committee's guiding principles and the grant requirements in the FAST Act, which provided federal funding for Washington's pilot. By focusing on these principles, the evaluation can focus on the most important open policy questions that the pilot can address for decision makers.
- ▶ **Be measurable.** Many policy questions can be analyzed outside the scope of a pilot project. In fact, several have been the subject of the last several years of Steering Committee work: analysis of operational concepts, RUC financial performance, legal questions (e.g., bonding, use of revenues), and phasing alternatives. However, some policy questions remain, notably motorist acceptance factors that are best addressed through direct experience in a pilot environment. The evaluation measures for the pilot focus on these open policy questions, so the pilot design can focus on how to generate information that addresses open questions. The success of the pilot itself lies in its ability to provide information to address these questions.
- ▶ **Be concise.** To be useful to Steering Committee members, Commissioners, and ultimately legislators and the Governor, evaluation measures should be thorough but also comprehensible. There should be as few evaluation measures as possible, but they should address all key policy questions and guiding principles.

Evaluation Process

Below are additional steps to complete a robust evaluation of Washington’s pilot program, to be carried out during Phase 1 in 2017:

- ▶ Develop methods for collecting and analyzing information from the pilot. These will consist primarily of surveys of pilot participants and analysis of data generated by the pilot.
- ▶ Develop a plan for integrating the methods into the pilot in a way that complements core operations.
- ▶ Engage an evaluation team to carry out the evaluation and provide results to the Steering Committee and the Commission that can be incorporated into the overall findings.



Inputs to Evaluation Measures

The following pieces of background information were used to help draft evaluation measures.

- ▶ **Steering Committee Guiding Principles** adopted in 2013 and reaffirmed in 2015. These were the most important inputs as they directly reflect the interests of Washington stakeholders and policy makers.
- ▶ **Criteria used in Section 6020 of the FAST Act** for any pilots or demonstrations funded by the federal government. These were secondary inputs, but nonetheless important due to the need to satisfy federal criteria for use of pilot funds. Conveniently, as shown in the table on the next page, most of the federal criteria coincide with Steering Committee guiding principles.
- ▶ **Measures and criteria used to evaluate pilots in California and Oregon** as well as the live RUC system in New Zealand. These inputs were tertiary and used only when appropriate or helpful. However, each jurisdiction is at a distinct stage of development: New Zealand has a mature RUC system, Oregon has a small system only recently implemented, and California is conducting a pilot test. Moreover, each jurisdiction has unique policy outputs desired from its RUC system or pilot that differ from the policy outputs sought by Washington.

RUC Steering Committee Guiding Principles and Fast Act Criteria

Guiding Principle	Objective	Related Criteria from FAST Act Section 6020
Transparency	A road usage charge system should provide transparency in how the transportation system is paid for.	Public acceptance
Complementary policy objectives	A road usage charge system should, to the extent possible, be aligned with Washington’s energy, environmental, and congestion management goals.	Congestion mitigation (if appropriate)
Cost-effectiveness	The administration of a road usage charge system should be cost-effective and cost efficient.	Cost of system administration
Equity	All road users should pay a fair share with a road usage charge.	Income equity, geographic equity, urban vs. rural equity
Privacy	A road usage charge system should respect an individual’s right to privacy.	Protection of personal privacy
Data Security	A road usage charge system should meet applicable standards for data security, and access to data should be restricted to authorized people.	Reliability and security of technology
Simplicity	A road usage charge system should be simple, convenient, transparent to the user, and compliance should not create an undue burden on motorists.	Ease of compliance
Accountability	A system should have clear assignment of responsibility and oversight, and provide accurate reporting of usage and distribution of revenue collected.	Implementation
Enforcement	A road usage charge system should be costly to evade and easy to enforce.	Auditing and enforcement
System Flexibility	A road usage charge system should be adaptive, open to competing vendors, and able to evolve over time.	Use of independent third-party vendors
User Options	Consumer choice should be considered wherever possible.	Flexibility and user choice
Interoperability and Cooperation	A Washington RUC system should strive for interoperability with systems in other states, nationally, and internationally, as well as with other systems in Washington. Washington should proactively cooperate and collaborate with other entities that are also investigating road usage charges.	Interoperability
Phasing	Phasing should be considered in the deployment of a road usage charge system.	N/A

Pilot evaluation measures were drafted and adopted

Evaluation measures organized by each guiding principle have been developed. In total, there are 24 evaluation measures across the 13 guiding principles. Note that we do not recommend pilot evaluation measures for three of the guiding principles (cost-effectiveness, system flexibility, and phasing) for reasons stated in the table on the following page.

As presented elsewhere in this report, the proposed pilot must involve five regions of the state, each with a unique set of characteristics, unique policy questions to address, and therefore unique pilot objectives: Central Puget Sound, Northwest Washington (includes international interoperability with Surrey, BC), South-Central Washington, Southwest Washington (includes interstate interoperability with Oregon), and Southwest Washington. The evaluation measures displayed on the next page are intended to cut across the five distinct regions. Examples of the cross-cutting nature of the evaluation measures are listed below.

- ▶ Urban vs. suburban vs. rural equity will be based on data collected from all regions and compared.
- ▶ Enforcement effectiveness will be based on survey data collected from all regions and compared.
- ▶ Data related to interoperability will be derived from the Bellingham-Surrey and Vancouver-Portland regions. Evaluation will focus on two aspects of interoperability: (1) participants' experiences and understanding of it, and (2) the relative level of effort required to achieve it.

The measures in the table below define what will be quantitatively computed or qualitatively assessed and characterized in the pilot. Measures are not targets or requirements. Instead, information from the evaluation is intended to inform policy makers, including the RUC Steering Committee, WSTC, the Governor and the Legislature, about the performance of the pilot and its implications for future RUC policy formulation.

Adopted Pilot Evaluation Measures

Guiding Principle	Evaluation Measures
Transparency	<ol style="list-style-type: none"> 1. Change in participant understanding of gas tax rate, collection method, and use 2. Change in participant understanding of RUC rate, collection method, and use
Complementary policy objectives	<ol style="list-style-type: none"> 3. Impact of pilot on driving habits of participants 4. Impact of pilot on stated vehicle purchasing preferences of participants
Cost-effectiveness	<p><i>As a small-scale effort, the pilot project will not itself generate data that can be evaluated for cost-effectiveness. We recommend that information from the pilot be used to refine and update the RUC business case analysis.</i></p>
Equity	<ol style="list-style-type: none"> 5. Total and per-mile RUC vs. gas tax paid by urban, suburban, vs. rural status of participant 6. Total and per-mile RUC vs. gas tax paid by participant income 7. Total and per-mile RUC vs. gas tax paid by in-state vs. out-of-state participants 8. Participant expectations and before-and-after perceptions of RUC equity relative to gas taxes
Privacy	<ol style="list-style-type: none"> 9. Participant perception of privacy protection, including any changes in perception during the pilot 10. Relative ability of mileage reporting methods to protect participant privacy
Data Security	<ol style="list-style-type: none"> 11. Participant perception of data security, including any changes in perception during the pilot 12. Relative ability of mileage reporting methods to provide data security
Simplicity	<ol style="list-style-type: none"> 13. Time and indirect costs expended by participants to comply with pilot tasks 14. Participant understanding of compliance requirements
Accountability	<ol style="list-style-type: none"> 15. Description of assignment of responsibility and oversight for Washington agencies and other entities involved in pilot 16. Accuracy of reported road usage, revenue collected, and revenue distributed
Enforcement	<ol style="list-style-type: none"> 17. Participant perceptions of relative effectiveness of enforcement methods in maintaining compliance 18. Reasons for non-compliance expressed by participants (e.g., confusion, negligence, fraud) 19. Participant-stated locations of fuel purchases (potentially only for interoperability participants) Relative level of effort of enforcement methods (if tested) to implement and operate on a small-scale basis
System Flexibility	<p><i>In a short-term pilot project, long-term system flexibility cannot be effectively measured. We recommend outside policy analysis to address this principle.</i></p>
User Options	<ol style="list-style-type: none"> 20. Participant overall satisfaction and relative satisfaction with choices available in the pilot project 21. Reason for participant preferences of various mileage reporting methods
Interoperability and Cooperation	<ol style="list-style-type: none"> 22. Relative level of effort (staff time and direct costs) to achieve interoperability with (Oregon) and without (British Columbia) real money transactions 23. Participant understanding of interoperable RUC 24. Relative ease of compliance for interoperability test participants vs. others
Phasing	<p>Information from policy analysis, legal analysis, and business case analysis will inform this guiding principle.</p>

SECTION 3:

MILEAGE REPORTING OPTIONS AND SPECIAL FEATURES IN THE PILOT PROJECT

SECTION 3: MILEAGE REPORTING OPTIONS AND SPECIAL FEATURES IN THE PILOT PROJECT

RUC methods to be tested are detailed in the Concept of Operations

The final RUC mileage reporting options that will be offered in the Pilot Project are summarized in this section. The primary reference document that more fully details these options is called a Concept of Operations (or ConOps). A Concept of Operations is a more detailed description of how Washington's RUC will operate during the pilot project. The document is non-technical and presented from the viewpoints of the various RUC participants (the driver, the RUC account managers, state government, etc.). The ConOps provides a bridge between the broad policy goals that motivated the pilot project, and the specific technical requirements that are important at the operational level. There are several reasons for developing a Concept of Operations.

- ▶ Achieve stakeholder agreement on how the system is to be operated, who is responsible for the required pilot functions, and the necessary lines of communication.
- ▶ Define the high-level system approach and highlight advantages over other approaches.
- ▶ Define the environment in which the system will operate.
- ▶ Derive high-level requirements, especially user (i.e., driver) requirements.
- ▶ Provide the criteria to be used for validation of the completed system.
- ▶ This 2016 Implementation Plan reexamined the previous draft ConOps in light of new developments in the technology sector and/or changed policy or design direction from the project sponsors. As a result of the 2016 work, revisions were made to the ConOps. The following pages of this section (1) summarize the findings of the RUC Technology scan that was completed; (2) summarize the many pilot design questions the Steering Committee and WSTC answered during the course of the 2016 work plan; and (3) finally, summarizes the refined RUC mileage recording and reporting options that will be test in the pilot project.

A RUC technology scan identified advances in mileage reporting methods and technologies, but many improvements are still needed

An assessment was conducted of recently emerging RUC-related products, technologies, and development efforts that could support either a RUC pilot in Washington, or an operational system in the future. The full Road Usage Charge Technology Survey memorandum can be found in Appendix A.

Technologies that could support RUC in Washington's pilot are now being tested in California

Three approaches to RUC mileage recording and reporting that are currently being tested in California's pilot project were reviewed and assessed to determine whether they might be appropriate to support Washington's RUC pilot.

- ▶ Use of a **simple smartphone app** (or any mobile phone with a camera and texting capability) to record a vehicle's odometer reading and transmit that reading to a RUC account manager for verification and calculation of the road usage charges owed.
Recommendation: Very promising – will be tested in new ways in the Washington pilot.
- ▶ **A GPS smartphone concept**, where a vehicle's mileage is recorded on the smartphone itself and transmitted by the driver to the RUC account manager. The method being tested in California still has limitations and vulnerabilities, and does not function as most consumers (and policymakers) have envisioned.
Recommendation: By itself, the current GPS smartphone approach requires supplemental technologies (e.g., having a second device installed in the vehicle's OBD-II port) or additional steps by the driver (e.g., taking a photo of the vehicle odometer). For this reason, the Washington pilot will conduct a software/hardware engineering competition with hopes of developing a new approach for smartphone-enabled RUC mileage reporting.
- ▶ **In-vehicle telematics** uses technology that is already imbedded in the vehicle by the vehicle manufacturer to record and report vehicle mileage. Not all vehicles have this capability yet, and of those that do, most require the driver to pay for added services (GM On-Star, Ford SYNC and others all require subscriptions).
Recommendation: Even new vehicles that have telematics are not yet configured for full mileage reporting options. Because relatively few vehicles are enabled with this technology, and few automakers allow their systems to be used for RUC, Washington should wait for greater adoption and functionality of in-vehicle telematics systems before deploying this method for RUC.

Technologies still on the horizon may benefit a future RUC system

Each pilot project represents a snapshot in time, reflecting the technologies and mileage reporting methods that are available and appropriate for use at that time. As public and private sector interest in RUC continues to grow, new technologies (or new applications of existing technologies) are developed. Below are a few such approaches worth monitoring.

Evolving technology

Development of a 5G wireless network: A significant cost driver for operations of any of the technology-assisted RUC concepts is data transmission. Additionally, many of the technology options available today – devices that plug into the vehicle’s On-Board Diagnostics (OBD) port, smartphone apps, Bluetooth – require motorists to make tradeoffs: if they adopt an OBD-II mileage meter, they may not be able to purchase usage-based insurance; if they pair their vehicle to a smartphone via Bluetooth, they may not be able to use hands-free calling or stream music.

5G simply refers to the mobile telecommunications protocol currently under development. It includes native support for device-to-device communications with very high projected reliability (> 99.9%). What this means in practice is that mileage meters may no longer be necessary; vehicle engine control units can transmit mileage data directly to the account manager without routing through either an OBD-II dongle or telematics services. In areas with poor cellular coverage (rural areas but also dense urban areas where “urban canyons” interfere with radio signals) data are irregularly transmitted and data loss may occur. The improved reliability and coverage promised by 5G should mitigate this issue, particularly in urban environments.



Technologies still on the horizon may benefit a future RUC system (continued)

Re-emerging technologies or concepts:

Pay-at-the-Pump: In its 2006 RUC pilot project, Oregon tested a “Pay at the Pump” (PatP) concept. Perceived benefits of a PatP system are protection of driver privacy, ease of payment, the ability for motorists to make small, incremental payments, and, at least for any amount of time the state continues to collect a motor fuel tax, built in enforcement. Oregon’s PatP concept required equipment to be installed in both the vehicle and the gas pump. Oregon decided not to pursue PatP due to negative user feedback, technology issues, and the expected capital costs of retrofitting both gas stations and private vehicles.

Since 2007, additional development of the PatP has occurred. One example is a concept promoted by Verdeva, which would place RFID tags on vehicles and RFID readers at gas stations as the interface between the gas pumps point of sale system, state databases (such as DMV or DOL), and the Verdeva back office. Miles driven by the vehicle is estimated based on the volume of fuel purchased, and the RUC owed would be offset by the motor fuel tax paid at the pump. Verdeva’s technology is still at the proof-of-concept stage, and relies heavily on cooperation from gas station operators, as well as the ability of state databases to integrate with the Verdeva system. It also does not directly address how RUC would be collected from EV drivers, since these vehicles do not fill up at gas stations. Further, it does not differentiate between chargeable and non-chargeable miles, so it presents some challenges for interstate or international interoperability. However, it does present an operational concept that is familiar to motorists – paying for your road use, whether it be a motor fuel tax or a road user charge – at the gas pump.



Zone-based Charging: A number of companies offer RFID-enabled zone-based charging. In essence, this is an expanded tolling network. While the concept may be feasible for assessing RUC on mainline facilities, it is impractical for local routes, because gantries must be mounted on every road where a charge will be assessed.

Several important pilot design questions were addressed in 2016

The project team considered several questions related to the pilot project design. Assumptions and alternative approaches were discussed by the Steering Committee and the WSTC, with final decisions reached and summarized in the table below. Each of the adopted approaches are now reflected in the latest Concept of Operations (last revised 12/2016) and more simply reflected in the summary of the three operational approaches that will be tested in the 2017 pilot project (see page 44).

Resolution of Pilot Design Questions

#	Pilot Design Question	Decision	Reason
1	Who operates accounts? Will there be both public and commercial account management? Which operational concepts will be supported by the different account managers (organizations that run participant accounts)?	A state account manager will operate a Mileage Permit and Odometer Charge; a Commercial Account Manager will operate an Automated Distance Charge	Mileage Permit and Odometer Charge do not support provision of value added services to users. Automated Distance Charge does, and doing so supports the “open market” concept.
2	Should RUC enforcement be simulated in the pilot? If so, what activities will it comprise?	Partially; anomalies in mileage reporting will be recorded and explored, with compliance reminders provided to participants	A full and fair test of RUC enforcement is difficult to simulate when no money is collected. However, it is still beneficial to log reporting anomalies, explore reasons for non-compliance, and survey participants for their feedback.
3	If simulated enforcement is included, should simulated penalties/citations be included in the pilot?	No	Issuance of mock penalties/citations is likely to cause confusion, since the pilot test is strictly voluntary.

4	Which Operational Concepts should be interoperable with Oregon and Surrey participants?	OBD-II device with GPS	Location data are needed to detect state borders for full interoperability
5	Should there be an option for private roads to be automatically credited as free travel?	Yes, at least as an option	There may be demand for this feature in a future RUC system.
6	Will RUC payments be simulated? If yes, how?	No	Paying a bill is a familiar activity for nearly everybody and won't add insights to RUC policy.
7	What are the duration(s) for Time Permits and Odometer Charge readings?	30-day and 90-day Permits; Odometer Charge reporting required at 90 days	Multiple reporting periods are desirable, but not so frequent as to be burdensome to participants.
8	Which technologies should support Automated Distance Charge: on-board diagnostic (OBD-II) devices, telematics, smartphone?	OBD-II and Smartphone	Telematics is only supported by limited number of vehicles, and it does not include location awareness for interoperability.
9	What should be the basis of the Time Permit rate for the different lengths of Time Permits?	Time Permit will not be offered in the pilot. Instead, a Mileage Permit will be available.	Time Permit operates exactly like existing vehicle registration system; testing it in the pilot offers little insight. Time Permit should be considered for any future live RUC system.
10	Do participants on a Time Permit receive a separate tax credit for fuel consumed?	Time Permit will not be offered.	Time Permit not offered (see Question 9).

RUC methods to be tested: Mileage Permit, Odometer Charge, and Automated Distance Charge

Time Permit is dropped from the RUC offerings and replaced with a Mileage Permit

Previously, the RUC methods that were proposed for a pilot test included a Time Permit, which would allow drivers to purchase a permit to drive unlimited miles for a specific period of time (a week, month or year). This method is currently being tested in the California pilot as well. After much consideration, the Time Permit was dropped for three primary reasons. First, in a pilot where no real money is being exchanged, the purchase of a hypothetical Time Permit (where drivers would not need to record or report any mileage) provides almost no interaction between the driver and the RUC system, so there would not be much impression left on drivers that could be surveyed or evaluated. Second, the Time Permit would function almost identically to the current annual vehicle registration system that collects a flat fee from drivers each year. This transaction is common and well understood by both the public and the state agencies that administer the system. Third, a Time Permit was offered in the California pilot project, and it was the selected method for only 1.7% of participants. If this same percentage is assumed in Washington, all of the costs to provide this option – decals, establishment of the database, setup and training of the account managers, customer service reps, etc. – would be incurred for just 34 out of 2,000 participants.

A **Mileage Permit** will now be offered in the pilot test, taking the place of the Time Permit. This method allows drivers to purchase pre-paid miles in amounts determined by the driver based on the driver's estimate of how many miles will be driven. Periodically, the driver would be prompted to check the number of miles driven and to purchase additional miles if the original purchased amount is expended. The Mileage Permit allows drivers to purchase a relatively small number of miles (say, 3,000 miles), which may be more convenient and economical for vehicles that are not driven much during a year. A Mileage Permit also allows drivers to make smaller (but more frequent) RUC payments, which is desirable for many people. An example of a Mileage Permit decal (from the Republic of Slovenia) is shown at right.

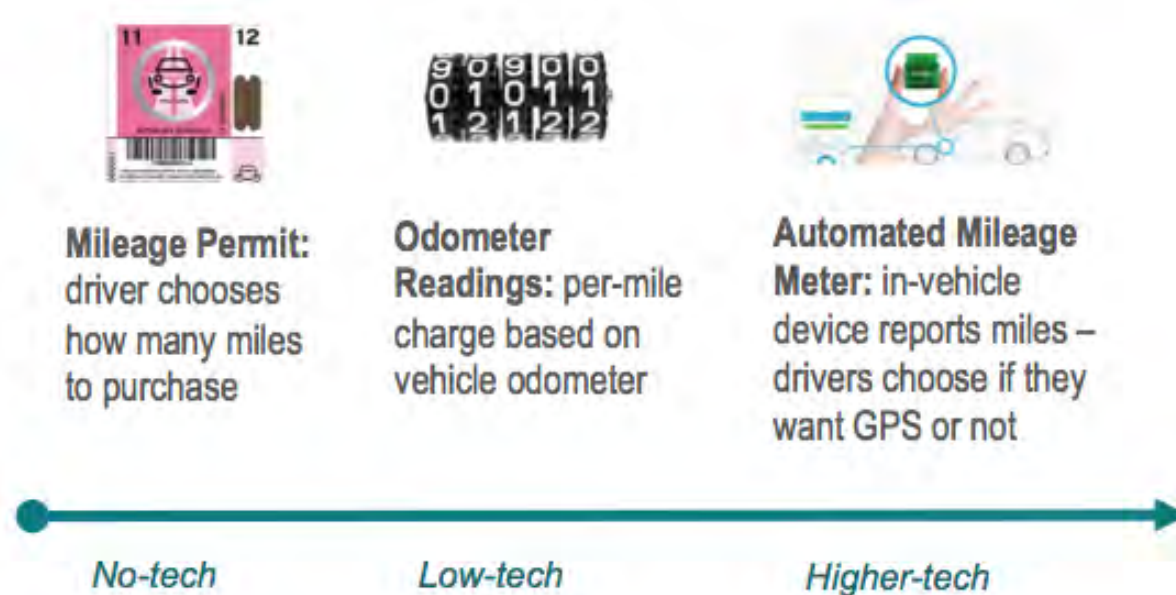


RUC methods to be tested: Mileage Permit, Odometer Charge, and Automated Distance Charge (continued)

The Operational Concepts described below will be tested in the Washington RUC pilot project:

- ▶ Operational Concept A – Mileage Permit
- ▶ Operational Concept B – Odometer Charge
- ▶ Operational Concept C – Automated Distance Charge

Note: In previous years, a fourth Operational Concept was described as “Smartphone.” But strictly speaking, a smartphone is not a basis for determining a RUC payment. Use of a smartphone is now reclassified as a technology—one of two possible technologies to support the Automated Distance Charge (the other being an OBD-II device), and also a supporting technology to make periodic mileage checks easier for participants that choose Mileage Permits or the Odometer Charge.



How mileage would be reported, calculated and paid in the Washington RUC system (as simulated)

The Washington pilot project will not involve the transfer of funds -- no money will be exchanged. Participants will simply receive invoices that indicate how much they would pay under a potential future RUC system using illustrative rates (which have not yet been finalized but are expected to be revenue neutral with the current gas tax).

Revised RUC options	How miles are reported	How RUC is calculated	How RUC is paid
Mileage Permit	Certified smartphone photo or in-person verification of vehicle odometer by authorized representative	RUC based on number of miles the participant chooses to purchase, in 1,000 mile increments, reconciled with actual miles driven every 3 months	Pay up front, at time of purchasing miles
Odometer Charge	Certified smartphone photo or in-person verification of vehicle odometer by authorized representative	RUC invoice based on exact mileage driven	Pay upon receipt of invoice, after mileage driven
Automated Mileage Charge	Plug-in mileage meter records and reports vehicle's actual mileage. Participants choose either GPS-enabled or simple mileage meter. TBD: Smartphone app to automatically report mileage	RUC invoice based on exact mileage driven. GPS-enabled meters automatically deduct non-chargeable miles. Smartphone app could also deduct non-chargeable miles.	Pay upon receipt of invoice, after mileage driven

The pilot will test international interoperability in partnership with Surrey, British Columbia

The City of Surrey, British Columbia agreed to partner in the Washington RUC pilot. This portion of the pilot will test international interoperability, including the calculation of foreign currency exchange rates.

At least 50 vehicles from Surrey, British Columbia and the surrounding area will participate, with the maximum pilot participants capped at 200. As with all aspects of the pilot (except the OReGo portion described on the next page), no real money will be exchanged, but illustrative RUC account statements will be provided to participants.



The agreement with Surrey allows them to determine much of the parameters of the road usage charge in their region. They will set their own test rates, road charge boundaries, and other characteristics (subject to project funding limitations). Not all mileage reporting options will be available to Surrey participants (e.g., DOL-agent or subagent assisted manual odometer readings will not be available).

Washington participants who have selected a GPS mileage reporting option and who travel to British Columbia will be charged the rates set for Surrey participants, and Surrey participants who travel to Washington State will be charged the rates set for Washington State participants. The currency exchange rates will be accounted for and appear on participant invoices.

Over the next few months, the pilot team will continue meetings with Surrey officials to define the goals and objectives, parameters of participation, and schedule for the test.

The pilot will test financial interoperability with OReGo (Oregon's RUC system) with real currency transactions



The State of Oregon's OReGO program agreed to partner in the Washington RUC pilot to test financial interoperability with real money transactions. A limited number of Washington and OReGO participants will be a part of this aspect of the pilot test. The Washington participants will have special RUC accounts that are seeded with a starting balance (say, \$200), and the Oregon participants the same.

Many details of OReGO's participation in the Washington State pilot are yet to be determined. However, it is likely that those participants selected to support this portion of the pilot will be subject to the Washington State pilot rules while driving in Washington, and subject to the OReGO program rules when driving in Oregon. Also, it is likely that participants in this portion of the pilot must use mileage reporting methods that have GPS location data so that the proper rates can be applied based on miles driven within Oregon (1.5 cents per mile) or Washington (2.4 cent test rate).

Over the next few months, the pilot team will convene a Washington-Oregon working group to outline goals, objectives, parameters and schedule for the test. The working group will then determine how selected participants will be provided money for their participation in this financial interoperability test. The working group will identify differences between Oregon operations and the Washington pilot, and ensure these approaches are compatible and appropriately applied during the pilot. The working group will also determine the frequency and content of data flows between Washington and Oregon RUC systems.

With support from SEVA, the pilot will test how RUC compares to Washington's annual \$150 registration surcharge on electric vehicles

Washington and other states now impose a flat annual registration surcharge on electric vehicles to help offset the cost of roadway impacts. Is RUC a better approach?

In Washington State, owners of plug-in electric vehicles (PEVs) are now required to pay an additional \$150 fee at the time of renewing their vehicle registration. This fee is levied in recognition that PEVs pay no gas tax and therefore contribute considerably less to the maintenance of roadways compared to the average driver.

Although Washington was the first, a few other states have enacted registration surcharges for PEVs. While imposition of a flat tax (or fee) on PEVs insures that those vehicles pay closer to their proportionate share for roadway use, these flat fees do not rise or fall according to actual miles driven, as does a RUC or even the gas tax. The principle concern with this approach, particularly for PEVs, is that many if not most PEVs drive less than the average number of miles driven by conventional gas-engine vehicles. Thus, for many PEV owners, the flat \$150 registration fee surcharge may be over-charging them for their use of the roadways. This is one reason why the Seattle Electric Vehicle Association (SEVA) has been an active follower and participant in the state's research of road usage charges.

How might RUC interact with other fiscal and policy issues related to electric vehicles?

With assistance from SEVA, the Washington pilot will recruit at least 50 PEV owners in the state to participate in the live pilot test. Additional fiscal and policy research questions related to PEVs and per-mile charges will be posed and explored, including whether a future RUC system might materially impact consumer adoption of electric vehicles in Washington.

A software developers' competition will be held to incentivize breakthroughs using a driver's smartphone as a new type of RUC mileage meter

Previously described as a software "Hackathon," Washington will sponsor an "Innovation Challenge" for electric engineers, system designers and software developers to provide a novel solution to mileage reporting using GPS location data.

The goal of this contest is to create a prototype solution (most likely smartphone software, but potentially also a device) that can be tested by a small pool of participants during the Washington pilot. The participating developers will be provided with problem statement, a desired outcome, as much relevant information as is available, and charge: find a solution using GPS location data that is convenient for drivers, allows consumers to retain control of all privacy settings, and not easily susceptible to fraud attempts. This competitive event will provide finalists with a cash stipend for final development and if warranted, inclusion in a portion of the Washington pilot test.

The University of Washington's Mobility Innovation Center has agreed to provide technical assistance, with at least three different departments within the University of Washington offering their research facilities, faculty and students to participate in the event.

Results from the event are expected by early summer, 2017.



SECTION 4:

AGENCY ROLES AND INTERESTS IN THE PILOT PROJECT

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The objective of this section is to identify potential agency roles in the pilot

This section contemplates potential agency roles in the pilot, including the Washington State Transportation Commission (WSTC), the Department of Licensing (DOL), the Washington State Department of Transportation (WSDOT), the Department of Revenue, Washington State Patrol, the Office of the State Treasurer, and the State Auditor's Office. The recommended roles were developed based on a series of meetings with these agencies and feedback from their staff conducted from July through December 2016.

In addition to ensuring state agencies with interest in transportation revenues are informed and able to share their expertise, an objective of the pilot project is to provide these agencies with a forum for observing a simulated RUC system that could be implemented in the future. This section also recognizes the unique experience and contributions these agencies can make in helping design a long-term RUC revenue collection system for the future.

Nine core pilot project functions were identified before considering potential agency roles

1. Establishing & Managing Commercial Account Managers (CAMs) and the State Account Manager (SAM)

All operational functionality related to setting up and administering the network of Account Managers, which can be private businesses – “Commercial Account Managers” – or an agency or vendor acting solely on behalf of government – “State Account Manager.”

2. Setup of RUC Accounts with Registered Vehicle Owners

All operational functionality related to having participants sign up for and enroll in the Road Usage Charge (RUC).

3. Establishing the Pilot RUC Accounting between States (Interoperability)

All operational functionality related to setting up a RUC system to support participants from other jurisdictions, with special attention to Oregon participants that are enrolled in OReGo.

4. Processing Mileage Data and Invoicing Registered Vehicle Owners

All operational functionality related to processing RUC data and collecting funds (only a small number of participants will participate in an actual exchange of currency).

5. Managing Operational Changes and Exceptions

All operational functionality related to handling changes to planned operational or exceptional events. This would include facilitating a switch of mileage reporting methods by registered vehicle owners, addressing vehicles that are sold or abandoned during the course of the pilot, etc.

Nine core pilot project functions, (continued)

6. Oversight and Audit of RUC Pilot Project Data

All operational functionality related to accounting and auditing for mileage statements and resulting (hypothesized) RUC revenue. For the limited real currency test with OReGo (Oregon's RUC system), these functions will be performed.

7. Compliance and Enforcement

All operational functionality related to encouraging compliance with RUC reporting and investigating possible fraud.

8. Managing Tax Credits and Refunds

All operational functionality related to crediting RUC accounts for gas taxes paid and, if authorized, issuance of refunds.

9. Special Pilot Project Features

Facilitating participation from Surrey, B.C. area drivers, OReGo (Oregon RUC account) drivers, and electric vehicle owners; and hosting a RUC "hack-a-thon" (or similar competitive development event) to develop/test a smartphone application for deducting miles driven out-of-state.

After consultation, potential agency roles in the pilot were identified

The following pages contain summary descriptions of each agency's expected interest or role in pilot project operations. The roles below are only for the pilot project. Potential longer-term roles in a future RUC system are suggested in the full technical report (see Appendix B), but not included in these summary pages as they are speculative and subject to future legislative policy determinations.

Agencies expected to have a role in carrying out pilot project functions:

- ▶ Washington State Transportation Commission (WSTC)
- ▶ Department of Licensing (DOL)
- ▶ Washington State Department of Transportation (WSDOT)

Agencies that may have an interest in the results of the pilot and/or a future RUC system:

- ▶ Department of Revenue (DOR)
- ▶ Washington State Patrol (WSP)
- ▶ Office of the State Treasurer (OST)
- ▶ State Auditor's Office (SAO)

Washington State Transportation Commission (WSTC)

WSTC has the most responsibility for pilot operations. Specific roles and responsibilities include:

- ▶ Procure, negotiate and enter into a turnkey contract with a prime contractor for the provision of necessary RUC technologies and support services.
- ▶ Facilitate or enter into agreements with Oregon DOT and Surrey, British Columbia outlining cooperative actions and support for their participation in the pilot project.
- ▶ Facilitate or enter into agreements with DOL for their pilot support services, including providing access to vehicle licensing offices (i.e., agents (County Auditors) and subagents).
- ▶ Serve as the primary point of contact for all project-related communications, including public and private sector stakeholders, elected officials, NGOs, the media, and general public inquiries.
- ▶ Assist in efforts to recruit registered owners of up to 2,000 vehicles to participate in the RUC pilot test.
- ▶ Convene RUC Steering Committee for periodic meetings to obtain policy guidance and provide pilot status reports.
- ▶ Convene regular work sessions of the interagency working group (DOL, WSDOT, WSTC) to facilitate knowledge transfer of RUC operations, and to tap agencies' expertise in spotting potential issues for a RUC system in the future.
- ▶ Commission research, white papers, special policy reports and technical memoranda to more fully explore policy-related issues that arise from a transition to a RUC system.
- ▶ Provide guidance and direction in setting the (hypothetical) RUC rates, exemptions, and mileage credit policies that will be used in the pilot test.
- ▶ Prepare required reports for WSDOT submittal to FHWA and other government agencies reporting on the progress, budget and schedule of the Washington RUC pilot project.

Washington State Department of Licensing (DOL)

Most of DOL's activities consist of close observation, expert advice, and counsel as they participate in regular interagency working group sessions to help identify potential issues during the pilot and for any future transition from the gas tax to a RUC system. DOL activities include:

- ▶ Actively participate in the regularly scheduled interagency working group sessions to help identify potential issues that must be resolved in any future RUC system.
- ▶ Help answer or redirect questions from the public regarding the RUC pilot project.
- ▶ Authorize and facilitate contacts between project delivery team (consultants) and vehicle licensing offices at select agents (County Auditors) and subagents located within five geographic regions of the state.
- ▶ Provide specific feedback and advice related to information technology, revenue collection, and vehicle licensing systems.
- ▶ Provide feedback and advice related to gas tax refund processes.
- ▶ Provide advice related to compliance and enforcement issues.



Washington State Department of Transportation (WSDOT)

While WSDOT has perhaps the most interest in ensuring that any future RUC system is capable of providing sustainable transportation revenues to fund the state's transportation system, WSDOT does not have many active roles to play in pilot operations. WSDOT activities include:

- ▶ Provide data, and review financial analyses related to rate setting, revenue estimation and refunds/credits for (simulated) RUC revenues in the pilot project.
- ▶ Assist with efforts to recruit owners of up to 2,000 vehicles to participate in the RUC pilot test by publicizing the project through WSDOT communication channels. Serve as liaison and assist with efforts to recruit electric vehicle owners to participate in the pilot test.
- ▶ Provide specific advice and counsel on the accounting standards, processes, and protections required in revenue collection systems (similar to tolls).
- ▶ Act as financial fiduciary for federal grant funding for the Washington RUC pilot project.
- ▶ Transmit federally required grant funding status reports to FHWA.
- ▶ Actively participate in the regularly scheduled interagency working group and consultation agency sessions to help identify potential issues that must be resolved in any future RUC system.
- ▶ Communicate the purpose and need for sustainable transportation revenues with public and private stakeholders, elected officials, NGOs, and the media.
- ▶ Help answer or redirect questions from the public regarding Washington's RUC pilot project.

Washington State Department of Revenue (DOR)

DOR is not expected to have any formal role or responsibility in the pilot test operations, but will be an important observer of the pilot operations as they can help identify issues and provide advice related to revenue collection systems.

- ▶ Actively participate in the interagency consultation process, including helping to identify issues that must be resolved in any future RUC system.
- ▶ Help answer or redirect questions from the public regarding Washington's RUC pilot project.
- ▶ Advise on how best to assist RUC volunteers, including resources and approaches necessary to achieve high payment compliance rates.
- ▶ Provide advice on other large-volume revenue collection activities, including information security, audit processes, accounts receivable, administering credits and refunds, and collecting revenue from out-of-state entities.



Washington State Patrol (WSP)

WSP will not have any role in pilot test operations. However, to help develop a future RUC system, WSP should be consulted for specific input to the following areas:

- ▶ Detecting and deterring vehicle licensing fraud.
- ▶ Roadside enforcement approaches and activities.



Office of the State Treasurer (OST)

The Office of the State Treasurer has as much interest in ensuring sustainable revenue sources as WSDOT and other transportation beneficiaries, considering the State has approximately \$8 billion in outstanding bonds that rely on current gas tax revenues for repayment. Areas where OST can be of special help include:

- ▶ Review the fiscal analysis and impacts of various potential RUC payment policies (whether RUC is prepaid, post-paid after miles driven, revenues collected monthly, quarterly, annually, etc.).
- ▶ Provide inputs on how a future RUC can be structured and authorized to achieve multiple fiscal policy objectives, including supporting the state's high credit rating.



State Auditor's Office (SAO)

The SAO may be able to share their experience and provide their perspectives on how a future RUC system – and the organization that would be asked to administer RUC – can best ensure program accountability, transparency, and revenue security.

- ▶ Provide perspectives on internal audit processes, emphasizing information accuracy/security and handling of payments



SECTION 5:

IDENTIFYING AND RECRUITING VOLUNTEERS

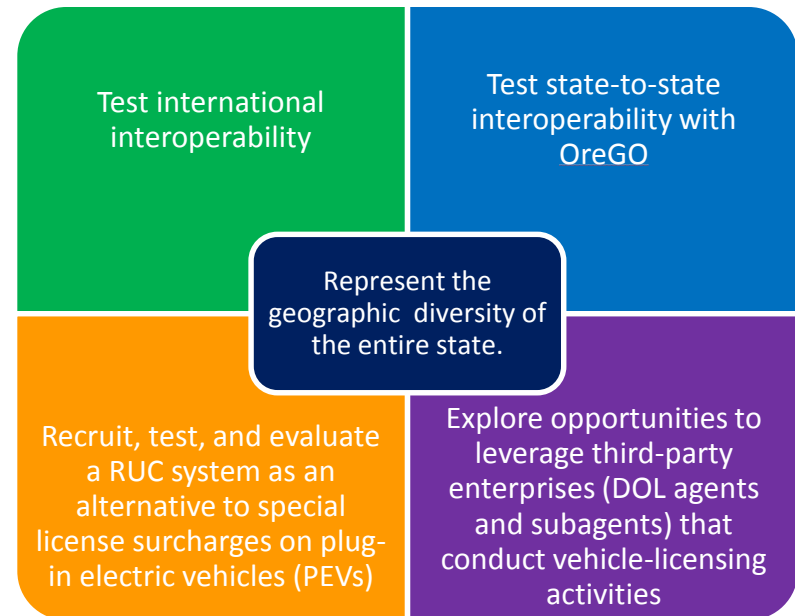
SECTION 5: IDENTIFYING AND RECRUITING VOLUNTEERS

Project features drive decisions about the number, location, and characteristics of participants

Washington’s federally funded RUC pilot has several innovative, first-in-the-nation features. These features drive decisions about the location and characteristics of pilot participants. The graphic below summarizes four unique features of Washington’s pilot (the four corners) along with a crosscutting preference to represent the geographic diversity of the entire state (the center box).

The recommended regions proposed for recruiting pilot participants are designed to achieve the following:

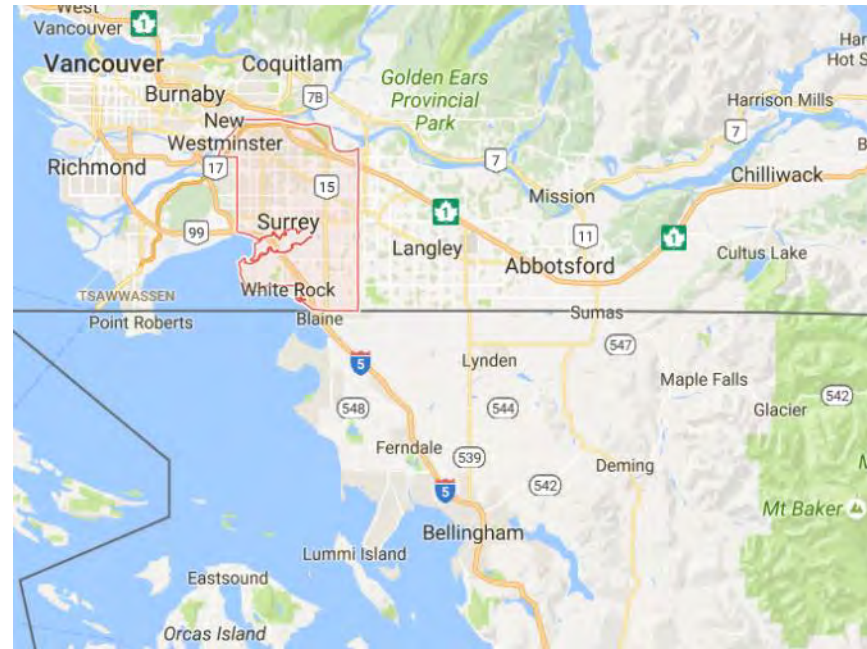
- ▶ Support these four key pilot features.
- ▶ Reflect the geographic, economic, and demographic diversity of the state. Housing and employment patterns, income, ethnicity, and age distributions were all considered to ensure the target regions are defined in a way that they contain a sufficiently large and diverse pool of prospective participants.
- ▶ Leverage pre-existing regional boundaries to efficiently leverage pre-existing communications channels for recruitment of participants by pilot partners and stakeholders (e.g., MPO, RTPPO, legislative, and media market boundaries).



Factor 1: Test international interoperability with Surrey, BC

A key partner in the Washington RUC Pilot is the city of Surrey in British Columbia, Canada. Officials in Surrey are interested in recruiting residents to participate in the pilot for the purpose of testing both technological and (simulated) financial interoperability across the international border. Surrey residents' travel into Washington will be measured and reported, and selected Washington residents' travel into British Columbia will be measured and reported.

In order to test interoperability in both directions, it is necessary to define one of the five target regions as including the part of Washington containing the land port of entry most likely to be utilized by passenger vehicles traveling between Washington and Surrey. In 2015, U.S. Customs and Border Protection reported 4.2 million passenger vehicle entries at the Blaine, Washington port of entry. The second most-used crossing is Point Roberts, with just over one million passenger vehicle entries in 2015.



Factor 2: Test interstate interoperability with Oregon's OreGO program

A second key feature of the pilot is to test technological and financial interoperability with Oregon DOT's OreGO system. As with the international element of the pilot, it makes sense to define one of the pilot's target regions to include this area of high cross-border traffic.



Much of the central and eastern parts of both states are sparsely populated with relatively little cross-border traffic. Therefore, efforts to recruit both OreGO participants and Washingtonians who might engage in cross-border travel should be focused on Southwest Washington (the Portland-Vancouver area). The Oregon DOT will be a significant partner in this aspect of the pilot in testing interoperability on a cash transaction basis between Washington's RUC pilot and the OreGO program. Due to the complexities introduced by the real payments aspect of this portion of the pilot, we recommend recruiting 20 Oregonians who meet the following criteria:

- ▶ Are currently enrolled in OreGO
- ▶ Have a GPS-enabled mileage reporting device
- ▶ Drive into Washington at least occasionally and preferably on a regular basis
- ▶ Are willing to participate in Washington's pilot (this is critical since the Washington/Oregon component of the pilot will exact "real" payments from participants)

A large number of OreGO participants are not required since this feature is a proof-of-concept for financial interoperability.

Factor 3: Recruit, test, and evaluate a RUC system as an alternative to special surcharges on Plug-in Electric Vehicles (PEVs)

The Seattle Electric Vehicle Association (SEVA) will be engaged to help recruit EV drivers in order to ensure the pilot addresses this third innovative pilot feature. While its membership can be found throughout Washington, SEVA is based in Seattle, and a majority of its members can be found in the Puget Sound region.

To ensure an adequate number of PEVs are enrolled to test RUC as an alternative to special surcharges, we recommend working with SEVA to recruit a minimum of 25 PEVs from the Seattle area. However, to allow room for PEV drivers from other regions of the state, while maintaining a good mix of vehicle types and ages, we recommend capping SEVA participation at 100 vehicles.

Factor 4: Partner with the Department of Licensing’s agents and subagents to assist in administering the Odometer Charge

A key partner in the pilot is the Washington Department of Licensing (DOL), which is responsible for maintaining the state’s vehicle registration database. DOL utilizes a network of County government offices (“agents” – all County Auditors except King County) and private sector commercial enterprises referred to as “subagents” to administer vehicle registration and other vehicle licensing services. A key feature of this pilot project is to explore the opportunities presented by this pre-existing arrangement to reduce the administrative costs associated with reporting odometer reads in a RUC system.

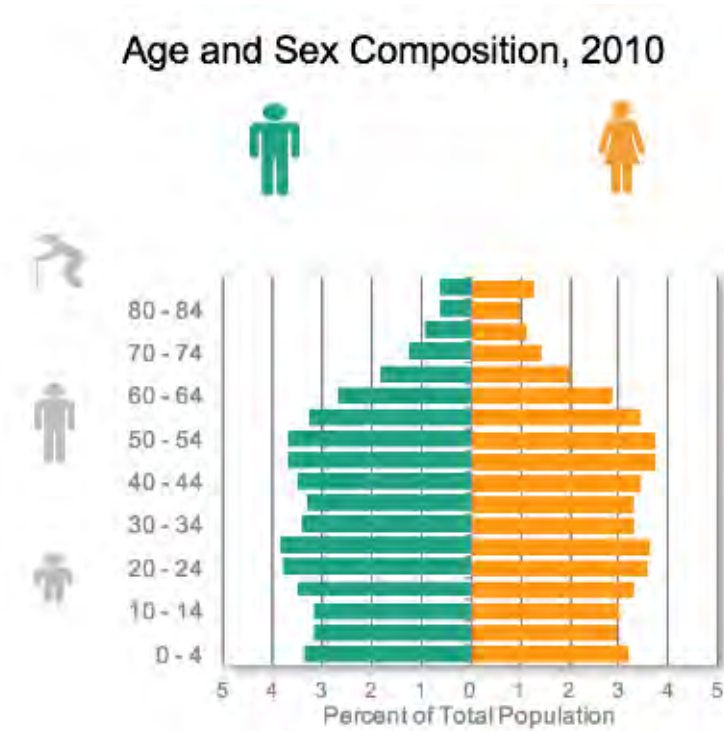
There is at least one vehicle licensing agent or subagent in each county. In developing the five target regions for the pilot, a key goal is to ensure the location and type of agent or subagent office(s) is adequate to support pilot participants who may need assistance from these vehicle licensing offices in each region.



Factor 5: Represent the geographic diversity of the entire state

It is important that the five regions selected for the pilot are collectively representative of the state as a whole. Washington has a diversity of demographic, geographic, and economic characteristics, and the five target regions must reflect that diversity. Geographically, about 84% of Washington’s population of nearly 6.9 million is concentrated in urbanized areas.

Demographically, in the last decade, Washington has attracted new residents in the 20-34 age brackets, due in large part to fast growth in its information technology and biotechnology sectors. Economically, Washington also enjoys tremendous diversity within its 66,456 square miles. Key industry sectors include agriculture, information technology, tourism, and energy production. The recommended target geographic regions are defined and summarized on the next two pages. They were defined to ensure a potential participant pool with diverse economic situations, geographic settings, types of employment, and ages.



Volunteer recruiting activities will be concentrated in five regions of the state

The five regions for the Washington RUC Pilot Project are defined as follows:

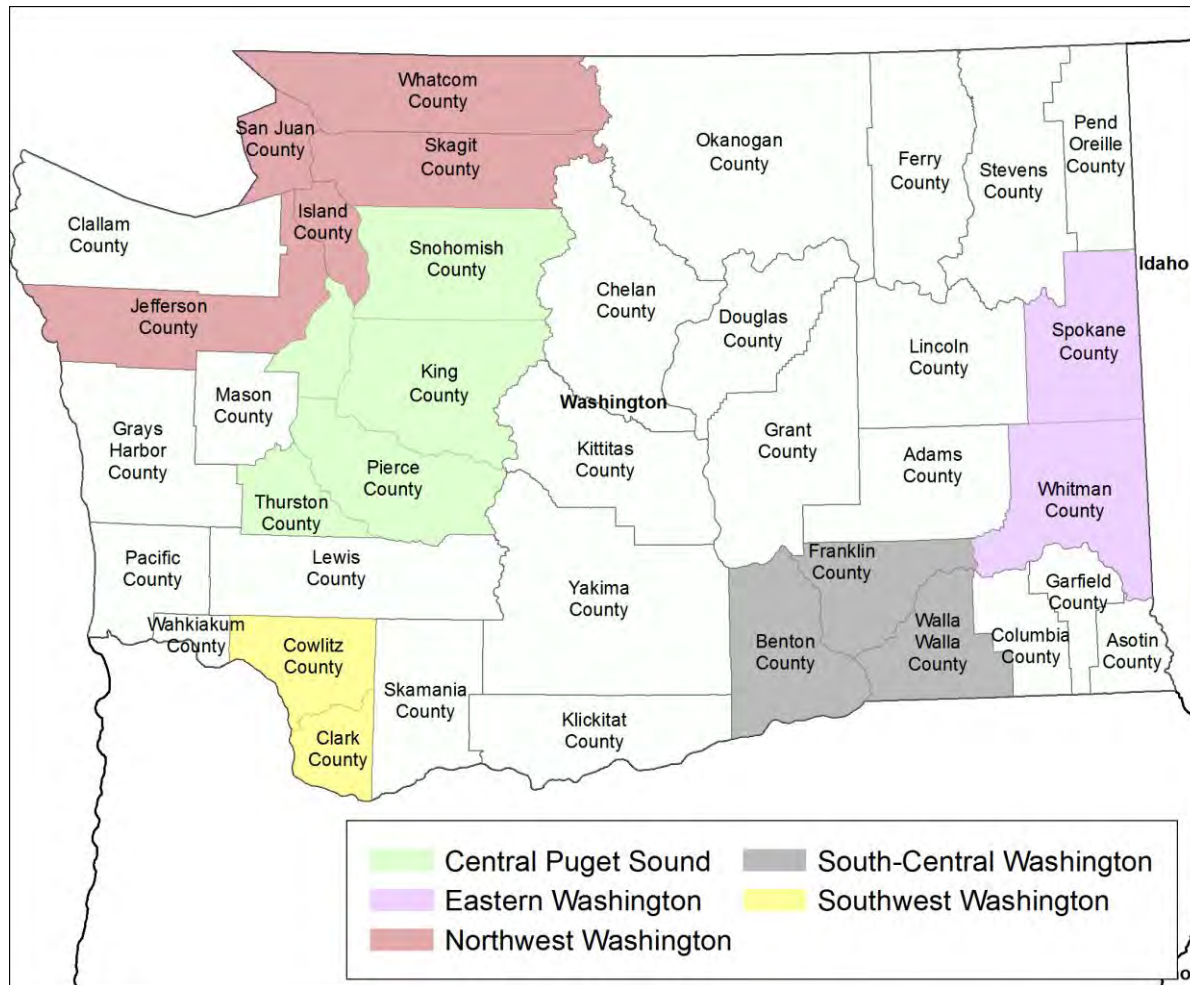
- ▶ **Central Puget Sound.** This region has the majority of the state's population and will provide perspectives from primarily urban and suburban drivers regarding RUC. It also includes the largest concentration of PEV drivers in the state.
- ▶ **Eastern Washington.** This region includes Spokane and Pullman, and features cross-border travel to Idaho. It includes a mixture of urban, suburban, and rural residents.
- ▶ **Northwest Washington.** Recruiting from this region will include primarily rural residents but will have a special focus on the international interoperability aspects.
- ▶ **South-Central Washington.** This region will provide a mixture of urban (Tri-Cities) and rural drivers from surrounding counties.
- ▶ **Southwest Washington.** This region will provide primarily urban drivers in a region with a high volume of cross-border travel with Oregon.

The boundary definitions of each region are presented in the map on the next page. Collectively, these five regions capture the economic, geographic, and demographic diversity of Washington. In addition, they allow for ease of recruiting participants and deploying systems to support key features of the test, including interstate and international interoperability, PEV surcharge alternatives, and DOL agent and subagent collaboration.

Note: These definitions do not preclude participation by residents of other areas of the state. However, they allow for focused recruitment activities in these regions to fulfill specific pilot features. In addition, they allow for focused deployment of DOL agents and subagents in areas where high concentrations of participants will reside to more efficiently operate the Odometer Charge concept.

Targeted regions for recruiting volunteers

The map below summarizes the five regions targeted for pilot participant recruitment. Collectively, these five regions help to fulfill the four unique features of Washington’s pilot.



Goal and strategies for recruiting pilot project participants

The Goal: recruit up to 2,000 vehicles from diverse locations in Washington to participate in a test of RUC methods. In addition to vehicles from Washington, up to 200 vehicles from Surrey, BC will be invited to participate in the pilot, and approximately 20 from Oregon's OreGO program.

The key recruiting challenge is that the general population does not know how their roads are currently funded, that revenues are not sustainable, or what a RUC is. It is important to walk people through a logical sequence of actions toward understanding the challenges and creating a willingness to participate in testing this potential new system is important.

The overarching goal of this section is to articulate a clear **strategy** that will result in vehicles being ready to take part in Washington's pilot project. To achieve this, the following activities are key to success:

- ▶ Define channels for sharing facts about the pilot project
- ▶ Identify key partners in recruitment efforts
- ▶ Raise public and stakeholder awareness about the need for a long-term transportation funding solution and that a RUC may be a potential successor to the gas tax
- ▶ Provide interested volunteers with basic information that describes what they will be required to do as a participant in the pilot, and when they will need to do it

Framework for Participant Recruitment

The pilot participant recruitment strategy is designed to provide potential volunteers with information about the project that spurs people in the target regions to participate. This strategy features key influencers such as members of the Steering Committee and WSTC to act as ambassadors for the pilot. They will be asked to highlight the benefits of testing RUC and invite Washingtonians to be a part of something historic, since Washington’s pilot will be the first to test interstate interoperability with actual money, and will be the first in the world to test international interoperability.

The central hub of volunteer identification and management is the pilot project website’s *Interest List*. As the pilot moves from Stage 0 (2016 implementation planning) into Stage 1 (pilot prep and setup), the website will extend from being an information repository to a tool the public can use to interact with the pilot, including to indicate interest.



RUC Ambassadors are a critical part of the recruitment strategy

One of the most important components of the pilot recruiting strategy is the concept of a RUC Ambassador. These are people who have opportunities to meet with policy makers, members of the media, and stakeholders, and who are equipped to make presentations about the pilot to a variety of audiences. In the beginning, RUC Ambassadors are drawn from the membership of the Steering Committee, the Commission, and WSDOT. Throughout Stage 1, this core group of Ambassadors will be tasked with recruiting additional RUC Ambassadors through interaction with partner organizations and one-on-one briefings with key influencers in Washington.

Volunteers need shepherding to become enrolled participants

While recruiting limits (2000 in Washington) reflect the maximum number of *vehicles* that can be supported in the pilot, this recruiting plan focuses on recruiting *people* – more specifically, registered vehicle owners – who will enroll their vehicles into the pilot. In most cases we expect that one recruited person will translate into one participating vehicle, although there may be some circumstances in which it is desirable for a single person to bring more than one vehicle into the pilot.

Recruiting participants into the pilot requires that individuals move through a series of stages, from gaining awareness of the pilot to developing an interest to committing to participate. A successful recruiting effort must move people through those stages and convert them from “interested bystander” in a large pool of potential participants to active participant. Not everyone will complete the journey. At each stage, some people drop off. The number of people that successfully complete the move from one stage to the next is referred to as the **conversion rate**. Based on experience with other pilots and with recruiting people into traditional volunteer activities, the conversion rate from “pool” to “participants” is likely to be somewhere between 5% and 15%.

The recruiting pipeline starts out with a **pool** of potential participants. Examples of methods used to reach this pool are news stories (both print and television), social media, utilizing partner email lists, and presentations by pilot ambassadors at conferences, meetings, and other events.

The next stage in the recruiting pipeline is to convert a portion of the pool to members of the pilot **interest list**. It is imperative that every recruiting event, presentation, briefing, and news story tell people how to sign up on the interest list on the pilot project website. When potential volunteers sign up for the interest list, they can choose to receive periodic updates on pilot activities, including recruiting emails, and they can indicate whether they are interested in being a volunteer.



The pilot project website will serve as the portal for potential volunteers to express their interest in participating in the pilot

The Interest List functionality of the pilot website, including ability to indicate volunteer interest, sign up for email updates, and share information via social media, should be complete in early 2017. In order to ensure the interest list process is as simple and straightforward as possible, and to encourage as many people as possible to engage early in the pilot, the on-line signup should request only a limited amount of information, including:

- ▶ First name
- ▶ Email address
- ▶ ZIP code
- ▶ Interest in being a volunteer (this can be changed by the subscriber at any time)
- ▶ Interest in receiving emails or newsletters about the pilot (this can be changed by the subscriber at any time)

In Q3 of 2017, the pilot team will reach out to interest list members that have indicated they are interested in participating in the pilot. This group is referred to as **prospects**. These prospects will be asked to provide demographic information, as well as details about the number and type of vehicles they would want to enroll in the pilot. The pilot team will sort through the responses to identify potential volunteers in the five target regions. These individuals will be deemed **qualified** and invited to enroll one or more vehicles, at which point they finally become a **participant**. Because a small number of people may enroll more than one vehicle, the number of participating people is likely to be slightly less than the number of vehicles.



Recruiting tools include digital, print and social media, and in-person dialogue with prospective volunteers

A wide range of paper and digital products support the recruiting effort. These are referred to throughout this section as “tools”. Tools should be customized to specific audiences and purposes, but there is a core set of tools that can be mixed-and-matched to create recruiting “tool kits.”

For the remainder of this section, we discuss five recruiting streams and identify assets that can be deployed in each. Those assets are the ones listed above -- the idea is not to develop unique assets to each stream but to develop one core set that is easily customizable and flexible enough to be used in different contexts and different media.



One important tool that supports several of the recruiting streams is an old-fashioned paper sign-up list. While we will strive to make excellent information about the pilot

available through the website and make it easy for people to subscribe to the interest list on-line, it is also critical to capture interest at the source when making presentations or otherwise engaging with the public. Ambassadors should avoid saying “go to the website to do that,” and instead take the sign-up sheet to meetings to let people know they can get more information by filling it out – just their name, email address, and ZIP code. When the meeting is over, the list should be sent to the project team to be converted to the on-line interest list. The new interest list member will also receive a welcome email. Ambassadors can send the list by mail, email, or by snapping a (good quality) photo on your mobile phone and emailing the picture to the project team.

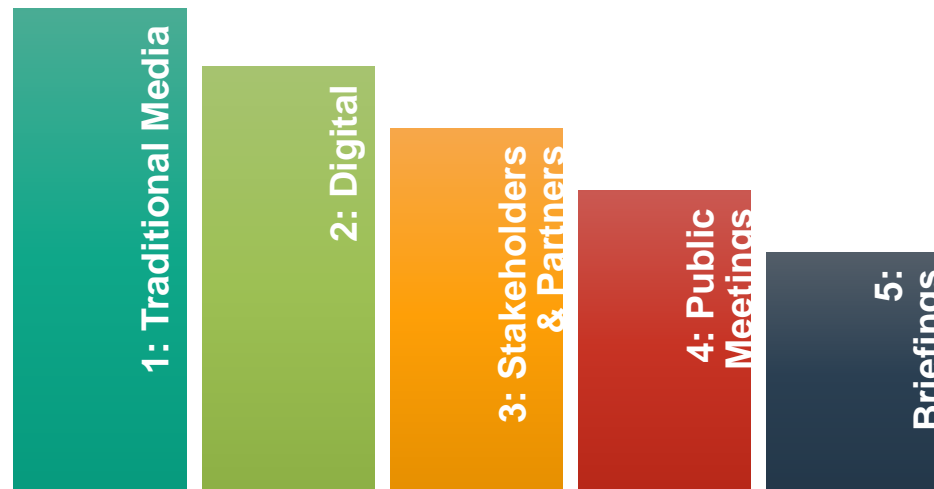
Finally, every tool – newsletter, tweet, PowerPoint presentation, news release, etc. – must contain a link to the pilot website interest list. This requirement means the basic website, with interest list sign-up, must be stable and live prior to the beginning of Stage 1 recruiting outreach.

Five primary information “streams” will be used to support recruiting

Five recruiting “streams” (or channels) have been identified through which the pilot team and RUC ambassadors can reach out to potential volunteers and induce them to sign up on the interest list. The first two (traditional media and digital) are designed to provide general information to wide audiences and strongly leverage activities described in the Media Strategy and Website Communications Plan documents. The other three (stakeholders & partners, public meetings, and briefings) deliver more specific information to targeted audiences, in addition to being conduits for general pilot information. Each of these streams is described in the following pages.

These recruiting streams are not audiences or recruiting tools – they are means of reaching different audiences and disseminating recruiting tools.

Recommendation: develop recruiting “tool kits” targeted to each recruiting stream. Examples of tools that would be included in each tool kit are basic PowerPoint presentations about the pilot, publication-ready newsletter copy, social media copy, and elevator speeches.



Recruiting Stream 1: Traditional Media

The “traditional media” recruiting stream leverages mass media outlets such as television, newspaper, and radio to provide general information about the pilot. It is important that coverage be balanced and factual. Crafting clear, brief, and compelling news releases and fact sheets encourages outlets to report on initiatives.

Staging

The traditional media stream carries throughout all pilot phases, starting in Pilot Stage 0 (now) and continuing through the completion of the active pilot (Stage 2).

In Stage 0, the primary activities undertaken through the traditional media stream have the goals of educating and informing the public about the road funding challenge and the purpose of the pilot. These activities continue through Stage 1, but with the added goal of encouraging Interest List signups, especially in March - June of 2017.

During Stage 1 and 2, news releases should be distributed to all major markets prior to each major pilot milestone, such as:

- ▶ Official launch of the full pilot website (start of recruitment effort)
- ▶ Selection of pilot service and technology providers
- ▶ Beginning of pilot enrollment
- ▶ Official start of the “test drive”
- ▶ Pilot conclusion

During Stage 0 and Stage 1, targeted news releases should be distributed to local media prior to any public meeting or event at which the pilot will be discussed, and after any meeting at which significant decisions about the pilot are made. Finally, during Stage 1, a concerted effort should be made by members of the Steering Committee and the Commission to meet with selected newspaper editorial boards to discuss the pilot, with the goal of generating editorial support.

Recruiting Stream 1: Traditional Media (continued)

Target Audience

Traditional media targets a very wide swath of the general population and typically has broad geographic coverage. As such, messaging should be general and fact-based in nature, and not assume any prior knowledge of transportation funding or RUC.

Assets

The types of assets that support engagement through traditional media channels include:

- ▶ News releases
- ▶ Op-ed copy
- ▶ Ambassador talking points
- ▶ FAQ sheets/webpages
- ▶ Steering Committee members (make available for interviews)

Goal: Work toward earned media exposure in the five target regions

Recruiting Stream 2: Digital

The digital recruiting stream leverages a range of digital resources to reach somewhat more targeted audiences than traditional media. Components include the pilot website and interest list, but also partner email lists and online presence, and potentially a targeted social media presence for the pilot itself.

Components of the digital recruiting stream include:

- ▶ **Pilot website with interest list:** The pilot website is a passive component (people have to go to it) and is primarily an asynchronous and relatively static information platform. Information about the pilot will be posted, including documents prepared by the Commission, FAQs, and general pilot schedules. It will also contain an interest list signup form. In the early phases of the pilot, the project will not have a direct social media presence. The website will contain tools that allow people to easily share information or links via their own social media accounts.
- ▶ **Partner email lists and digital media** (Seattle Electric Vehicle Association [SEVA], Voice of Washington State [VOWS], Metropolitan Planning Organizations/Regional Transportation Planning Organizations, etc.): Many of our partners and stakeholders already maintain email-based mailing lists, which they use to disseminate information. We recommend leveraging these lists to distribute information about the pilot, including calls to sign up on the interest list and attend public meetings.
- ▶ **Virtual public meetings and briefings conducted via webinar:** Webinars leveraging partner interest groups and email lists will supplement in-person recruiting presentations and briefings (Streams 3, 4, and 5).
- ▶ **Partner social media accounts:** As with email, many of the pilot project's partners have an active social media presence. This component involves asking partner agencies, stakeholders, and vendors (once they are selected) to post information about the pilot on their own Facebook, Twitter, LinkedIn, Instagram, etc. accounts.
- ▶ **Pilot social media accounts.** During Stage 1, there is the option for the pilot to establish its own social media presence on platforms such as LinkedIn, Facebook, and Twitter. More information on this option will be available in the larger Communications Plan. For recruiting purposes, it may be more effective to rely on partner social media for general outreach, since subscribers, followers, and members already know our partners to be trusted agents.

Recruiting Stream 2: Digital (continued)

- ▶ **Targeted social media:** If other recruiting streams are not successfully delivering the WSTC's desired volunteer pool, it is possible to use social media platforms such as Facebook to deliver highly targeted messages to populations that meet specific criteria. Targets can be defined based on various demographic factors, income, and other criteria.

Phasing

The Digital recruiting stream begins in Stage 0 (now) and continues throughout the pilot.

Target Audience

The target audience for digital recruiting varies depending on the component, but in general is more targeted than the traditional media stream.

- ▶ **Pilot website with interest list:** Anyone who is motivated to attend due to either an outside stimulus (e.g., public meeting, news report), or casual visitors.
- ▶ **Partner email lists and digital media (SEVA, VOWS, MPOs/RTPOs, etc.):** Generally, these lists comprise people with some interest in transportation issues, but recruiting efforts must be made by the partner (e.g., SEVA sends the message, not the Commission).
- ▶ **Partner social media accounts:** Similar target to partner email lists.
- ▶ **Pilot social media accounts:** This will evolve over time but generally will target individuals who are following other web content (e.g., news) related to the project as well as partners.
- ▶ **Targeted social media:** The targets will be prospective participants within the five regions being recruited for the pilot.

Recruiting Stream 2: Digital (continued)

Assets

- ▶ Pilot Website
 - > FAQs
 - > Calendar of upcoming events
 - > Interest list signup form
 - > Comment/question form
 - > Contact information
- ▶ Newsletter/announcement copy for dissemination via partner email and social media
 - > Most content will be general in nature and similar copy can be distributed to all partners
 - > Some audience-specific e-newsletter copy may be appropriate in limited contexts (e.g., for partners that request content targeted to their membership)
- ▶ Pilot project Twitter account
- ▶ Video interviews with members of Steering Committee and the Commission can be posted on the pilot website and shared with partners for dissemination through their digital channels
- ▶ Targeted social media campaigns to specific subpopulations

Recruiting Stream 3: Stakeholders & Partners

The Washington RUC pilot has a large number of stakeholders and partners that can be leveraged to recruit Washingtonians (as well as residents of Surrey and customers of OreGO) to join the interest list, and possibly participate in the pilot. This stream primarily involves tapping stakeholder and partner groups to identify public speaking opportunities for RUC Ambassadors such as conferences, meetings, conventions, and other public events, and asking partner agencies to support other marketing activities. The list of pilot stakeholders and partners is extensive and includes:

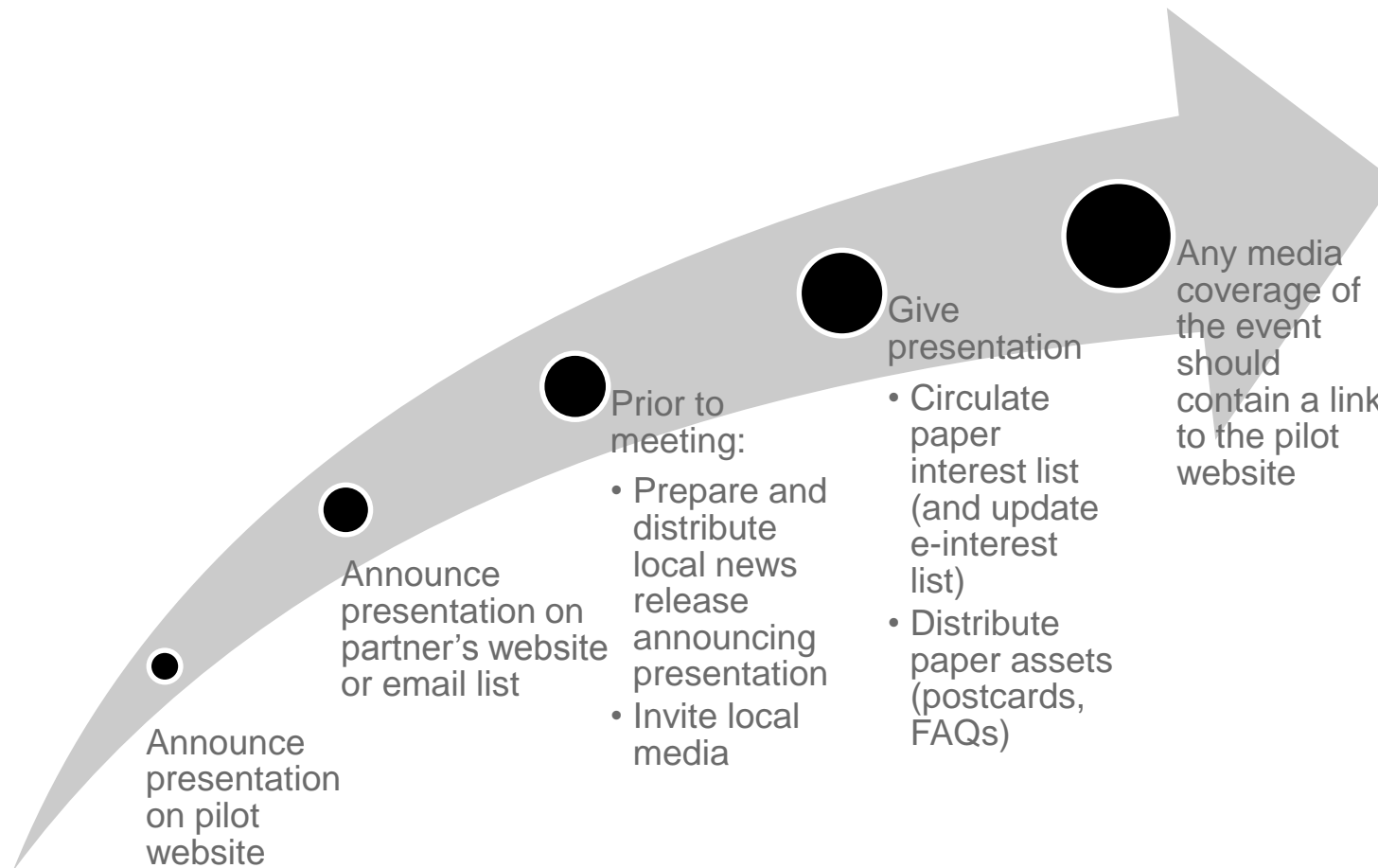
- ▶ **RUC Steering Committee:** The Steering Committee comprises individuals who are members of other organizations with an interest in transportation funding. Their first ambassadorial act can be taking the RUC pilot message back to their own organizations.
- ▶ **Washington State Transportation Commission.** The Commission was tasked by the Legislature to lead investigations into RUC. It has, in many ways, been the “voice” of RUC in Washington over the last several years by making presentations to interest groups, legislators, and partner agencies. This role should continue, but with a recruiting focus during Stage 1.
- ▶ **Citizen Interest Groups, Professional Associations, Trade Groups, and Advocacy Groups.** Groups representing various interests, such as environmental conservationists, electric vehicle owners, or the motoring public (AAA and Good Roads) may be interested in welcoming presentations by RUC Ambassadors. As road funding from motor fuel taxes erodes, professional associations related to civil engineering and the construction industry are beginning to realize they also face a challenge. In addition, Chambers of Commerce host a variety of roundtables and networking events that could be suitable forums for RUC presentations.
- ▶ **Washington State Department of Transportation (WSDOT).** As with fuel taxes, WSDOT would be the recipient of a considerable portion of RUC revenues and hence has an important stake in the design, implementation, and operations of a RUC system. WSDOT can be utilized in recruiting as a link to other partner agencies and interest groups.
- ▶ **Washington State Department of Licensing (DOL).** DOL works with an extensive network of agents and subagents located throughout the state. These are physical locations that many Washingtonians travel to annually in order to renew a vehicle registration, to transfer vehicle ownership (title), or to purchase special plates. DOL could support recruitment efforts by asking agents and subagents to display posters about the pilot project in their locations, and distributing FAQ sheets to interested citizens.

Recruiting Stream 3: Stakeholders & Partners (continued)

- ▶ **Equipment Suppliers, Professional Associations and Commercial Account Management Entities.** Private companies will at a minimum provide the technology and systems to implement the RUC, and potentially offer account management and other value-added services. In the event commercial account managers are used for the pilot, they can support enrollment by marketing directly to potential “customers” and offering their own incentives for participation.

To maximize the impact of presentations made at meetings, conferences, and other events, we recommend complementing Stream 3 activities with traditional and digital media. Each presentation to a partner audience should be preceded with marketing and a news release announcing the presentation, and followed by media coverage or an update.

Strategy for Maximizing the Impact of Public Presentations



Recruiting Stream 3: Stakeholders & Partners (continued)

Staging

This recruiting stream will be utilized during Stage 1 of the pilot. Early in 2017, emphasis will be placed on driving signups to the interest list. During March-June, supporting assets will speak more directly to volunteer opportunities and timelines.

It should be noted that, since the agendas for many meetings are planned weeks or months in advance, planning for this stream and efforts to get on agendas should start during Stage 0.

Target Audience

The audiences likely to be reached through stakeholder and partner channels are typically geographically focused and already somewhat interested in transportation issues.

Assets

- ▶ Print media such as FAQs and Posters for distribution in partner locations
- ▶ Content for partner newsletters and websites
- ▶ Ambassador talking points
- ▶ Basic RUC pilot PowerPoint presentations for RUC Ambassadors to use during stakeholder/partner/trade/advocacy groups meetings and events
- ▶ Paper interest list template (get sign-ups at the events, then convert to on-line interest list)

Recruiting Stream 4: Public Meetings

This recruiting stream leverages opportunities presented by governmental and quasi-governmental organizations that host public meetings. Examples include MPOs, RTPOs, County Commissions, and City Councils.

Phasing

This recruiting stream will be utilized during Stage 1 of the pilot. Early in 2017, emphasis will be placed on driving sign-ups to the interest list. During March-June, supporting assets will speak more directly to volunteer opportunities and timelines.

It should be noted that, since the agendas for many meetings are planned weeks or months in advance, planning for this stream and efforts to get on agendas should start during Stage 0.

Target Audience

The target audiences for most public meetings will be the general public but *only in target regions*. Public meetings, especially those conducted by County Commissions, MPOs, and RTPOs tend to draw locally and there is likely to be little value in making presentations outside the target areas unless invited to do so.

Assets

- ▶ Basic RUC pilot PowerPoint presentations
- ▶ Ambassador talking points
- ▶ Printed assets (postcards, FAQs)
- ▶ Paper interest list template (get signups at the events, then convert to on-line interest list)

Recruiting Stream 5: Briefings

This recruiting stream is intended to provide informal, one-on-one meetings with key influencers with the twin goals of recruiting them to participate in the pilot and converting them to become Ambassadors for the program. Responsibility for conducting briefings falls largely on members of the Steering Committee and the Commission. These meetings would involve explaining the program, inviting the person to join as a participant, and recruiting them to become Ambassadors.

Phasing

This recruiting stream will be started during Stage 0 and expanded during Stage 1 of the pilot. During the remainder of 2016, emphasis is on informing and personally recruiting key influencers in Washington. Early in 2017, emphasis will be placed on driving sign-ups to the interest list. During March-June 2017, supporting assets will speak directly to volunteer opportunities and timelines.

Target Audience

One-on-one briefings are likely to have targeted geographic impact. With a few exceptions, these briefings will take place in one of the five target recruiting regions. The audience includes:

- ▶ Policy makers
- ▶ Community leaders involved in transportation issues
- ▶ Public agency executives

Assets

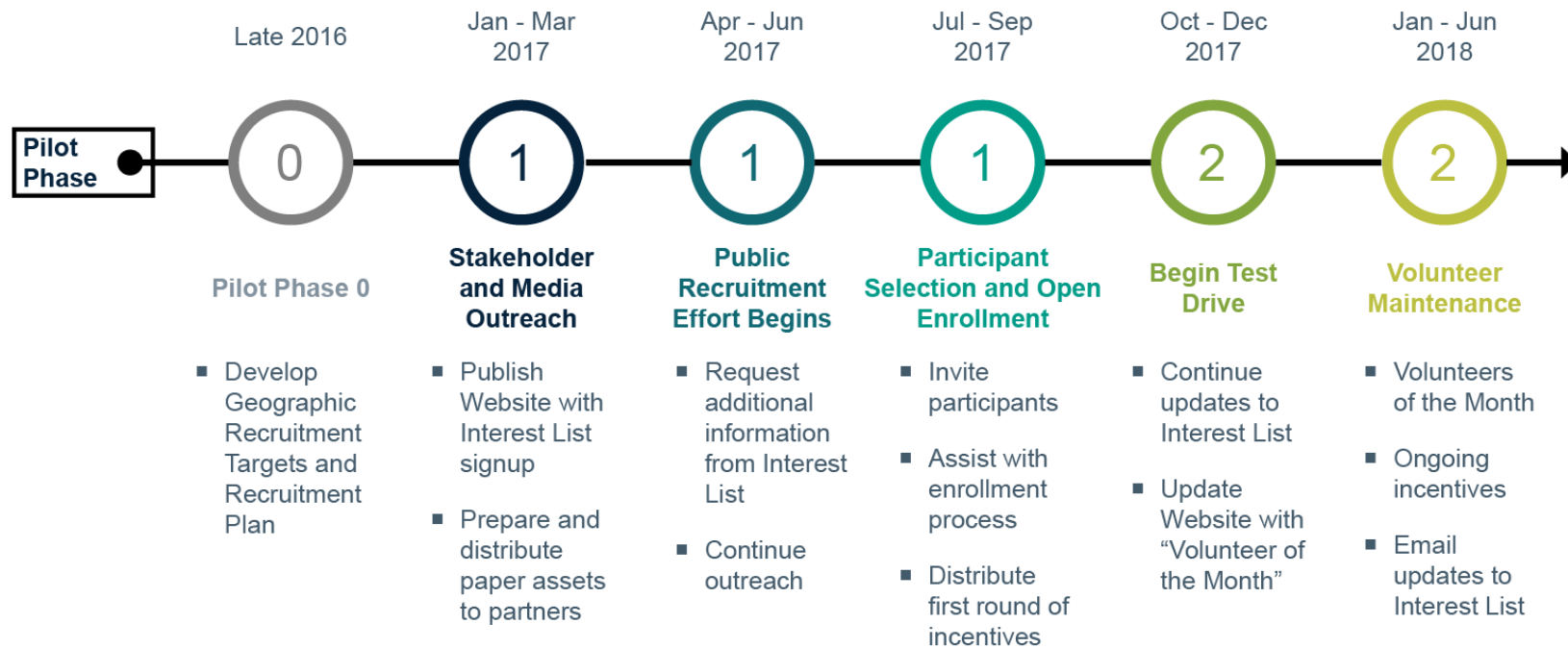
- ▶ Basic RUC pilot PowerPoint presentations
- ▶ Ambassador talking points
- ▶ Printed assets (postcards, FAQs)

Potential Incentives

Incentives, including personal recognition, free services, and compensation for time spent on the pilot can be powerful recruiting and retention tools. At this time, it is too early in the pilot planning to finalize an incentive plan, but potential incentives include the following:

- ▶ **Value-added services provided by account managers:** Various providers of RUC services in Oregon and California offer a range of value-added services to motorists who hold accounts with them. These services range from geo-fencing (e.g. “teen driver alert”), to vehicle health monitoring and driver safety feedback.
- ▶ **“Volunteer of the Month” feature on pilot website:** Sometimes, simple recognition for participating is more meaningful than payments or free services. A “volunteer of the month” feature could be incorporated into the pilot’s website and would feature a volunteer’s story, reasons for being in the pilot, and experiences.
- ▶ **Awards upon completion of each milestone:** Another potential incentive is to offer a small award each time a pilot participant successfully completes a major milestone. Awards can be financial or non-financial. Examples of milestones include the following:
 - > Successfully installing equipment or mobile apps
 - > Completing a manual odometer reading
 - > Completing a survey or focus group
 - > “Paying” an invoice
 - > Returning OBD-II devices at the end of the pilot
- ▶ **Cash compensation for time spent on pilot activities**
- ▶ **Direct incentives by account managers to enrolled customers:** No account managers have been selected for the pilot, but it is conceivable that commercial account managers could run their own contests, sweepstakes, or other recognition programs.

Recruiting Timeline



SECTION 6:

COMMUNICATING WITH THE PUBLIC AND KEY STAKEHOLDERS ABOUT THE PILOT

SECTION 6: COMMUNICATING WITH THE PUBLIC AND KEY STAKEHOLDERS ABOUT THE PILOT

Communication about the WA RUC pilot project will be through a variety of platforms, with key messages delivered in-person, digitally, and through the media. The Communication Plan focuses on the what and the why. Work plans provide details on the how and include, the Pilot Project Participant Recruitment Plan, the Media Strategy for pre-launch briefings, and the Website Plan.

Goals

The Plan has five primary goals. Individual work plans address one or more of these goals, depending on the topic:

- ▶ **Inform and educate the public** on several topics related to road usage charging (what it is, why it's worth testing) and the pilot project.
- ▶ **Recruit pilot project participants** from across the state who represent diverse populations. The Pilot Project Participant Recruitment Plan addresses this most explicitly, but any communication material or story about RUC and the pilot project has the potential to aid in recruitment.
- ▶ **Generate broad understanding** of the pilot project among stakeholders, including the general public, the private sector and businesses, and other agencies and organizations.
- ▶ **Cultivate balanced and accurate media coverage** about road usage charging and the WA RUC pilot project. The Media Strategy directly addresses this, but all communications efforts have this goal in mind. Media coverage will introduce the RUC concept to a broader audience and should reinforce recruitment efforts.
- ▶ **Assess public opinion** before and during the pilot to evaluate changes in perspective and acceptance regarding road usage charging and different ways to record mileage. The exact details are still to be worked out, but will likely involve the use of the VOWS survey panel.

Four principles guide communications work. Information on the supporting resources and actions taken to date are included under each principle.

Principle #1: Be consistent and clear. Use the full term “road usage charge” until your audience knows what you mean; only then refer to RUC. Emphasize that this is a pilot project. Always use the brand and tagline. Use key messages and reference the website, which serves as the information hub.

- ▶ In this pre-pilot phase, website development has been a priority to ensure a central information hub is in place and to provide a platform to facilitate public comment and the ability to sign-up for updates or to express interest in pilot participation.
- ▶ A frequently asked questions (FAQ) document was developed and continues to evolve. This document includes key messages related to transportation funding, road usage charges, and the pilot project. It serves as a resource for project spokespeople and the project team to ensure consistency and provides content for the website and other communications materials.

Principle #2: Stay proactive. Anticipate questions, volunteer to make presentations, and share information. Identify spokespeople.

- ▶ WSTC staff and Commissioners have been the primary spokespeople to date, and four Steering Committee members have volunteered to join us. This group will be available for interview requests once media attention picks up in the New Year.
- ▶ A Power Point presentation has been created that WSTC staff, consultants, and Steering Committee members use when speaking to groups. Several presentations were made during fall 2016 to transportation stakeholder groups, such as the Washington Highway Users Federation and King County’s SeaShore Transportation Forum, and many more are planned for 2017.
- ▶ Media briefings with select outlets were conducted in December 2017, and more will be scheduled once the pilot is announced.

Principle #3: Adapt and learn. Test messaging; listen to feedback from focus groups, media stories, and other sources; and adapt based on what is learned.

- ▶ The project team has adopted lessons learned from work done in other states (California, Hawaii, and Oregon) and other transportation funding work here in Washington. Media is monitored weekly to track if and how road usage charging (and eventually the pilot project) is talked about, though little has been produced locally to date.

Principle #4: Keep it brief, use visuals. Resist the temptation to over-explain in print; use video and infographics.

- ▶ This principle guided development of the website.

2017 Communications Tasks

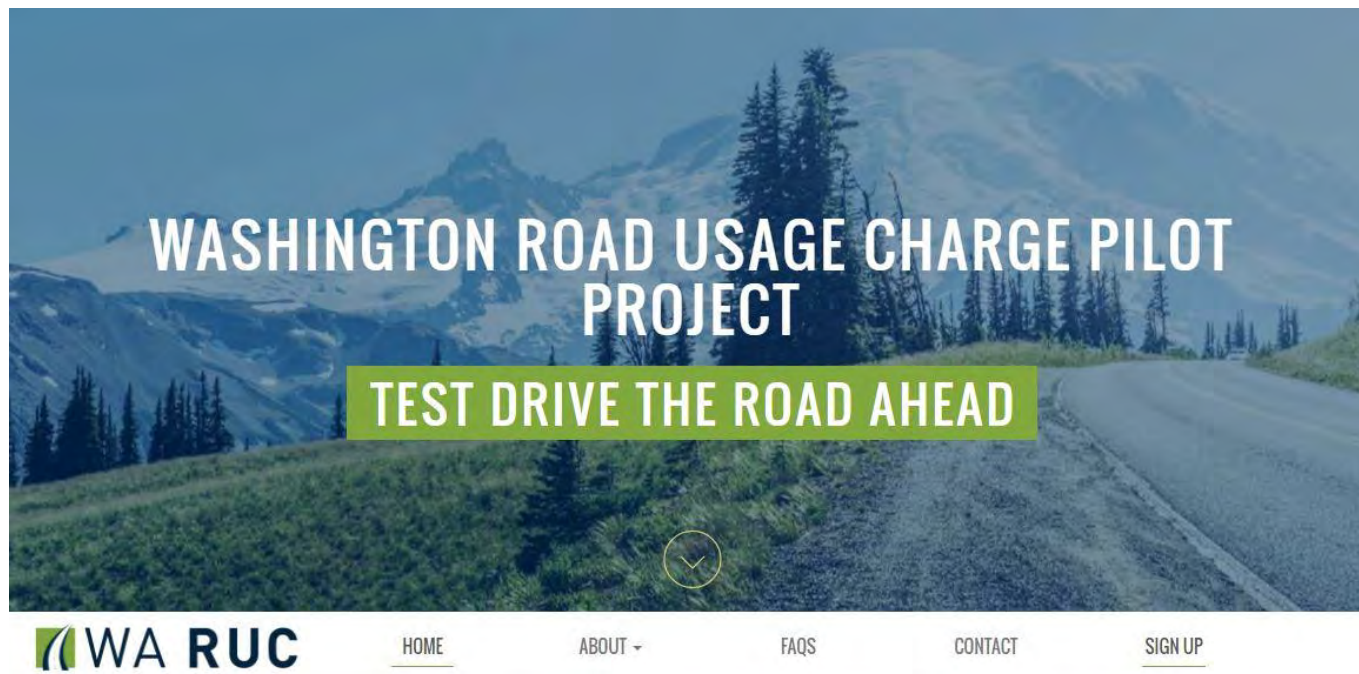
The Plan outlines specific strategies for three key audiences: 1) the general public; 2) stakeholder groups, defined as local, regional, and statewide professional, affinity, and business groups, and elected officials and agency heads; and 3) the media.

In early 2017, a detailed Public Outreach work plan will be developed. This will include a schedule and budget for three types of outreach: 1) digital outreach via surveys, webinars, the website, and social media; 2) in-person outreach via continued presentations and briefings, focus groups, and community and public events; and 3) ongoing media coverage.

Print and online material will continue to be developed and refined to support each stage of the pilot. This includes adding questions and answers to the website and FAQs, and reframing problem statements as we learn what messages people understand and connect with.

Washington’s Pilot Project website is launched

As part of this Stage 0, a new website was created to share information on the Washington Road Usage Charge pilot project. As outlined in the Communications Plan, the website serves as the home base for the project and is a centralized source of consistent and updated information on road usage charging, the work of the Steering Committee, and details of the pilot. The website will evolve as participant recruitment begins and the pilot launch approaches with more detailed information about opportunities to participate. Currently, the website includes basic information about road usage charging on the home page and frequently asked questions page, links to Steering Committee agendas and notes and work completed since 2012, and both a contact form to submit comments or questions and a sign-up form to be added to the interest list and learn more about the pilot.



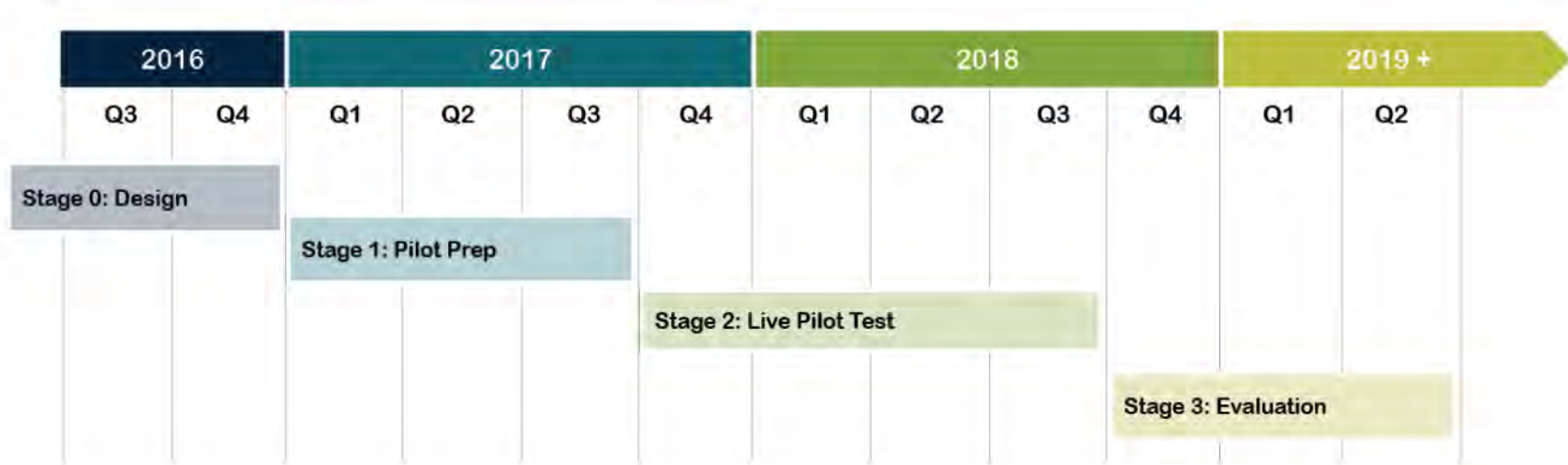
SECTION 7:

PROPOSED PILOT PROJECT SCHEDULE

SECTION 7: PROPOSED PILOT PROJECT SCHEDULE

Stage 1 consists of all pilot design and preparation activities, leading to a fall 2017 launch of the year-long live pilot test

The full pilot project requires 29 months and will be carried out in three stages: Stage 1, Final Design and Pilot Preparation; Stage 2, Live Pilot Test; and Stage 3, Pilot Evaluation and Reporting.



Launch of Stage 2, the live pilot test, is dependent upon successful completion of Stage 1, which cannot begin until contracts are signed.

There are a few significant schedule risks in Stage 1, the most significant being the contracting process. WSTC must have a contract in place with FHWA to obtain full funding for all Stage 1 activities. Because WSTC is not an eligible direct recipient of federal funds, WSDOT must be the financial fiduciary for the project, ensuring that project costs, invoices and reimbursements are carried out in accordance with federal policies. This arrangement is not unique; many local government projects that are funded in part with federal money also require WSDOT to serve in this capacity. Nonetheless, this arrangement requires an agreement between WSDOT and WSTC that delineates the proper roles and responsibilities for fund management. This could take the form of a second agreement solely between WSDOT and WSTC, or these provisions could be addressed in the base agreement between FHWA and WSTC, with WSDOT as a necessary party to the contract (essentially, a three-party agreement).

A further schedule risk involves contracts with prime contractors, consultants, subcontractors and equipment/service providers that all must be in place before the pilot project can begin final design and system testing activities. Even with WSTC's base agreement in place with the prime contractor, a new scope of work to reflect Stage 1 activities, schedule and budget must be in place before any work can be authorized. The prime contractor cannot undertake any work to acquire the technologies and services needed from vendors to implement the pilot project until a final Stage 1 Scope of Work has been executed between WSTC and the prime contractor.

The final target launch date for Stage 2 Live Pilot Test cannot be set with any certainty until Stage 1 activities are well underway. With an exact start date for Stage 1 dependent upon contract execution between WSTC and FHWA, the live pilot test is estimated to launch sometime in fall 2017.

Assuming all contracts are executed in January, launch of the live pilot test should occur early in Q4 2017 (likely October)

The live pilot test is most likely to begin in October 2017, barring any further delays or unforeseen problems during Stage 1 final design and testing activities, which are projected to require eight (8) full months of work. A high-level project schedule for all Stage 1 activities is provided below. The activities are organized around four primary tasks (or work streams): Task 1, Pilot Test Activities; Task 2, Public Attitude Assessment; Task 3, Project Communications and Participant Engagement; and Task 4, Project Management, Oversight and Policy Development.

STAGE 1 - Final Design & Pilot Prep

Activity / Task	Duration (Months)	Activity / Task	Duration (Months)
Task 1 - Pilot Test Activities	8	Task 2 - Attitude Assessment	8
Develop Technical Documents:		General Public Baseline Assessment	
-Pilot System Requirements	2	-Baseline Surveys	4
-Pilot Interface Definition	2	-Baseline Focus Groups	4
-Final Pilot Concept of Operations	2	-Baseline Attitude Assessment Report	4
-Pilot Interoperability Design (with other agencies, Oregon)	2	Pre-Pilot Participant Surveys	2
Develop Plans for:		Task 3 - Project Communications & Participant Engagement	8
-Pilot Organizational Design	5	Develop Communications Materials:	
-Final Pilot Evaluation Plan	2	-Written Communications	3
-Detailed Pilot Testing & Operations Procedures	2	-Digital/Project Web Portal and Communications	3
Procurement & Contracting		Execute Communications Plan	
-Draft Procurement Documents	1	-Media Outreach/Briefings	
-Conduct Procurement Process	3	-Issues Management	
-Negotiate & Sign Contracts with Service Providers	2	Participant Recruitment, Incentives & Engagement	6
-Negotiate & Sign Agreements for vehicle licensing offices participation	8	Task 4 - Project Management, Oversight & Policy Development	8
Development & Testing for each RUC method:		Washington RUC Steering Committee	
-Mileage Permit	4	-Meetings and webinars	8
-Odometer Charge	4	-Policy Development & Reports	8
-Automated Mileage Reporting	4	Project Management & Control	8
-Interoperability & Reconciliation	8	Project Reporting (State, Legislative, Federal)	8
-Integration & Oversight of Development & Testing	2		
Customer Support: Help Desk Setup and Training	2		
Smartphone Application Hackathon			
-Develop Specifications and Event Planning	3		
-Conduct Hackathon Event	3		
-Award and Pilot Integration for Smartphone App	2		