# WASHINGTON STATE ROAD USAGE CHARGE

# STEERING COMMITTEE

## 2015 Meeting # 2
## Meeting Notes | December 1, 2015

## ATTENDEES

### Steering Committee Members

Chair Joe Tortorelli, WSTC Commissioner
Anne Haley, WSTC Commissioner
Roy Jennings, WSTC Commissioner
Representative Judy Clibborn
Representative Linda Kochmar
Representative Ed Orcutt
Representative Jake Fey
Curt Augustine, Alliance of Automobile Manufacturers
James Thompson, Washington Public Ports Association
Don Gerend, City of Sammamish Councilmember
Tom Hingson, Everett Transit
Amy Arnis, Washington State Department of Transportation (WSDOT)
Pat Kohler, Washington State Department of Licensing (DOL)
Janet Ray, AAA Washington
Neil Strege, Washington Roundtable

### WSTC Staff

Reema Griffith, Executive Director
Paul Parker, Deputy Director
Carl See, Senior Financial Analyst

### Consultants

Paula Hammond, WSP | Parsons Brinckerhoff

Brent Baker, WSP | Parsons Brinckerhoff
Jeff Doyle, D'Artagnan Consulting
Travis Dunn, D'Artagnan Consulting
Jack Opiola, D'Artagnan Consulting
Matthew Dorfman, D'Artagnan Consulting
Steve Morello, D'Artagnan Consulting
Montana James, BERK Consulting

### Other Presenters

Ryan Morrison, TrueMileage
Fred Blumer, Vehcon
Nate Bryer, Azuga
Alex Harvey-Gurr, SmartCar

### Other Attendees

Jennifer Harris, House Transportation Committee
Jeff Finn, Seattle Electric Vehicle Association
Doug Klunder, ACLU of Washington
Sadeeq Simmons, DOL
Haiping Zhang, DOL
Jackson Maynard, Washington State Senate
Tonia Buell, WSDOT
Gerald Dang, Hawaii Department of Transportation
Jade Butay, Hawaii Department of Transportation

**NOTE:** As presentation materials are available on the Washington State Road Usage Charge website (https://waroadusagecharge.wordpress.com/materials/) this meeting summary focuses on the discussion

and not the presentation content. Italics reflect comments or questions from the Steering Committee while bullets denote consultant team or presenter responses.

## Welcome and Introductions

Joe Tortorelli, Steering Committee Chair, welcomed the group and made introductory remarks on the current status of the Commission and the Steering Committee's charge. Committee members and attendees introduced themselves around the room. Joe then reviewed the agenda of the meeting and asked for public comment.

## Public Comment

No one from the audience provided public comment.

## Presentation of Revised Business Case Analysis

Travis Dunn provided an overview of the revised business case analysis.

### Discussion

*Model year 2019 starts on January 2, 2018. So that would need to be clear in this business case analysis. Perhaps we mean model year 2020?*

- Correct, the analysis should read "model year 2020."

*In regards to the analysis of the various collections by a contracted model versus a state model, does this take into account the various commercial partner options, whether they cost more or less, and what percentage of customers would choose which option of commercial partners?*

- Yes, the analysis takes that into account. It assumes a certain percentage of customers would choose each option. Those details are included in the briefing book. The chart in the PowerPoint is an average across the options.

- This analysis was based on a cents per mile basis, so it is important to understand that each line in these projections is multiplied by total miles traveled to arrive at total revenue. Depending on the rate of growth of VMT, it could change the shape of the curve.

*Are these projections [on slides 15-17] net or gross revenue?*

- These figures represent net cents per mile (net of collection costs).

*Who will be building charging stations in the future for the rise in electric vehicles? Public sector or private?*

- The private sector will step in to do that. Recent legislation incentivizes the private sector to do so, and while the business model isn't quite there yet, with continued tax breaks, in about four years the private sector will take over building charging stations.

- When considering modern vehicles (electric and autonomous) those vehicles demand good roads. Roads need to be well marked, well striped, and have solid safety guardrails for those vehicles. The issue of road maintenance is more important now than ever.

*AAA Washington has been looking at autonomous vehicles more and more recently. Understanding what we do about electric, how long does it take for a whole fleet to turn over?*

- The average is about 11 years. It could take up to 15 here in Washington where our weather is a bit better than in other regions.

- Newer vehicles are driven many more miles per year than older vehicles, on average.

*Oregon offers the consumer both the option to go through the state or private sector. Have you looked at a hybrid approach such as this for Washington?*

- The analysis considers this (for more details see the briefing book). The chart presented in this slideshow actually presents a hybrid method.

*In a hybrid system such as Oregon's, how does that affect administrative and audit expenses? Do they increase?*

- There are savings from engaging commercial partners for account management, but there are increased costs to complete the audit functions, on both customers and the commercial partners. That is factored into the overall costs of the hybrid approach. The savings still outweigh the costs in this analysis.

- The Department of Licensing in Washington already has audit agents who work with private partners for other programs, so this would not be such a shift for the state in terms of administrative procedures.

*Is it correct that the experience at the gas pump would not change, and it would be the consumers' choice of how to reconcile [between the gas tax and the Road Usage Charge (RUC)]?*

- New vehicle owners would have to choose how to reconcile.

*Would older vehicle owners be able to choose to do a RUC over the gas tax if they wanted?*

- That would be a policy option to consider. This scenario presented in the Business Case Analysis does not include that, but it could be opted for.

- Early on this committee decided that this exploration is focused on a replacement of the fuel tax, recognizing that longer term there isn't enough revenue in the transportation system as currently structured.

## General Comments from Committee Members

- While the Analysis averages a fuel tax increase each year, keep in mind that fuel tax increases happen irregularly, most recently only once in 13 years. They are difficult to pass and rely on a range of circumstances.

- In the scenario "Shift Happens" it is assumed that by 2040, 20% of new cars will be electric. In 25 years I really think that electric will be the standard. I think that it will be higher than that. I am convinced that by 2040, 50% of new sales will be electric.

- Just last week Toyota announced by 2040 they will not make any more gas vehicles, only electric.

- Just this year 1.75% of vehicle sales are electric vehicle sales. I think the figures we are seeing in the Business Case Analysis are really conservative based on what we are seeing in the marketplace.

- If as many electric cars as we are projecting are going to be on the roads in coming years, it would ruin the residential electrical grid. That electric fuel is not free.

## Federal Reauthorization Act Grant Funding for RUC Pilot Projects

Paula Hammond provided a review of the Federal Reauthorization Act Grant Funding.

### Discussion

*Why is does the House version of the Transportation package specify that a RUC is non-toll revenue but the Senate version does not?*

- It depends on how rules are written, but the intention was to separate the notion of a RUC from a toll; this was just not included in the Senate version.

*What do you mean by "soft match" funding in the briefing book?*

- It means money being used by Washington could be utilized to match up with federal pilots.

*Is there any indication that the feds are looking to states to pilot the RUC as replacement for national gas tax?*

- It is far too early to speculate on that. The Federal Government has the same problem Washington does, and they are interested in the most innovative technology available.

Jack Opiola provided an update regarding the federal transportation package, noting that he received an update via email explaining that:

- Only states will be allowed to lead pilot projects and research on a RUC;

- It is anticipated that the conference committee bill will be passed and enacted into law by mid-December;

- The conference bill stipulates a 5 year program for $95 million, at a 50-50 match;

- The Advisory Committee concept was removed from the bill, so the U.S. Secretary of Transportation will award the grants;

- There will likely be a focus on grant recipients' RUC pilots being robust in geographic dispersion.

## Review of Roadmap: A pathway to RUC in Washington

Jeff Doyle reviewed the Roadmap with the group, providing background on its origin, the sequence it details, and major milestones.

### Discussion

*Why does Oregon's current RUC pilot have only about 1,000 drivers enrolled when they capped it at 5,000?*

- The maximum of 5,000 drivers was a not to exceed number, not a goal. Oregon had about 3,000 people registered on their website, but did not seek those people out for this second round of RUC. The Oregon Department of Transportation has not done much marketing, however, the Commercial Account Managers have done significant marketing. As of the end of October, Oregon did a reconciliation of fees collected by commercial account managers to the Treasury Department in Oregon and that process worked well. Washington has done significant work on a transition plan, which Oregon has not really done.

- Washington's plan to create a communications plan is extremely important for testing and transition of a RUC. This is something Oregon did not have, and it has likely contributed to these low numbers.

*Will the Washington Communications Plan be created before the demo project to drum up participants for the demo project? I am just curios whether steps 6 and 7 on the road map are more concurrent.*

- The communications plan is significant for making clear the current status of taxes, for creating a plan for how to have these conversations with the public. It is strategy for education, informing, and describing what RUC is. As the demonstration project proceeds, the communications plan should have components for each phase. Then finally it is a plan for how to discuss results and close out the demo project.

- There are many disincentives for individuals to enroll in RUC demo projects – they cost more money and it is an off the beaten path project. So a communications plan will be important.

- The Washington RUC is already being talked about in Washington D.C., whether there is a plan or not. This topic is already out on the soundwaves, so it behooves the Committee to have a plan and strategy on how to discuss this; it is better to be in front of the issue than reactive.

- It is important to talk about what RUC is not. The work the Puget Sound Regional Council (PSRC) is doing now has clouded the topic a bit. This is a confusing message and topic for the public.

*How much did Oregon spend on their current RUC system?*

- The current program in Oregon was a bit over $8 million to establish and for the first 3 years of operations. Ongoing costs will be less, since the set up was most expensive.

*What happened in Minnesota's RUC pilot? Why did they stop work after their demo project?*

- One of the methods they tested (reporting GPS miles via cellphone) was inaccurate and many miles were missed. The state had a committee similar to the Washington committee, but there wasn't much buy in from the committee members so the project lost momentum.

## Review of RUC Demonstration Proposal

### 2014 Proposal Recap

Jeff Doyle provided an overview and review of the demonstration project proposal that the Committee proposed in 2014, including primary objectives and corresponding proposed activities.

### Reexamining Steering Committee RUC Principles and Purpose of Demonstration

Jeff then reviewed the guiding principles of the demonstration project and the purpose of a demonstration project. He discussed these principles and the purpose of the project in the context of a few reservations or questions that have been raised regarding whether or not Washington needs to do a demonstration project, emphasizing that the purpose of a demonstration project is to gauge *Washington* motorists' preferences in relation to RUC policy and concepts.

### Reaffirm RUC guiding principles

Jeff reviewed the overriding purpose of a Road Usage Charge system – to have a sustainable and more equitable revenue source to fund transportation.

## Discussion and General Comments

*Referring back to the guiding principles we are missing user options, interoperability, and transition. Why?*

- Insufficient space on the slide. The demonstration project may not test every principle, but it will be up to the Steering Committee to prioritize them. This will be made clear in the report.

*Timing is everything. One of the things in the middle of the chart is the Department of Licensing (DOL) system being complete. I am wondering why you would do a demo project prior to having the DOL system up and running and operating well. You wouldn't want an externality (like the DOL system), affecting the results of the RUC demo project, right?*

- A demonstration project wouldn't use the DOL system. It would have to be a parallel, externally managed process. A demonstration project would provide DOL an opportunity to see how a RUC would work for future considerations.

- The DOL system will be up and running in December 2016, but there would need to be modifications to the new system to configure to a RUC. DOL would want the demo project first to know how to configure their new system to adapt when the time comes. A demo project would give DOL the business requirements needed to configure the system for a RUC. DOL would also need to know the answers to some policy choices in order to implement, such as whether the RUC will use a contracted model or hybrid, etc.

*Wouldn't doing a demonstration project at the same time as implementing a new DOL system could be a distraction and a source of confusion for the public?*

- This would depend on what DOL's role in the demo project would be. The public interface into DOL's new system will not be very extensive until it actually goes live.

*If Washington runs a demo project and doesn't do it in collaboration with DOL, we could then create the business requirements that DOL would use to configure its system. Would there be more cost to DOL if we do this concurrently?*

- It would be expensive and a challenge to configure the RUC system at the same time or before the launch of the new DOL system. However, before DOL made any configurations for a RUC, we would need to be sure we are going to pursue a RUC, which a demonstration project would help us clarify.

- Convene a technical expert committee in parallel to this work so they can anticipate and prepare for technical issues earlier rather than later.

- The transition and scaling from the demonstration project to a full system is significant. A thorough demonstration project is necessary to inform the transition to a system, when going from 2,000 users to 6 million. That will be a really important transition.
  - o The scaling issue is important, but it is iterative. It is something that will evolve along the way.

*How are we going to capture the demo project information? How are we going to capture and analyze the different models?*

- Those details are contained in the 2014 proposal. The consulting team will send around a copy of the 2014 Demonstration Project proposal to this group for their review again.

- The Concept of Operations unifies the four methods to be used in a RUC system. The next phase would be an implementation plan. Involving the DOL system in the pilot would send the wrong message and imply that it has been decided that a RUC is the right option for Washington. The purpose of the demonstration is to test that out.

## Lunch Presentations by Commercial Partners

Matthew Dorfman introduced the technology spotlight working lunch featuring TrueMileage, Vehcon, Azuga, and SmartCar. Matthew explained that each of the technologies presented provide a variety of features and components that can suit different drivers in different ways. They are all opt-in approaches that emphasize privacy and data protection.

### Discussion

### TrueMileage, Ryan Morrison

Ryan provided background on his company and an overview of the technology. The company specializes in analytics for usage based car insurance, which focuses on mileage driven. They take a privacy sensitive approach in their methods and devices. TrueMileage's technology stores data from OBC and summarizes the data over the lifetime of a vehicle. Their device can be sent back to them, or be transmitted via NFC technology on various smart phones. As soon as someone taps the device to their phone, transmitting the data, that data is also uploaded to TrueMileage for storing and reporting. The device does not pass along speed information and cannot look at GPS locations, so it is privacy sensitive.

*Is GPS tracking is more expensive for newer vehicles?*

- Newer vehicles typically already have GPS capability, so for people who are less concerned with privacy, they could  "opt in" and have their GPS tracked easily and efficiently

*Are you familiar with technology that enables vehicles to talk directly to the gas pump so that the pump can then charge the driver for exactly the total miles driven since the last fuel up?*

- No.

- Roy Jennings noted that many things could be obsolete, due to quickly changing technology.

- Ryan noted that this is an advantage of having commercial partners as they make adapting to new technology a big part of their business.

### Fred Blumer, Vehcon

Fred provided a background on Vehcon, noting that their specialization is in pictures, or mobile applications and image data analytics. Vehcon's technology is able to extract and validate data from pictures of vehicles. Fred explained that Vehcon focuses on solutions that are privacy centric, low-cost, and simple to use and distribute. Their product, which is called MVerity, is currently on the market and being used by some insurance companies. It requires no hardware and is an app that can be used on any phone.

*Do you have instructions to help people take good images?*

- Vehcon's application includes guiding brackets to ensure a quality photo is taken.

*We do need to address other drivers who are going through our state. How do we address drivers who move through our state but don't even stop for a tank of gas?*

- Vehcon does not currently have a solution for that and it may have to be a policy decision.

- Reema noted that the RUC is not even going to apply for the trucking industry, so they would continue to pay as they do now for the diesel tax, which trucks must apportion and reconcile to each state and province they travel in, through the International Fuel Tax Agreement.

*Do you think your system would lower our administrative costs?*

- Fred said he does not anticipate that Vehcon's technology could lower implementation costs for Washington, but in terms of collection, Vehcon's technology can reduce costs.

- Paula noted that we have been discussing auditing, and the cost to the state to double and triple check the auditing loop. But it looks like Vehcon's technology includes an audit function.

  o Fred confirmed that, saying they even have technology for those without apps, so you can report via texting.

*What about when I, as a Washington resident, am driving to Oregon, or any other state? How am I reimbursed for that?*

- Vehcon's technology simply collects the mileage on the car. A policy decision will be needed for how to treat, Washington residents driving out of state.

  o Matthew emphasized that the idea would be to offer a variety of options and allow users to choose the one that works best for them. This particular option may not work well for those who drive frequently out of state.

*Vehcon's technology can be somewhat personalized, or modified, is that right?*

- Vehcon's platform can be customized, so it could create some allowance for a subtraction of miles for driving out of state, etc. Again, this may be more simply and effectively fixed with a policy decision, as adding complexity to the technology is not always the best answer. Vehcon does, however use receipt images and data extraction there as well, which could be an option.

**Nate Bryer, Azuga**

Nate provided an overview of his company's market research into how to meet the needs of this unique challenge. Azuga has been in the fleet tracking business for a few years now, and has been working to leverage their existing technology to meet the needs of the government and consumer side of things.

In their consumer research, they have found that the most popular features include: state received mileage data only; simple installation; and monitoring fuel consumption and driving habits. The least popular features include a monthly fee, setting up an account to pay the RUC, and high mileage vehicles will pay more than they do now.

Azuga's platform is a simple, plug and play solution and includes features such as tracking vehicle metrics and some gamification and tools like "find my car." The system also works in electric vehicles.

Finally, Nate provided an overview of the marketing efforts Azuga has done in Oregon for the OreGo program.

*How does the account management side at Azuga work?*

- Azuga enrolls customers via their website and sends the information entered to Oregon's Department of Transportation for verification. Once it has been verified, Azuga sends a welcome email to the customer and sends them their device.

*What are the biggest challenges in scaling a system, in your experience, from say 1,000 drivers to 6 million?*

- It depends on the technology. Azuga's system is built in the cloud, so they have the ability to scale very quickly and easily. .

**Alex Harvey-Gurr, SmartCar**

Alex provided an overview of embedded telematics, or cars that have cellular modems embedded in them. These modems allow vehicles to transmit data remotely and wirelessly over the internet. Most electric vehicles today are connected via embedded telematics, such as the Tesla, BMW, and Nissan Leaf. Plug in hybrids and gas powered cars also have embedded telematics. It is expected that half of the U.S. fleet will have embedded telematics by 2025.

SmartCar aggregates and standardizes the data from the various vehicles into a standard API. It receives direct and verified data from vehicles for odometer readouts and fuel tank and location readouts. The privacy concerns so far have been because data collection methods have been all or nothing. You have to collect all data. But SmartCar is able to allow commercial account managers to only extract the RUC related data. Consumers are able to select which data they share. SmartCar's interface does not require any hardware and is intuitive and user friendly. It is an easy and low cost solution.

*Does this mean that vehicles have to always choose to have their OnStar service turned on for SmartCar to collect the data?*

- With newer cars, that modem is always on. But with OnStar, they would need to have the subscription and have it turned on.

- Curt added that California is planning to require automakers to make all vehicles have mileage tracking technology. This is going to happen in the not too distant future, and if California requires it, then most automakers will make it standard moving forward.

*Does SmartCar have any solutions for the interoperability and out of state driver challenges we have been discussing?*

- SmartCar is currently working with commercial account managers to develop interoperability options.

- Janet Ray noted that for any platform Washington chooses, it needs to be adaptable and dynamic because of changing technology.

*With privacy concerns in consideration, is there an option to have just a toggle? Yes you are in WA or no you are not?*

- SmartCar engineers are currently working on this issue (just like the out of state driver issue) specifically looking at geo-fencing options, which would use GPS technology to turn the tracking "on" or "off" based on landmarks or "geo-fences."

## Conclusion

Matthew wrapped the presentations by noting that each of these technologies are currently operational and provide a range of complementary options for a RUC system.

## Discussion of Steering Committee Recommendations to Legislature

### Outline of Report

Paula reviewed the outline of the report to the legislature and Governor for 2015, overviewing what each section will contain. Paula asked for feedback from the group on the outline.

*Do we have any "parking lot" policy issues that we want to consider in this report?*

- The most glaring issue is the bond issue, which the Treasurer's Office is working to determine what the bonding situation would look like under a RUC. This information will be included in the report.

## Work Program Priorities for 2016, and Beyond

Paula then reviewed the work program priorities for 2016 with the group, which include addressing unresolved policy issues. Paula then asked the group to review the prioritization of unresolved policy issues that the consultant team placed into a three tiered system (policy issues to address before a demonstration project; policy issues to address as part of a demonstration project; policy issues to address outside the scope of a demonstration project).

*Putting time into Tier 1 policy issues will be important because we will have to communicate these things to the public. That tier needs to be focused on before the demonstration project.*

*If the Tier 1 policy concerns are not solvable, then is there really any point in doing a demonstration project?*

- The Treasurer's Office memo from last year is still in standing and WSTC will be working with that office to work through the Tier 1 policy challenges in 2016, so that is part of the interim work that will be done. These challenges can be solved, it is just a matter of sorting out how to classify the RUC, making decisions on how to implement, etc.

*We have clarified in past meetings that, because of the way our bonds are structured, that the gas tax will need to persist in addition to a RUC, right?*

- Yes, the gas tax must be maintained to a level to sufficiently repay the bond holders. However, Reema will confirm all of this in her conversations with the Treasurer's office.

### General Comments and Decisions

- "Whether and how to charge out of state drivers" should be in both the demonstration project tier as well as the one that it is currently in.

- During the demonstration project, there should be a concurrent policy workgroup that meets to analyze and dig in deeper on many of the identified policy issues.

- During the demonstration project this Committee will also continue to meet.

- It was noted that "tier 3," or policy issues to address outside the scope of a demonstration project would include work being done through the Western States Consortium.

- The page showing the tiers of policy challenges will be reformatted to make it clear that this is not a linear process and that some of these pieces will happen concurrently.

- The report to the legislature will include clear statements and direction that the RUC will be implemented in addition to the gas tax and the page detailing the various tiers of policy challenges will also reflect that.

- The report to the legislature will include language noting that technology is swiftly changing and evolving, so any RUC demonstration project or implementation will have to take that into account.

- Refunding drivers for their dual charges (the gas tax and the RUC) during the demonstration project will be added as an outstanding policy issue.

## Evaluation Criteria for a Demonstration Project

Travis presented the concept of moving the evaluation process in a demonstration project up to the beginning phases. He then reviewed an example of how a guiding principle from the demo project could translate into a measurement method for evaluation.

### Crafting a Communications Plan

Paula reviewed the purpose and components of crafting a communications plan for the Washington RUC work, including the strategy involved.

### General Comments and Decisions

- The intended audience for this Communications Plan includes residents, the legislature, state agencies, and any other entities we need to communicate with. This is not a short term or small project. It is not a one-time thing, it is iterative.

- This committee's acceptance and review of the Communication Plan will be important. It is intended to ensure that we are all on the same page and using the same key messages.

- Some of the strategy involved in the Communications Plan will include aligning within Washington on what a RUC would look like, including how to work with PSRC and their research.

- The Communications Plan will be established with the guidance of professional messaging and media professionals.

### Create a Demonstration Proposal that Works for Washington

Paula reviewed this last piece of the 2016 work plan, explaining it would need to detail concepts to test and articulating the purpose and need for a demonstration project.

### General Comments and Decisions

- One of the most important reasons to do a demonstration project for a RUC is to acclimate Washingtonians to such a system and to test which systems work best for *Washington*.

- WSTC will be doing interim work with different state agencies to clarify policy issues in 2016, but no major work will be done until after the 2016 legislative session.

## Recap of Decisions, Directions, Next Steps, and Final Report Drafting

Paula and Reema reviewed the next steps for this Committee:

- On December 8 the Washington State Transportation Commission will review Road Usage Charge progress. The Commission will provide feedback based on that presentation.

- The consulting team will draft up the Report to the Legislature.

- This Committee will review the draft report to the Legislature; a Final Report will be created based on that feedback.

- A presentation of the Report to the Legislature will be scheduled in 2016.

Joe Tortorelli then adjourned the meeting.