

# VTrans RUC Feasibility Study and Implementation Plan – Advisory Committee Meeting Notes

**PREPARED BY:** Roshini Durand, CDM Smith  
**DATE:** August 19, 2021  
**PROJECT:** VTrans RUC Feasibility Study and Implementation Plan

This memorandum provides a summary of the key points presented, Advisory Committee (AC) discussions, votes and decisions from the first Road Usage Charge AC meeting. The meeting was held virtually on August 17, 2021 from 1:00 to 3:00 p.m. Eastern Time.

## AGENDA

### ITEM 1: 1:00 Welcome and introductions (Chair, Michele Boomhower, VTrans)

The purpose of this first advisory committee was to present background of Road Usage Charging (RUC), introduce AC members to a potential RUC approach for Vermont and surface guiding principles and policy issues to prepare AC members for decision making.

### ITEM 2: 1:10 Presentation: Road Usage Charging in the United States (Jim Whitty, CDM Smith).

Jim Whitty presented the white paper that the consulting team had provided in advance of the first advisory committee meeting.

#### **Key points:**

- Challenges for Vermont’s road funding system: increasing EV adoption will impact infrastructure funding and drive the need for alternatives funding for transportation in Vermont. Presentation of low (40%), medium (60%) and high (90%) EV adoption scenarios<sup>1</sup> from 2015 to 2050 and the corresponding loss of gas tax revenues. Graphs showed rapid EV adoption, pushed by the cross-over point, will be driven by several factors –technology advancements leading to shorter charge times and longer travel distances for EVs and the coming price parity between EVs and ICEs later this decade. Cross-over point further reinforced by automakers like GE that indicate they will not sell ICE vehicles by 2035.
- Road Usage Charge concepts and terminology.

---

<sup>1</sup> The EV adoption scenarios are based on work by Dave Roberts from VT Electric Investment Corp, summarized in a June 19, 2020 memo to Vermont Electric Power Company (VELCO) for their use in accounting for electric vehicle power demand in the VELCO Long Range Plan 2020 Update.

- Mileage Based Usage Fee (MBUF) is a consumption tax like the gas tax. Key difference is that an MBUF paid per mile is the same for all vehicles while the gas tax per mile paid depends on the vehicle's fuel efficiency. MBUF relies on mileage reporting mechanisms that can be either manual (based on odometer reading reporting) or automated (based on technologies installed or embedded in the vehicle). Both manual systems that rely on state odometer reading systems and automated systems that rely on privately operated account-based systems have been tested in state and regional pilots and proven viability.
- Annual flat fee is usually collected at vehicle registration and generally does not involve private sector account managers. Flat fees easier to implement but tend to be perceived as inequitable (especially if implemented as the single solution) as frequent and occasional road users would have to pay the same fee.
- The per kWh charge the least common road user charge, only introduced in Oklahoma where the concept passed into law but not yet implemented. Feasibility of the concept not yet demonstrated – collecting such a tax at the home or office is perceived as highly problematic and complicated by three levels of charging. The Oklahoma per kWh fee only imposed at public charging stations. Legacy stations not obligated to assess the charge. Jim Whitty pointed out that not all the issues related to per kWh fee will be known at the outset. Issues will be discovered along the way as the states consider their exploration.

#### Discussions:

- Chris Jolly: Is the objective to break even with current gas tax revenue?
  - Michele Boomhower: The project team is looking at a break-even model. The team does not want to charge EV owners more than the amount the average driver currently pays in gas tax.
  - Joe Segale: Goal overall is to be revenue neutral and to collect fees equitably and cost-effectively. VAOT is aware that changing the way people pay for services will also change behavior and wants to be sensitive to these changes and consider approaches to minimize adverse impacts or unintended consequences. This is where the project will need guidance from the AC.
- Jim Sullivan: Understands the desire to collect revenue from out-of-state (OOS) drivers. Why would we not apply MBUF to all vehicles? It looks like this would be the fair and equitable thing to do.
  - Michele Boomhower: Trying to approach framework for Vermont in a cautious manner. Vermont AOT recognizes the switch for EVs first will help with the proof of concept for Vermont and also help national efforts because the federal gas tax will suffer the same fate. We are not ready to engage all drivers. We are engaging with EVs first to start with the most urgent needs.

### ITEM 3: 1:40 Review scope of work and timeline (Joe Segale, VTrans)

Joe Segale presented the project scope and timeline.

#### Key points:

- Joe emphasized the framework and concept presented are starting points for the AC to consider. The framework has been developed to consider Vermont residents' perspective and non-Vermont residents' perspective.
- For the per kWh fee, it will be important to specifically understand the mechanics and consider whether a credit against the MBUF would have to be issued for Vermont residents.

**No discussion.**

### ITEM 4: 1:50 Role of the Advisory Committee (Jim Whitty, CDM)

Jim Whitty presented the role of the advisory committee and specified that the goal of preparing the AC for decision making. Jim provided an overview of the typical issues raised in other states.

#### Key points:

- Equity – All of the topics have been addressed in different states. The question is mainly how to develop an approach for Vermont
- Management and operational structures – all have been tested in the US and proved viable. Cost efficiency will be a key consideration.
- Policy and system design issues for per kWh fee – main question will be whether and how to exempt Vermont residents. Should a credit mechanism be considered?

#### Discussions:

- Jim Sullivan: How is the notion of the flat fee vs. MBUF reasonable? Is the flat fee approach essentially letting high mileage drivers pay a set fee for a certain number of miles and then get free rides?
  - Jim Whitty: This is correct. A flat fee must be set at an appropriate amount that not 'reward' high-mileage vehicle users with lots of free miles above the flat fee amount.
- Philip Picotte: It seems that the per kWh fee relates to public charging mainly. Are we going to look at private kWh facilities, such as home or work?
  - Jim Whitty: The PUC report highlighted the many logistical challenges related to collection of the per kWh fee, and recommended focus public charging stations that may have meters and level three DC fast charging.
  - Michele Boomhower: The public charging stations are most likely the audience of interest at this point in time. For very small rural utilities, those who have not adopted smart meters, the framework for collecting per kWh fee was not universal. We collectively agreed that we had to find different ways of doing it for Vermonters and

non-Vermonters. Visitors are maybe the most likely users of the L3/DC chargers. We would have to specifically explore what happens when non-Vermonters charge at AirBnBs and other places. Acknowledge this is not a perfect system (a lot of people have access to Level 1 charging and there is no way to track people who charge at home) - – our focus is to be as equitable as possible while being inclusive.

- David Roberts: What Federal action with per kWh fee? There may be some cracks we have to deal with especially considering difficulty of applying a fee to level 2; even DC fast charging can be challenging.
- Group discussion ensued around federal changes and whether any action at the federal level will focus on replacing the federal portion of the gas taxes. Jim Whitty mentioned it will likely be 6 years+ for a federal MBUF concept to emerge (there is a reauthorization bill to see how to manage the federal component, but doubtful that they are looking into the per kWh fee topic). By the time a federal system begins implementation, Vermont would have already reached the cross-over point in terms of EV adoption.
- Michele Boomhower: Likelihood of a federal system to occur in a timely manner for Vermont is low. This is why Vermont is being so proactive. Waiting for a federal response is not adequate for Vermont. We acknowledge there are going to be gaps in our own framework, but we are trying to catch different use cases as broadly as possible.

- **Decision/Action Item:**

The group concluded that states seem to be ahead of the game. Chris Jolly will still contact others at FHWA for any additional insight on federal policies that may influence this study.

#### ITEM 5: 2:10 Guiding principles for Road Usage Charge system (Action item)

Jim Whitty presented the draft guiding principles of the RUC.

#### Key points:

- These principles have been developed for other pilots and projects across other states. They can be used as a starter list for Vermont, but it does not have to be the same.
- AC members were invited to weigh in on the draft guiding principles and decide whether to adopt the proposed list with some amendments or start a completely different list.

#### Discussion:

- Jim Sullivan: List is fine. Suggestion to elevate “feasible and efficient” to the top of the list. Need to add a bullet for how “understandable” the fee is for the end user. There are different choices and costs, and we have to make sure the end user understands the framework.
  - Michele Boomhower: This discussion came up with the legislature. The question was raised about why we should use a very complex approach (e.g., involving plug-in devices that measure mileage) when we could just send everyone to play a flat fee of \$120/yr. We have to consider value stream for various options and burden for developing

administering base case vs. burden over time. Vermont is a very small place. While options may give consumers the choice/flexibility they would like, we should question whether we can afford those choices with our scale.

- Jim Sullivan: Likes the salience of the MBUF one-time charge compared to an incremental charge. A one-time charge could have a more significant impact in changing driving behaviors (e.g., incentivize people to drive less) than incremental charges. Michele Boomhower commented that we need to be equitable as we administer the plan.
- Jonathan Slason: Advises not to define equity yet (rural/urban, income, etc.) as we don't want to preclude other dimensions of equity.
- Marygrace Parker: Important to specify that focus is on passenger vehicles and this concept would be different for other vehicle types so this presentation is not taken out of context. There is a risk that large commercial organizations will lobby against this. We have to remember that Heavy Vehicles for example have a different fee system.
  - Jim: We should mention this study is focused on light duty vehicles only in the title to mitigate the risk.
- Jim Whitty: Note that these principles might conflict in application.
- Michele Boomhower: Ask the advisory committee to adopt the guiding principles through a vote.

**Decision/Vote:** All present advisory committee members voted to adopt the guiding principles. See attachment.

#### ITEM 6: 2:30 Stakeholder engagement (Jonathan Slason, RSG)

Jonathan Slason presented the stakeholder engagement process and the initial list of stakeholders.

#### **Key points:**

- Go beyond stakeholder engagement and EV drivers. Goal is also to educate public to avoid any misconceptions. Though we start with something small and reliable for EVs, we have to manage expectations with general public to avoid distortions.
- Process will support issues identification. Any issues flagged will be communicated to Joe Segale who will communicate with Michele Boomhower
- AC members invited to weigh in on Initial list of stakeholders presented – who else should be included? Is there stakeholder that should be removed from the list?
- The stakeholder list can evolve and does not have to be set in stone.

#### **Discussion:**

- Michele Boomhower: Initial reaction is that we have to think differently about how we group utility stakeholders. VPPSA might not be best way to get at utilities (Not all small utility members are members of VPPSA). Maybe list distribution utilities as one stakeholder group. Have a group conversation with distribution utilities so they can hear feedback from others.

- Joe Segale: We need to add the Department of Motor Vehicles to the list of stakeholders.
- Jim Sullivan: Similar comment to Joe. Likes the idea of using the annual vehicle inspection to report odometer readings. The DMV is already communication with inspection stations and collecting other data. We need buy-in of inspection stations also.
- Michele: Local energy committees should be on the list. Can these be reached through Regional Planning Commissions (RPCs)?
  - Jim Sullivan: RPCs work with energy committees. Distribution and proliferation of energy committees is not consistent across state. Northwest region has very few.
- Michele: We need to consider how we can use written communication in place of direct, in-person stakeholder outreach given the project timeline and scope.
- Jim Whitty: Are underserved populations on the list?
  - Jonathan Slason: Yes, plan to reach out via Capstone, VNRC, equity office, etc.
- Jim Whitty: We can determine in a couple of weeks whether this list is sufficient or not.
- No comments on the public opinion survey provided.

ITEM 7: 2:50 Administration: member input on meeting dates (Chair and VTrans staff)

**Key points:**

- Limited time and budget, but project team will try to reach out to all stakeholders
- Public opinion survey may be extended further
- Aiming for last week of September and last week of October for second and third advisory committee meetings. Jim Whitty plans to attend meeting in person. A digital option will also be provided.

ITEM 8: 2:55 Public comment

Michele Boomhower mentioned she is conducting an interview with WCAX that will be on the Tuesday evening news.

ITEM 9: 3:00 Adjournment

Attachment

## Guiding principles for policy and system design for a road usage charge system for light duty vehicles

- **Do No Harm**
  - Revenue neutrality
  - Sustained EV uptake
- **Equitable & Fair**
  - User pay system
  - Users have choices
  - Privacy and security data protected
  - Equitable cost distribution
- **Feasible & Efficient**
  - Ease of administration/minimal government burden
  - Enforceable
  - Simplicity of compliance and ease of use
  - Understandable
  - Accurate and system performance
- **Transparent and Accountable**
  - Open system
  - Open to competing vendors
  - Accountable oversight
- **Adaptive for the future**
  - Integration with other state policies
  - Interoperability with other state systems
  - Flexible, secure, and scalable