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 September 29, 2021 from 2:00 to 5:00 p.m. Eastern Time.

The presentation materials for this meeting are provided as email attachments sent along with these meeting notes.

PARTICIPANTS

• VTrans/DMV Staff
  o Joe Segale
  o Patrick Murphy
  o Daniel Dutcher/ Matthew Kostik

• Advisory Committee
  o Michele Boomhower, VTrans (Chair)
  o David Roberts, VEIC/Drive Electric
  o Jim Sullivan, Bennington Commission Regional Commission
  o Philip Picotte, VT Public Service Department
  o Samantha Hurt, Capstone Community Action
  o Rebecca Sameroff, VT Department of Taxes
  o Michael Smith, VT DMV
  o Virginia Smith Reeder, The Eastern Transportation Coalition
  o Trish Hendren, The Eastern Transportation Coalition
  o Wanda Minoli, VT DMV

• Public
  o David Holm

• Consulting team
  o CDM Smith: James Whitty/Project Manager, Roshini Durand/Deputy Project, Matthew Dorfman, Scott Wilson, Andrew LcLean
  o RSG: Jonathan Slason, Mark Fowler

AGENDA

ITEM 1: 2PM  Welcome, Roll Call and Review of the Agenda (Chair, Michele Boomhower, VTrans)
ITEM 2a: 2:10 Stakeholder engagement – Presentation of outreach results (Jonathan Slason, RSG)

Jonathan Slason/RSG presented the most salient points from the four group of stakeholder meetings for the advisory committee to reflect on. Noted that other one-on-one meetings have been planned with the consulting team to gather more information.

Discussions & reactions:

- Daniel Dutcher shared the link to the VTrans report suggesting no fees on EVs until they reach 15% market share: https://legislature.vermont.gov/assets/Legislative-Reports/2016-Legislative-EV-Study-FINAL-formatted.pdf
- Wanda Minoli: Notes that as this RUC initiative moves quicker, it will be important to align with new DMV system. If we want to have a fee assigned to registration, it would be critical for this to be built into the DMV modernization effort.

ITEM 2b: 2:20 Stakeholder engagement – Presentation of survey results (Mark Fowler, RSG)

Mark Fowler/RSG presented survey results. Notes that survey has a good geographic representation and mentions that many respondents came from Drive Electric. Generally, respondents understood charging schemes and knew about the state gas tax. Most respondents understood the need to transition away from gas tax. Most thought MBUF a reasonable approach. There was a clear preference for MBUF as opposed to FF (60%) and a strong preference for collecting the fee at annual registration. Eighty-six percent of respondents answered that the introduction of an MBUF or flat fee would most likely not change the likelihood of purchasing an EV over the next few years.

Discussions & reactions:

- Michele: Commented on equitability of survey engagement, reaching households with lower incomes and more diverse demographic. Asked consultant team to speak to opportunities and whether VTrans has to think about further engagement relative to equitability factors?
- Jonathan: Indicated that consulting team discussed this with Patrick Murphy. For the purpose of the survey, we agreed that we achieved an adequate outcome. From the equity perspective, if we conclude the sample is not representative, we can always field this in the future to get a different perspective, measure impacts and design a system that specifically addresses equity concerns.
- Joe to Samantha: Are you aware of people we should be discussing this with to get their perspectives?
- Samantha: Can check with people we are currently interfacing with and see if we can coordinate with VTrans to respond to a survey. Does not expect widely different responses to the survey.
- Trish: For the stakeholder survey, if there is going to be a report, recommends including results from PA, DE, NJ and NC statewide surveys on MBUF (e.g., support for concept) to provide some context to the results just gathered in VT.

ITEM 3: 2:25 MBUF system definition – Presentation of MBUF system definition (Matthew Dorfman, CDM Smith)
Joe mentions that a lot of information and recommendations will be presented and recommends forming smaller groups to discuss concepts that will be presented. Joe will be organizing meetings between now and end of November to pursue discussions. Jim Whitty introduces first slides and concepts, emphasizes separate concepts apply for VT registered vehicles versus out of state vehicles. Matthew presents MBUFF system slides.

Discussions & reactions:

**Refunds (slides 7/8)**

- Wanda: Wants to clarify that if we talk about refunds whether it’s for registration fee or MBUFF. Indicates DMV would have to collect registration and MBUFF separately. First year would usually be flat fee and the following year may be a different system (Matthew confirms that this is the way the system works in Utah)
- Wanda: Would like to see the refund go away as it is a very challenging to administer
- David Roberts (chat): Agree with the general desire to avoid refunds but wonders if someone moved out of state or sold their EV if there should be consideration of refunds. Would be more important if fees were over a certain dollar threshold - maybe $200+?
  - Michael Smith responds that as a regular vehicle owner who moves out of state there is no refund.
  - Matthew: This can be a consideration. With an MBUFF mechanism, it should be easier to process refunds separately especially as it is on a usage basis.

**Vehicle types (slides 9/10)**

- Jim Sullivan: On the question of different vehicle types, we have to consider that Plug-In hybrids are paying a lot of gas tax and an elevated MBUFF on top of that.
  - Matthew: Confirms it’s challenging to know what PHEVs consume in each mode (gas vs electric). It’s true that it all depends on the usage of PHEV. It’s possible, we’d be able to differentiate driving mode with more sophisticated telematics. At the moment, there is no way to independently verify this. Specifies that Utah DOT applies a separate rate (with an intermediate value) for PHEVs as an attempt to factor in this difference.
  - David Holm: The problem of PHEV vehicle MBUFF (electric versus fuel mileage) goes away if all vehicles (electric and fossil fuel) pay the MBUFF.

**Walk through MBUFF options (slide 13)**

- Wanda: Re: MBUFF option1, my heart skipped a beat when Matthew mentioned that self-reporting is easy to report. Have to factor in DMV complexities.
  - Matthew confirms that the basis for simplicity comment is on overall concept compared to other MBUFF options. Have not specifically looked at simplicity for Vermont.
  - Wanda mentioned that would have to develop/modify system to capture this information in Vermont
• Rebecca Sameroff: Is there a smartphone odometer-image capture option that can be paired with self-reporting?
  o Matthew: Yes, this technology has been tested before. We have seen it’s simple to go in vehicle to take a picture of the odometer

• Jim Sullivan: How do you prevent people going into another vehicle and sending the picture?
  o Matthew: The company we worked with in past pilots (e.g., Washington pilot) has a database that can check if vehicle matches dashboard layout of the right vehicle. Acknowledges there would have to be extra validation by looking up DMV or CARFAX data to make sure there is no odometer fraud (if same vehicle dashboard)

FF & MBUF cost considerations (slides 20-23)

• Joe: Specifies that the analysis is assuming all electric and PHEV based on Dave Robert’s medium forecast scenario. Assumes year 1 is 2024 (assumes 15,000 in the state).

• Wanda: Are we also assuming that we’re categorizing these vehicle as pleasure vehicles? Note that there is a distinction between commercial and pleasure vehicles. In commercial vehicle world, we have registrations based on weight (can have vehicles that pay IFTA for example). Some of the vehicles use hybrid models.

• Michael Smith: When you think about IRP, it’s pro-rated rate of registration fee. UPS said they bought 30,000 electric trucks. Have a registration fee set for these cases.

• Matthew: In general, these cost considerations focus on light vehicles. Heavy vehicles are typically considered to having to pay a different rate than Light Vehicles. Refers to ETC study focusing on Heavy Vehicles where the conclusion was that trucks should not pay the same rates as LVs.

• Trish: Do the costs estimates you have included the cost to VT to implement the various options – capital and operational costs? Especially to VT DMV?

• Matthew: Assuming that these are capital costs but have to check [Post meeting verification: estimated costs do not include capital costs]

• Michael Smith: How would you know how much it costs?

• Matthew: Estimations are based on assumptions made in other states. It’s not a rigorous costs analysis specific to Vermont data.

• Trish: Thank you. Yes, that was my question -- capital and operating expenses to VT and what was used to come up with those estimates. Realizing this is very hard but the cost estimation framework really helps put the options in perspective.

Decision point: Which vehicles should be included? (slide 30)

• Michele: We already heard there is complexity related to heavy vehicles (electric school buses, on-road and off-road vehicles). There’s a world of consideration for heavy vehicles (HVs).
• Jim Whitty: Specifies this slide should read Light Vehicles (LV). HV systems do exist but have to be more robust, also based on weight factor. This factors in as well as the configuration of the vehicle. Oregon has such a system and it’s separate from the LV system.

• Michele: Our legislature is not expecting us to respond for all vehicles, but are looking at EV and Hybrid vehicles.

• Mike Smith: Wants to point out for alternative fuel, already has other fuels charges.

• Jim Sullivan: Agree that the topic should be “all vehicles should pay MBUF”. Mentions double taxing of Plug-in hybrid vehicles. It you set standards like 40 MPG, then create a weird incentive for people to purchase cars that 39.9 MPG or something like that. If we put a sliding scale, it becomes complex to administer. Advise doing something simple for Vermont.

• Wanda: Appreciate that the focus of the study is about “pleasure vehicles”. In the world of DMV, I see the best way to advance a policy is to integrate it – I like to look at inclusion instead of having a policy bifurcated over years. If this rests with DMV, we have to look at systems of choices we have to put in place, so that when something changes, it’s already been planned in the DMV system. Once the program is defined, it will grow pretty quickly.

• Wanda: When will Vermont hit that 15% threshold?
  o Michele: This information comes from Dave Roberts estimations and think it’s 2025.
  o Dave Roberts: The forecast of about 15,000 EVs by 2024 is the "medium" EV growth scenario we prepared for the VELCO electric system planning forecast and used in this analysis would be approximately 2026. The low growth scenario would be around 2030 and the high scenario 2024

• Wanda: Think there is value in not getting into the details, but if we’re thinking we’ll bring this to the legislature, we have to think about how this will be integrated.

• Michele: What are the conversations in other states about moving to MBUF for all vehicles
  o Jim Whitty: Oregon has proposed to transition to all new vehicles with a rating of 30 MPG and above starting in a certain year; Utah had a completely different approach (has committed to transition all vehicles, but looked at various options for phasing in vehicles by model year and mpg). Generally, states have been loath to try to transition everyone in the whole fleet to an MBUF system in a small amount of time. They’ve considered spacing it out over a number of years. Utah decided to space over 10 years.

• Trish: Will be great if project team can talk about the Utah situation given they included EV and Plug-in Hybrids?
  o Matthew: True that Oregon is giving fuel tax refunds for miles driven for fuel-combustion vehicles (based on number of miles driven based on mpg equivalent). Not doing it for PHEVs, because risk that they could be using electric driving mode. But in Utah, it’s different as they are charging RUC in lieu of the flat fee – no fuel tax refund in Utah
Decision point: What are the rate considerations? Should it be high or average based on cost estimation slides? (slide 32)

- Trish: For Virginia it was necessary to pass the legislation. Needed both flat fee to address privacy and MBUF to give people who didn't drive much a way to not "pay as much" as drivers with high VMT.
- Jim Sullivan: Is there an assumption that there should be a flat fee?
- Jim Whitty: Yes, in the Vermont concept there is an assumption that there'll be a flat fee
- Joe: My understanding that this is how it’s being implemented (in conjunction) in other states?
- Jim Whitty: So far, all of them are linked. No state is doing MBUF alone.
- Jim Sullivan: Understand MBUF, but not flat fee. If I hit the flat fee amount, I keep driving for free. Not sure if flat fee is necessary.
- Joe: Provides a privacy option is one way to think about it.
- Wanda: Part of the study is about balancing funding for the system. If we’re trying to capture some of the lost revenue, will have to go beyond registration fee unless go beyond a huge difference rate for registering pleasure vehicles. If we don’t look at MBUF, we’d end up with lost revenue unless we have very high rates. Note that we operate on a fee-bill and can only request legislative approval to raise fees every 3 years. I’m sensitive to more fees we operate (currently over 230 fees). When we look at the structure, I am sensitive to not wanting multiple additional fees. If our outcome is to create a fair/equitable way for people to purchase EV/PHEV vehicle and contribute to roads, we would have to capture MBUF.
- Michele: Just want to throw out equity again. People paying gas tax are paying small incremental charges and not paying once-a-year big lifts. And if we combine bills for simplicity, it will be an even bigger lift. Considerations and reasons why we want to make sure we’re not only charging a flat fee. Or if we have flat fee how we’re going to allow payment on monthly basis for example.
- Jim Sullivan: If we have to have a flat fee, we’d need a high flat fee to encourage people to use MBUF

Decision point: Refunds or exemptions for vehicles without GPS reporting (slide 33)?

- Jim Sullivan: Why are we creating this complex refund mechanism when you’re not doing it for gas-powered vehicle. I would go with “no refund” option.
- Wanda: Not going to weigh in policy discussions, but will come from a systems/functional perspective. Currently DMV processes $1.4 million of refunds per year. Very costly to process refund. When I see refunds, I see a team of 25 having to handle this.
- Trish: Given there a lot of small states on TETC, we made some assumptions based on available data on average driving per region to figure out refunds.

Decision point: Privacy (slide 34)
• Wanda: Asks Mike Smith if this data is protected today? Specifies that will want to follow up with Joe with this. There’s some data today that we provide. We should align what we do under Vermont statute and driver privacy protection act law, before we figure out what we should do.

• Michael Smith: When I think about Driver Privacy Protection Act (18 U.S.C. chapter 123), it protects where I live not where I have been.

• Jim Sullivan. Politically this whole initiative might get derailed if we’re talking about tracking where people are.

FF/MBUF recommendations (slide 37)

• Jim Whitty: Asks how would we address those recommendations?
  o Joe: May need to break into smaller groups
  o Michele: Would like to have working groups to take a deeper dive into particular areas.
    When come back to next AC meeting, good to frame recommendations (because there’s a lot of recommendations today), help determine from a voting perspective how we want to advance towards recommendations.

• Michele: Asked about experience with implementation and the time it took in other states.
  o Jim Whitty: Took 2 years for Oregon to implement system, Utah took a little shorter time – 20 months. Both used CAM approach, and neither one of them uses vehicle inspection approach.

• Wanda: From the DOT side, we have to look at the larger policy to make sure we can have legislation we can implement. It looks like the report from the consultant says if we want to balance revenue, we would have to jump to MBUF.

• Trish: The sentiment that MBUF is where the future is, is getting more common. The more you use, the more you pay is making way. In OR, still under 1000 people are enrolled in the MBUF program. For UT, it’s over 4,000. These are small – having numbers in mind helps understand that small is not 20,000 but a few thousands. It helps Vermont understand that they can start small.
  o Jim: Agrees with Trish. These numbers are pretty close and it’s important to understand the reasoning. The purpose was to get the system started to see how the system works. At some other point, legislature enacts another law to increase the size of the program. There are a lot of things to work out on the system side and it’s important to get it right before growing.

• Joe: Flat fee perception is that it’s not fair. We could in theory just assess a flat fee and from a systemwide perspective, make up for all lost gas taxes. Flat fee gives people who are concerned about privacy an option.

• Wanda: I was thinking this report is saying we have to do both if we want a balance in the revenue collection.
Joe: specifies we could just do a flat fee, do consultant recommendation (MBUF and FF) or do nothing

Joe: There’s a third topic for the agenda on how the FF was calculated. Suggest that we hold the topic for next time.

Key considerations for per kWh (slides 38 - 43)

Michele: clarifies she has never envisioned that these charges would only apply to non-residents. Envisioned residents who choose to use these Public Charging Stations (PCS) would also pay this fee. They may in effect be double charged as it were if they were paying a FF and charging at a PCS. Not sure if there is a mechanism to distinguish between resident and non-resident so that they don’t double pay.

Dutcher, Daniel: Charging by kWh is required by Vermont law. Other charges are also permitted, but the per kWh charge must be displayed. A good argument could be made to prohibit other charges (hookup and time-based charges), except for holdover fees (which do not affect the cost of actually charging).

Options to protect Vermonters from paying per-kWh (slide 48)

Wanda: If we do this we would only go to PCS owned by private entities? How do we implement or rule a statute that has an impact on a private business?

Jim Whitty: We don’t have this mechanism for the gas tax currently, the fuel distributors pay the gas tax before the gasoline transaction. We would need to have new system for them to collect payment and an audit function.

Wanda: You would have to treat these PCS as a fuel distributor distributing a different form of fuel (electricity)

Jim Whitty: Notes that dates on slide 49 are wrong and are flipped for IOWA and OKLAHOMA.

Recommendations (slides 51-52)

Michele frames recommendations. VT spent a couple of years trying to figure out whether there was a reliable way to collect this per-kWh fee at homes. Could not come to a technological viable solution – some people would choose Level 1 charging that would be undetectable. In agreement with utilities, we’re going to pursue the notion that there are 26% of gas tax paid by non-Vermonters. Our utilities talked about the potential of being wholesale processors of a fee because they know the per-kWh they deliver to charging stations. A further deep dive with utility partners would be useful. Not sure we can exempt Vermonters from paying this fee. Not sure if there will be enough Vermonters for this to be a concern. They may be fine paying that charge exceptionally.

Wanda: Appreciates Michele’s summary and wants to build on it. Mentions she really like this concept. It’s all inclusive.
• Michele: Thinking about Vermonters that charge EVs, we prefer them charging at home and at night when electricity is cheapest. This is really about capturing non-Vermonters who would be passing through. One of the other pieces we’re working on, the national standard for delivering a per-kWHR – working with utility companies to standardize so we can apply per-kWHR fee at PCS.

• David Roberts:
  o In terms of getting utilities up and running in terms of charging a fee to customers, would be easier to focus on fast charging (as they have payment system associated to it). There are a lot of level 2 PCS today that will continue to be free (equipment will vary and company that manages this equipment would want a cut of the revenue). Fast charging would be a better fit.
  o In terms of equity, consider the fact that there’s work underway to locate PCS at affordable multi-unit housing (working on that with a couple of other agencies) – this may include eligibility for charging in certain locations. In that context, we’ll see double charging come up as an issue.

• Dutcher, Daniel:
  o Charging by kWh is required by Vermont law. Other charges are also permitted, but the per kWh charge must be displayed. A good argument could be made to prohibit other charges (hookup and time-based charges), except for holdover fees (which do not affect the cost of actually charging).
  o Something came up how we assess fees at charging stations. Wanted to point out that at VT, required to charge and display a kWh fee. Have details available for those who are interested. To complicate things it appears possible to charge hookup fee and time fee. And there’s a good argument to disallow this as it makes it difficult for customers to compare
  o Most people running charging stations, either don’t know this or won’t care, but department of Agriculture will surely set up a set of measurements and standards.

• Joe: mentions that Daniel Dutcher should connect with consulting team to discuss next steps

• David Holm: Since a per-kWHR fee seems complicated and impractical with all the different systems and metering, maybe a sales tax (based on % of dollars paid for charging) is best way to go. Retailers can provide a Vermont resident discount if they so choose.

ITEM 4: 4:20 Fee structure and rate setting – Presentation of fee structure (Scott Wilson, CDM)
Michele: Decision to address rate setting at the next meeting

ITEM 5: 4:50 Public comment
• No public comment

ITEM 6: 4:55 Next steps
1. Subcommittee meetings organized (Michele):
   - Had originally had planned to have 3rd meeting in October but will move it to November so we can have subcommittee discussions. VTrans will reconvene with consultants to further discuss how to organize sub-committees and send out notification on when we’ll have future meetings.
   - We will record the sub-committee meetings so people can review and submit comments/questions to the consulting team and give deadline to respond so we have feedback prior to next advisory committee meetings.

2. Subcommittee meetings for MBUF and per-kWh (Joe)
   - Format: Two-hour meetings
   - One group on MBUF where the goal will be to firm up some of the decisions that have to be made now versus next steps.
   - One group on per-kWh
   - Participants: DMV needs to be involved in both discussions. If anyone particularly interested in participating, please let Joe know.

3. Approach to discuss rate setting (Joe)
   - Memos should be wrapped up by the end of the week and they’ll be posted by the end of the week
   - No need for separate meeting rate setting as there’s less policy and more methodology.
   - Decision to ask feedback from Trish and others or organize a peer review instead of separate meetings.
   - Trish confirms she would be happy to provide review of technical memos and support subcommittee work on flat fee/MBUF.

4. DMV and Public utilities involvement
   - Michele: Need to involve DMV to discuss technical systems and how to interface with DMV modernization process. Want to avoid bringing recommendations on things that we cannot implement. Other point is to talk to public utilities to see how they imagine operationalizing these.
   - Joe: Consultant team had a meeting with DMV (Mike Smith) that gave a general idea on systems and benchmark on current systems. Acknowledges a lot more work needs to be done to understand DMV system and constraints.
   - Wanda: Suggests engaging in conversation with contractors that manage the inspection program.
   - Michele: Agree that important to understand inspection programs also.