

Comprehensive Energy Plan / Climate Action Plan Transportation Technical Workshop Summary

Thursday, August 26, 2021, 9:30 AM – 3:30 PM

Hosted by the Department of Public Service (PSD) in partnership with members of the Cross-Sector Mitigation (CSM) Subcommittee of the Vermont Climate Council

This summary is not meant to be comprehensive, but rather captures key themes raised by participants. For more details, the agenda, presentation materials, and recording can be found on the [VT PSD website](#).

Attendance

Approximately 70 individuals, including state staff and invited speakers, participated in the Workshop.

Workshop Objectives

The workshop was organized to share information about the Vermont Comprehensive Energy Plan (CEP) and the Climate Action Plan (CAP) process and to solicit input from experts and interested stakeholders on:

- What state strategies, policies, and programs are needed to achieve Comprehensive Energy Plan (CEP) and Global Warming Solutions Act (GWSA) Climate Action Plan (CAP) goals in the transportation sector?
- How should the State consider and balance tradeoffs among criteria when assessing policy options (for example: equity, cost-effectiveness, co-benefits, feasibility, carbon, and energy reductions)?

Welcome Message, Sec. Joe Flynn, VT Agency of Transportation and member of the VCC
Secretary Flynn provided an overview of the Workshop's agenda and emphasized the purpose -- to get participants' input on what VT can do beyond what we are already doing to expeditiously mitigate GHG emissions from the transportation sector to meet the GWSA mandated goals. He thanked the attendees for their commitment of time and ideas to make the CEP and CAP successful in meeting the GWSA goals.

I. **Transportation Equity in Vermont**, Sue Minter, Just Transitions Subcommittee, Capstone Community Action

Sue Minter introduced the Vermont Climate Council (VCC) [JT Equity Principles](#) and assessment tool and provided a definition of equity that includes distributive, procedural, contextual, and corrective equity. She talked about how the JT Subcommittee thinks about impacted and frontline communities as those who historically have been marginalized and are more vulnerable because they typically have a higher energy burden, including a higher percentage of their income used for transportation costs. She described several existing programs that are designed to improve access of frontline communities to clean and affordable transportation, such as Mileage Smart, which provides financial incentives toward the purchase of a hybrid, plug-in hybrid (PEH), and electric vehicles (EVs).

II. Overview of Comprehensive Energy Plan (CEP) & Climate Action Plan (CAP) Process, Ed McNamara, PSD; Jane Lazorchak, ANR, Director of GWSA

In explaining the CEP process, Ed McNamara said the updated plan must be consistent with GWSA (90% renewable by 2050 and net zero GHG emissions by 2050) and will include strategies for implementing actions, including financing and funding needs. The CEP strategies and actions will be supported by analysis of mitigation pathways, including scenario analysis conducted in collaboration with VCC subcommittees. The draft CEP will be released in Oct for public comment and provisionally adopted in January 2022.

Jane Lazorchak said the CAP includes not only mitigation strategies but also sequestration, resilience, and adaptation strategies, with a lens toward a just transition and co-benefits. She emphasized that the CAP process is designed as a co-creation effort that allows the public/stakeholders to participate in the development of the pathways, strategies, and actions. Overlap between the two plans includes the cost-effective analysis of reduction targets; energy sector analysis (scenarios and actions); and public engagement and equity efforts. Jane provided an overview of the public engagement plans beyond these workshops. The initial CAP will be released in December, and the VCC will continue to oversee the updates and implementation process.

III. Vermont's Transportation Energy and Climate Picture, Jared Duval, Energy Action Network, VCC member

Jared Duval provided an overview of Vermont's historical GHG emissions and future reduction requirements to meet the goals in each sector. Transportation contributes 40% of the state's total GHG emissions with 71% of that from light-duty gasoline vehicles and 15% from non-road transportation emissions. He highlighted the state's per capita transportation GHG emissions, which are higher than other New England states in part because of the rural land use patterns.

In describing EAN's GHG reduction analysis, Jared said there are three key transportation pathways:

- Transportation mode changes
- Fuel efficiency or lower carbon fuels
- Increased use of electric vehicles

He referred participants to [EAN's annual progress report](#) for more information.

IV. Supporting the Climate Action Plan through Today's Workshop, Johanna Miller & Gina Campoli, VCC Cross-Sector Mitigation Subcommittee Transportation Leads

The Transportation Task Leads gave an overview of potential pathways and strategies under consideration by the Climate Council and asked participants to be thinking about the following questions: What is missing? Are we heading in the right direction? Do you have other ideas for recommended actions? How should we prioritize short-term and long-term strategies?

Pathways under consideration are:

- Vehicle electrification
- Increased overall efficiency of vehicles
- Reduction of single occupancy vehicle trips
- Smart growth

Vehicle electrification **strategies** include ways to increase deployment of both electric light-duty and mid- to heavy-duty vehicles as well as electrification of other modes of transportation such as bikes, motorcycles, and scooters.

To get more efficient vehicles and encourage more efficient use during the transition to electric vehicles, the CSM Subcommittee is considering **strategies** such as feebates for more efficient vehicles, increasing the use of lower carbon fuels, and lowering speed limits.

To increase transportation choices may likely require **strategies** like expansion of transit options including greater infrastructure to support bike and pedestrian facilities, rail, and buses.

Land use and increased smart growth **strategies** could include investment in critical infrastructure in compact urban centers, improving integration of state, regional, and local land use and transportation planning, and conserving large forest blocks, farmland, and open spaces outside of downtown and village centers.

Actions they asked the participants to think about included:

- Funding
- Regulatory and other policies
- Administrative structure and capacity building
- Equity in terms of JT principles
- Data collection, modeling, and analysis

V. Vermont EV Progress, EVSE Activity, and Zero Emissions Vehicle Action Plan, Dan Dutcher, VTrans; Deidra Ritzer, DEC

This session was designed to give participants an overview of the current and planned state transportation policies that could help reduce transportation GHG emissions. The speakers covered transportation electrification and efficiency programs and policies, such as adopting the California low-emissions vehicles (LEV) and zero emissions vehicle (ZEV) standards; implementing the Transportation Electrification Scorecard, Mileage Smart, Vehicle Incentive, and Replace your Ride programs; and implementing vehicle charging rate structures that are affordable.

VI. Morning Breakout Sessions: Transportation Electrification and Increased Efficiency

Two simultaneous breakout groups formed to allow more discussion from participants; the topics and questions were the same in both groups.

Group A: Facilitator - Cindy Cook; Reporter - Johanna Miller

Group B: Facilitator - Ed Delhagen; Reporter - Gina Campoli

Questions to Guide Discussion:

- How are current programs working? How much do they need to be scaled up? What do we need to scale them? What is missing?
- What needs to change to grow the used vehicle market for efficient vehicles?
- How does Vermont support lower income and rural residents and businesses, and not subsidize drivers with financial capacity?
- In the near term, how should state policy balance EV charging infrastructure in rural areas with serving residents of multiunit dwellings?
- Where are there co-benefits of strategies/actions within the transportation sector? Beyond the transportation sector?
- Which of these have most/least potential for achieving distributional equity outcomes?

Morning Breakout Groups Combined Summary

Current Programs

- The State is committed to expanding existing programs including increased resources for both incentives and outreach. It recently received funding to offer navigator (ombudsman) support to help Vermonters access them, particularly lower-income households.
- The point was made that the State should also make a greater investment in translation services to reach non-English speaking households.
- To expand existing programs will require commitment to increasing state staff.
- Some participants voiced support for adopting more stringent ZEV standards, including pushing for 100% ZEV sales by 2035.
- VT's electric utilities should provide higher incentives that are large enough to overcome the significantly higher cost for commercial/professional lawn care equipment used by contractors and municipalities, with the 6-7 hour run times.

EVSE infrastructure

- Participants agreed on the importance of building charging infrastructure to serve rural communities; to make charging available at homes, where 95% of charging takes place, and where people work; and to provide public charging options for renters and multi-family units, including streetlight charging stations.
- Providing charging at schools could also increase the visibility of EVs.
- Participants were interested in the use of EVs and charging stations for flexible load management strategies and two-way flow of electricity in the future.
- Consider ways to make public charging more affordable. Vermont's latest round of public charging stations using VW settlement funds resulted in high EV user costs of \$0.49/kWh for Level 2 charging and \$0.39 - \$0.44/kWh for Level 3 charging, according to one participant. These high fuel costs may not encourage a transition to EVs.
- Another participant suggested that the State's proposed Electric Vehicle Supply Equipment (EVSE) grant program include integrating EVSE within existing streetlighting poles to address the current lack of access for renters.

Building new EV market

- **Vehicle availability: Dealers** are working with the state to increase outreach and make the sales process more accessible. The challenge now is the chip shortage and lithium battery supply chain problems limiting production of new EVs, and higher costs for used vehicles caused by increased demand.
- Participants discussed the best approach to making **purchase incentives** easy to access and simple to understand and the need to educate dealers about EVs. (Note: Efficiency VT and Burlington Electric are working on developing a dealer training program.)
- **Used EV market:** The used market is an important entry point into the EV market for lower income households. One participant suggested that the state needs a program that matches used EV purchases with the incentives for EVSEs to increase the used vehicle market. Others suggested that the development of used EV market is tied to a robust incentives for new EVs to encourage turn-over in addition to direct incentives for used EVs.

Equity

- **Targeting lower income and rural residents and businesses:** Scarce public funds need to be targeted to those with greatest need through income-based incentives according to several participants.

- **Fleet turnover** of old cars is a problem; there is a need to provide incentives to turn over older cars and purchase electric or more efficient ones.

Funding

- Several participants suggested that one-time federal funding may be best suited to investment in EVSE, but there is also a need for long-term sustainable funding.
- Current funding is not adequate to achieve targets several participants agreed. This requires a Hurricane Irene level of investment!
- Transportation Climate Initiative (TCI) was put forward as a viable option for generating on-going revenues to provide incentives and support other programs.
- As funding from the gas tax declines, the state will need to consider alternatives, e.g., higher vehicle registration fees based on VMT.
- To help prioritize investments, participants suggested that options should be analyzed through independent cost-benefit analyses and others suggested that life-cycle cost analysis be applied.

VII. The Land Use and Transportation Demand Nexus, Dan Dutcher, VTrans; Bronwyn Cooke, DHCD

Dan Dutcher and Bronwyn Cooke provided information on the state's current or planned programs to reduce vehicle miles traveled (VMT) including providing options other than personal vehicles and changing land use patterns to reduce reliance on vehicles, reduce vehicle trips' length, and reduce the number of trips. Although the State spends more on public transit than other states, the biggest challenge to increasing public transit is the rural character. Behavior and systems change are both needed to achieve the goals.

To increase access to alternative modes of transportation, the State is currently:

- Expanding electric bus fleet and park and ride program
- Offering mobility and transportation Innovations Grant Program
- Increasing active transport options through bike lanes and pedestrian infrastructure
- Promoting Complete Streets policy to ensure that the needs of all users are considered
- Setting goals to increase rail use

To support Smart Growth and other demand management strategies, the State is:

- Compact development also provides greater return on investment on infrastructure, and protects farms and forests in addition to supporting transportation goals
- Encouraging coordinated land use planning from state down to municipal level
- State designation programs: Using non-regulatory approaches to encourage compact development such as incentives and technical assistance within designated areas (5 designations)
 - Benefits for designations: tax credits; grant priority; sales tax reallocation, easier permitting
- Slide on funding, tools and incentives show current programs for encouraging smart growth

VIII. Afternoon Breakout Session: Land Use and Transportation Demand (including chat)

Two simultaneous breakout groups formed; the topics and questions were the same in both groups.

Group A: Facilitator - Cindy Cook; Reporter - Johanna Miller

Group B: Facilitator - Ed Delhagen; Reporter - Gina Campoli

Questions to Guide Discussion:

- What should we be looking out for on the horizon re: land use and transportation energy demand?
- What are the barriers to linking and elevating land use and transportation goals? What should we be doing to overcome those barriers?
- How can land use policies and program be structured to better advance both land use and transportation goals?
- What one new or amended land use policy would most enable/accelerate land use and transportation energy/emissions goals?
- What would be the single best use of funding to support the State's land use goals and transportation energy and emissions goals?

Afternoon Breakout Groups Combined Summary

Land use planning

- **Smart Growth:** A lot of good planning, including smart growth, is happening at the local level but it hard to implement without critical investments in infrastructure needed to support compact growth.
- **State planning office:** The suggestion was made to reinstate **state land use planning** to identify areas suited for growth in compact settlements, provide more centralized guidance, and counter the scattered planning approach currently. This office could coordinate and make strategic investments with the coming federal funding.
 - Others added that we need both top down and bottom up; municipalities will likely not make significant change without some top-down push.
 - Regional Planning Commissions (RPCs) might be the best messenger to municipalities on this and could provide the tools to address land use planning guidance. RPCs understand the local context and already provide technical assistance, but RPCs need more capacity to strengthen their leadership role.
- **Barriers to compact development:** Need to overcome factors that can make urban areas less attractive because of concentration of industry, traffic gridlock, flooding from overdevelopment, high land costs, etc.
 - Forcing growth into city centers could have adverse impacts like pushing industry into the rural areas.
 - Strategies need to also support rural living with less travel, e.g., broadband for remote work.
 - We need to talk about strengthening protections of land and resources outside of compact community centers for a lot of reasons, including to keep our farms working and viable.
 - Affordable housing is trumping a lot of the other needs. Developers are moving outside of core areas due to price and lack of infrastructure; need additional funding for affordable housing in town centers where it might be more expensive to live.
- **Complete Streets:** Provide more incentives, grants, and technical assistance to encourage municipalities to comply with Complete Streets (similar to MA).

- Suggestion was made to connect Complete Streets to brownfield remediation and buyout of frequently flooded areas.
- **Parking:** Get rid of **minimum parking requirements** for developers. Changes to parking practices can be considered as part of the State's bylaws modernization fund for municipalities.
- Consider **strategic disinvestment** in infrastructure e.g., disincentivize parking, downsize or eliminate roads so we can invest public funding into more effective modes of transport.
- **Implement "Transfer Development Rights"** charge on a sliding scale for those who live in remote areas. Use revenues from charge to pay for affordable housing, infrastructure, etc.
- Prohibit rural residential zoning (minimum lot sizes) and/or requiring zoning

Increasing transportation options

- In discussing the need for increasing transit options, such as bus, rail corridors, and E-bikes for "last mile" solutions, participants noted the **challenges** of developing cost-effective EV transit in less populated rural areas. In general, public transit faces the barrier of cultural preferences for convenience and saving time.
- **Bus infrastructure** needs to be improved to make use easier and accessible (expanded bus stops), and bus service should be supported with complementary options like guaranteed ride home program for emergencies. Guaranteed Ride Home is still available to all Vermonters who share a ride or use public transit. Visit connectingcommuters.org
- **Increase transit ridership** with better trip planning software and coordination with other modes of travel. Others said that the state trip planner app is continuing to add connectivity across modes and has had positive feedback from users, although it is more difficult to use in rural areas.
- **Public transit investments require regional cooperation**, that is, agreement between municipalities to contribute to funding with property taxes. Disincentive that could be remedied with higher level funding.
- Also **bike and ped facilities** (e.g. sidewalk and bike lanes) are needed to support compact development and building that infrastructure is incredibly expensive and time-consuming.

Data collection and analysis

- **Need to quantify impacts of decisions so the tradeoffs are transparent** to Vermonters; e.g., what will be the impact of building more roads vs public transit investments; what is the societal cost of free parking,?
- A participant suggested that the state needs to make the **GHG inventory** more timely and granular to measure progress.
- We need **data on equity impacts** in the transportation sector to be able to address them.

Funding

- **Use taxation** to disincentive choices with adverse GHG impacts, e.g., a carbon tax; a tax on new developments in rural areas; higher taxes on large homes, feebates, etc. More carbon intensive development should cost more.
- A participant raised the **equity implications** of the current transportation funding system (partially funded by state but mostly by property taxes).
- **More funding is needed for agency staff** and less siloing to provide effective outreach and help for individual towns; more funding is needed for RPCs, particularly in lower income areas of the state.

- **Support was expressed for TCI** to reduce emissions and raise revenues if equity is baked into the program.

IX. Next Steps

Ed McNamara encouraged participants to continue the discussion by submitting comments through other channels, including these state email addresses:

- Email (to submit comments on the CEP): PSD.ComprehensiveEnergyPlan@vermont.gov
- VCC Public Comment Portal:
<https://anweb.vt.gov/ANR/ClimateCouncil/PublicInputForm.aspx?PKID=3209>

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