



Planning Advisory Committee Agenda

Wednesday, May 12, 2021

2:30pm to 4:00pm

Remote Access Meeting Only via Zoom

Please join the meeting by clicking: <https://us02web.zoom.us/j/89964173438>

For those who would prefer to join by phone or those without a microphone on your computer, please dial in using your phone. (For supported devices, tap a one-touch number below to join instantly.)

Dial: +1 646 876 9923; Meeting ID: 899 6417 3438

For supported devices, tap a one-touch number join instantly: +16468769923,,89964173438#

Agenda

2:30 Welcome and Introductions, Joss Besse

2:35 Approval of March 10, 2021 Minutes*

2:40 Multifamily Housing EV Charging VEIC Report*, Dave Roberts

Vermont Energy Investment Corporation's Drive Electric Vermont conducted a study and produced a report on electric vehicle charging in multifamily homes. Dave Roberts will provide a presentation on the report.

3:05 Draft Future Vision for Taft Corners, Matt Boulanger & Taylor Newton

Town of Williston and CCRPC staff will present the **draft** future vision for Taft Corners. This is stage 1 of the [Williston form based code project](#). We will also provide a [Mentimeter](#) demonstration; this was a helpful public engagement feedback tool. Feedback from fellow planners on the draft vision would be greatly appreciated.

3:35 Broadband Legislation, Regina Mahony

CCRPC has been following H.360 and is waiting to see how the Legislature will decide to deploy broadband connectivity funds. CCRPC will provide a status update at the meeting.

3:40 Members Items Open Forum, Members

If anyone has anything they'd like to bring up with the group, please do so.

3:50 Regional Act 250/Section 248 Projects on the Horizon - Please email Regina and Taylor with projects on the horizon.

3:55 Other Business

a. Congrats to the 2021 VPA Planning Award Winners in Chittenden County:

- Mark Blucher Professional Planner of the Year: **Meagan Tuttle, AICP**, Principal Planner for Comprehensive Planning, City of Burlington
- Career Achievement Award for Excellence in Planning: **Dean Pierce, AICP**, Director of Planning and Zoning, Town of Shelburne. This is a discretionary award that recognizes individuals who make unique and lasting contributions to Vermont planning throughout their career.

b. CCRPC is working with three other regions (Addison, Rutland and Central VT) on a combined Comprehensive Economic Development Strategy (CEDS) currently called the West Central Vermont CEDS. While Chittenden

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CHITTENDEN COUNTY RPC

Communities Planning Together

County already has a CEDS this will help us update that component of the ECOS Plan (in 2023); and set us up for the possibility of becoming an [Economic Development District](#), which could provide a more consistent amount of EDA funding in the region. **Save the date for the first public engagement meeting on the evening of June 17th.**

- c. **Summit on the Future of Vermont: May 26 & 27, 1-5pm.** Join the Vermont Council on Rural Development to consider transformational goals and actions for the future of our economy, environment, communities, and people at the Summit on the Future of Vermont. Share your voice and shape action for Vermont's future. [Learn More & Register »](#).
- d. The [2020 ECOS Annual Report: The State of Chittenden County](#) was released at the end of March.

4:00 Adjourn

* = Attachment

NEXT MEETING: June 9, 2021 (take summer off?)

1 CHITTENDEN COUNTY REGIONAL PLANNING COMMISSION
2 PLANNING ADVISORY COMMITTEE - MINUTES
3

4 DATE: Wednesday, March 10, 2021
5 TIME: 2:30 p.m. to 4:00 p.m.
6 PLACE: Virtual Meeting via Zoom with link as published on the agenda
7

Members Present:

Joss Besse, Bolton, Chair
Eric Vorwald, Winooski
Ravi Venkataraman, Richmond
Alex Weinhagen, Hinesburg
Cymone Haiju, Milton
Wayne Howe, CCRPC Representative
Paul Conner, So. Burlington
Darren Schibler, Essex
Owiso Makuku, Essex
Matt Boulanger, Williston
Dean Pierce, Shelburne
Larry Lewack, Charlotte

Katherine Sonnick, Jericho
Sarah Hadd, Colchester (left at 3:32pm)
David White, Burlington (left at 3:20pm)

Staff:

Regina Mahony, Planning Program Manager
Eleni Churchill, Transportation Program Manager
Jason Charest, Senior Transportation Planner
Taylor Newton, Senior Planner
Charlie Baker, Executive Director

8
9
10 **1. Welcome and Introductions**

11 Joss Besse called the meeting to order at 2:34 p.m.
12

13 **2. Approval of February 10, 2021 Minutes**

14
15 Paul Conner made a motion, seconded by Alex Weinhagen, to approve the February 10, 2021 minutes. No further
16 discussion. MOTION PASSED.
17

18 **3. I-89 Study Update & Input**

19 Eleni Churchill and Jason Charest provided an update on the I-89 2050 Study with a focus on design concepts,
20 metrics and results of the Exits 12B, 13 and 14 evaluations. Please go to the [Envision89](#) website for comprehensive
21 information on this study.
22

23 There was quite a bit of discussion of Exit 13 SPDI. Could the land where the former eastbound I-189 lane have the
24 opportunity for redevelopment and/or return to the UVM Eastwoods natural area; or could it be used as a bike path?
25 While it's possible this study won't be able to determine if these areas could be re-purposed. There was a question
26 about how this design would work for folks travelling northbound on 89 and trying to get on to Shelburne Road
27 during pm peak? Depictions of the traffic impacts for the interchanges evaluated can be found [here](#).
28

29 There was quite a bit of discussion on Exit 14 DDI. With the removal of the clover leaf ramps, there could be a
30 potential for redevelopment in those areas. While this study won't go into that level of detail (won't be able to know
31 if VTrans and FHWA would allow for the land to be sold); there was a question about whether that redevelopment
32 potential could be scored in some way in the matrix? It seems like it would be valuable. Jason stated that it may be
33 hard to evaluate that at this stage. He stated that the Board asked to have impervious surface added as an evaluation
34 criteria; which is somewhat related in the sense of impervious surface potentially being removed in this design. There
35 was a suggestion by three members to make the multi-use path in the center of the DDI 20' wide in this design.
36

37 There was another question about whether it's possible to put the pedestrian and bike paths under the ramps at Exit
38 14 to keep them completely separated from the vehicle traffic. Staff will take that question back to the consultant
39 team.
40

41 Eleni and Jason asked the PAC to take a look at the interchange evaluation matrix after the meeting, as there wasn't
42 much time to review these in detail. Staff stated that we are trying to make sure we have this evaluation stage done

1 thoroughly and correctly. Question – has there been any discussion about weighting the evaluation criteria? Some
 2 might be more important than others (for example 1 acre change of impervious surface impact may be a lot less
 3 important than vehicle miles travelled). Right now, every goal and metric is scored equally. Paul Conner suggested,
 4 in that case, maybe there should be a review of the metrics within each goal to make sure that there are equivalent of
 5 bigger and smaller criteria.
 6

7 Eleni explained that there has been a significant amount of outreach, including focus groups with New Americans
 8 and typically underrepresented populations, business community and workshops in South Burlington. By May the
 9 plan is to have a decision on which interchanges to move forward into the I-89 corridor bundles for evaluation.
 10

11 **4. FY22 UPWP Overview**

12 Regina Mahony gave the PAC an overview of the land use projects that were submitted for the FY22 UPWP. Regina
 13 Mahony explained that Staff is working on allocating staff hours in the draft. This will go to the UPWP Committee
 14 for their final review at the end of March.

Regulating Trails and Trail Parking	Bolton
Bolton Land Use and Development Regulation Amendments	Bolton
Zoning Administrator Ticketing Bylaws	Bolton
Transportation Impact Fee Study – Revision & Expansion	Burlington
Planned Unit Development Update (not transportation program eligible)	Jericho
Climate Action Plan, Transportation Component	South Burlington
Planning Technical Assistance	South Burlington

15
 16 **5. Town of Bolton Plan Amendment**

17 The Town of Bolton is considering a Town Plan amendment to their future land use map. See the attached letter from
 18 Staff acknowledging this amendment and indicating that CCRPC’s original plan approval still stands. Question about
 19 allowing more mixed uses, but they are so small lots. And the Town is open to commercial. Lots of steep slope and
 20 streams. Awkward to solve the problem by changing to the zoning district; and set back allowances. Could have been
 21 an overlay.
 22

23 There was some discussion about where exactly the change is proposed for because the two maps submitted are very
 24 similar. Larry Lewack clarified since he was still in Bolton when this first came about. There was also discussion
 25 about changing the rural district to a village district to accommodate small lots. This would allow for mixed uses in
 26 addition to simply accommodating the lot sizes. It may be better to employ an overlay district to simply allow for a
 27 change in setbacks. Larry Lewack stated that they did discuss the fact that more uses would be allowed, but the lots
 28 are so small and there are significant steep slopes so the area really wouldn’t lend itself to commercial.
 29

30 The PAC did not have any objections to the letter as drafted.
 31

32 **6. Members Items Open Forum**

33 Joss Besse asked if any members had any items to discuss with each other.
 34

35 Larry Lewack explained that there were four zoning changes on the ballot: two passed - on farm accessory
 36 businesses, and obsolete bylaw language; and two associated with the East Charlotte village failed. It would have
 37 changed 5 acre to 1 acre zoning in a commercial/village area. Need to foster a community conversation about the
 38 need and benefit of a diversity of housing types. Want to engage in a conversation with CCRPC for assistance in
 39 these conversations. There was some discussion from municipalities with experience in zoning amendments that go
 40 to the voters – Westford used to do that. Alex Weinhagen suggested that ACCD’s new zoning guide could be helpful:
 41 <https://accd.vermont.gov/sites/accdnew/files/documents/CD/CPR/CPR-Z4GN-Guide-Final-web.pdf>
 42 Richmond still does that, and are still working on addressing amendments that failed in 2012. They are trying to front
 43 load the conversations with the public as much as possible.

1
2 Taylor Newton asked if Charlotte ever voted to be a 'rural town' even though it is over 2,500 people? There was
3 some discussion over the statutory authority to vote by Australian ballot when over 2,500.
4

5 **7. Regional Act 250/Section 248 Projects on the Horizon.**

6 Regina asked the PAC to email Regina and Taylor any Act 250/Section 248 updates.
7

8 **8. Other Business**

- 9 a. Permitting Helipads and Airstrips – [Letter](#) from the Vermont Transportation Board to Municipal Manager's
10 and Planning Commissioners. Regina Mahony asked the municipalities if they've seen any of these in their
11 municipalities. Paul Conner: They've only received a question rarely, but the So. Burlington PC does want to
12 address it, as it certainly could happen. Cymone Haiju – there are two locations in Milton now; and the PC
13 does want to take this up. Dean Pierce: Similar boat as South Burlington. Have only heard whispers so far;
14 but it could definitely happen. Darren Schibler asked the PAC about not defining it as a use, and then it
15 would be reviewed as a conditional use, and likely wouldn't pass because it wouldn't be able to meet the
16 criteria. Alex Weinhagen said that likely wouldn't happen in Hinesburg because they have three use types:
17 permitted, conditional and accessory and the accessory uses are very broad. Someone could make the
18 argument that they are an accessory use; and they wouldn't have any standards to judge it against. Regina
19 thanked the PAC for their input.
20 b. Cannabis APA magazine article*
21 c. Chittenden County Housing Convening – Monday, March 29th at 6pm. Agenda will go out soon. Regina
22 Mahony asked the members to let her know if they have any suggestions on the equity topic for this
23 convening.
24 d. Community Wildlife Program at VT Fish and Wildlife is hosting a webinar on Starting Your Town
25 Conservation Fund next Thursday, March 11th at 1:00pm-2:00pm. Registration information is [here](#).
26

27 **9. Adjourn**

28 Meeting adjourned at 4:01pm.

29
30 Respectfully submitted, Regina Mahony
31

Electric Vehicle charging for your multi-family dwelling



Overview

Multi-family housing (MFH), including town homes, apartments and condominiums often have unique issues associated with EV charging installations. The following information will help orient potential installers and users to these issues and provide guidance on recommended practices.

Drive Electric Vermont (DEV) has a general resource on plug-in electric vehicle (EV) charging technology which is a good place to learn about EV charging and related issues:

<http://driveelectricvt.com/for-businesses>

DEV's EV Charging Installation Guide has more detailed information on siting considerations, including recommendations to ensure charging is accessible for disabled EV owners:

<http://www.driveelectricvt.com/charging-stations/installation-guide>



EV charging at Burlington Co-housing East Village Community

EV Charging Installation Considerations

- 1. Location** – If MFH residents have assigned parking spaces and own their residence then it is usually simplest to install charging in those spots. This is usually done at the owner's expense, although grants or incentives may be available to offset the cost. If parking spaces are not assigned or occupants are renters, then MFH owners should look to minimize the distance from existing electric service connections to a charging spot to reduce installation costs.
- 2. Type of Charging** – Level 2 (208/240V AC) is the most common variety of public charging infrastructure and uses a standardized connector for all EVs except Tesla, which has an adapter available. On a Level 2 charger, a vehicle takes about 4-6 hours to reach full battery charge, which makes it ideal for overnight home charging. Level 1 charging is simply plugging into a standard 120V receptacle. It takes much longer and is less efficient than Level 2, but could be worth considering in some cases, especially if there are existing receptacles available near where residents park.
- 3. Number of Charging Ports** – Charging equipment vendors have various models available, many of which have "dual-port" configurations with the ability to charge two EVs at once from one piece of equipment. Single port equipment can be a good, low cost solution for parking spaces dedicated to individual residents. For shared or public use, providing a minimum of two charging ports is recommended. When installing new charging, a best practice is to place additional electrical conduit to streamline future expansion of EV charging as demand warrants.

4. **Cord Management** – Equipment manufacturers have developed various ways to manage the cord running from the charging equipment to the vehicle charging port. Keeping cords off the ground will reduce maintenance issues, simplify snow removal, and provide a more pleasant experience for users. Cords should not stretch across pedestrian walkways when in use.
5. **Signage** – Shared or public EV charging parking spaces should be signed. We recommend regulatory signs indicating no parking “except electric vehicle charging”. For public EV spaces, special time or other restrictions could be shown, for example “residents only from 8 PM to 9 AM.”

Dual Port ChargePoint Level 2 networked EV charger



EV Charging Cost Considerations

1. **Capital Costs** – Level 2 charging requires purchasing EV charging equipment. The equipment cost varies depending on monitoring and metering capabilities and/or the ability to collect payment for charging sessions.

Basic single-port Level 2 chargers suitable for MFH use are available starting around \$600, with more advanced dual-port networked equipment costing up to \$7,000 or more. Many electric utilities offer incentives for Level 2 charging purchases.

Installation costs will vary significantly depending on proximity to existing power connections, capacity of existing electric service, and type of unit installed. A typical home installation may cost \$500-1,000, but it is possible some MFH locations could cost \$10,000 or more, depending on whether upgrades are needed to the existing electrical service and other factors. Getting an estimate from a licensed electrician is recommended to better understand cost.

Use of wall mounted equipment is generally less expensive than pedestal or bollard style units due to reduced installation costs, as there is no need for a concrete pedestal mount.

2. **Charging Equipment Subscription Costs** – Networked charging equipment that can collect payments often requires an annual or monthly fee to a service provider offering connected monitoring and payment services using cellular data service or a Wi-Fi connection. Depending on the vendor, this might add another \$120-400 per port in annual operating expense for this capability. .

Summary of Capital and Non-Electricity Costs with Example Equipment Models

Type	Costs (excluding installation)	Example Vendors
Non-internet connected	Hardware: \$500-\$700 Subscription: N/A	Clipper Creek ruggedized models
Internet Wi-Fi connected, 3 rd party payment & reservation	Hardware: \$800-\$2,000 Subscription: \$10-25 per month	Enel X with Juicebox EV Match AmpUp
Cellular networked commercial charger	Hardware: \$4,000-\$7,500 Subscription: \$20-\$40 per month per port	ChargePoint CT 4000 family Flo Commercial EV Box

- 3. Electricity Costs** – Ongoing operating costs also depend on the amount of use the charging stations receive. Individual models of EVs can charge at different rates, typically ranging from 3-7 kW for Level 2 charging. An average all-electric EV driver that charges at home 85% of the time will use about 250 kWh per month. That adds up to around \$50/month in electric costs for power based on Vermont's average electric rate of \$0.19/kWh. If the charger is also accessible to the public, roughly another 125 kWh per month, or about 30 hours of active use, costing another \$25/month is possible although public use is highly variable.

Depending on your MFH property's level of electric use and rate structure, it may be subject to peak demand charges which could add additional costs to your electric bill if EV charging activity overlaps with peak periods.

Setting Fees to Cover Costs

MFH owners have a few options to assess fees on EV charging activity to cover their costs:

- 1. Resident meter** – If EV owners have their own charging equipment tied into their meters, covering costs is a non-issue - they will pay for their own electricity like usual.
- 2. Pass-through** – If residents have their own dedicated space and charging equipment, but it is connected to a shared meter, then charging equipment is available that will allow them to report on how much energy is used and this could be added to their HOA or tenant fees.
- 3. Flat rate** – EV charging could be offered to residents as an amenity, either to all residents, similar to a fitness center, or to residents who opt in for a flat rate. In this case the charging equipment should be limited to resident use only.
- 4. Cost to charge** – As described above, there is charging equipment available that can automatically collect a fee, which can then be deposited into an account for the homeowners' association (HOA) or management company. Property owners may want to factor in electricity costs, network subscription fees, payment processing costs, and/or extended warranties to ensure all operating costs associated with the charging equipment are covered.

In addition to operating costs, the cost of installing a charging station can also be shared with residents. In the case of a resident-owned charger, the resident is typically responsible for installation costs. In cases where upgrades are needed to the building electrical panel or in the case of a community charger, these costs could be shared across the residents through an HOA fee or through a dedicated fundraising effort.

Incentives

Many electric utilities in Vermont are offering incentives for EV chargers, typically in the range of \$500 per port, and publicly accessible chargers might be eligible for additional incentives. Contact your local utility for more information.

Federal tax credits are also available for EV chargers, but currently expire at the end of 2021. Businesses, including property managers, may be eligible for 30% off, up to \$30,000, the purchase and installation of EV charging stations. For individuals, the tax credit is 30% off, up to \$1,000.

Additional Resources

The Drive Electric Vermont team is available to respond to questions and help you get started:
<https://www.driveelectricvt.com/contact-us>

The US Dept of Energy has EV charging resources for multi-unit dwelling residents:
https://afdc.energy.gov/fuels/electricity_charging_multi.html

A few Vermont utilities have pilot programs with EV Match, a charging equipment provider that offers low cost solutions for access-controlled charging and fee collection appropriate for MFH locations:
<https://www.evmatch.com/>

Other companies that provide services for charging are ChargePoint, EV Safe Charge, and SemaConnect:

- ChargePoint: <https://www.chargepoint.com/blog/ev-charging-condos-get-your-hoa-say-yes/>
- EV Safe Charge: <https://evsafecharge.com/ev-charging-for-apartments/>
- SemaConnect: <https://semaconnect.com/applications/apartments-and-condos/>

A few cities have developed case studies for MFH that explore common barriers and solutions:

- Smart Columbus Case Study
<https://d2rfd3nxvhnf29.cloudfront.net/legacy/uploadedfiles/playbook-assets/electric-vehicle-charging/mud-case-study-final.pdf>
- Plug In San Diego EV Charging
https://www.sandag.org/uploads/projectid/projectid_511_25855.pdf
- Seattle City Light Guide https://energysolutions.seattle.gov/wp-content/uploads/Electric_Vehicle_Service_Equipment_for_Multi.pdf



EV Match enabled level 2 charging at Burlington Electric Department pilot location - 316 Flynn Ave mixed use development

