



CNHRPC Full Commission Meeting
Meeting Summary
Thursday, February 10, 2022
7:00pm

Horseshoe Pond Community Resource Center
26 Commercial Street
Concord, NH 03301
with
Remote Zoom Meeting Option

Commission Attendees: Diane Adinolfo, Town of Allenstown
Steve Buckley, Town of Bow
Harry Wright, Town of Bradford
Jim Bibbo, Town of Bradford
Tyson Miller, Town of Canterbury
Stan Brehm, Town of Chichester
Matthew Hicks, City of Concord
Erle Pierce, City of Concord
Karen McNamara, City of Concord
Betsy Bosiak, Town of Epsom
Scott Osgood, Town of Henniker
Gary Sparks, Town of Hillsborough
Clarke Kidder, Town of Hopkinton
Emilio Cancio-Bello, Town of Sutton
Russell Tatro, Town of Webster

CNHRPC Staff: Stephanie Alexander, Senior Planner
Matt Baronas, Regional Planner
Matt, Monahan, Senior Planner
Michael Tardiff, Executive Director
Craig Tufts, Principal Senior GIS/Transportation Planner

Public Attendees: Tim White, NHDES
Jessica Wilcox, NHDES/GSCCC

The meeting began at 7:01 PM, called to order by CNHRPC Chair Matthew Hicks. Matthew informed the group that the number of in-person participants needed for a quorum was not met so no formal business would be conducted. The Full Commission informal meeting began with a guest presentation.

Speakers – Jessica Wilcox, NH DES Transportation Program Specialist and Coordinator of Granite State Clean Cities Coalition – How Communities can be Preparing for Electric Vehicles

Mike Tardiff introduced the speakers for the evening, Jessica Wilcox and Tim White, sharing that they were present to discuss Electric Vehicles (EVs). Mike also shared that the NH Transportation Council has been discussing opportunities with legislation and funding to support EVs, making it a timely presentation to help towns in preparing plans for these vehicles.

Jessica Wilcox of the NH Department of Environmental Services Transportation Program introduced herself and her colleague Tim White, also of NHDES. Jessica coordinates the state's Clean Cities Coalition which is supported by the U.S. Department of Energy. Clean Cities Coalition works with private businesses or fleets, cities, and towns that are interested in transitioning from fossil fuels to alternative sources to power energy efficient electric vehicles.

Jessica then outlined the two types of Electric Vehicles (EVs): Better Electric Vehicles (BEVs) and Plug-in Hybrid Electric Vehicles (PHEVs). BEVs are powered only by an electric battery and no engine whereas PHEVs are a combination of gasoline engine with an electric motor. Both types are considered Plug-in Electric Vehicles (PEVs) since they require electric battery charge.

Next, the benefits of EVs were outlined for both the environment and the consumer. Without tail-pipe emissions, EVs reduce greenhouse gases such as NOx. Jessica highlighted that these reductions will become more significant with the integration of even more renewables into transportation. Fueling with electricity is currently the equivalent of over \$1.00 cheaper than a gallon of gasoline and the cost of EV batteries has begun to decrease.

A graph of total registered EVs by New Hampshire County from 2016 to 2020 was presented. Jessica pointed out that the registrations have increased each year, most notably in Hillsborough and Rockingham counties. These numbers are expected to continue to grow as more body types of EVs become available and battery ranges improve.

Jessica shared that vehicle manufacturers are investing significantly in electrification including new products, more EVs with four wheel range, and longer ranges. Also, there are companies that are working with automakers to integrate plug in hybrid upfits and battery electric powertrains into existing trucks and vans, a potential way for municipalities to transition to EVs.

Alternative equipment that could be electrified were highlighted by Jessica including, refuse trucks, forklifts, streetsweepers, or commercial lawn equipment. Larger vehicles such as school buses, public transit, or long haul trucks were covered as potential places to utilize EV technology.

Jessica detailed the three types of charging stations available for EVs: Level 1 charging which uses a standard house outlet, Level 2 charging which requires a 240v electrical service and dedicated 40 amp circuit, and lastly Level 3 Direct Current Fast Charging (DCFC) which utilizes three-phase 480v AC electric circuit. Each type offers different speeds of charging, and more powerful charging increases the miles of range per hour of charge. Jessica reported that there are currently 127 universal (non-proprietary) Level 2 charging stations in the state although they may not be available for public use -for instance, hospitality

businesses will install them for guests or car dealerships will install them for car buyers. The City of Dover was successful in installing DCFC charging stations by working with Tesla who subsidized much of the install. Jessica shared that Level 2 charging offers the most potential for municipalities due to its affordability.

Ideal sites for charging installation were identified as places accessible to both residents and visitors that support economic activity and growth in the workforce, such as downtown areas. Jessica highlighted that with investment in EVs infrastructure (EVSE) increasing, it is a good strategy for municipalities to plan by determining key locations that would work well for charging and to try to coordinate with neighboring communities. Regional Planning Commissions can help with more strategic widespread projects. Other useful strategies for municipalities are to encourage EV procurement through state contracts and install charging in municipal parking lots, garages, park and rides, or other town facilities.

Jessica outlined many of the funding possibilities for EVSE projects including:

- An EPA program funded through the Diesel Emission Reduction Act that supports state programs funding electric buses as well as school bus rebates.
- EPA's new Clean School Bus Program.
- The NH Electric Cooperative EV Charger Incentive.
- USDA Rural Business Development Grants.
- Volkswagen Settlement Trust Funds which NHDES leads distributing of funding.
- The federal infrastructure bill (Infrastructure Investment and Jobs Act 2021) allocates \$17 million to support EV infrastructure in New Hampshire.

New Hampshire's Federal Highway Administration (FHWA) designated EV corridors were identified, several of which run through the Central NH region – I-93, I-89, US 3, NH 9, US 4, and others. This list of state corridors are categorized as meeting alternative fuel distance infrastructure requirements or still pending infrastructure. These routes spread awareness to EV users and helps identify places to allocate future EV infrastructure funding. (The State has an open RFP for a contractor to construct EVSE simultaneously on these corridors).

Next Jessica highlighted the importance of understanding the town's electric permitting process. NH does not have a statewide standard to rely on although some towns have adopted the International Building Codes set of standards. The best practices for streamlining DCFC permitting were identified as:

- Standardizing the permit review and inspection process,
- consolidating the number of reviews or inspection,
- developing a step-by-step checklist for approval,
- making the permitting process transparent,
- offering options to submit permit applications electronically,
- counting EV charging spaces as parking spaces,
- identifying a single contact person to speak with,
- placing information on the town website, and lastly,
- collaborating with bordering municipalities or regions to get some EVSE consistency.

Jessica concluded her presentation by emphasizing the Granite State Green Cities Coalition at <https://www.granitestatecleancities.nh.gov/index.htm> is a useful resource and staff are willing to provide assistance to towns looking to implement any clean fuel or electric vehicle projects.

Betsy Bosiak asked what the expected battery life is for EVs, to which Jessica responded the batteries should last the life of the vehicle. Tim White added battery technology is constantly improving.

Erle Pierce asked about the potential for “range anxiety” with electric vehicles especially in an emergency or evacuation. Jessica noted that EV users are less likely to leave the house without having full range (opposed to gasoline drivers leaving on a low tank), after charging overnight. The growth of EVSE charging infrastructure further eases worries about range, and EVs have the capability of idling for 24-36 hours. Tim White noted the benefits of an informed EV driver, such as using one of many map applications that display charging stations. Tim concurred the best way to address “range anxiety” is by implementing more EVSE charge infrastructure, a goal NHDES is working hard to achieve.

Matthew Hicks asked about the increased cost in electricity due to the increased demand of electric vehicles and charging. Jessica replied EVs can be programmed to charge during off-peak hours to help mitigate demand issues and in New Hampshire, utilities are proposing dockets to the Public Utilities Commission to provide time of use rates to residents. Additionally, Eversource is looking to supporting public charging infrastructure. Utilities are recognizing the grid will benefit from a more balanced use schedule as opposed to mass charging at peak times.

Adjournment

Stephanie Alexander thanked the guest speakers for their presentation. She informed the remote Zoom attendees that the in-person meeting room at Horseshoe Pond Community Resource Center unexpectedly lost internet connection and could not reconnect. After apologies were relayed from the in-person staff members for the technical trouble, the meeting concluded at 8:01 PM.