VERMONT

State of Vermont
Division of Policy, Planning and Intermodal Development
Barre City Place
219 North Main Street
Barre, VT 05641
vtrans.vermont.gov

Agency of Transportation

[phone] 802-505-3480
[ttd] 800-253-0191

Legislative Report

To: House and Senate Committees on Transportation

Date: January 15, 2025

From: Andrea Wright, PE, Environmental Policy Manager

Re: Statewide Level 3 EVSE (Direct Current Fast Charging or DCFC) Report, Map, and Funding for installation and maintenance of charging equipment to meet the targets of the Comprehensive Energy Plan and the Vermont Climate Action Plan.

Members of the Committees,

The Vermont Agency of Transportation (AOT) respectfully submits the following report on Vermont's public electric vehicle fast-charging network and progress toward State legislative goals and the National Electric Vehicle Infrastructure (NEVI) Deployment Plan as required by Sections 23 and 25 of Act 148 (2024 Transportation Bill).

Sec. 23 of Act 148 (2024 Transportation Bill) amended Sec. 4 of Act 184 (2022 Transportation Bill) which amended Sec. 30(b) of Act 55 (2021 Transportation Bill) requiring the following:

> § 2906. ELECTRIC VEHICLE SUPPLY EQUIPMENT GOALS
> It shall be the goal of the State to have, as practicable, a level 3 EVSE charging port available to the public:
>
> (1) within **three driving miles** of every exit of the Dwight D. Eisenhower National System of Interstate and Defense Highways within the State;
> (2) within **25 miles** of another level 3 EVSE charging port available to the public along a State highway, as defined in subdivision 1(20) of this title; and
> (3) co-located with or within a safe and both walkable and rollable distance of publicly accessible amenities such as restrooms, restaurants, and convenience stores to provide a safe, consistent, and convenient experience for the traveling public along the State highway system.
>
> § 2907. ANNUAL REPORTING; ELECTRIC VEHICLE SUPPLY EQUIPMENT
> (a) Notwithstanding 2 V.S.A. § 20(d), the Agency of Transportation shall:
> (1) file a report, with a map, on the State's efforts to meet its federally required Electric Vehicle Infrastructure Deployment Plan, as updated, and the goals set forth in section 2906 of this chapter with the House and Senate Committees on

Transportation not later than January 15 each year until the Deployment Plan is met; and

(2) file a report on the current operability of EVSE available to the public and deployed through the assistance of Agency funding with the House and Senate Committees on Transportation not later than January 15 each year.

(b) The reports required under subsection (a) of this section can be combined when filing with the House and Senate Committees on Transportation and shall prominently be posted on the Agency of Transportation's website.

Sec. 25 of Act 148 (2024 Transportation Bill) includes the following:

> Sec. 25. EVSE PLAN; REPORT
> The Agency of Transportation, in consultation with the Agencies of Agriculture, Food and Markets and of Commerce and Community Development, shall prepare a written plan, which may incorporate other plans that have been prepared to secure federal funding under the National Electric Vehicle Infrastructure Formula Program, for how to fund and maintain the EVSE necessary for Vermont to meet that portion of the goals of the Comprehensive Energy Plan and the Vermont Climate Action Plan. The written plan shall be filed with the House and Senate Committees on Transportation not later than January 15, 2025.

The first part of this report addresses the State/AOT efforts to meet the goals related to level 3 DC fast charging ports available to the public in accordance with state goals and the NEVI Deployment Plan as well as the current operability of related charging ports. The second part of this report addresses funding the installation and maintenance of the EVSE infrastructure necessary for Vermont to meet that portion of the goals of the Comprehensive Energy Plan and the Vermont Climate Action Plan.

EVSE GOALS AND OPERABILITY

Until the NEVI Program was created as a federal formula-funded appropriation by the Investment in Infrastructure and Jobs Act of 2021, State investments in fast charging have been managed by the Agency of Commerce and Community Development in partnership with the EVSE interagency workgroup which includes AOT, Agency of Natural Resources, Department of Public Service, and the Department of Buildings and General Services. In 2017, Vermont was awarded $2.8 million in VW Settlement Funds which, administered by ACCD, spurred the deployment of public fast charging in 26 downtown locations. The status of these projects is included in maps 2 and 3 below. With federal formula funding sources now available—the NEVI program and the Carbon Reduction Program—and federal discretionary funding opportunities—Charging and Fueling Infrastructure Grants and other "gap-filling" grants through the Federal Highway Administration (FHWA)—the Agency of Transportation is primarily responsible for fast charging to serve highway corridors.

The Investment in Infrastructure and Jobs Act (IIJA) established the National Electric Vehicle Infrastructure (NEVI) Program with $5 billion in formula funds and the Charging and Fueling Infrastructure (CFI) Grants with $2.5 billion in competitive funds. Vermont's share of the formula funds

is roughly $21.2 million over five years (FFY2022-2026). Federal program guidelines require annual approval by FHWA of a state's NEVI plan before being able to access that year's apportionment. To date, FHWA has approved three Vermont state plans providing access to FFY2022-2025 funds, totaling approximately $17 million. Vermont's most recent state plan update, approved by FHWA in October 2024, is included at the end of this report. Vermont's initial plan, first update, and second (most recent) update are all available on the AOT website. The Vermont Legislature also directed $2 million in ARPA funds to supplement fast charging along highway corridors.

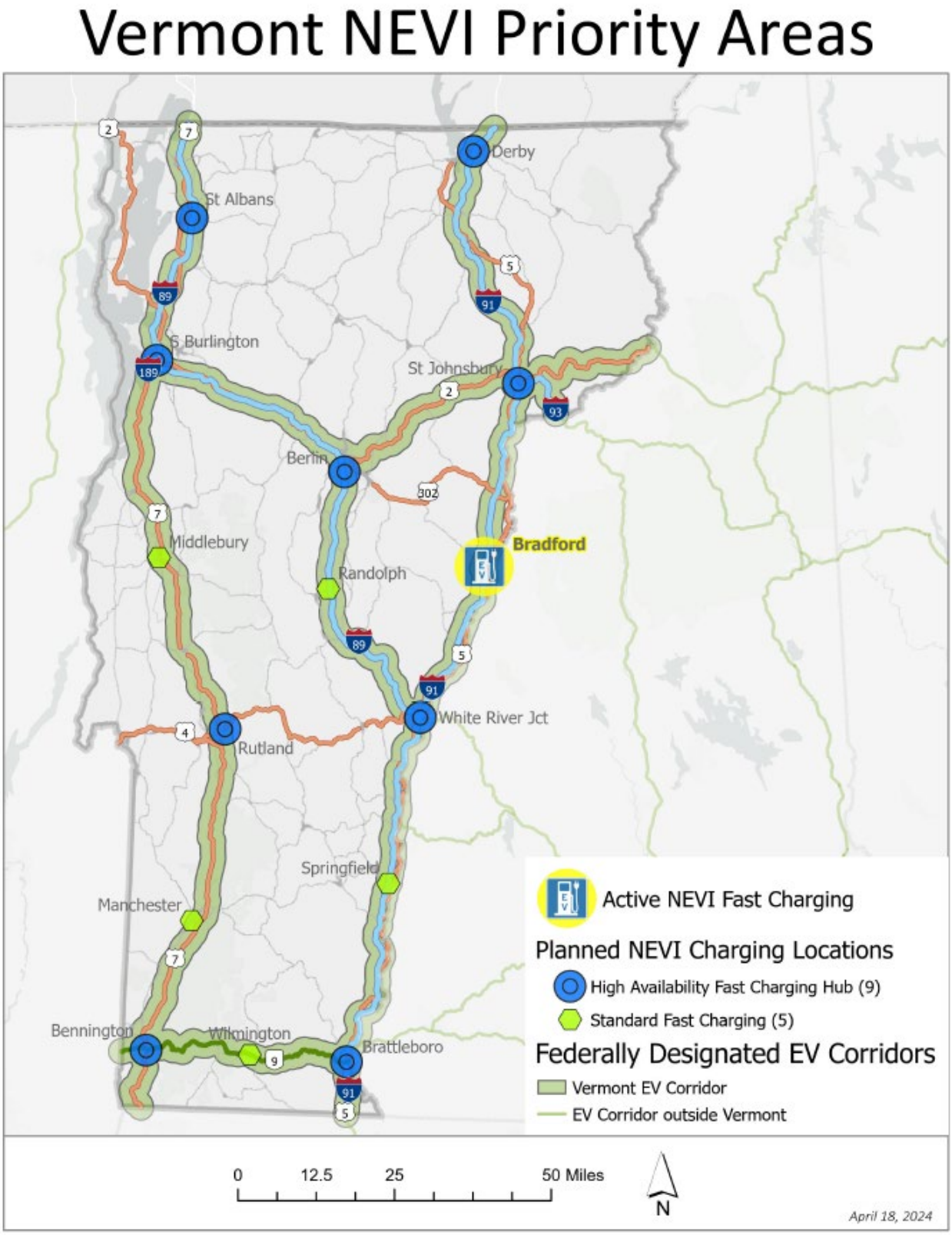
Federally funded charging stations must meet the following minimum criteria for location, ports, and power to count toward a "fully built-out" certification:

- located within one mile of an interstate exit or highway intersection,
- within 50 miles of the next location, and
- have a minimum of four ports capable of charging 150kW simultaneously (600kW minimum per location).

Meeting the one-mile criteria, while ensuring access to a variety of public amenities, poses a particular challenge in our rural state, as does locating a willing and committed site host that meets all other NEVI requirements. After reviewing compelling proposals for sites located just beyond one mile from the Alternative Fuels Corridor (AFC) exit, AOT requested and received FHWA approval for six exceptions to build NEVI funded charging stations within 3 miles of the interstate at locations poised to offer a robust, consistent user experience while also contributing to economic activity in Vermont's downtowns and villages.

A map of the 15 NEVI locations proposed to meet FHWA's "fully built-out" status is included below as Map 1. As of January 2025, one station is open (Bradford). The remaining 14 priority locations were included in the first solicitation, with 11 awards made.

Map 1 - Vermont's 15 NEVI Priority Locations



Despite challenges with the NEVI program, which has seen delays with the issuance of evolving guidance and final rules, the Agency has achieved several key milestones in the past year. Beyond approval of the third annual NEVI plan, the Agency celebrated opening one of the first NEVI-funded charging locations in the country, after successfully navigating the SEP-14 (Special Experimental Project) process to obtain FHWA approval to move forward with its proposed alternative contracting methods for EV charging deployment. This allowed the Agency to cost-effectively build upon prior efforts by ACCD to upgrade a site in Bradford to meet NEVI standards. The site provides the traveling public with one level 2 charging port, two 50kW DCFC ports, and four 180kW DCFC ports; and positively contributes to the local economy via its downtown location.

In the last year, AOT also issued a two-step solicitation process, beginning with a Request for Qualifications (RFQ) to develop a list of six providers to support the State in its buildout plans. The RFQ was followed by the Agency's first Request for Proposals (RFP) for DCFC projects at the next fourteen priority locations identified in Vermont's NEVI plan that are required to reach "fully built-out" status as determined by FHWA. The following summarizes the contracting process to date:

- On April 16, 2024, AOT issued a Request for Qualifications (RFQ) to identify electric vehicle charging providers that are capable of building out Vermont's charging network to federal and state specifications. For the full announcement, please read the press release.
- On June 5, 2024, AOT announced the list of electric vehicle charging providers selected through the RFQ process to build out Vermont's charging network to federal and state specifications. For the full announcement, please read the press release.
- On July 25, 2024, AOT issued a Request for Proposals (RFP) to invite bids from the eight providers selected through the RFQ for the design, construction, ownership, operation, and maintenance of public charging infrastructure at 14 sites along Vermont's Alternative Fuel Corridors.
- On December 12, 2024, AOT announced the award of 11 electric vehicle (EV) public charging projects that will contribute toward the build out of Vermont's charging network to federal and state specifications with the installation of 60 additional fast charging ports across the state. For the full announcement, please read the press release. Contracts for these projects are expected to be fully executed in early 2025.
- The Agency expects to issue a second solicitation in 2025 for proposals to complete contracting for the remaining three locations that would lead the State to be certified by FHWA as "fully built-out" and to go beyond the NEVI 50 miles between locations goal and to begin to fill in gaps to meet the State's goal to have DCFC located every 25 miles on and off designated corridors. That announcement will be posted on the AOT website and on the Contract Administration website when it becomes available.

The Agency also continues to seek competitive FHWA grant funds from the $2.5 billion Charging and Fueling Infrastructure (CFI) Grant Program. The Agency was unsuccessful in its 2023 Round 1 and 2024 Round 2 efforts to secure funding through this highly competitive opportunity despite submitting strong proposals that incorporated feedback from FHWA. The CFI Round 2 opportunity received 416 applications requesting a combined $4.05 billion in funding, more than six times the amount of funding

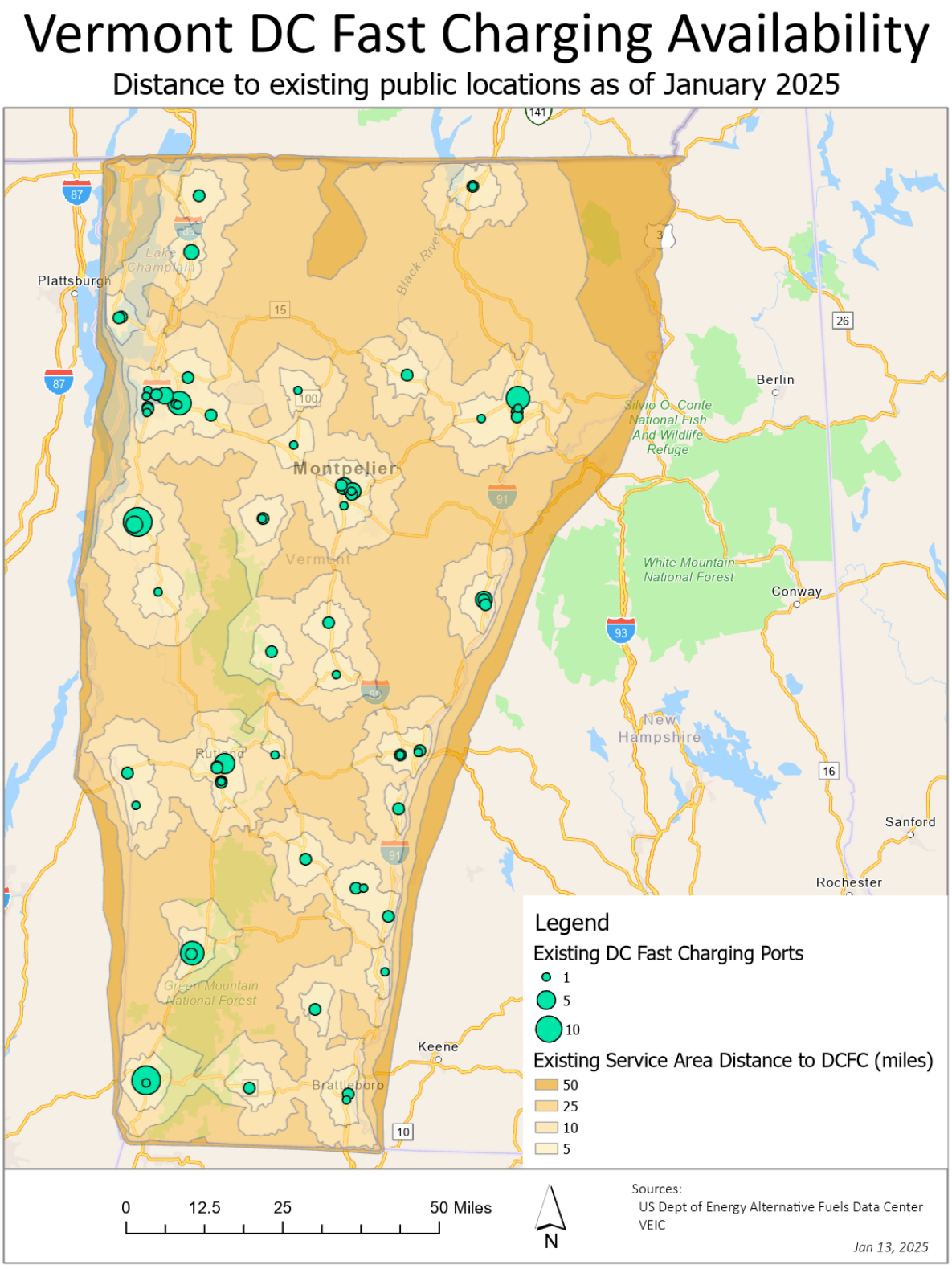
available, and rejected 90% of applications. In each of the first two funding rounds, AOT proposed both level 2 community charging and DC fast charging along interstate corridors. The community charging proposal included level 2 charging at priority State Forests, Parks and Recreational Facilities, and at multiunit dwellings and at workplaces to support workforce charging in the state's most rural areas. The corridor charging proposal included additional DC fast charging to fill in gaps towards meeting the State's goal of 25 miles between DCFC locations and at five well-traveled locations to provide redundancy for increased access to light-duty public charging and to establish a medium and heavy-duty freight charging network. While these discretionary funds would have helped to make progress toward State goals, they do not impact Vermont's ability to meet its NEVI deployment plan.

To further close gaps along state highways and work toward meeting the 25-mile state goal, AOT will look to use remaining NEVI funds after certified as fully built out and is exploring the use of Carbon Reduction Program funds to deploy right-sized charging to locations where equipment is in need of significant repair or replacement, regardless of whether it is on or off the designated Alternative Fuel Corridors. The intent would be to fill in the public DCFC network as quickly and efficiently as possible where gaps have been created by inoperable stations. AOT anticipates that these collective efforts will begin to make the kind of progress needed in the State's infrastructure to support significantly higher levels of EV registrations in each passing year.

The map below titled "Vermont DC Fast Charging Availability – Distance to existing public locations as of January 2025," or Map 2, shows currently available DC fast chargers and the State's gaps in meeting its legislative goal to have a fast charger within 25 miles of the next fast charger. The darkest orange areas represent gaps in meeting the state goals - areas where someone would find themselves more than 25 miles from the nearest charger.

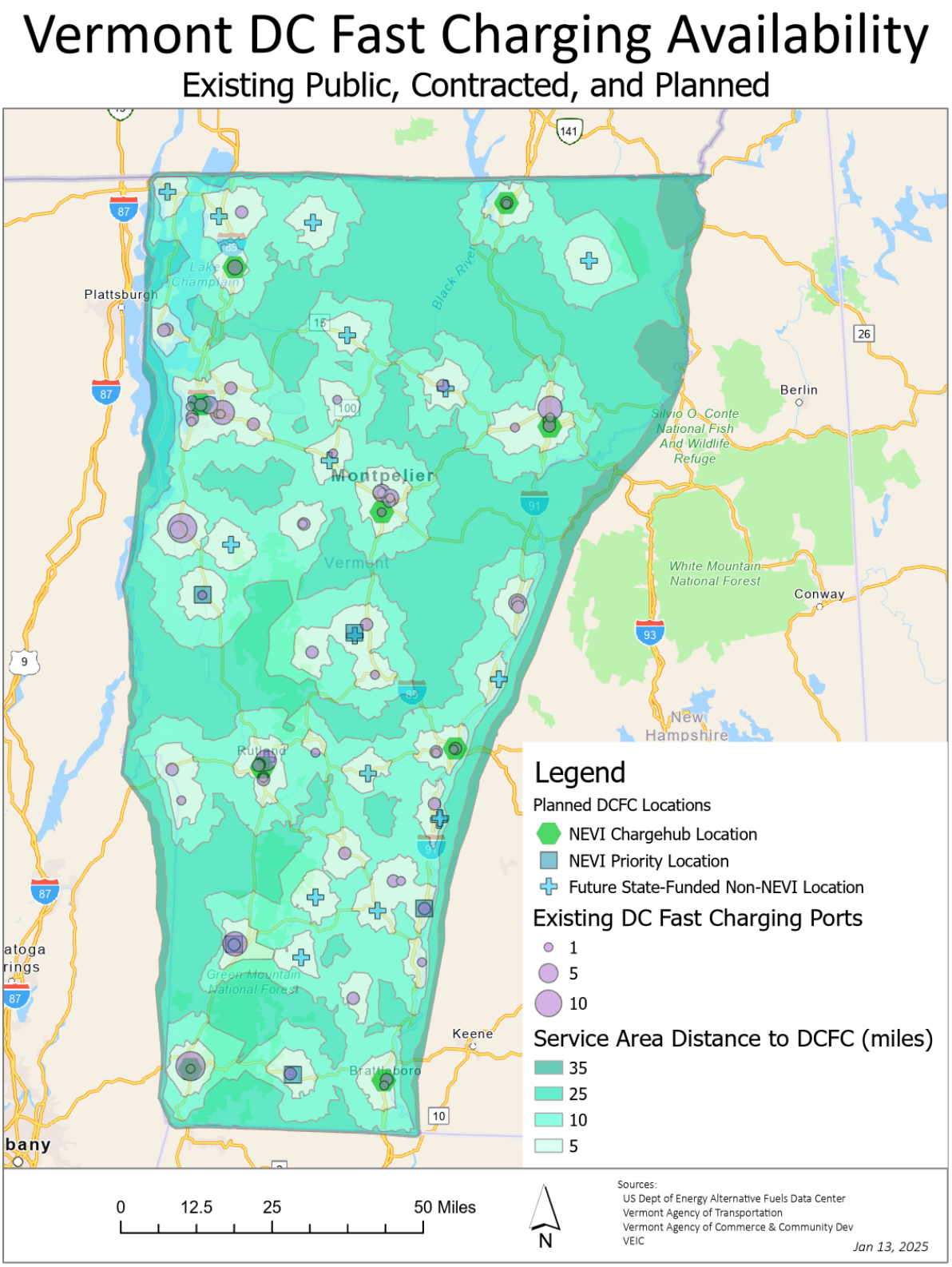
For the purposes of this report, Map 2 includes fast chargers using the J3400 (also known as the North American Charging Standard, NACS, or "Tesla") connector that are open to public use. Over the last year, most, if not all, major auto manufacturers announced plans to adopt NACS beginning with model year 2025. This industry shift will allow non-Tesla EVs easy access to charge at Tesla charging stations. The process to standardize the connector type was expedited to meet auto manufacturers' timeline, and it is now known more generally as the J3400 connector. Map 2 below shows existing Tesla DCFC open to non-Tesla EVs including "Magic Dock" locations for EVs equipped with CCS connectors and adapters built into the charging equipment (Vergennes) and locations open to non-Tesla EVs with J3400 adapters (Willison, St. Johnsbury, Rutland, and Bennington). All major EV manufacturers are expected to have J3400 adapters available for existing EVs by the end of 2025. Three Tesla "Superchargers" that are Tesla-only (South Burlington, Berlin, and Brattleboro) are excluded from the map due to limitations for public use.

Map 2 - Vermont DC Fast Charging Availability – Distance to existing public locations as of January 2025



The map below titled “Vermont DC Fast Charging Availability – Existing public, contracted and planned,” or Map 3, adds additional contracted and planned DCFC locations that are funded by the State of Vermont, including NEVI-supported equipment. The latest NEVI plan locations are included along with blue crosses denoting where contracts or grant agreements have been reached by the State through ACCD state funds and ARPA funds. Installation of DCFC stations at these locations will not only provide more DC fast charging locations and greater redundancy in the statewide network, supporting growing passenger EV adoption but also early adopters of medium- and heavy-duty electrified vehicles along the State’s main EV freight corridors (I-89, I-91, I-93, I-189) and at critical junctures of multiple routes.

Map 3 - Vermont DC Fast Charging Availability – Existing Public, Contracted and Planned



DCFC Stations on Highway Corridors - AOT and ACCD Funded DCFC Station Status as of 1/8/25

Program	Municipality	Address	Status
AOT/NEVI	Bradford	6 South Main Street, Bradford, VT 05033	Operational
AOT/NEVI	Randolph	7 Summer St., Randolph, VT 05060	Contracted
AOT/NEVI	Wilmington	97 E Main St., Wilmington, VT 05363	Contracted
AOT/NEVI	Rutland	120 South Main St., Rutland, VT 05701	Contracted
AOT/NEVI	Berlin	TBD	Awarded
AOT/NEVI	South Burlington	TBD	Awarded
AOT/NEVI	St. Albans	TBD	Awarded
AOT/NEVI	White River Junction	TBD	Awarded
AOT/NEVI	Brattleboro	TBD	Awarded
AOT/NEVI	Middlebury	TBD	Awarded
AOT/NEVI	Bennington	TBD	Awarded
AOT/NEVI	Manchester	TBD	Awarded
AOT/NEVI	St. Johnsbury	TBD	Planned
AOT/NEVI	Derby	TBD	Planned
AOT/NEVI	Springfield	TBD	Planned
ACCD/VW	Alburgh	TBD	Contracted
ACCD/VW	Bradford	South Main Street, Bradford, VT 05033	Operational
ACCD/VW	Brighton	TBD	Contracted
ACCD/VW	Enosburg	117 Pearl St., Enosburg, VT 05450	Contracted
ACCD/VW	Fairhaven	5 S. Park Place, Fair Haven, VT 05743	Operational
ACCD/VW	Hardwick	126 Hazen Union Dr, Hardwick, VT 05843	Contracted
ACCD/VW	Johnson	25 Route 15, Johnson, VT 05656	Operational
ACCD/VW	Ludlow	112 Main Street, Ludlow, VT 05149	Operational
ACCD/VW	Newport	4486 U.S. Rte. 5, Newport, VT 05855	Operational
ACCD/VW	Randolph	44 South Main Street Randolph, VT 05060	Contracted
ACCD/VW	Rutland	TBD	Contracted
ACCD/VW	South Hero	337 US Rt 2, South Hero, VT 05486	Operational
ACCD/VW	Springfield	14 Missing Link Rd, Springfield, VT 05156	Operational
ACCD/VW	St Johnsbury	51 Depot Square, St. Johnsbury, VT 05819	Contracted
ACCD/VW	Vergennes	48 Green Street, Vergennes, VT 05491	Operational
ACCD/VW	Waterbury	5 Pilgrim Park Rd, Waterbury, VT 05676	Contracted
ACCD/VW	Wilmington	19 S. Main Street, Wilmington, VT 05363	Operational
ACCD/ChargeVT	Windsor	183 Main St, Windsor, VT 05089	Planned
ACCD/ChargeVT	Thetford	3052 US-5, Thetford, VT 05043	Planned
ACCD/ChargeVT	Windsor	30 Depot Ave, Windsor, VT 05089	Planned
ACCD/ChargeVT	Swanton	74 Merchant's Row, Swanton, VT 05488	Planned
ACCD/ChargeVT	Woodstock	548 W Woodstock, VT 05091	Planned

ACCD/ChargeVT	Weston	657 Main St, Weston, VT 05161	Planned
ACCD/ChargeVT	Chester	60 Main Street, Chester, VT 05143	Planned
ACCD/ChargeVT	Bristol	25 Mountain View St., Bristol, VT 05443	Planned
ACCD/ChargeVT	Rawsonville	8701 VT Rt 30, Rawsonville, VT 05155	Planned

FUNDING INSTALLATION AND MAINTENANCE TO MEET CAP TARGETS

The initial Climate Action Plan (CAP), adopted by the Vermont Climate Council (VCC) in 2021, includes modeling in its Pathways 2.0 Report that indicates approximately 126,000 EVs will need to be deployed by 2030 in order to achieve the state's emissions reduction requirements.

AOT uses the Alternative Fuel Data Center's (AFDC) tool to estimate the number of public charging ports required to support adoption of EVs in line with the state's 2030 target of 126,000 PEVs. Access to charging at home impacts the estimates for the amount and type of public charging needed. AOT therefore used two different scenarios for home charging access in the tool to estimate the number of public ports needed.

Scenario 1 - Public EV charging ports needed to support 126,000 PEVs by 2030 – assuming 71% of drivers have access to home charging, 42% PHEVs.

Charging Level	Public Charging Ports Needed	Public Charging Ports Existing including Planned Public Investments	Gap
Level 2	3,105	912	2,193
DCFC	565	364	201
Total Ports	3,670	1,276	2,394

https://afdc.energy.gov/

Scenario 2 - Public EV charging ports needed to support 126,000 PEVs by 2030 – assuming 87% of drivers have access to home charging, 42% PHEVs.

Charging Level	Public Charging Ports Needed	Public Charging Ports Existing including Planned Public Investments	Gap
Level 2	2,126	912	1,214
DCFC	413	364	49
Total Ports	2,539	1,276	1,263

https://afdc.energy.gov/

Scenario 1 above assumes that 71% of drivers would have access to home charging while Scenario 2 assumes a larger number of EV drivers, 87%, have access to home charging.

This exercise demonstrates that increased access to home charging may reduce the amount of public EVSE DCFC needed to support Vermont drivers. The scenario that assumes 71% of drivers have access to home charging reflects Vermont's current housing stock, where 71% of homes are single family homes with more readily available and affordable home charging solutions. Home charging access is more challenging for drivers living in the 29% of homes that are in multiunit buildings or manufactured home communities have. Meaningfully increasing investments in multiunit charging would ensure more equitable access to home EV charging and decrease amount of public charging and level of investment needed to support equitable adoption of EVs.

DCFC plays an important role in this public EVSE network, as many EV drivers may expect to rely on fast charging when not charging at home. However, in these scenarios, increased level 2 charging available at locations off corridor remains an important part of the EVSE charging network, Level 2 charging is less expensive to install, likely to have lower rates for use compared to DCFC, reduces demand on the grid, and leverages opportunities to offer "right sized" charging in places where drivers tend to park for longer periods of time, such as at workplaces or at public attractions. Additional funds for competitive programs that can demonstrate documented unmet need, such as ACCD's Charge Vermont program and Burlington Electric Department's successful CFI award for level 2 and DCFC public charging ports throughout the city, support Vermonters' ability to charge where they live, work, and play.

To fund the outstanding EVSE needed to support the targeted transition to vehicle electrification in the state, AOT will continue to pursue discretionary funding opportunities as they become available. In the meantime, AOT plans to incorporate both NEVI and CRP formula funding into its next solicitation for DCFC. The expected outcomes of that solicitation is described below.

DCFC Funding - Available and Needed

Funding Source	Amount Available	Minimum Ports
NEVI	$8.5 million plus 20% match from private sector	Up to roughly 62 DCFC ports: (12 required for NEVI build out, remaining toward filling gaps along corridors)
CRP	$2 million plus 20% match from private sector	Up to roughly 14 DCFC ports to fill in the public DCFC network as quickly and efficiently as possible where gaps have been created by inoperable stations, remaining toward filling gaps along corridors
CFI – corridor and community charging	TBD – dependent on the outcome of future opportunities	TBD – dependent on the outcome of future opportunities
Total Federal Funding Available	$10.5 million for DCFC plus 20% match from private sector	76 DCFC ports
Funding Gap	$21.5 million	125 DCFC ports

A gap of 125 public DCFC ports required to meet CAP targets remain unfunded after the available federal resources are exhausted and are still needed to support the State's EV adoption targets. Calculated based on today's estimates ($170,000 total cost per port), it will cost an additional $21.5 million to reach this goal, including private sector investment. It is not necessarily anticipated that only federal and state funding resources will be required to support reaching these targets, the private sector is also investing in public charging. The amount of private sector investment in the EVSE network will, however, fluctuate based on the demand for charging (i.e. electric vehicle adoption) and the whole portfolio of types of charging available.

Operations and maintenance provisions included in public investment agreements ensure that infrastructure remains operational and well maintained and avoids stranded or inoperable stations, at least in the near term. Projects funded via NEVI and CRP (and CFI if awarded in future rounds) all require a minimum of five years of operation and maintenance to ensure consistent and continued uptime (chargers must be operational at least 97% of the time) for the duration of the contract as required by 23 CFR 680. That maintenance expense is provided for in the cost per port awarded.

Projects funded via VW and Charge VT (ACCD) also include maintenance and ongoing operations requirements. The VW agreement is seven years and includes a continuity of operation and maintenance provision that chargers must be operational at least 97% of the time based on 24 hours a day and 7 days a week. The grant term for Charge VT is five years and stipulates no more than 10% downtime in a 30-day period.

State of Vermont

Electric Vehicle Infrastructure Deployment Plan 2024 (FFY2025) Update

Vermont Agency of Transportation
September 1, 2024

VERMONT

Contents

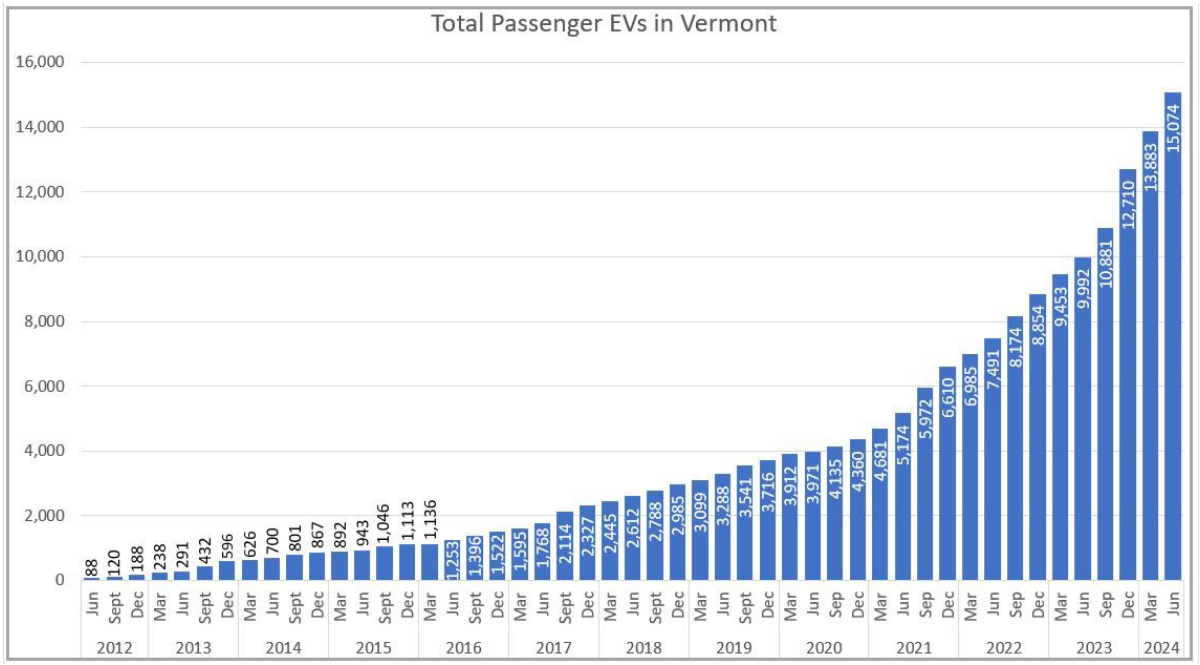
Introduction

Throughout 2024, news headlines in Vermont have been devastatingly repetitive as residents contend with yet another season of poor air quality from Canadian wildfires, beaches closed due heat-inspired algae blooms, increased prevalence of mosquito-borne illnesses at northern latitudes, and multiple fierce flooding events that once again ravaged homes and downtowns across the state. Our work to address our climate crisis has never been more urgent. The State of Vermont remains committed to reducing greenhouse gas emissions from the transportation sector and transition much of Vermont's motor vehicle fleet to use electricity as a cleaner source of energy.

The Global Warming Solutions Act requires Vermont to reduce greenhouse gas pollution to 26% below 2005 levels by 2025, 40% below 1990 levels by 2030, and 80% below 1990 levels by 2050, and the steps to meet this requirement are detailed in the 2021 Vermont Climate Action Plan[1] (a 2025 update of the Plan is in progress) as well as climate action plans developed by local and regional partners across the state. The Climate Action Plan includes a priority of developing electric vehicle charging infrastructure to support transportation electrification.

As of July 2024, there were 15,074 plug-in passenger vehicles and light-duty trucks in the state, or approximately 2% of registered vehicles. This includes 6,331 plug-in hybrids and 8,743 all electric vehicles. To reach the state's 2030 target of 126,000 PEVs by 2030, the Alternative Fuel Data Center's Electric Vehicle Infrastructure Projection Tool (EVI-Pro) Lite[2] indicates Vermont would need 4,345 public Level 2 charging ports (351 at public recreation areas) and 384 public DCFC ports to support these vehicles. With 881 public Level 2 charging ports and 184 public fast charging ports currently in operation, that leaves a significant gap of 3,464 Level 2 and 200 DCFC ports to rapidly close.

Figure 1. Total Passenger EVs in Vermont as of June 2024



[1] Vermont Agency of Natural Resources. 2021. Initial Vermont Climate Action Plan. https://climatechange.vermont.gov/readtheplan

[2] Alternative Fuels Data Center. 2024. Electric Vehicle Infrastructure Projection Tool (EVI-Pro) Lite. https://afdc.energy.gov/evi-x-toolbox#/evi-pro-ports

The State of Vermont had previously specified a goal in the SFY2022 Transportation Bill to have charging availability within five miles of every interstate exit and every 50 miles along state highways[3]. Vermont presently has over 441 publicly accessible chargers, equating to the highest per capita presence of EVSE in the nation[4]. The state has achieved this abundance of public EVSE in part through $3.5 million of strategic state investments since 2014[5]. State goals for EVSE availability were re-examined in the SFY2023 and SFY2024 Transportation bills to reflect the current federal requirements and support EV adoption at levels suggested in Vermont Climate Action Plan modeling. The State now aims for public fast charging within one mile of every interstate exit and every 25 miles along state highways. This document reflects updates to Vermont's Electric Vehicle Infrastructure Deployment Plan, which is intended to help guide State investments in public EV charging infrastructure towards these targets through the National Electric Vehicle Infrastructure (NEVI) Program. Federal NEVI guidance requires that this plan be reviewed and updated annually to reflect lessons learned, rapidly changing conditions, new priorities, and refined strategies.

The Vermont Agency of Transportation (VTrans) led the development of the initial and updated NEVI plans, with support from an interagency work group of State agencies involved in transportation electrification, assistance from the Vermont Energy Investment Corporation (VEIC), coordinators of the Drive Electric Vermont program, and feedback from many stakeholders.

This updated 2024 NEVI plan builds on several Vermont studies and other Electric Vehicle Supply Equipment (EVSE)-related activities:

- 2024 FHWA Charging and Fueling Infrastructure (CFI) discretionary grant program (Round 2) community and corridor proposals
- National Grid Northeast Freight Corridors Charging Plan
- 2024 Joint Office of Energy and Transportation National Zero-Emission Freight Corridor Strategy
- 2022 Vermont NEVI Plan and 2023 Vermont NEVI Plan Update
- 2021 Vermont Climate Action Plan
- 2018 Multi-State ZEV Action Plan
- 2017 VTrans DC Fast Charging Corridor Study
- 2014 VTrans EVSE Plan
- State of Vermont EVSE grant programs administered by the Vermont Agency of Commerce and Community Development
- Federal alternative fuel corridor designations

The plan examines how the State of Vermont can support development of public electric vehicle supply equipment (EVSE, commonly referred to as "charging equipment"), the availability of which is critical to accelerating EV adoption in the State and broader region.

[3] State of Vermont. June 2021. Act 55 – FY2022 Transportation Bill, Section 30. https://legislature.vermont.gov/Documents/2022/Docs/ACTS/ACT055/ACT055%20As%20Enacted.pdf
[4] Drive Electric Vermont. 2024. Public Charging Map. https://www.driveelectricvt.com/about-evs/charging-map
[5] Vermont Agency of Commerce and Community Development. 2021. Electric Vehicle Supply Equipment (EVSE) Grant Program. https://accd.vermont.gov/community-development/funding-incentives/electric-vehicle-supply-equipment-evse-grant-program

VTrans anticipates meeting plan milestones according to the following schedule:

- **September 2024**: Third Year Plan Update submitted. Solicitation for proposals using FFY2022, FFY2023, and FFY2024 NEVI funds as well as FY2023 ARPA funds closes.
- **October 2024**: FHWA plan approval decisions announced. Conditional awards announced.
- **Winter 2024/2025**: Contracts finalized.
- **Spring 2025**: Site work begins with 2025 construction season.
- **Summer 2025**: Annual plan update reviewed, revised, and submitted to FHWA for approval.

The Agency follows a rolling, iterative process of learning and planning for the NEVI program, continuously applying new lessons to future rounds of implementation. Given the many uncertainties surrounding the NEVI Program—the impact of increased demand for direct current fast chargers (DCFC) nationwide, supply chain issues, the challenging economics of more rural locations, the adoption of NACS plugs by auto manufacturers, and more—VTrans is learning from the development of its program, its first NEVI-funded charging station, and its first round of solicitations.

Updates from Prior Plan

- State Agency Coordination
    - Through an MOU with DHCD, VTrans continues to explore the feasibility of whether several eligible sites with state funded EVSE projects may be cost-effectively upgraded to meet NEVI minimum requirements and count toward fully building out Vermont's AFC corridors with additional investment.
    - VTrans is working with DHCD and ANR State Parks department to identify shovel-ready sites for CFI Round 2 community charging projects at workplaces, multiunit dwellings, and public recreational areas.

- Public Engagement
    - VTrans continues to consult with public and private partners and is starting to establish a framework through which to gather more input directly from communities to shape the deployment of funds when more program flexibility is possible after the corridor build-out is achieved.
    - VTrans established a mechanism for regular coordination with the Vermont Climate Action Office and others for communications and participation in future community engagement activities.
    - VTrans' engagement with the Vermont Legislature resulted in the authorization of an "EV infrastructure fee" for all plug-in electric vehicles to become effective January 2025, dedicating more funding in this year's transportation bill (2024 Act 148) to deploy multiunit and workplace charging, and enhanced reporting of the existing conditions and future needs for the state's public EV charging network with a view towards filling in gaps and addressing weaknesses that might otherwise slow EV adoption in Vermont.
    - VTrans is working with labor and workforce partners to develop a pathway for pre-apprentice and apprentice training to be incorporated in future community charging projects.
    - VTrans hosted a pre-solicitation meeting on June 25, 2024 to invite feedback from the 8 EVSE providers prequalified through the Request for Qualifications process.

- Vermont utilities are engaged in VTrans' RFP and CFI process to vet potential sites for cost, timeliness, and feasibility.
- VTrans is increasingly participating in regional and national conversations about zero-emission medium and heavy-duty vehicle charging infrastructure in the development of its freight charging strategy/

- Plan Vision and Goals
  - After reaching "fully built-out" status, VTrans is looking toward building more redundancy at select NEVI locations as a foundation for a medium- and heavy-duty freight charging network and increased fleet electrification. VTrans will also continue to support the deployment of EVSE in community and corridor locations to meet state requirements.

- Contracting
  - VTrans worked with its local FHWA Division Office to determine a path to utilizing a sole source contracting process to quickly and cost effectively upgrade several sites currently in development through the state's VW Settlement EVSE funding program to meet NEVI program requirements.
  - Through a Special Experimental Project No. 14 (SEP-14) request approved by FHWA, VTrans is utilizing the Design-Build-Own-Operate-Maintain (DBOOM) alternative contracting method to cover the entirety of the project at each charging location through the 5-year operations, maintenance, and reporting period
  - VTrans worked with its local FHWA office to refine a multi-step contracting process that meets both requirements for construction as well as the ongoing operations and maintenance of EVSE installed through the NEVI program. This involved an initial RFQ to develop a list of qualified vendors, RFPs for specific projects, and a competitive solicitation for a third-party verification of construction requirements and other specified deliverables.
    - On February 15, 2024, a sole source contract was executed for upgrades to build Vermont's first federally funded station in Bradford, which opened to the public on April 23rd, and was the 6th such installation in the country funded by NEVI.
    - On April 16, 2023, VTrans issued a Request for Qualifications (RFQ) resulting in 8 EV charging providers qualified to build Vermont's charging network to federal and state specifications.
    - On July 24, 2024, VTrans invited the shortlist of 8 qualified vendors to submit proposals in response to Vermont's first NEVI Request for Proposals (RFP) for the remaining 14 locations required to fully build out the state's Alternative Fuel Corridors (AFCs).

- Civil Rights
  - Onramping additional EVSE providers to our shortlist of pre-qualified vendors that are capable of meeting state and federal requirements will become increasingly important as Vermont begins issuing solicitations for community charging projects. As such, future bidding opportunities will be advertised directly to businesses listed in the Agency's Disadvantaged Business Enterprise (DBE) Directory.

- Existing and Future Conditions Analysis
    - Vermont's first charging station intended to count toward "fully built-out" determination became operational on April 23, 2024.

- EV Charging Infrastructure Deployment
    - An RFP for 14 locations required to fully build out the state's AFCs was issued on July 24, 2024.

- Discretionary Exceptions
    - A likely need for discretionary exceptions for 3 locations has arisen with increased site analysis transpiring through the RFP process. These sites where one charging station would cover multiple corridors, fall under 3 miles of one of the AFCs.

- Equity Considerations
    - VTrans' RFP encourages equity in project teaming and the development of a two-tiered pricing structure with a lower per kWh rate for households with lower incomes or no access to home charging.

- Labor and Workforce Considerations
    - Through the development of its Round 2 CFI proposal, VTrans is working with labor and workforce partners to create opportunities for new electrical interns, pre-apprentices, and apprentices and leverage the build out of Vermont's community charging infrastructure to support the training of new and aspiring electricians seeking to gain on-site work experience.

State Agency Coordination

VTrans continues to contribute to an interagency workgroup on EV Charging, sharing decision-making on investments and program design with the Department of Housing and Community Development (DHCD), Agency of Natural Resources (ANR), the Public Service Depart (PSD) and Buildings and General Services (BGS).

Through an MOU with DHCD, VTrans was able to cost-effectively upgrade a state-funded site in Bradford to become one of the first NEVI-funded stations to open in the nation and begin progress toward fully building out Vermont's AFC corridors. Though VTrans had hoped to replicate that sort of upgrade at six other locations, the vendor working at those locations has struggled to obtain site host agreements and energize working equipment in a timely and efficient manner. The decision was therefore made to seek proposals through another competitive solicitation process to complete those identified locations from scratch, ultimately resulting in what will be a more robust and redundant network.

In preparation for its Round 2 Charging and Fueling Infrastructure (CFI) proposal for discretionary grant funding, VTrans partnered with DHCD and ANR to identify shovel-ready sites for community charging projects. Charge Vermont is a program created with $10 million in state funds for public charging at workplaces, multiunit dwellings, and public attractions. In its first year, it has been oversubscribed in some areas with unmet need of nearly $4 million at more than 120 workplaces and multiunit dwellings identified through pre-applications submitted. VTrans is seeking, with our state agency and utility partners, to leverage the existing program structure to help fill this gap in charging for residents without access to home charging and who rely on workplace charging with federal discretionary funds.

As part of its CFI submission, VTrans has also proposed to work with state and federal agencies to deploy charging stations at public parks, forests, and wildlife refuges, identified through a prioritization exercise with the Agency of Natural Resources (ANR). If successful, VTrans would enter into an MOU with ANR as the primary site host for more than a dozen locations.

Public Engagement

As the NEVI funding is highly prescribed until corridor build-out is achieved, VTrans intends to continue consulting with public and private partners to meet that first goal. Additionally VTrans is starting to establish a framework through which to gather more input directly from communities to shape the deployment of funds when more flexibility is possible.

The Agency has completed its Transportation Equity Framework[6], which will guide future sustained public engagement for plans, projects, and programs, including those related to EVSE deployment. This and a parallel effort to implement the State's recently enacted environmental justice law will shape how the Agency approaches these responsibilities. In 2024, the Agency began the initial phases of the Framework's rollout and implementation which includes an update to the Agency's community engagement plan.

While we await an updated community engagement plan, VTrans' NEVI staff has begun developing a separate communications strategy for keeping existing contacts informed of EVSE related updates as well as interacting with community groups on an ongoing basis, outlined in the following sections.

Community Engagement Outcomes Report

General Public

VTrans' website architecture was updated to elevate its environmental policy and sustainability programs, including clean transportation incentives and EV charging, higher in the site map and more in line with VTrans core operational and planning divisions. The contact form used to collect public comments and contact information for parties interested in receiving programmatic updates was upgraded to a more user-friendly email marketing and customer relationship management (CRM) software platform. This allows for the segmentation of contacts collected and enables VTrans to share targeted news updates based on interest in multiple topics. A suite of resources on public charging including a public charging map are also available on the Drive Electric Vermont website. A website refresh is due to be completed in 2024 for a more user friendly and experience.

VTrans established an ongoing collaboration with the Vermont Climate Action Office (CAO) housed within the Vermont Agency of Natural Resources (ANR) Department of Environmental Conservation (DEC) to partner on regularly scheduled community outreach activities. The CAO is in the process of updating the Vermont Climate Action Plan due in 2025, and through this process has incorporated targeted outreach activities over the next year with a variety of community groups. VTrans is in coordination with these efforts to increase its usefulness to participants and inform both programs with important feedback.

VTrans contributes EVSE updates in the CAO's regular newsletters and shares relevant CAO updates through VTrans' channels. The CAO provides quarterly reports with anonymized public responses and

[6] Vermont Agency of Transportation. 2024. Transportation Equity Framework. https://vtrans.vermont.gov/equity

feedback related to EV charging collected during focus groups and public events that VTrans incorporates in plan updates and proposals for discretionary funding opportunities. As Vermont approaches full corridor build out, VTrans will increasingly participate in public engagement events alongside the CAO and with other statewide, regional, and local organizations. Added staff capacity at the CAO will enable VTrans to identify and participate in more opportunities[7] in the coming year(s).

VTrans will partner with other organizations as opportunities to join their community engagement initiatives arise. These include Vermont Clean Cities and Communities Coalition series of planned listening sessions and ride-and-drive events scheduled in the coming year and VTrans' Go Vermont program participation at statewide events to increase awareness and assess community transportation needs.

Government Entities

In addition to its interagency and intergovernmental coordination, VTrans has consistently and deeply engaged with the Vermont Legislature on transportation electrification and climate issues. With the authorization of an "EV infrastructure fee" for all plug-in electric vehicles to become effective January 2025, the legislature has dedicated more funding in this year's transportation bill (2024 Act 148) to deploy multiunit and workplace charging. The Agency also worked with the legislature on enhanced reporting of the existing conditions and future needs for the state's public EV charging network, with a view towards filling in gaps and addressing weaknesses that might otherwise slow EV adoption in Vermont. State legislative goals have also been revised with input from the Agency to include more nuance and better reflect the realities of our rural state, with the following approved in June 2024:

> "*It shall be the goal of the State to have, as practicable, level 3 EVSE charging ports available to the public: (1) within three driving miles of every exit of the Dwight D. Eisenhower National System of Interstate and Defense Highways within the State; (2) within 25 driving miles of another level 3 EVSE charging port available to the public along a State highway, as defined in subdivision 1(20) of this title; and (3) co-located with or within a safe and both walkable and rollable distance of publicly accessible amenities such as restrooms, restaurants, and convenience stores to provide a safe, consistent, and convenient experience for the traveling public along the State highway system.*"

The changed language increases the distance from the interstate or state highway network to up to three miles, in recognition that there are some areas of Vermont where the absence of viable sites with desired amenities within one mile would create a less safe, less convenient, and potentially more costly experience for EV travelers. It also strikes a preferred balance between what is most expedient for individual drivers and what might better serve the communities and local economies in which DC fast chargers are located.

VTrans has also shared state charging infrastructure plans with various stakeholder groups including at Drive Electric Vermont stakeholder meetings, which are held on a quarterly basis with representatives from industry, advocacy organizations, government officials and electric utility representatives.

Regional Planning Commissions and Metropolitan Planning Organizations

VTrans regularly joins monthly Transportation Planning Initiative (TPI) meetings to provide staff at Vermont's 11 Regional Planning Commissions (RPCs) and Metropolitan Planning Organization (MPO) with updates related to the state's charging plan and related funding opportunities and receive feedback

[7] Vermont Climate Action Office. 2024. Events calendar. https://climatechange.vermont.gov/calendar

about regional needs. The RPCs act as conduits between state and local governments, helping to facilitate communication with city and town officials. VTrans meets with individual RPCs and municipal groups on an ongoing basis to provide topical presentations to staff and stakeholders and discuss local needs. Recent discussions with town staff, regional EV charging working groups, and regional energy planners centered on identifying potential sites for inclusion in a statewide Round 2 CFI application for corridor or community charging.

Labor Organizations

VTrans met with the International Brotherhood of Electrical Workers (IBEW) Local 300 Vermont electrical workers union, Vermont Works for Women economic justice and career training nonprofit, and Electrical Vehicle Infrastructure Training Program (EVITP) training and certifying body to learn more about existing opportunities for new electrical interns, pre-apprentices, apprentices, and advanced training for certified electricians. VTrans recognizes the immense opportunity to leverage the build out of its community charging infrastructure to support the training of new and aspiring electricians seeking to gain on-site work experience. Establishing a pipeline of new talent as part of these EVSE projects will help to develop a network of professionals who will be vital to installing a growing number of chargers and keeping these investments well maintained and operable over the long term.

VTrans is working with the Vermont Department of Labor (DOL) State Registered Apprenticeship Program on identifying a source of support for EVSE apprentice and pre-apprentice labor in the installation of Level 2 chargers as part of Vermont's Round 2 CFI application. Businesses, educational centers, and workforce development organizations throughout the state are already engaged with the program and are interested in adding the EVSE component to existing offerings.

VTrans recommends that all Request for Proposals (RFP) bids include engagement with these organizations and consideration of workforce development in building their project teams.

Private Sector/EVSE Industry Representatives

VTrans hosted a pre-solicitation meeting on June 25, 2024, for the 8 EVSE providers prequalified through the Request for Qualifications process. These shortlisted vendors were invited to provide feedback and questions in advance, during, and after the meeting and the questions and answers were transcribed and shared with the group. VTrans incorporated feedback such as extending the solicitation window so bidders have more time to work with prospective site hosts, electric utilities, and their teams to develop quality proposals. Outstanding questions about connection types, Buy America requirements, and equipment standards were clarified with Vermont's FHWA Division Office and included in the follow up.

Utilities

VTrans regularly works with utilities to identify opportunities for EVSE in their service territories. Vermont electric utilities continue to offer incentives for EVSE installations, some of which have increased the incentive amount and expanded eligibility to include multiunit and workplace charging, in addition to residential installations.

The contact information for each of Vermont's 17 electric utilities is included in the RFP for bidders to engage with while building their proposals. Bidders are encouraged to engage with utilities as they define the scope of their proposals and begin designing site plans. The importance of utility engagement is reflected in the scoring criteria which encourages proposals to include an outline of engagement with the electric utility to determine viability of electric service at the site, details about the available power supply, equipment and service upgrades required and the details of such upgrades, a signed letter of

support from the utility that confirms the utility will provide required electric service that complies with NEVI requirements at the proposed site signed by the entity represented. Cost estimates for equipment upgrades and related services, along with conceptual plans are also encouraged in proposals.

Green Mountain Power (GMP) is the state's largest utility, serving over 80% of the state (more than 260,000 customers). GMP and several smaller and municipal electric departments are researching estimates for interconnection at state and national recreational sites across Vermont in preparation for our forthcoming proposal for CFI discretionary funds. Vermont's smaller utilities are assessing site readiness within territories in some of the state's most rural areas.

GMP administered the Charge Vermont program with state funds made available through the Vermont Agency of Commerce and Community Development (ACCD) for charging at workplaces, multiunit dwellings, and public attractions. GMP and ACCD provided program data demonstrating the unmet need from this oversubscribed program. VTrans is developing a component in our forthcoming CFI proposal to support workforce development activities that includes establishing a pathway for training new electricians to participate in the installations of Level 2 chargers at key sites at workplaces, including recreational areas, and at multiunit dwellings to support Vermont residents without existing access to home charging.

Utility representatives from all corners of the state continue to note ongoing supply chain shortages of transformers, switch gear, and related equipment needed for DC fast charging make ready infrastructure. In some cases, utilities are hearing potential delays of a year or more for certain components, placing additional urgency on the need to site and advance NEVI-funded installations quickly to minimize any further delays. For the upgrade to Vermont's first NEVI site in Bradford, VTrans worked with GMP to locate NEVI compliant equipment within its own inventory to ensure the site would be completed as quickly as possible. The Agency will continue to work with its utility partners to build cooperative and creative solutions to reduce lead times for equipment and improve procurement timing.

Transportation and Freight Logistics Industry

The Northeast and Mid-Atlantic region is a critical location for zero-emission freight truck infrastructure deployment. Vermont's planning efforts for medium and heavy-duty charging are supported through regional coordination, federal planning studies, and initial infrastructure investment commitments. The National Zero-Emission Freight Corridor Strategy[8] identifies key sites in Vermont as priority locations where investments in charging infrastructure for zero-emission trucks are critical to meet the needs of an early growing market and well-positioned to catalyze broader public and private investment. The strategy moves through four progressive phases to promote zero-emission truck adoption from 2024 to 2027, 2027 to 2030, 2030 to 2035, and 2035 to 2040. The phased strategy prioritizes the sequencing of deploying zero-emission medium and heavy-duty vehicle (ZE-MHDV) charging infrastructure in and around key freight hubs and along freight corridors to support accelerated adoption of ZE-MHDVs and ultimately achieve a national zero-emission freight (ZEF) network. Vermont corridors are identified in phases 3 and 4 to expand and complete the network. During the initial years, while the strategy focus is on establishing regional ZEF hubs and initial corridor connections in phases 1 and 2, VTrans is laying the groundwork needed to support network expansion in later phases.

VTrans is participating in the Northeast Freight Corridors Charging Plan[9], a regional study led by the

[8] Joint Office of Energy and Transportation. 2024. National Zero-Emission Freight Corridor Strategy. https://driveelectric.gov/files/zef-corridor-strategy.pdf

[9] National Grid. 2023. Readying the Northeastern U.S. for Electric Trucks: National Grid to Build DOE Funded

electric utility National Grid with a $1.2 million grant from the U.S. Department of Energy. The plan will put forth recommendations to strategically guide the deployment of truck charging infrastructure along 3,000 miles of highway corridors throughout the northeastern United States and key freight corridors that connect with the Port of New York and New Jersey. State transportation, energy, and environment agencies from nine states – Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont – are engaged in the project to provide input and guidance, along with utilities, clean cities coalitions, the National Renewable Energy Labs, the Rocky Mountain Institute, and other project partners.

A regional study currently underway is forecasting charging demand by zero-emission trucks at 130 potential sites through 2045 (5 in Vermont), using a modeling approach employed during the development of an earlier two-state plan. Using these forecasts and input from states and other participating stakeholders, the project will select priority sites for further utility analysis of necessary grid infrastructure upgrades and costs. VTrans and the Vermont Climate Action Office scored the 5 locations identified in Vermont along I-91 on the criteria of availability of physical space to accommodate truck parking, proximity to trucking fleets that could benefit from chargers, and in a location that serves both directions of highway traffic that is close to a highway exit. VTrans also considered sites identified in Vermont's NEVI plan as Chargehubs in its site prioritization. The results of this plan will likely inform future funding opportunities and serve as a model for other regions in the country. The final plan, due for completion in mid-2025, will identify critical near-term needs and priority areas for charging infrastructure, estimate the timing of future points of stress for the existing grid, and serve as a blueprint for large-scale infrastructure deployment for zero-emission trucks throughout the region.

VTrans began meeting with local and regional industry partners to build partnerships in identifying current and future electric equipment adoption and charging needs to inform the siting and design of medium and heavy-duty EVSE. One of Vermont's most iconic consumer brands is assisting VTrans with qualifying key locations that may be best suited for freight charging in conjunction with its freight carriers and trucking routes. VTrans plans to continue developing relationships with additional industry partners in the year ahead.

In addition to local and regional coordination efforts, VTrans is in regular communication with our counterparts at Quebec's Ministry of Transportation to exchange information about current and future charging plans for both sides of the border that support growing electric transboundary travel. This sharing of information informs siting considerations for Vermont's EVSE for both light duty passenger vehicle charging and medium and heavy-duty freight charging stations.

All of these efforts inform Vermont's pursuit of funding opportunities to deploy freight charging infrastructure and ready its corridors as the adoption of ZE-MHDVs expands. VTrans' proposal for CFI discretionary funds for corridor charging represents 5 counties with 5 key Chargehub locations along I-89 and I-91 identified in both the Northeast Freight Corridors Charging Plan and National Zero-Emission Freight Corridor Strategy. The CFI application is supported by leading state policies, coordinated planning, and investment for zero-emission freight trucks and infrastructure in the region. The Northeast and Mid-Atlantic states have been leaders for more than a decade in supporting rapid and equitable uptake of zero-emission light-, medium- and heavy-duty vehicles through actions such as the adoption of California's Advanced Clean Cars and Advanced Clean Trucks regulations, the development of multi-state action plans, the launch of zero-emission vehicle and infrastructure incentive programs, and implementation of other nationally leading policies and programs to accelerate market transformation. States in the region are working together to plan for and deploy charging infrastructure, including through

Roadmap. https://www.nationalgridus.com/News/2023/10/Readying-the-Northeastern-U-S-for-Electric-Trucks-National-Grid-to-Build-DOE-Funded-Roadmap/

regional planning and multi-state freight truck infrastructure deployment efforts. Two federally funded planning studies covering major corridors in the region will identify priority, cost-effective locations for charging infrastructure investment and solutions to address key barriers for zero-emission freight truck deployment. The CFI application will leverage regional planning efforts to strategically deploy charging infrastructure in locations that serve local fleet needs, support the build out of a regional network of freight truck charging infrastructure, and reduce emissions pollution in Vermont's rural and disadvantaged communities.

State Public Transportation Agencies

VTrans has a policy to transition the state's transit fleet of approximately 430 transit vehicles to zero-emission propulsion over the next few decades. Specifically, VTrans' plans call for 100 percent of the fleet to be powered by renewable energy by 2050. This decision has service and operations implications across the 7 transit agencies in the state: new infrastructure must be procured and installed, maintenance and training needs will change, and additional funding sources must be explored to meet the capital needs of the program. As of August 2024, nearly $54 million in federal and state funds have brought Vermont's public transit fleet to just over 15% electric with 66 electric vehicles now in service or funded to become electric in the coming months. Vermont's Carbon Reduction Strategy further identified additional support (an initial $2.9 million) for electric sprinter vans to provide on-demand mobility service to rural areas.

Vermont's transit system primarily serves disadvantaged persons, including economically disadvantaged, disabled, and underserved residents throughout Vermont. While challenges abound and the costs and efforts are significant, these electrification efforts will result in reduced GHG emissions, reduced maintenance costs, and reflect an equitable approach in Vermont's efforts to expand the use of electric vehicles.

Urban, Rural, Underserved, Disadvantaged Communities

Now in its 5th year, VTrans' Mobility and Transportation Innovations (MTI) grant program was enabled by the Vermont Legislature with the passage of the 2020 Transportation Bill (Act 121). The program is designed to support innovative strategies and projects that improve mobility and access to services for transit-dependent Vermonters, reduce the use of single occupancy vehicles, and reduce greenhouse gas emissions. In addition to funds provided through the authorization of the Transportation Bill, this year the program included funding from the federal Infrastructure Investment and Jobs Act (IIJA) Carbon Reduction Program (CRP). These additional CRP funds specifically support the expansion of travel demand management projects that encourage less carbon-intensive means of travel. The program is open to municipalities, local or regional planning agencies, transit agencies, school districts or schools, non-profit organizations, and citizen groups focused on providing public transportation resources.

While, this year's funding opportunity remains open, examples of previously funded projects include increased access to carsharing and transitioning shared fleets to electric. One such project area aimed at improving equity and access through carsharing. The recipient also received a state-funded Electrify Your Fleet grant award to add an all-electric Chevy Bolt to its fleet of 6 EVs. Their operations manager said, "The program gives us a clear path to steadily transition towards a majority-EV carsharing operation so we can provide our members with more choices without burning gas and also augment our efforts to reduce greenhouse gas emissions in our transportation system. Thanks for making this such a practical and transparent process!" This recipient also used the program to expand its service area to include additional communities where the need for mobility services is great, yet the limited availability of public transit and other factors necessitate a greater degree of subsidy to sustain a carsharing service there.

By supporting programs like these, VTrans aims to increase opportunities for the public to see and

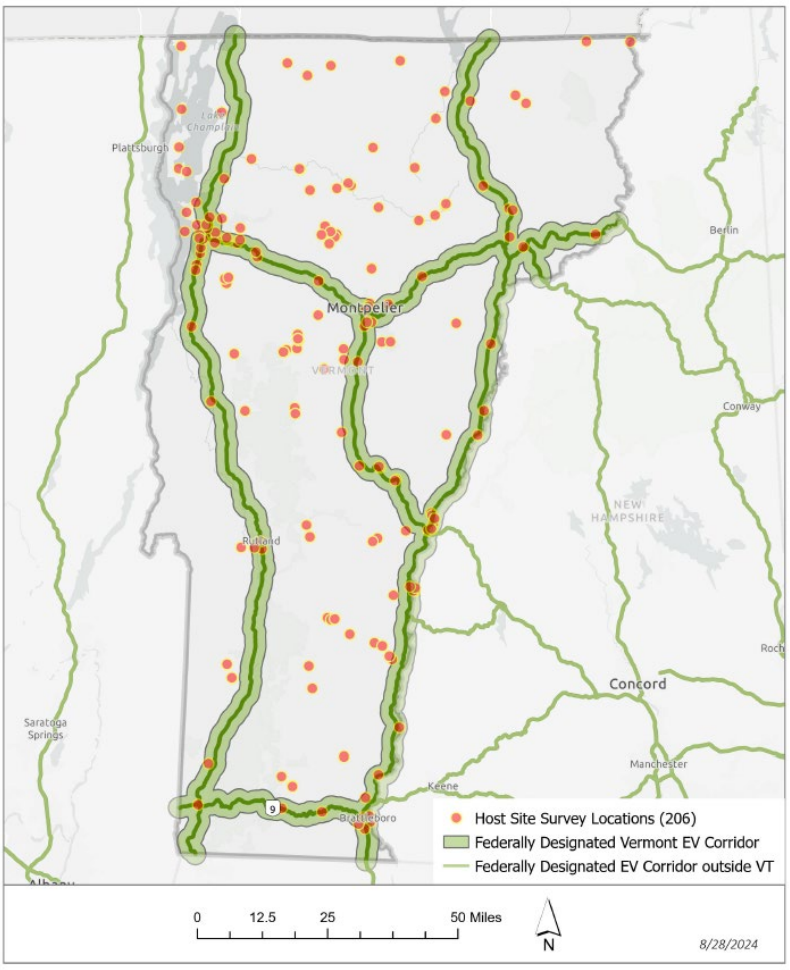
interact with electric vehicles of all sizes, model a clean transition with a variety of electric transportation options, and provide an entry point for people to learn more about how they, too, can participate in the transition.

Site-Specific Public Engagement

To identify potential host site locations for charging stations, VTrans and VEIC/Drive Electric Vermont released a survey targeted to property and business owners interested in supporting plug-in electric vehicle (PEV) charging or providing services associated with the installation and management of charging. Those interested in partnering with the State may fill out the survey at https://arcg.is/DDeDT [arcg.is] to offer their collaboration. The survey results will help identify opportunities for potential charging locations or EV charging services. Survey responses are shared to facilitate potential partnering discussions between property owners/managers, charging service providers, and installation contractors.

As of July 2024, the survey has collected approximately 206 responses, with 53 of the potential host sites identified located within two miles of proposed corridor fast charging priority areas across the state. The survey will remain open to continue collecting responses and streamline location siting processes for NEVI and CFI funded EVSE installations.

Figure 2. Potential EVSE Site Host Locations



For example, 11 sites located within roughly 1 mile of exits in or near the towns identified as NEVI priority sites were identified as possible site hosts for Vermont's first RFP. These sites expressed interest via the survey and agreed to have their locations and contact information included in the RFP for bidders to engage with while building their proposals.

For the Bradford station, Norwich Technologies worked with the Bradford Selectboard and the Town's energy committee to bring the project to fruition. VTrans' expectation is that providers will reach out to the communities in which they aim to locate charging.

Plan Vision and Goals

In the early stages of Vermont's NEVI roll out—with a focus on site selection, design, and future-proofing—it is also important to include considerations for medium- and heavy-duty freight and fleet electrification. After reaching "fully built-out" status, VTrans is looking toward building more redundancy at its NEVI locations with up to eight (8) ports, essentially doubling the infrastructure, with more 350kW stations at sites along EV freight corridors. In anticipation that future federal guidance will include minimum requirements for freight charging, VTrans submitted its Round 7 Alternative Fuel Corridors nominations for Electric Vehicle Freight Corridors with a focus on four National Highway System routes within the National Highway Freight Network for the new EV freight designation[10].

Vermont put forth its application for the 2023 FHWA Charging and Fueling Infrastructure (CFI) discretionary grant program to further support the deployment of EVSE in community and corridor locations. The program garnered immense interest nationwide and was highly oversubscribed with quality applications. Ultimately, VTrans' proposal was not funded in the first round, however, the team is adjusting the scope for the 2024 Round 2 CFI funding opportunity with a sharper focus on preparing Vermont's AFCs for freight travel. Round 2 CFI-supported corridor charging sites were selected for their alignment with national, regional, and cross-border efforts to build out an electric freight corridor as well as with coordination with local fleets, existing freight infrastructure such as truck stops with ample space for EVSE and truck parking, and proximity to overburdened and underserved communities in a disadvantaged census tract. Each of these sites are in rural locations where private investment is less likely to support early EVSE installations without significant subsidies.

VTrans' proposal for CFI-supported community charging would further efforts to provide equitable charging across the state as quickly as possible in some of the state's most rural locations. These locations were identified to meet the three-tiered goal of supporting local economic development, workforce development, and those without access to home charging. VTrans proposes to leverage state and federally owned properties at state parks, and national parks, forests, and wildlife refuges to install Level 2 EVSE at locations that would increase charging availability in many rural areas of the state, enabling more EV travel and tourism in these areas along designated scenic byways. The proposal includes additional Level 2 EVSE installed at workplaces and multiunit dwellings intended to benefit folks who cannot install charging at home and who rely on charging at work. These community sites would serve as training grounds for interns and pre-apprentices interested in pursuing job opportunities in the electrical trade and provide inroads with labor organizations eager to support those interested in developing a career in the trades.

[10] Federal Highway Administration. 2024. Freight Electric Vehicle (EV) Corridors. https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/freight_ev_corridors/

Contracting

VTrans worked with its local FHWA Division Office to determine a path to utilizing a sole source contracting process to quickly and cost effectively upgrade several sites currently in development through the state's VW Settlement EVSE funding program to meet NEVI program requirements.

Through a Special Experimental Project No. 14 (SEP-14) request approved by FHWA, VTrans is able to deviate from the FHWA's construction contracting framework to instead utilize Vermont's own competitive procurement policies and procedures for its NEVI projects. For all federally funded public charging projects, Vermont is utilizing the Design-Build-Own-Operate-Maintain (DBOOM) alternative contracting method to cover the entirety of the project at each charging location through the 5-year operations, maintenance, and reporting period. VTrans worked with its local FHWA office to refine a multi-step contracting process that meets both requirements for construction as well as the ongoing operations and maintenance of EVSE installed through the NEVI program. This involved an initial RFQ to develop a list of qualified vendors, RFPs for specific projects, and a competitive solicitation for a third-party verification of construction requirements and other specified deliverables.

On February 15, 2024, a sole source contract was executed between VTrans and Norwich Technologies, Inc. for upgrades to an EVSE at a municipally owned parking lot in downtown Bradford, Vermont. The federally funded upgrades include the installation of 4 super-fast NEVI charging stations that can simultaneously charge 180 kilowatts per hour. This installation, opened to the public on April 23rd, marked Vermont's first federally funded public fast charging station and the 6th such installation in the country funded by NEVI.[11]

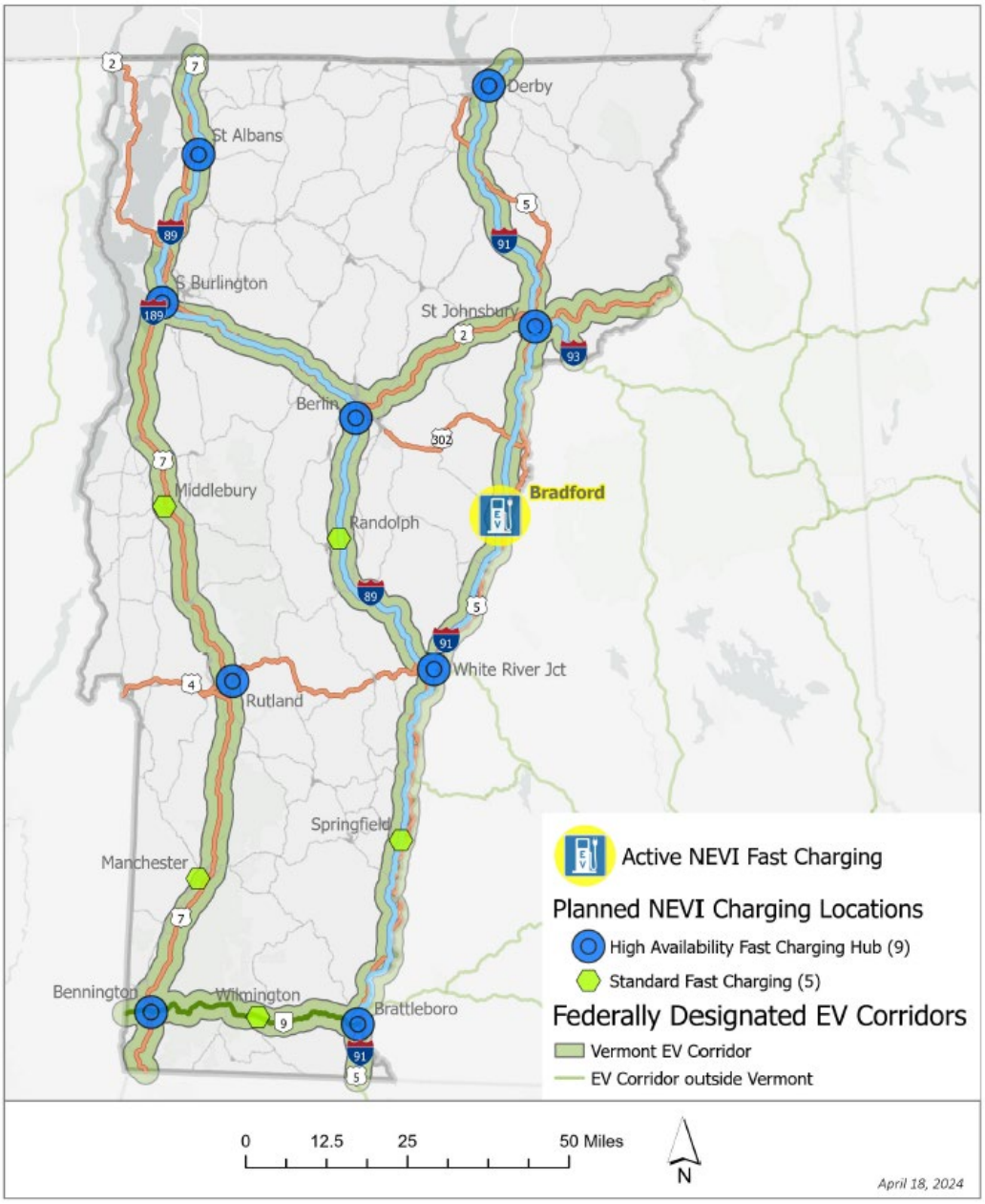
On April 16, 2023, VTrans issued a Request for Qualifications (RFQ) one week prior to the ribbon cutting of the state's first NEVI station in Bradford. The RFQ was advertised on VTrans' Contract Administration and NEVI webpages; and via press release, email newsletter, and social media channels; and through partner stakeholder groups. Through a competitive selection process, VTrans qualified 8 EV charging providers that are capable of building Vermont's charging network to federal and state specifications[12].

On July 24, 2024, VTrans invited the shortlist of 8 qualified vendors to submit proposals in response to Vermont's first NEVI Request for Proposals (RFP) for the remaining 14 locations required to fully build out the state's Alternative Fuel Corridors (AFC) shown in the map below.

[11] State of Vermont Office of Governor Phil Scott. 2024. Vermont's First Federally Funded EV Fast Chargers Now Operational. https://governor.vermont.gov/press-release/vermonts-first-federally-funded-ev-fast-chargers-now-operational

[12] Vermont Agency of Transportation. 2024. Agency of Transportation Announces Qualified Providers for Public Electric Vehicle Charging Projects. https://vtrans.vermont.gov/sites/aot/files/06.05.24%20Press%20Release%20-%20Qualified%20Providers%20for%20Public%20EV%20Charging%20Projects.pdf

Figure 3. Map of 14 NEVI Priority Locations Included in RFP



Status of Contracting Process

Table 1. Status of Contracting Process

Round of Contracting (example: 1st Round of Three)	Number of Proposals or Applications received	Contract Type (design-build-operate-maintain, design-build, or others)	Date Solicitation Released	Date Solicitation Closed	Date of Award
Sole Source Contract	1	Design-Build-Own-Operate-Maintain (DBOOM)	n/a	n/a	2/15/24
Request for Qualifications (RFQ)	10	Design-Build-Own-Operate-Maintain (DBOOM)	4/16/24	5/22/24	n/a
Request for Proposals (RFP)	TBD	Design-Build-Own-Operate-Maintain (DBOOM)	7/25/24	Scheduled 9/23/24	Scheduled 10/21/24

Awarded Contracts

Table 2. Awarded Contracts

Round of Contracting (example: 1st Round of Three)	Award Recipient	Contract Type (design-build-operate-maintain, design-build, or others)	Location of Charging Station	Award Amount	Estimated Date of Operation
Sole Source Contract	Norwich Technologies, Inc.	Design-Build-Own-Operate-Maintain (DBOOM)	Bradford, VT	$631,662.00	Opened 4/23/24

Scoring Methodologies Utilized

VTrans utilized a scoring rubric to evaluate responses to the RFQ, which considered past performance, including workforce diversity, and the ability to complete projects in a timely, cost-effective, and equitable manner. The proposal evaluation for Vermont's RFP is also points based according to the scoring matrix provided below. Scoring is closely aligned with the sections required in the project proposal template provided to bidders. Proposals will be scored competitively, and consideration will be made for proposals that go above and beyond minimum requirements and provide for a robust user experience. Futureproofing and resiliency considerations will also be scored to reflect the longevity of these investments. The maximum score a proposal may receive is 100 points.

In addition to the scoring criteria below, bidders were also asked to demonstrate efforts and commitments to equity in contracting and workforce opportunities such as considerations for employing local labor or those from underrepresented groups in responses to the RFQ.

Table 3. Scoring Matrix from 2024 RFP

Category	Criteria for Scoring	Total Possible Points
Proposal Identification		
1. Project Location	Enter city or town name and distance to nearest Alternative Fuel Corridor. If site host is known, include physical address and latitude/longitude coordinates.	3 Points
2. Proposal Point of Contact	Name, title, email address, phone number, and mailing address of Proposer.	
3. Site Host Point of Contact	If the site host is known, include name, title, email address, phone number, and mailing address of site host.	
Project Management		
1. Project Team and Key Personnel	List all individuals from teaming partners/firms and their roles, as related to the project, committed and designated to serve in connection with staffing and managing the project. Proposers shall identify all additional Key Personnel or changes made to Key Personnel if different from those identified previously in the Statement of Qualifications. Include resumes for any Key Personnel added after submission of SOQ.	5 Points
2. Subcontracting	If the Proposer is unable to provide the name of a teaming partner or subcontractor, indicate how they will obtain a firm, including what qualifications they expect the firm to provide, and details of the procurement process utilized to secure the firm. Include efforts to seek contracting opportunities with certified women- and minority-owned businesses.	5 Points
3. Labor and Workforce Considerations	Describe commitments to inclusion in contracting and workforce opportunities. This may include considerations, where available, such as employing local labor, apprentices, or those from underrepresented groups.	5 Points
Site Readiness		
1. Site Attributes	Describe the site if it is known and any attributes related to site readiness that currently exist and, if not currently present, when and how will the attributes be added to provide a safe and user-friendly	7 Points

	experience If distance from nearest AFC is over 1 mile, include detailed rationale for requesting an exception. If proposing a Chargehub site, include details related to parking space/bay configurations that allow vehicles to pull-through to accommodate charging port variations for different vehicle types. Include any details related to futureproofing and opportunities to expand or upgrade the site.	
2. Site Plans	Maps, images, or design plans submitted with potential sites clearly marked with indicators of the placement of EVSE, parking spaces to be served, distance to electrical infrastructure (existing and/or upgrades needed).	7 Points
3. Site Host Agreement	Site host agreement submitted or letter of support/agreement with site host submitted if executed site host agreement is not yet available	7 Points
4. Utility Engagement	Contact electric utility to investigate viability of site. Provide details about the available power supply and whether equipment and service upgrades are required. Attach a signed letter of support from the utility that confirms the utility will provide required electric service that complies with NEVI requirements to the Applicant at the proposed site. Include cost estimates for equipment upgrades and related services.	7 Points
Project Details		
1. Constraints and Requirements	Account for anticipated challenges with this specific location, including challenges for identifying a viable site (if not yet known). If a site is already known, describe specific challenges associated with that site. Identify potential lag times or bottlenecks and describe how the project team will shorten time to commissioning or manage delays, including access to equipment and estimated lead times. Describe how the Proposer will ensure the project complies with federal and state requirements.	10 Points

2. Battery Energy Storage Systems	Detail the costs related to any BESS included in the proposal and describe how the equipment will meet the NEVI minimum requirements for power and uptime.	2 Points
3. Operations and Maintenance	Provide O&M plan for the 5-year project duration. Include plans for equipment uptime (minimum 97%), network connectivity, proactive monitoring, warranties, technical support, site maintenance, and customer service. Identify the parties responsible for each task. Describe the intent and ability to extend this support beyond the completion of the contract.	10 Points
Project Schedule and Budget		
1. Project Schedule	Use the "NEVI Price Proposal and Project Schedule" Excel Template to provide a timeline of milestones that details the design, construction, operations and maintenance for this project location. Enter the description and timeframes in number of weeks for each milestone.	10 Points
2. Project Budget	Use the "NEVI Price Proposal and Project Schedule" Excel Template to provide a budget that details individual eligible and ineligible costs related to the project location, the sources and amounts of match, and itemized equipment and services. Increased points possible for match exceeding the minimum requirement of 20%, projects utilizing utility and tax incentives, design elements that enable futureproofing.	10 Points
3. Invoicing	Milestones entered in the "NEVI Price Proposal and Project Schedule" reflect reasonable reimbursement needs for incorporation into a Schedule of Values to be developed with VTrans to support the invoicing process.	2 Points
4. Rate Structure	The proposed rate structure clearly defines how users will be charged. Increased points possible for consideration for reduced rates for income qualified drivers and/or those living in multiunit dwellings without access to charging at home.	10 Points
Total		100 points

Plan for Compliance with Federal Requirements

VTrans is working with a third-party compliance consultant under an existing retainer contract to review design specifications and perform on-site testing to ensure the work performed in Bradford is compliant with federal and state requirements. VTrans is considering the need for additional consulting capabilities as the state's program progresses and whether that would be an extension of the work performed through the retainer or through a separate competitive procurement process.

While securing additional match funding for this work may be a barrier, Vermont has heard from other states that have benefited from outside assistance with the development and ongoing management of their NEVI programs. The third-party VTrans currently works with outlined several lessons learned from their work in Bradford that are now being incorporated into their work in other states. The ongoing sharing of lessons learned across state lines becomes a valuable educational opportunity for the entire industry leading to greater consistency from states in their management of their programs and from the private sector in their understanding the full scope of expectations related to NEVI and in their ability to execute projects in alignment with those expectations.

Civil Rights

As states make progress in achieving fully built-out status along the nation's AFCs, VTrans expects more EVSE providers to enter the market and gain experience with higher powered equipment and Title 23 requirements. It will become increasingly important to onramp additional EVSE providers to our shortlist of pre-qualified vendors that are capable of meeting state and federal requirements especially as Vermont begins issuing solicitations for community charging projects. Future bidding opportunities will be advertised directly to businesses listed in the Agency's Disadvantaged Business Enterprise (DBE) Directory.

In the meantime, VTrans' Office of Civil Rights will share updates with the DBE list through its bi-weekly newsletters about the results of the RFQ and additional details about the RFP so that registered DBEs could potentially participate on project teams as subcontractors or site hosts. The DBE directory was also shared in the RFP and the provided proposal template to encourage bidders to engage with this list while developing their proposals to seek out contracting opportunities with certified women and minority-owned businesses.

Existing and Future Conditions Analysis

Existing Charging Stations

Table 4. Existing Charging Stations as of September 1, 2024

State EV Charging Location Unique ID*	Route	Location (street address or AFC + mile marker)	Number of Charging Ports	EV Network (if known)	Meets all relevant requirements in 23 CFR 680?	Intent to count towards Fully Built Out determination?
14	VT 5	6 South Main St., Bradford, VT 05033	8 (4x 180kW NEVI funded ports,	Red E Charge	Yes	Yes

			2x 50kW state funded ports, 2x Level 2 state funded ports)			
22	US 7	113 Monkton Rd Vergennes VT 05491	12	Tesla	No	No
27	US 7	4993 Main St, Manchester Center, VT 05255	8	Livingston Energy	TBD	TBD

EV Charging Infrastructure Deployment

Planned Charging Stations

The following figures and tables outline the most recent status of charging along Vermont's 6 Alternative Fuel Corridors.

Table 5. Federally Designated Alternative Fuel EC Corridors in Vermont

Route	Designation
I-89 from NH border to Quebec border	Corridor-ready
I-91 from MA border to Quebec border	Portions corridor-ready and pending
I-93 from St Johnsbury to NH border	Portions corridor-ready and pending
US 2 from Montpelier to the NH border	Portions corridor-ready and pending
US 7 from MA border to S Burlington	Portions corridor-ready and pending
VT 9 from NH border to NY border	Corridor-ready

Figure 4. Map of Planned Vermont NEVI Priority Locations

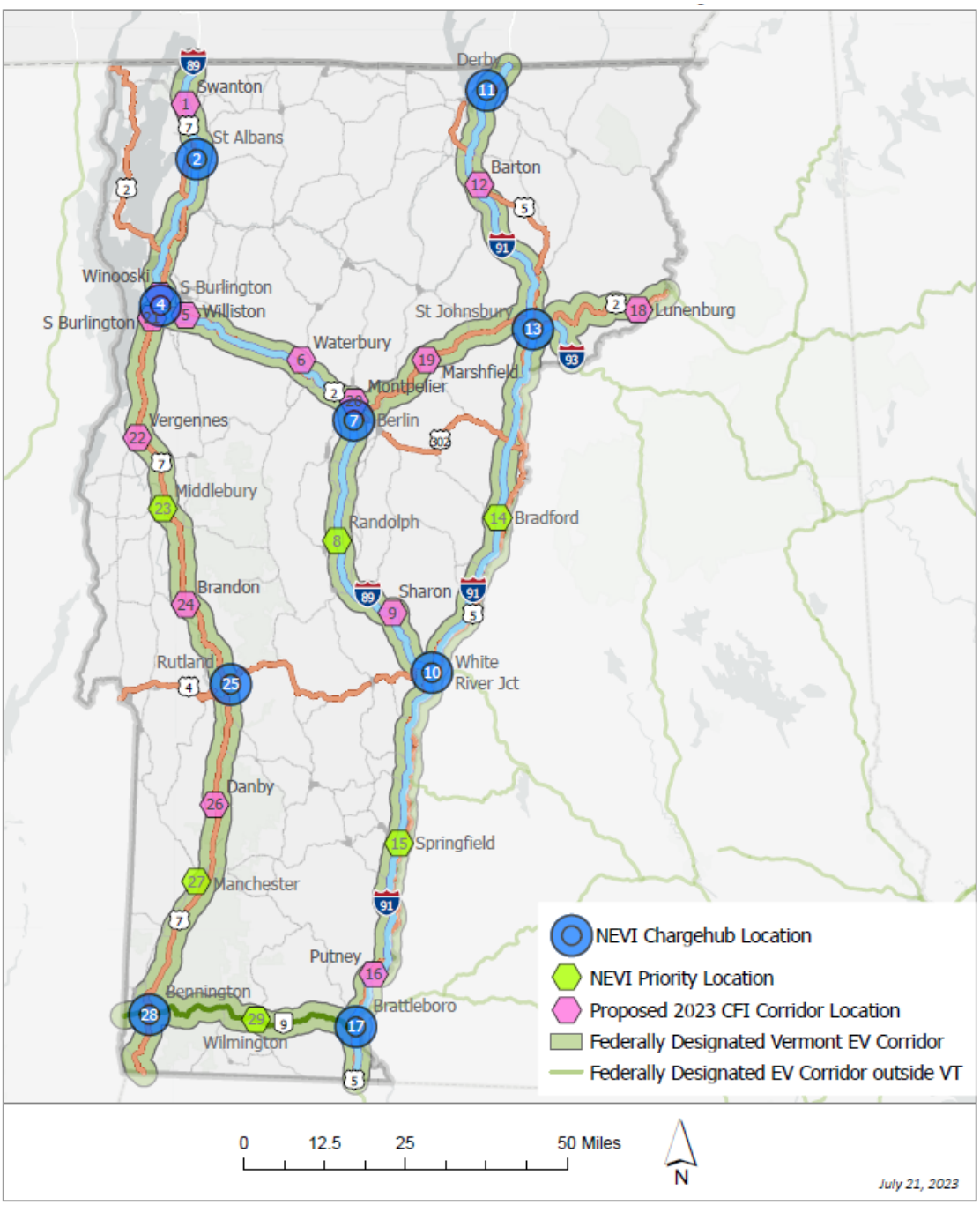


Table 6. Stations Included in 2024 RFP

State EV Charging Location Map ID	Route(s)	Location	Number of Ports	Funding Sources (Choose No NEVI, FY22/FY23, FY24, FY25, FY26, or FY27+)	Status
2	I-89	St Albans	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25	To be constructed
4	I-89	S Burlington	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25	To be constructed
7	I-89	Berlin	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25	To be constructed
8	I-89	Randolph	NEVI Standard 4 ports	FFY22/23, FFY24, FFY25, Eligible for additional ARPA funds	To be constructed
10	I-89 / I-91	White River Jct	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25	To be constructed
11	I-91	Derby	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25, Eligible for additional ARPA funds	Potential upgrade of current installation
13	I-91 / I-93 / US 2	St Johnsbury	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25, Eligible for additional ARPA funds	Potential upgrade of current installation
15	I-91	Springfield	NEVI Standard 4 ports	FFY22/23, FFY24, FFY25, Eligible for additional ARPA funds	Potential upgrade of current installation
17	I-91 / VT 9	Brattleboro	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25	To be constructed
23	US 7	Middlebury	NEVI Standard 4 ports	FFY22/23, FFY24, FFY25	To be constructed
25	US 7	Rutland	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25, Eligible for additional ARPA	Potential upgrade of current installation

				funds	
27	US 7	Manchester	NEVI Standard 4 ports	FFY22/23, FFY24, FFY25	To be constructed
28	US 7 / VT 9	Bennington	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25	To be constructed

Table 7. Planned Vermont NEVI Priority Locations

State EV Charging Location Map ID	Route(s)	Location	Number of Ports	Anticipated Funding Sources (Choose No NEVI, FY22/FY23, FY24, FY25, FY26, or FY27+)	Status
1	I-89	Swanton	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
2	I-89	St Albans	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25	To be constructed
3	I-89	Winooski	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
4	I-89	S Burlington	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25	To be constructed
5	I-89	Williston	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
6	I-89	Waterbury	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
7	I-89	Berlin	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25	To be constructed
8	I-89	Randolph	NEVI Standard 4 ports	FFY22/23, FFY24, FFY25, Eligible for additional ARPA funds	To be constructed
9	I-89	Sharon	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
10	I-89 / I-91	White River Jct	Potential Chargehub up	FFY22/23, FFY24, FFY25	To be constructed

			to 8 ports		
11	I-91	Derby	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25, Eligible for additional ARPA funds	Potential upgrade of current installation
12	I-91	Barton	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
13	I-91 / I-93 / US 2	St Johnsbury	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25, Eligible for additional ARPA funds	Potential upgrade of current installation
14	I-91	Bradford	NEVI Standard 4 ports	FY26 or FY27+	Constructed - Upgrade
15	I-91	Springfield	NEVI Standard 4 ports	FFY22/23, FFY24, FFY25, Eligible for additional ARPA funds	Potential upgrade of current installation
16	I-91	Putney	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
17	I-91 / VT 9	Brattleboro	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25	To be constructed
18	US 2	Lunenburg	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
19	US 2	Marshfield	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
20	US 2	Montpelier	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
21	US 7	S Burlington	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
22	US 7	Vergennes	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
23	US 7	Middlebury	NEVI Standard 4 ports	FFY22/23, FFY24, FFY25	To be constructed
24	US 7	Brandon	NEVI Standard 4 ports	FY26 or FY27+	To be constructed

25	US 7	Rutland	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25, Eligible for additional ARPA funds	Potential upgrade of current installation
26	US 7	Danby	NEVI Standard 4 ports	FY26 or FY27+	To be constructed
27	US 7	Manchester	NEVI Standard 4 ports	FFY22/23, FFY24, FFY25	To be constructed
28	US 7 / VT 9	Bennington	Potential Chargehub up to 8 ports	FFY22/23, FFY24, FFY25	To be constructed
29	VT 9	Wilmington	NEVI Standard 4 ports	FFY22/23, FFY24, FFY25, Eligible for additional ARPA funds	To be constructed

Planning Towards a Fully Built Out Determination

How many stations are still needed to achieve Fully Built Out status (based on the State's EV AFCs as of the date of this update's submission)?	***14-17 (see discretionary exceptions section below)***
Provide the estimated month/year to achieve Fully Built Out status:	***2025-2026 barring any supply chain or unforeseen siting constraints***

Discretionary Exceptions

A likely need for discretionary exceptions has arisen with increased site analysis transpiring through the RFP process. As of the writing of this plan update, there are 3 potential locations in question. At the South Burlington/Burlington location we are working to find a site that is 1 mile from both corridors I-89 and US-7. In Berlin, the most logical and site ready location is an existing truck stop and travel center located along I-89, however it is over 3 miles from US-2. A second station located nearby in downtown Montpelier could meet the requirement along US-2 but the area is prone to flooding in recent years and we would want to make sure additional measures are included to protect any NEVI investment there. Three AFCs converge in St. Johnsbury and an exception will likely be necessary for one station to cover all 3. Multiple potential sites exist within 1 mile of the I-91 and US-2 interchange, however Vermont's 11-mile stretch of I-93 is under 3 miles from this area with few eligible sites.

EV Charging Infrastructure Deployment After Build Out

Vermont expects to be able to obtain "fully built-out" status for its corridor network using the first three years of NEVI formula funds, ARPA funds authorized for DC fast charging along highway corridors, and CFI discretionary grant awards. Once the Vermont's AFCs are fully built-out to meet NEVI minimum requirements, remaining funding for DC fast charging will focus on filling gaps to meet state goals beyond NEVI requirements (at least one DCFC station within one mile of every exit along interstates 89,

91, 93, and a DCFC station within 25 miles of the next throughout the state highway system), early stages of electric freight corridor build out as discussed in earlier sections of this plan, and increased public engagement and opportunities for public input to shape Vermont's EV charging landscape to determine collective priorities for the siting of community charging stations post-certification of Vermont's fast-charging corridors.

Through our work with other state agencies and partners, we know there is latent demand for community, workplace, and multiunit dwelling charging. With our partners and sister agencies, we are exploring the possibility of leveraging future federal funding to support programs that are already in place, in high demand, and with large gaps to fill existing need. Level 2 charging projects in these locations will support the workforce at remote locations, bring travelers to rural areas, and support those without access to home charging. These projects will also support workforce development and serve as training grounds for electrical interns and pre-apprentices seeking to explore a career path in the trades.

If timing allows Vermont to certify its corridors as fully built-out, greater flexibility in deploying NEVI funds will be key to delivering greater benefits to disadvantaged and underserved communities. In any case, Vermont's prioritization analyses will need to be updated continually, based upon state environmental justice rules and tools currently under development, and as other factors such as EV adoption rates change. Deployment in future years will be guided by NEVI program requirements, public input and legislative goals, funding availability through overlapping state or federal sources (state transportation fund or the Carbon Reduction Program, for example), but also by evaluating the effectiveness of NEVI and similar investments to help achieve the greenhouse gas emissions reductions targets set by the Biden administration and required by Vermont's Global Warming Solutions Act.

Equity Considerations

Although the use of NEVI funding is highly prescribed until corridor build-out is achieved, VTrans' desire is to make sure federally funded stations benefit the communities in which they are installed.

In the RFQ and RFP, VTrans encouraged teaming considerations and requested bids include a demonstration of efforts and commitments to equity in contracting and workforce opportunities such as considerations for employing local labor or those from underrepresented groups. Also in the RFP, VTrans is exploring the development of a two-tiered pricing structure, with a lower per kWh rate for households with lower incomes or no access to home charging. VTrans would develop a method for determining applicant eligibility and facilitating enrollment in the subsidized charging program. The revenue differential between the market and lower rate for participants enrolled in the lower rate would be an operating expense eligible for reimbursement annually for up to five years.

In VTrans' strategy to prepare Vermont's AFCs for electric freight travel, sitting considerations will include alignment with national, regional, and cross-border efforts to build out an electric freight corridor as well as in coordination with local fleets, existing freight infrastructure such as truck stops, and proximity to overburdened and underserved communities in disadvantaged census tracts. Most of Vermont's EVSE will be sited in rural locations where private investment is less likely to support early EVSE installations without significant subsidies.

Additional outreach to Disadvantaged Communities (DACs) along with a process to identify, quantify, and measure benefits to DACs is in development for the coming year(s) as corridors near full build out and funding becomes more flexible.

Labor and Workforce Considerations

VTrans' desire to make sure federally funded stations benefit the communities in which they are installed also includes workforce development to both create local career opportunities as well as ensure investments will be maintained and operating properly over the long term.

In the RFQ and RFP, VTrans encouraged teaming considerations and requested bids include a demonstration of efforts and commitments to equity in contracting and workforce opportunities such as considerations for employing local labor or those from underrepresented groups. VTrans also encourages bidders to seek out contracting opportunities with certified women and minority-owned businesses through the Agency's Disadvantage Business Enterprises directory.

In its development of a community charging proposal for the Round 2 CFI grant opportunity, VTrans is engaging with several organizations in an effort to implement a workforce training pipeline for those seeking to enter the field and a pathway to securing higher level certifications for those already established in their electrical careers. These efforts would create opportunities for new electrical interns, pre-apprentices, and apprentices and leverage the build out of Vermont's community charging infrastructure to support the training of new and aspiring electricians seeking to gain on-site work experience.

The CFI proposal includes additional Level 2 EVSE installed at workplaces and multiunit dwellings intended to benefit folks who cannot install charging at home and who charge at work. These community sites would serve as training grounds for interns and pre-apprentices interested in pursuing job opportunities in the electrical trade and provide inroads with labor organizations eager to support those interested in developing a career in the trades.

VTrans also intends to comply with NEVI requirements to have licensed EVITP certified electricians on site for installation and maintenance of federally funded EVSE. By including the following statement, VTrans confirms intent to comply with 23 CFR 680.106(j):

> "*In compliance with 23 CFR 680.106(j) to ensure that the installation and maintenance of chargers is performed safely by a qualified and increasingly diverse workforce of licensed technicians and other laborers, all electricians installing, operating, or maintaining EVSE must receive certification from the EVITP or a registered apprenticeship program for electricians that includes charger-specific training developed as part of a national guideline standard approved by the Department of Labor in consultation with the Department of Transportation, if and when such programs are approved."*