STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
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Office of the Commissioner

July 26, 2022

Secretary Peter Buttigieg
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

Subject: National Electric Vehicle Infrastructure-State of Connecticut Plan

Honorable Secretary Buttigieg,

The Connecticut Department of Transportation (CTDOT) is pleased to submit the enclosed National Electric Vehicle Infrastructure (NEVI) plan- *Connecticut's Charging Ahead Plan: A Strategy to Expand Public Electric Vehicle Charging* for your review and approval. This plan builds on Connecticut's commitment to clean transportation, reducing greenhouse gas (GHG) emissions, and ensuring that consumers have a reliable, convenient network of electric vehicle (EV) chargers.

The State of Connecticut has long supported the greater deployment of EVs and other zero-emission vehicles across multiple vehicle classes to reduce the transportation sector's environmental impacts and achieve its GHG reduction targets. CTDOT acknowledges, and research has shown, that the availability of publicly accessible EV charging is a critical supporting element that must be in place before widespread EV adoption can occur. The availability of NEVI funding will allow Connecticut to help expand the state's fast charging network, including in rural and disproportionately impacted communities. It will also help address the growing demand for charging in the parts of the state that already see higher EV adoption and usage.

Connecticut's NEVI Plan has been developed by CTDOT, with collaboration from the Connecticut Department of Energy and Environmental Protection and with feedback from hundreds of stakeholders. The plan addresses each of the elements in the NEVI Formula Program guidance and template, and in the Bipartisan Infrastructure Law, enacted as the Infrastructure Investment and Jobs Act, Public Law 117-58.

CTDOT appreciates the ongoing guidance in our plan development provided by the U.S. Department of Transportation and the U.S Department of Energy's Joint Office. We look forward to building on and promoting a national network of electric vehicle charging. Please feel free to contact Ms. Kimberly Lesay, Bureau Chief of Policy and Planning, at Kimberly.Lesay@ct.gov or by phone at (860) 594-2001 with any questions regarding this plan.

Sincerely,

Joseph J. Giulietti
Commissioner

Enclosure

CONNECTICUT'S CHARGING AHEAD PLAN

A Strategy to Expand Public Electric Vehicle Charging

July 29, 2022

Pending Approval from FHWA

Table of Contents

Glossary of Terms and Acronyms

AC – Alternating Current
ADA – Americans with Disabilities Act
AFC – Alternative Fuel Corridor
BEB – Battery Electric Bus
CEEJAC – Connecticut Equity and Environmental Justice Advisory Council
CCS – Combined Charging System or plug type for DC Fast Charging
COG – Council of Government
Corridor Pending – Corridor does not satisfy FHWA requirements
Corridor Ready – Corridor meets FHWA requirements
CCEC – Connecticut Clean Economy Council
CTDECD – Connecticut Department of Economic and Community Development
CTDEEP – Connecticut Department of Energy & Environmental Protection
CTDOL – Connecticut Department of Labor
CTDOT – Connecticut Department of Transportation
CTOWS – Connecticut Office of Workforce Strategy
DAC – Disadvantaged Community
DBE – Disadvantaged Business Enterprises
DC – Direct Current DC Fast Charging – High power charging 400-800 volt, 150-600 amps, 3 phase
DCFC – Direct Current Fast Charger
DOE – U.S. Department of Energy
DOT – U.S. Department of Transportation
EDC – Electric Distribution Company
EJ – Environmental Justice
EV – Electric Vehicle
EVITP - Electric Vehicle Infrastructure Training Program
EVSE – Electric Vehicle Service Equipment
FHWA – Federal Highway Administration
GWC – Governor's Workforce Council
ICE – Internal Combustion Engine
IIJA – Infrastructure Investment and Jobs Act
kW – Kilowatt (1,000 watts)
kWH – Kilowatt Hour (1,000 watts for 1 hour)
Level I – Low power charging 120-volt, 10-20 amps, single phase
Level 2 – Medium power charging 240-volt, 15-50 amps, single phase
MHD – Medium and Heavy Duty (vehicles)
MPO – Municipal Planning Organizations
NESCAUM – Northeast States for Coordinated Air Use Management
NEVI – National Electric Vehicle Infrastructure
PEL – Planning and Environmental Linkages
PROWAG – Public Right-of Way Accessibility Guidelines
PURA – Public Utilities Regulatory Authority
RFP -Request for Proposals
SHPO - State Historic Preservation Office
STIP – Statewide Transportation Improvement Program
TCI – Transportation Climate Initiative TIP – Transportation Improvement Program
UCONN – University of Connecticut

Introduction

Connecticut will receive approximately $52 million in formula funding over the next five years from the passage of the Infrastructure Investment and Jobs Act (IIJA), Public Law 117-58 (November 15, 2021) to support the expansion of a statewide electric vehicle (EV) charging network. The Connecticut Department of Transportation (CTDOT) will administer these funds. Pursuant to the state receiving the National Electric Vehicle Infrastructure (NEVI) funds, the NEVI program requires each state to submit a deployment plan to the Federal Highway Administration (FHWA) by August 1, 2022, for fiscal year 2022 and 2023 funding and provide an updated NEVI plan to FHWA annually.

Connecticut is at the forefront of the EV revolution being one of the first states to adopt the California Zero Emission Vehicle Program in 2005. Connecticut was one of eleven states to sign the Zero-Emission Vehicle Memorandum of Understanding in 2013 and has committed to an ambitious EV adoption goal of putting between 125,000 – 150,000 EVs on the road by 2025. As of July 2022, there were 25,444 EVs registered in Connecticut, a fraction of the total 2.9 million light-duty passenger cars and trucks registered in Connecticut. The Connecticut Department of Motor Vehicles (CTDMV) records indicate that the annual sales of new light-duty vehicles in Connecticut fluctuate each year from roughly 150,000 – 180,000[1], but over the last 12 months, there has been over 600 new registered EVs per month in the state. This indicates that the EV market in Connecticut is growing, and Connecticut has a unique opportunity to leverage NEVI funds to help expand a publicly accessible charging network to further promote EV adoption.

While the passage of the IIJA and the creation of the NEVI program has accelerated Connecticut's planning efforts for expanding a fast charging network, a great deal of work has already been done to identify gaps in the existing fast charging network throughout the state. In the fall of 2021, CTDOT began an analysis examining where existing fast charging was located within the state. The analysis was presented in January of 2022 to inform stakeholders of the status of EV Fast Charging technology and where EV fast charging gaps (50 miles between stations) existed along Connecticut's transportation corridors. CTDOT fine-tuned the state's Fast Charging Gap Analysis work to adhere to the February 2022 NEVI guidance criteria and highlighted the fast charging stations and locations that met the guidance.

[1] Connecticut Department of Motor Vehicle website accessed on July 13, 2022 from https://portal.ct.gov/DMV/News-and-Publications/News-and-Publications/Electric-vehicle-stats

Building on the Fast Charging Gap Analysis, CTDOT determined early in the NEVI planning process that developing a comprehensive NEVI plan and grant solicitation for the state required engaging with and soliciting input from the many stakeholders that could be impacted by this program. In the spring of 2022, CTDOT began rigorously engaging with stakeholders and facilitated numerous listening sessions with utility providers, consultants, fueling station providers, non-profits, businesses, and the general public, to better understand the needs, constraints, and opportunities of expanding fast charging infrastructure in the state.

Reoccurring themes identified during listening sessions included:

- Operations and maintenance to ensure reliability
- Siting considerations, particularly in rural and urban areas
- Data collection and reporting frequency
- Competitive bidding processes and the amount of lead time to submit projects
- Criteria to prioritize funding locations
- Power level of chargers (not all stations need 350kW)
- Engaging with Environmental Justice (EJ) communities
- Contracting methods

As indicated in the NEVI guidance, states are required to fully build out their FHWA designated Alternative Fuel Corridors (AFCs) before funding EV charging in other locations across the state. As a result, program planning and this plan focus largely on this Phase 1 of the NEVI program, which is prioritizing the build-out of fast charging along Connecticut's existing AFCs to ensure residents and travelers were always within range of a charging station while traveling along the state's interstate highways.

Connecticut's Charging Ahead Plan: A Strategy to Expand Public Electric Vehicle Charging will be updated annually to document progress to date, identify new challenges and opportunities, and highlight the deployment plan for the coming years. Connecticut is committed to reviewing the outcomes of the plan to determine best practices, ensure that the plan meets program guidelines, and to confirm that the plan is achieving the state's goals for a connected network of electric vehicle chargers.

Dates of State Plan for Electric Vehicle Infrastructure Deployment Development

Development of *Connecticut's Charging Ahead Plan: A Strategy to Expand Public Electric Vehicle Charging* began in the spring of 2022, following the February release of NEVI Formula Program Guidance from FHWA. After submittal of this Plan to FHWA for review, CTDOT will transition to drafting the Phase 1 grant solicitation for EV charging stations focused on building out fast charging along the state's AFCs. Connecticut's goal is to have the NEVI grant solicitation published during the first quarter (Q1) of 2023. CTDOT

expects to receive proposals during 2023 and send award letters to selected projects later in 2023.

Connecticut's NEVI plan is submitted by CTDOT's Commissioner, who has the authority to adopt this plan. CTDOT has provided updates and presentations to the Connecticut Councils of Government (COGs)/Metropolitan Planning Organizations (MPOs) bimonthly (starting in March 2022) to inform them of the NEVI program, answer their questions, receive feedback, and make them aware that the NEVI program is to be administered as a Federal-aid Highway Program under Title 23 United States Code Chapter 1 and that federal funds will be capped at 80% of project costs. In addition, CTDOT will be working with the COGs to ensure that the NEVI program will be incorporated into Transportation Improvement Programs (TIPs). CTDOT will include the NEVI program in the Statewide Transportation Improvement Program (STIP) and ensure that all projects complete all state and federal environmental reviews.

Table 1: Timeline of NEVI Plan Development and Phase 1 Implementation

Activity	Date
Develop Plan Narrative	March through June 2022
Refine DCFC Gap Analysis	April through June 2022
Coordinate with DEEP- Compile Plan Data	Ongoing
Public Outreach (Webinars, one on one sessions, COG/MPO meetings etc.)	April & May 2022
Regional Outreach Efforts	May 2022
Draft Plan Recommendations	May and June 2022
Submit to DOT Mgmt. for Review/Approval	June-July 2022
Final Plan submission to Joint Office	by August 1, 2022
Notification from Joint Office Plan is Approved	Anticipated October 2022
Drafting of program procedures and protocols	Anticipated October 2022-Q1 of 2023
Evaluate Proposals and Include Projects into STIP/TIP	2023
Award Grants/Contract(s) for DCFC station for Phase 1 (Alt Fuel Corridors)	2023

State Agency Coordination

CTDOT has coordinated with other Connecticut state agencies to use their experiences and expertise in the development of a comprehensive state fast charging plan to meet all NEVI program requirements.

When the NEVI Formula Program Guidance was released, CTDOT reached out to Connecticut Department of Energy and Environmental Protection (CTDEEP) to establish a working group specifically focused on addressing NEVI plan development and implementation. There are two Bureaus within CTDEEP that participated in preparing the NEVI plan; the Bureau of Air Management (BAM), and the Bureau of Energy and Technology Policy. CTDOT also coordinated and met with staff from the Connecticut Public Utilities Regulatory Authority (PURA). Each of these entities contributed staff time to help CTDOT draft the NEVI state plan and provide input on the implementation strategy. CTDEEP shared lessons learned from their experience managing the state's EVConnecticut Electric Vehicle Supply Equipment (EVSE) infrastructure program. They also provided valuable feedback and direction on how CTDOT could incorporate strategies outlined in Connecticut's EV Roadmap: A Policy Framework to Accelerate Electric Vehicle Adoption [2] (developed and published by CTDEEP in 2020) into NEVI planning.

The CTDOT/CTDEEP working group met biweekly from April to July and collaborated on developing plan sections based on each unit's strengths and experiences. As plan gaps/needs were identified, other Connecticut state agencies such as the Department of Labor (CTDOL) and the Department of Economic and Community Development (CTDECD), were consulted to provide input on various sections of the plan.

CTDOT acknowledges that charging and fueling infrastructure funded under this program will be subject to Build America, Buy American Act provisions. CTDOT plans to adhere to Federal requirements for the NEVI program and include these provisions within the grant solicitation.

Public Engagement

CTDOT is committed to learning from the input and interests of Connecticut residents in developing and implementing the NEVI program. Throughout the five-year NEVI program, CTDOT will have an open and transparent stakeholder process that engages and encourages participation from citizens and businesses as the state works to help build out a strong network of EV fast chargers across Connecticut.

[2] Connecticut Department of Energy and Environmental Protection; Connecticut's EV Roadmap: A Policy Framework to Accelerate Electric Vehicle Adoption, accessed on July 28, 2022 from https://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/f7ed4932eec438d0852585520001c81b/$FILE/EV%20Roadmap%20for%20Connecticut.pdf

In early February 2022, before FHWA released NEVI guidance, CTDOT held two public stakeholder meetings that showed the status of EV Fast Charging technology and identified locations of EV fast charging gaps along Connecticut's transportation corridors. Over 300 stakeholders participated in the live webinars, and an additional 50 people have viewed the presentation since it was posted in February of 2022. In addition, CTDOT received over 60 written comments and responses to the gap analysis that were included as an addendum to the YouTube recording[3] of the presentation. This initial public outreach effort spurred many EVSE private developers, charging manufacturers, and original equipment manufacturers, to reach out to CTDOT about their plans to expand fast charging infrastructure within the state. Over the next five years, CTDOT hopes to expand these conversations to enhance and facilitate the growing network of EV fast charging across the state.

Stakeholders Involved in Plan Development

Starting in December of 2021, CTDOT met with private sector companies, utilities, environmental and environmental justice (EJ) advocacy groups, municipalities, MPOs, Regional Transportation Planning Organizations (RTPOs), Council of Governments (COGs), and other interested parties. The goal of these listening sessions was to help inform the state's NEVI plan for supporting fast charging infrastructure in Connecticut.

CTDOT worked closely with the Connecticut FHWA division office throughout development of the FY 22/23 NEVI plan. The FHWA division office participated in several public NEVI listening sessions, and division staff also participated in calls CTDOT organized with the Joint Office. In addition, CTDOT met with staff at the division office and the State Historic Preservation Office (SHPO) to identify opportunities to simplify the evaluation of EV charging projects. Through these meetings, suggestions were offered to CTDOT for items to include within the NEVI grant application that might help streamline the SHPO and National Environmental Policy Act (NEPA) review process. CTDOT will continue working closely with the Connecticut division office and SHPO to ensure that CT's NEVI program meets all requirements of Section 106 of the National Historic Preservation Act of 1966 and work together to find efficiencies in the process.

In July 2021, PURA issued a final decision in Docket No. 17-12-03RE04 that established a nine-year program to support the installation of electric vehicle charging infrastructure (Level 2 and DCFCs) across Connecticut (EV Charging Program). The EV Charging

[3] Connecticut Department of Transportation Outreach Session on the Bipartisan Infrastructure Law: National Electric Vehicle Infrastructure (NEVI) Formula Program (April/May 2022) YouTube Link: https://dotvideo.ct.gov/PM/NEVIStakeholderEngagementSessionCTDOT.mp4

Program[4] established deployment targets based on three-year program implementation cycles for the following market segments: DCFCs; Level 2 chargers installed at multi-unit dwellings, workplaces, and public "destinations"; and Level 2 chargers installed at residential, single-family dwellings. As part of this decision, Connecticut's electric distribution companies (EDCs) United Illuminating and Eversource are required to coordinate and facilitate planning efforts between their light-duty EV managed charging and make-ready incentive program and CTDOT's work on the buildout of fast charging. CTDOT and the EDCs began meeting biweekly in February of 2022. The goal of these meetings is to work collaboratively and coordinate the implementation of programs that support Connecticut's transition to electric transportation. These meetings are expected to continue over the next year and help address challenges and opportunities that may arise as the CT NEVI program is implemented.

In addition to meeting with the EDCs, which are Connecticut's two largest utility providers, CTDOT also hosted meetings with the other small municipal electric utilities operating within the state that are not regulated by PURA. In preparation for the meeting, CTDOT sent out a 20-question survey to all participants that allowed them to discuss their answers one-on-one or submit their responses in writing. Many participants asked for one-on-one meetings, and CTDOT used these sessions to discuss any outstanding questions about NEVI and explore how each of the utilities could play a role in the timely buildout of a fast charging network within their territories and across the state.

CTDOT has biweekly standing meetings, initiated in March of 2022, with Connecticut's Clean Cities coordinators who provided valuable resources and information for NEVI plan development. The Clean Cities coordinators helped to inform their members of CTDOT's NEVI stakeholder meetings, available NEVI resources, the state NEVI survey, and CTDOT's EV-related social media posts. CTDOT plans to continue working with Clean Cities in the future to ensure outreach and stakeholder engagement efforts are maximized.

CTDOT and CTDEEP staff also engaged with the Georgetown Climate Center, the Connecticut Green Bank, and the Northeast States for Coordinated Air Use Management (NESCAUM). NESCAUM in particular, provided detailed information on the challenges and opportunities for permitting and installing EV charging equipment that was instrumental in addressing some of the related required plan sections.

[4] Connecticut Public Utilities Regulatory Authority: Electric Vehicle Charging Program website accessed on July 28, 2022 from https://portal.ct.gov/pura/electric/office-of-utility-programs-and-initiatives/clean-energy-programs/electric-vehicle-charging-program

Many of Connecticut's colleges, universities, and institutions of higher learning also expressed interest in the NEVI program. Many of these facilities are interested in being EV charging site hosts, while others are interested in helping with research aspects of the state's Plan to build charging infrastructure. CTDOT is partnering with the University of Connecticut (UCONN) as part of CT's Cooperative Transportation Research Program to study Optimal Light Duty EV Charging Station Locations with Supplemental Clean Energy Microgrids. The study is planned for 24 months, beginning in August 2022. CTDOT anticipates working with UCONN to identify optimal locations for EV charging stations across Connecticut with specific constraints in which utility feeder capacity is limited or costly to expand. UCONN will provide a microgrid design tool to evaluate optimal charging locations, and CTDOT may utilize this analysis to direct future NEVI funding investments.

Connecticut has a history of coordinating with neighboring state DOTs on Alternative Fuel Corridor planning and ensuring that corridor nominations work to help expand the alternative fueling network beyond our state's borders. CTDOT continued this coordination when planning for NEVI Phase 1 investments. Several NEVI coordination sessions were held with the Rhode Island Department of Transportation (RIDOT), the Massachusetts Department of Transportation, and the New York State Department of Transportation to better understand how they anticipate structuring their NEVI programs and building out infrastructure within their respective states. Connecticut expects to continue these coordination sessions throughout the five-year NEVI program to ensure travelers to our region encounter a seamless EV charging experience.

During April and May of 2022, CTDOT held four virtual stakeholder meetings and presented at four additional venues to inform and keep stakeholders up to date with NEVI plan guidance and development. These stakeholder meetings also served as listening sessions where the public, potential site owners/operators, and other interested parties could engage with CTDOT and ask questions. During these meetings, the public shared feedback on plan development, stakeholder outreach ideas, and specific criteria that the state should include in a fast charging grant solicitation over the next five years. CTDOT provided public notice at least two weeks prior to scheduled meetings and posted the meeting dates on CTDOT's public calendar. Included in the public notice was the offer of support services such as language translation and Americans with Disabilities Act (ADA) accommodations upon request. Stakeholders with similar priorities were offered the opportunity to group together on specific dates to facilitate focused discussion topics and questions. CTDOT also varied the meeting times to encourage broad participation of different stakeholder groups. The CTDOT team was available to answer questions and receive comments during each session. CTDOT received over 60+ questions/comments during the four sessions.

NEVI Stakeholder Engagement Meetings Spring 2022

Session 1: Focus on Environment | April 26, 12-1pm

71 registered, 72% attendance rate

Session 2: Focus on Community | April 28, 7-8pm

57 registered, 44% attendance rate

Session 3: Focus on Municipalities & Utilities | May 4, 3-4pm

122 registered, 55% attendance rate

Session 4: Focus on Business | May 6, 8-9am

65 registered, 46% attendance rate

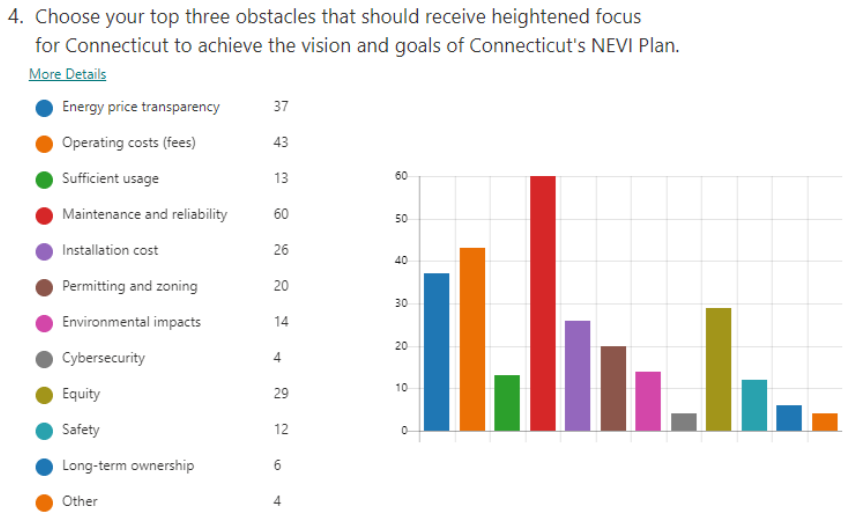
Other NEVI Presentations Spring 2022

March 1 & May 5 update - COG Coordination Teleconference

April 27 & May 25 DEEP/DOT Environmental Justice Stakeholders Meeting

Each stakeholder session was live-streamed on YouTube and Microsoft Office Teams Live. CTDOT ensured that live closed-captioning was also available on Zoom, and the team posted a presentation recording on YouTube, offering closed-captioning (including non-English translation options) as an available option. For all Zoom sessions, CTDOT included additional accessibility and language assistance which stakeholders could access by contacting a member of our CTDOT Communication staff. We anticipate that for future NEVI outreach in which we utilize Zoom or YouTube, we will follow the same procedures to ensure we are giving stakeholders adequate notice of information/listening sessions and ensure translation and interpretation services are provided when requested.

Figure 1: Sample from CT's NEVI Survey



In addition to hosting stakeholder engagement sessions, the public was encouraged to take our NEVI state-specific survey in which nine easy-to-read questions built off our stakeholder engagement session and centered around Connecticut's specific NEVI program development. Answers were analyzed to gauge interest around questions such as: if chargers should be located less than 50 miles apart, should CTDOT plan for 350kW chargers in some locations, and what are the perceived barriers that would prevent Connecticut from achieving stated vision and goals? On average, the survey took 10 minutes to complete, and we received a clearer understanding of participants' feedback. Stakeholders were encouraged to submit letters and comments to CTDOT via email. Emails and social media channels were distributed weekly starting in April to inform the public that CTDOT was collecting input on NEVI planning. CTDOT refined comments into focused topics that helped direct plan development and will help the grant solicitation development.

Public Outreach

CTDOT engaged a wide range of electric vehicle infrastructure stakeholders and communities during the Spring of 2022 to receive feedback and input on how Connecticut should structure the state's NEVI plan and grant solicitation over the next five years. In addition to hosting information/listening sessions referenced above, CTDOT also created other outreach tools that the public could reference to learn more about the NEVI program.

Public Involvement Resources Created by CTDOT:

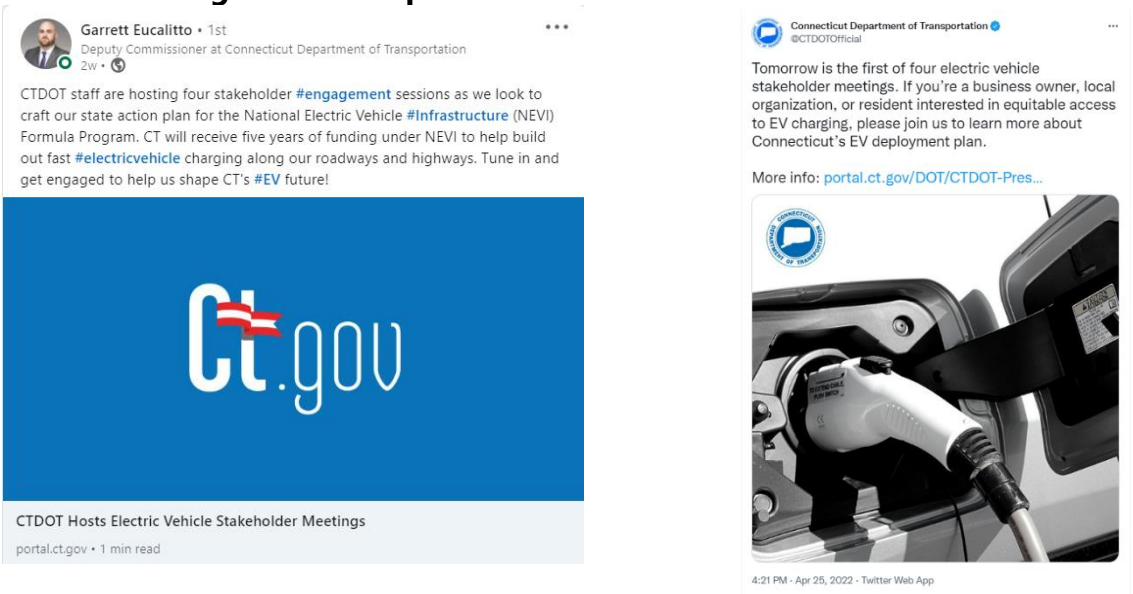
- Connecticut NEVI landing webpage[5]
    - Recording[6] of stakeholder presentation on YouTube

[5] Connecticut Department of Transportation's NEVI website, Available at: https://portal.ct.gov/DOT/Sustainability-and-Resiliency/NEVI-Program

[6] Connecticut Department of Transportation Outreach Session on the Bipartisan Infrastructure Law: National Electric Vehicle Infrastructure (NEVI) Formula Program (April/May 2022) YouTube Link: https://dotvideo.ct.gov/PM/NEVIStakeholderEngagementSessionCTDOT.mp4

    - Public Survey[7] to help with plan development
    - Email Distribution Sign-Up[8] for stakeholders to stay up to date with NEVI news
    - PDF of CT NEVI Stakeholder Presentation[9]
    - CT FAQ document[10] a resource for NEVI stakeholders
- A dedicated NEVI email address: CT-DOTEVPLANNING@ct.gov
- Generated Social Media Pinpoint Sites

Figure 2: Examples of CTDOT NEVI Social Media Posts



[7] CTDOT National Electric Vehicle Infrastructure (NEVI) Stakeholder Survey, Available at: https://forms.office.com/pages/responsepage.aspx?id=-nyLEd2juUiwJjH_abtzi45T5v9R8yJOhuFZS_ncxCVUQklMUVNCWkhKSjhYWU1SUjhKRU5GRzQ1OS4u

[8] Subscribe for updates from the Connecticut Department of Transportation at https://confirmsubscription.com/h/j/B442E21CC5D87BEB

[9] Connecticut Department of Transportation Outreach Session on the Bipartisan Infrastructure Law: National Electric Vehicle Infrastructure (NEVI) Formula Program (April/May 2022) PDF of Presentation Link https://portal.ct.gov/-/media/DOT/documents/dsustainabilityandresiliencyunit/CTDOT-Stakeholder-NEVI-Presentation-FINAL.pdf

[10] Connecticut Department of Transportation Frequently Asked Questions, May 2022 https://portal.ct.gov/-/media/DOT/documents/dsustainabilityandresiliencyunit/NEVI-FAQs-20220523.pdf

Table 2: Public Involvement Results (as of June 10, 2022)

Public Involvement Method	Count
Webpage Visits	543
LinkedIn Post	1,004 impressions
Facebook Impressions	630 impressions
Instagram Impressions	307 impressions
Twitter Impressions	1,026 impressions
Completed NEVI General Surveys	93 Survey Responses
Completed Utility Surveys	4 out of 7
Emails to CT-DOTEVPLANNING@ct.gov	60 emails

CTDOT recognizes that public outreach is critical in ensuring the NEVI program's success. Despite a short planning timeframe, CTDOT worked to receive feedback from stakeholders indicating the type of outreach events they would like to see in the future, and specific groups indicated interest in participating in targeted outreach opportunities. CTDOT values meaningful public involvement and will be exploring ways to further engage with these groups during future NEVI outreach opportunities.
Potential Future Outreach Opportunities Identified through 2022 Listening Sessions/Survey Responses Focused on:

- Multi-Unit Dwelling (MUDs) in low-income neighborhoods
- Gas station owners/operators
- Small Business Organizations
- Fleet Operators (both light-duty and medium & heavy duty)
- Ride-sharing services
- Historically disadvantaged and underserved communities
- Tribal Communities
- EV Charging providers
- Municipalities
- Rural populations
- Communities with limited English proficiency
- Parking lot/garage operators

CTDOT anticipates engaging stakeholders throughout the NEVI process with updates and opportunities to provide input through email, social media, and outreach events throughout future plan updates and implementation process. CTDOT intends to utilize the NEVI Outlook contacts that have subscribed to the distribution list (384 contacts) and CTDOT's Campaign Monitor listserv, which contains approximately 2,000 subscribers. Additionally, engagement efforts will be directed to include groups representing disadvantaged, low-income, Tribal and rural communities. The project team may hire a consultant to lead outreach efforts.

CTDOT will consider additional outreach strategies to reach stakeholders, including ad placement in print and digital news, and social media; authoring op-eds or thought leadership pieces for print and digital news, as well as social media; and engaging local transportation media contacts for feature and interview opportunities.

There is a great deal of synergy and excitement around EVs and EV charging opportunities within the state, and CTDOT anticipates ongoing engagement with the community and prospective partners in NEVI plan updates and implementation for the coming years.

Plan Vision and Goals

The build out of both public direct current fast chargers (DCFC) and public Level 2 chargers is anticipated to play an important role in accelerating the adoption of EVs and in mitigating greenhouse gas emissions and other transportation related emissions. Connecticut suffers from some of the worst air quality in the country, especially along heavily traveled transportation corridors where criteria air pollutants are most densely concentrated. In Connecticut, the transportation sector is estimated to be responsible for about 38 percent of economy-wide greenhouse gas emissions, and more than 66 percent of nitrogen oxides, a harmful component of smog and other hazardous air pollutants.

Based upon the state's experience installing Level 2 EV infrastructure through the EVConnecticut program and in partnering with the utilities to install DCFCs in several of our Service Plazas in 2016, CTDOT has identified significant barriers to the development of viable business models to operate public DCFC networks. CTDOT does not intend to own and operate the state's NEVI charging network. Instead, CTDOT anticipates providing competitive NEVI grants to other entities, both public and private, for their acquisition/installation of the public DCFC stations. To realize this, CTDOT has laid out a vision and supporting goals that will serve as a foundation to help guide the state's future NEVI grant solicitation.

Vision

Connecticut's Charging Ahead Plan will create a multi-year robust roadmap for how the state intends to catalyze the expansion of a safe, reliable, accessible EV fast charging network by spurring investment in and ensuring equitable distribution of fast charging infrastructure throughout the state.

Overarching Goals of Connecticut's *Charging Ahead Plan*

- **Accelerate EV adoption/deployment** by making fast charging convenient and reliable while also providing a seamless New England EV traveler experience

    - Collaborate with state and local partners (frequent correspondence) to address gaps along Connecticut's highway network
    - Coordinate with other state agency partners and the utilities on EVSE installation and distribution (e.g., make ready and VW EVSE grant funding)
    - Create a business opportunity for companies that provide public EV charging services
    - Support DEEP's efforts to work with state and municipal governments to modify building codes and permitting requirements to support EV infrastructure deployment
    - Promote regional EV initiatives/educational materials on CTDOT website and other formats
    - Leverage opportunities where existing DCFC infrastructure can be updated to NEVI standards
- **Provide equitable access to the benefits of electrification across the state**
    - Phase 2 of Plan will run targeted outreach specific to rural areas and areas underserved by EV fast charging opportunities
    - Solicit applications and award funds through a transparent public process
- **Boost range confidence**
    - Provide sufficient coverage (in tandem with non-NEVI fast charging, workplace charging, residential charging, and other charging infrastructure), so that prospective buyers and EV drivers have confidence that they can recharge an EV in Connecticut when and where needed
    - Each NEVI station will have at least four units offering EV charging and, where feasible, CTDOT will encourage one charging space be available that offers a pull through space for passenger vehicles pulling trailers or recreational vehicles.
    - Charging locations will be discoverable online at the US Department of Energy Alternative Fuel Data Center and various third-party applications
    - Ensure that OEMs and auto dealers within the state remain abreast of all DCFC buildout by providing quarterly DCFC infrastructure updates on the NEVI website
- **Engage stakeholders in the NEVI Plan development and program implementation**
    - Provide a forward-facing Connecticut NEVI website
    - Maintain a NEVI specific email distribution list
    - Coordinate with COGs, community, business and EJ groups, and other stakeholder groups to actively listen and gather ideas on the Plan and implementation
    - Provide online survey opportunities to gauge stakeholder reaction to plan direction/ideas

- **Ensure EV charging network is accessible and easy to locate**
    - Require clear Manual on Uniform Traffic Control Device (MUTCD) compliant wayfinding signage
    - ADA and universal design considerations
- **Maximize investments to complement other available funding streams/programs**
    - Encourage NEVI applicants to also participate in utility EVSE programs (make-ready, managed charging, rate riders etc.) when applicable
    - Encourage creative public investment strategies
    - Leverage other state financial incentives aimed at building out EV infrastructure

Contracting

Connecticut's Charging Ahead Plan: A Strategy to Expand Public Electric Vehicle Charging will be updated annually (beginning in FY24), allowing public and private entities to apply for funding to build stations that fit the requirements set forth by the most current FHWA NEVI program guidance. In Phase 1 (FY22-23) of the program, $18.9 million in federal funds will be allocated to complete the buildout of the DC Fast Charging network along Connecticut's FHWA designated Alternative Fuel Corridors. CTDOT's analysis indicates that approximately ten areas identified as zones within this plan will be needed to fully build out Connecticut's EV corridors for Phase 1.

CTDOT expects to contract with other entities, including private sector entities, EV charging station providers, site hosts, and others, on a competitive basis to own and operate the NEVI-funded EV charging stations. CTDOT anticipates releasing grant solicitations periodically, with criteria that will be developed to collect, evaluate, and award contracts transparently. Grant contracting language will include all applicable federal requirements and guidelines. CTDOT will emphasize achieving benefits for Justice40 Disadvantaged Communities (DACs) and outreach to small businesses as well as other interested parties. CTDOT will ensure this criterion is included in both the program development and the award selection process. Grant applications will be awarded through a transparent scoring and ranking process that CTDOT will develop following FHWA approval of this Plan.

For Phase 1, the solicitation process will inform prospective grant applicants to identify specific installation sites within CTDOT's ten identified EV zones and to work with property owners, utilities, and municipalities to complete the development of their application that meets the program's rigorous standards. In addition, the awardee will

be responsible for all federal requirements and guidelines and will work with CTDOT to ensure the project adheres to all environmental regulations.

To ensure ongoing operation and maintenance activities, CTDOT's grant solicitation will define operation and maintenance standards and requirements. CTDOT will require that awardees provide five years of continuous operation and maintenance for each charging port and that strict data reporting requirements must be met to guarantee reimbursement. It will also be documented within contract language that failure to meet any requirements set forth within the program will jeopardize project reimbursement. Efficient and effective deployment will be emphasized in the evaluation of applications.

For Phase 1, once all applications are scored, the highest ranked eligible application for each zone will be proposed for an award. CTDOT will develop grant agreement packages for proposed awardees. The grant agreement will include a defined Scope of Work, budget, schedule of deliverables, and terms and conditions. Agreements will require monthly calls and quarterly project reports to communicate progress and quickly address any issues that may arise. Reimbursement of the agreed amount (up to 80% of station project costs, pursuant to federal requirements) will occur no sooner than CTDOT determination of compliance with all requirements and confirmation that the station is in full operation. CTDOT is considering reserving a percentage of each award until after proof of minimum period of reliable operations and maintenance.

After the first round of projects is awarded, CTDOT will assess the Phase 1 grant solicitation and evaluate the installation and commissioning timelines to determine how to adjust the program strategy.

Table 3: Expected Timeline of NEVI Plan Development and Phase 1 Implementation

Activity	Date
Develop Plan Narrative	March through June 2022
Refine DCFC Gap Analysis	April through June 2022
Coordinate with DEEP- Compile Plan Data	Ongoing
Public Outreach (Webinars, one on one sessions, COG/MPO meetings etc.)	April & May 2022
Regional Outreach Efforts	May 2022
Draft Plan Recommendations	May and June 2022
Submit to DOT Mgmt. for Review/Approval	June-July 2022
Final Plan submission to Joint Office	by August 1, 2022
Notification from Joint Office Plan is Approved	Anticipated October 2022

Drafting of program procedures and protocols	Anticipated October 2022-Q1 of 2023
Evaluate Proposals and Include Projects into STIP/TIP	2023
Award Grants/Contract(s) for DCFC station for Phase 1 (Alt Fuel Corridors)	2023

Existing and Future Conditions Analysis

Although EV sales currently account for a relatively small percentage of overall vehicle sales in Connecticut compared to internal combustion engine (ICE) vehicles, the market is growing at a rapid pace. This growth is largely due to advances in battery technology, expanded vehicle range, increased model availability, and state policies and regulations to reduce emissions and incentivize EV adoption. The transition from ICE vehicles to EVs raises a variety of opportunities and challenges, including developing adequate charging infrastructure to meet consumers' charging needs, addressing increased electricity demand, maximizing the potential for more efficient use of the electric grid to lower electric rates for all ratepayers, and ensuring that low-income residents and underserved communities' benefit from transportation electrification.

Connecticut expects that future EV deployments will be driven by ZEV program manufacturer obligations (see table below). The minimum ZEV requirement for each manufacturer includes the percentage of passenger cars and light-duty trucks produced by the manufacturer and delivered for sale in Connecticut. Connecticut has adopted this California regulation pursuant to Connecticut General Statute 22a-174g[11]. The regulation also includes opportunities for compliance with transitional zero emission vehicles, which must demonstrate certain exhaust emissions standards, evaporative emissions standards, on-board diagnostic requirements, and extended warranties. Beyond 2025, the state expects deployments would be driven by the recently noticed CARB Advance Clean Cars II regulation requirements[12].

[11] Connecticut General Statute 22a-174g, Available at: https://www.cga.ct.gov/current/pub/chap_446c.htm#sec_22a-174g

[12] California Proposed Advanced Clean Cars II Regulations: All New Passenger Vehicles Sold in California to be Zero Emissions by 2035, Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii

Table 4: Zero Emission Vehicle (ZEV) Production Requirements[13]

Model Year	ZEV Requirement
2021	12%
2022	14.5%
2023	17%
2024	19.5%
2025 and later	22%

State Geography, Terrain, Climate, and Land Use Patterns

Connecticut is the second smallest and southernmost state in New England, with a total of 5,018 square miles of land mass that is 110 miles long and 70 miles wide, with 96 miles of general coastline. It is bordered by New York to the west, Massachusetts to the north, Rhode Island to the east, and Long Island Sound to the south. Within the central part of the state is the Connecticut River, which flows from north to south, and ultimately discharges into Long Island Sound. Other major rivers draining to the Sound include the Housatonic and Thames Rivers. Connecticut's terrain consists generally of coastal plains to the south, a central valley region which can be categorized as generally flat, and hills located in the northwest and northeast parts of the state. Although Connecticut is a relatively small state, it features a variety of landscapes, including mountains, open fields, and farmland in inland areas to coastal marshes and beaches along its southern coast. As such, the highest peak in the state is Bear Mountain, located in the northwest corner of the state, while many coastal land areas can be less than 20 feet above sea level.

Being a state located in the northeast region of the United States, Connecticut experiences four well defined seasons, with temperatures having the ability to range anywhere from below zero to over 100 Degrees Fahrenheit. However, on average, temperatures are historically mild, with only about 12 days per year when the temperature reaches over 90 degrees, and only about six days experiencing zero degrees or below. Connecticut experiences generally even precipitation patterns of rain and snowfall, with about one third of days seeing some amount of precipitation per year.

According to the National Oceanic and Atmospheric Administration (NOAA), Connecticut has been affected by 12 climate and weather disasters from 2010 to 2018. The most expensive of these disasters was Hurricane Sandy, which caused a total of $72.8 billion in combined damages to all states affected, including Connecticut.

[13] Zero Emission Vehicle (ZEV) Production Requirements, Available at: https://afdc.energy.gov/laws/4249

Warming oceans and melting ice sheets are also causing sea level rise on Long Island Sound directly affecting the Connecticut shoreline and low-lying terrain. In the last 100 years the waters of Long Island Sound have risen by nearly a foot, and that pace is accelerating. Under the state-adopted sea level change scenario of 20 by 50 (20 inches by 2050), a 100-year flood today will be more like a 23-year flood. The Sea Level Affecting Marshes Model (SLAMM) was applied to Connecticut's shoreline to better predict flooding along the coastal areas of Connecticut. The results of the model indicate that some coastal area roads that currently flood only a few times a year will flood more regularly, in some cases as much as at least once a month, by mid-century.

State Travel Patterns

Connecticut has 346 miles of National Highway System interstate highways, 4,137 miles of state-maintained routes and roads and approximately 21,556 miles of public roadways. The New York-to-New Haven corridor is home to three of the state's largest cities—Stamford, Bridgeport, and New Haven. The transportation network in this corridor is a tight knit concentration of interstate routes, state highways, parkways, rail lines, and ports, most notably Interstate 95 and the Merritt Parkway which parallel the coast. State Routes 7 and 8 and other major roads connect this coastal corridor to the nearby cities of Danbury and Waterbury, approximately 30 miles inland. Despite the density of transportation assets, this is Connecticut's most congested corridor.

The New York to Hartford corridor shares a long expanse of border with New York. It includes a dynamic mix of densely populated urban and suburban communities along I-84 and rural townships to the north. A network of state highways (principally State Routes 7 and 8) connect the corridors largest cities, Danbury, and Waterbury, to the coastal cities of Stamford, Norwalk, Bridgeport, and New Haven. The strong transportation assets of this corridor link Connecticut to the national economy. They also link the Danbury, Waterbury, and Hartford economic regions.

The north-south Hartford to New Haven corridor includes two of the most populous cities in the state, Hartford, the state capital, and New Haven, the busiest port between Boston and New York. The corridor also includes New England's second largest airport, Bradley International Airport. The corridor developed along the Connecticut River Valley, which links New Haven and Hartford, to Springfield, Massachusetts and other markets in Vermont, New Hampshire, and Canada, to the north. I-91 and the Hartford Line are the transportation backbone of the corridor and connect the region to significant transportation assets in Massachusetts—I-90. I-84 bisects the corridor from west to east; it links Hartford to the New York City metro area to the west and Boston to the east.

Eastern Connecticut borders Massachusetts in the north and Rhode Island to the east. The corridor includes a significant manufacturing sector dominated by General Dynamics Electric Boat in Groton and a large tourism industry comprising Mystic Seaport, Mystic Aquarium, major casinos, and coastal recreation. I-95 and the Northeast Corridor rail line link this corridor to New Haven and New York City to the west and Providence and Boston to the east. I-395, which traverses the corridor north-south, links eastern Connecticut's largest cities (New London and Norwich) to Worcester, Massachusetts and to I-90. The strategy for this region reflects its less urbanized nature and the importance of tourism and manufacturing.

CTDOT is one of the few state DOTs in the nation that directly owns and operates or subsidizes nearly all the state's public transportation services. Public transportation in Connecticut consists of commuter rail service, intercity passenger rail service, urban public transportation, and rural transportation providers. There are numerous providers of bus, paratransit, and commuter and intercity passenger rail service in Connecticut; however, there are still areas where service is lacking or inadequate to meet demand. CTfastrak, a bus rapid transit (BRT) system operating in central Connecticut, opened in 2015. In addition to bus, van, and rail services, the state provides grants, assistance, and incentives for other commuter programs, including telecommuting and ridesharing.

Connecticut has experienced slow population growth and this trend is projected to continue over the next 30 years. Much of the state's population is concentrated in the central and southwestern parts of the state, paralleling I-95 and I-91 and centered in the cities of Hartford, Waterbury, New Haven, Stamford and Bridgeport.

AFC-Corridor Networks (Pending and Ready)

Alternative Fuel Corridors (AFC) are critical to *Connecticut's Charging Ahead Plan*. Connecticut has a long history of supporting alternative fuel projects to improve public access to alternative motor fuels, improve air quality and reduce greenhouse gas emissions. Starting in 2016 and working with planning partners such as Connecticut Clean Cities, CTDOT has worked to nominate sections of interstate highways to the Electric Alternative Fuel Corridors network.

CTDOT nominated eight corridors (I-84, I-91, I-95, I-395, US-44/CT-2, CT-8, CT-9, & US-7) for inclusion in the Alternative Fuel Corridor network during FHWA's initial solicitation in 2016, but not all corridors met the AFC criteria at that time. Connecticut did not nominate any additional corridors during FHWA's round 2 (2017) or round 3 (2018) nomination cycles. During FHWA's round 4 (2019) nomination cycle, Connecticut nominated I-91 as the state's first signage ready corridor designated for hydrogen. Interstate 91 serves as Connecticut's, as well as Western New England's, primary North/South route. Connecticut anticipates the corridor to be designated as signage

ready upon the re-opening of a hydrogen fueling station in Hartford, currently awaiting upgrades.

During FHWA's round 5 (2020) nomination cycle, US-7 was designated as EV signage ready for the section between the I-95 interchange in Norwalk to New Milford. The remaining section of US-7 north of New Milford to the Massachusetts border was designated as EV signage pending until further alternative fueling station infrastructure were to become operational. Connecticut did not put forward a 2022 Round 6 AFC nomination to FHWA.

As of 2022, FHWA has designated the following Interstate highways as achieving **"signage-ready"** status for having sufficient EV charging stations to warrant installation of highway signage:

- I-84 (NY border to MA border)
- I-91 (New Haven to MA border)
- I-95 (NY border to RI border)
- I-395 (Waterford to MA border)
- US-7 (Norwalk to Milford, CT)

Three "signage-ready" EV corridors above are also included in larger multi-state corridors:

- I-84 (Middletown, NY to CT/MA border)
- I-91 (New Haven, CT to Norwich, VT)
- I-95 (Augusta, ME to Petersburg, VA)

Connecticut currently has one **"signage pending"** EV Corridor:

- US-7 (Milford, CT to MA border) as indicated by the red dotted line in Figure 1 below.

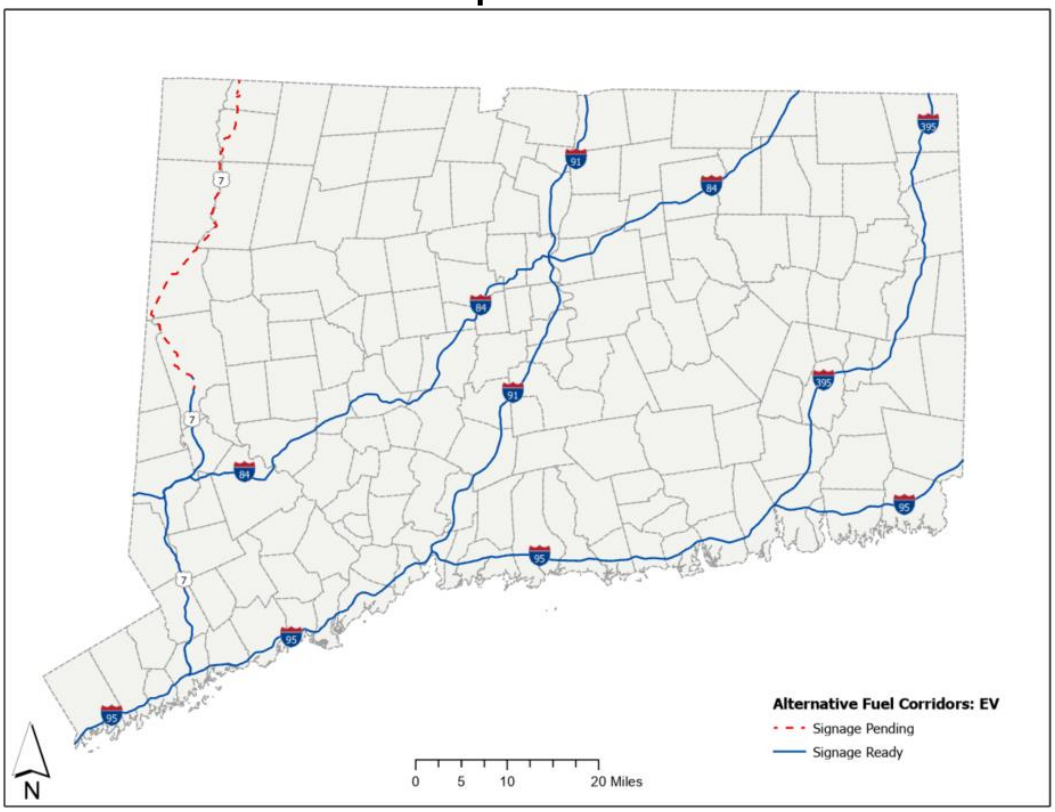
When the February 2022 NEVI guidance was released, the FHWA opened a Round 6 nomination process that set new parameters that defined an FHWA Electric Alternative Fuel Corridor (see Appendix: FHWA Round 6: Electric AFC Parameters RE: Public DC Fast Charging) and allowed states, if they so choose, to nominate additional FHWA AFCs. CTDOT created an inventory of the state's Direct Current (DC) fast charging infrastructure and found that the majority of Connecticut's current signage-ready AFCs did not meet the new parameters set by Round 6 of the AFC program. Connecticut did not proceed with additional AFC nominations in 2022 to allow more flexibility in program development in future years.

The Plan for Phase 1 of Connecticut's NEVI Plan is to prioritize fast charging build-out of the state's existing Electric Alternative Fuel Corridors (Figure 3), and we have been in

close contact with our neighboring states to bridge connectivity gaps at the border. CTDOT received input from many stakeholders during our NEVI outreach sessions that there is an interest in nominating additional AFCs in the future (Route 6, Route 8, Route 9, and the Merritt Parkway) and CTDOT plans to evaluate the nomination of additional corridors once all the existing Electric AFCs are built out.

See Appendix for Existing Locations of Charging Infrastructure Along AFCs (qualifying and non-qualifying).

Figure 3: FHWA Alternative Fuel Corridors: Electric Charging
April 2022



Known Risks and Challenges

Connecticut has gained experience in building out charging infrastructure through CTDEEP's EVConnecticut EVSE incentive programs that provided incentives to businesses, municipalities, and other entities to build Level 2 chargers. In addition, PURA's EV Charging Program, which launched in January 2022, encompasses both Level 2 and fast charging expansion goals for the utilities to achieve. CTDOT intends to build upon these existing efforts and work with CTDEEP to develop strategies to address the NEVI requirements and the associated challenges. CTDOT recognizes that supporting data, resources, and guidance from other state and federal partners are crucial to the success of the Plan.

Feedback from CTDEEP, utilities, charging manufacturers, and other stakeholders involved in the installation of charging infrastructure identified ongoing equipment, labor, transformer, and microchip shortages as having the potential to lengthen timelines and limit private sector capabilities. In addition to challenges associated with supply chain shortages and disruptions, there are ongoing concerns over rising inflation, construction costs, and labor shortages that could lead to increased installation costs or delayed completion.
In addition, CTDOT heard from stakeholders that a significant challenge for the state would be ensuring the funded EV chargers are reliable and viable for many years to come and not become stranded assets. We agree that this is one of the challenges – ensuring that chargers in the network continue to be functioning with at least 97 percent uptime over the coming years. CTDOT's grant solicitation process and contracting will be designed to enable the state to oversee project progress and maintain requirements stipulated in the NEVI guidance.

Stakeholder input received during CTDOT's Spring listening sessions highlighted the potential difficulty for many entities to front the capital costs for procuring and installing the charging equipment in order to participate in the NEVI program, which is administered as a reimbursement program. Recognizing this challenge, CTDOT has coordinated with the Connecticut Green Bank, a quasi-state organization with a mission to attract private investment into Connecticut's clean energy economy, to identify programs within their organization that potential applicants to the NEVI program could consider when exploring possible EVSE designs.

- The Green Bank's Commercial Property Assessed Clean Energy (C-PACE) Program is available to support financing for EV charging on a variety of commercial property types, either by itself or combined with energy-saving improvements. This innovative program uses a municipal benefit assessment mechanism to secure financing with a payment obligation that ties to a benefitted property rather than to a borrower, providing the ability to improve a building's cash flow and amenities without going out-of-pocket. As of the recent passage of Public Act 22-6, EVSE may be financed as a standalone improvement through C-PACE[14].
- The Green Bank also has an open, rolling Request for Proposals (RFP) for Green Bank Capital Solutions[15], through which project developers and capital providers

[14] Connecticut Green Bank's Commercial Property Assessed Clean Energy website accessed on July 28, 2022 from https://www.cpace.com/

[15] Connecticut Green Bank's Open Request for Proposals for Green Bank Capital Solutions website accessed on July 28, 2022 from https://www.ctgreenbank.com/wp-content/uploads/2020/07/Open-RFP-for-Green-Bank-Capital-Solutions.pdf

may solicit the Green Bank's participation to increase the impact of a given investment. This is targeted towards proposals with financing requirements that are not met by existing Green Bank financing programs. Examples of investments are senior and subordinate loans or participation in others' loans; credit enhancements like loan guarantees and loss reserves; equity; and access to tax-exempt bonding powers for qualified activities. The Open RFP is geared toward projects with a financing requirement of $250,000 or greater from the Green Bank, but smaller sized projects could be considered.

The federal guidance directs states that EVSE funded by NEVI federal funds must be installed and maintained by a contractor with the appropriate license and who is Electric Vehicle Infrastructure Training Program (EVITP)[16] trained and certified. According to the EVITP website, the training is available online and on-demand, with EVITP examinations occurring in person or online. However, the availability of licensed electricians/electrical contractors, EVITP-trained and certified workforce, and other critical occupations in this workforce sector in meeting the increased demand is uncertain. To ensure Connecticut has a workforce ready for installing and maintaining the EVSE, CTDOT is working with Connecticut Clean Cities and the DOL/OTP to identify and address the workforce challenges associated with EVSE installation and operation.

CTDOT recognizes the challenges ahead and plans to provide criteria within the state's competitive grant program that helps address these concerns. CTDOT anticipates that by working with Phase 1 and Phase 2 grant awardees and our planning partners, solutions will be identified to these concerns and help build out a reliable and convenient charging network for all.

EV Charging Infrastructure Deployment

CTDOT expects to partner with site host owner/operators primarily within the private sector to develop Connecticut's EV charging network. Per the Joint DOT/DOE guidance, Phase 1 of the state's Plan will focus on enhancement of FHWA corridor-ready and pending electric AFCs. Once Phase 1 fast charging installation is completed on the AFCs, CTDOT will shift focus to other parts of the state such as rural/urban communities to continue deployment of fast charging infrastructure and Level 2 chargers to the extent permitted under the NEVI program.

[16]Electric Vehicle infrastructure Training Program (EVITP) website accessed on July 28, 2022 from https://evitp.org/training/

Contracted entities will be required to develop stations that incorporate specific NEVI guidance and the requirements of the minimum standards rulemaking, and to further Connecticut's EV charging goals (articulated above).

Typical specifications for DC fast charging locations are likely to include:

- CCS Connector (industry standard)
- 150-350kW Max Power (higher power acceptable assuming costs are not prohibitive)
    - 400-800 volts, 150-600 amps, 3-phase
- Shared circuits provide a minimum of 150kW per vehicle
- Minimum 4 DCFC units per station
- Plans/futureproofing to include additional chargers
- Open 24/7 year-round and publicly available
- Adequate lighting, restrooms, ADA compliant
- Signage directing users to charging locations
- Applicant required to report usage data per location to CTDOT
- Price transparency at the charging location
- Station location, operational status, and cost/fees published online
- EV charging stalls marked accordingly
- Payment by contactless payment/phone/app/card and Plug and Charge (ISO 15118) but would prefer a 24x7 phone number
- Payment instructions must provide multilingual access and accessibility for people with disabilities
- Open Charge Point Protocol & Interface
- All equipment must be certified by an Occupational Safety and Health Administration nationally recognized testing laboratory

Other criteria being considered:

- Pull-through capacity for at least one space, should be available for vehicles pulling trailers or RV campers.
- A minimum length charge cable length (15 foot)
- Distributed energy resources that provide electrical capacity or energy
- Close proximity to numerous amenities
- For Phase 2, Level 2 charging CTDOT expects to require specifications such as: J1772 Connector (industry standard)
    - 6-10 kW Max Power
        - ❖ 240 volts, 15-50 amps, single phase
    - All AC Level 2 EVSE must be ENERGY STAR certified

As required by federal guidance, CTDOT will develop a framework to collect and evaluate station usage information from equipment owners and adjust the network as needed based on this information.

CTDOT places resilience as a top priority within our NEVI project development. When evaluating locations for potential NEVI funding, CTDOT will utilize the Federal Emergency Management Agency's National Flood Hazard Layer as a determining factor of the proposed infrastructure's resiliency. Areas outside of a Special Flood Hazard Area, defined as the area that will be inundated by a flood event having a 1-percent chance of being equaled or exceeded in any given year, will be placed at a higher consideration than those within.

Funding Sources

Funding for the NEVI Plan is based on federal fiscal year (FY) budget cycles that start on October 1 and end on September 30th of the following year. As the NEVI program is a new federal program under the IIJA, the rollout of the program was contingent on corresponding federal guidance to provide parameters for how the funds could be spent. Fortunately, NEVI funds can be rolled over into the corresponding fiscal years so there is not a requirement that FY22 funds need to be obligated by September 30 of 2022.

Per FHWA guidance, the NEVI program is to be administered as a Federal-aid highway program under Title 23, United States Code Chapter 1, and federal funds will be capped at 80 percent of project costs with a minimum of 20 percent non-federal match covered by grant recipients.

CTDOT expects to develop a program where the applicants (e.g., private sector parties) will provide at least the 20 percent cost share required to fund the non-federal share of the NEVI formula program, such as:

- Private funding, including lender/investor financing
- Utility administered EV Charging Program
- Other non-federal, and non-CTDOT, public or quasi-public funding sources/programs

Based on previous state-run EVSE incentive programs, private investment from an EVSE developer or site host in a project helps to ensure the success of both their business investments and has led to a more reliable product.

CTDOT expects that awardees will charge customers to use the charging stations and be responsible for maintenance of the infrastructure going forward. CTDOT understands that per the FHWA guidance, site hosts will be able to determine reasonable kW/hr

pricing for the electricity and use of the equipment and, per the guidance, the vendor may keep charging station revenues subject to federal requirements on program income or revenue.

Table 5: Expected Phase 1 Funding Levels

Charging Capacity	% of Project Covered	Maximum Funding Level by Applicant*	Maximum Number of Ports Funded per Application
150kW	To be determined up to 80%	To be determined	4 with opportunities for futureproofing
Over 150kW	To be determined up to 80%	To be determined	Proposals evaluated site by site

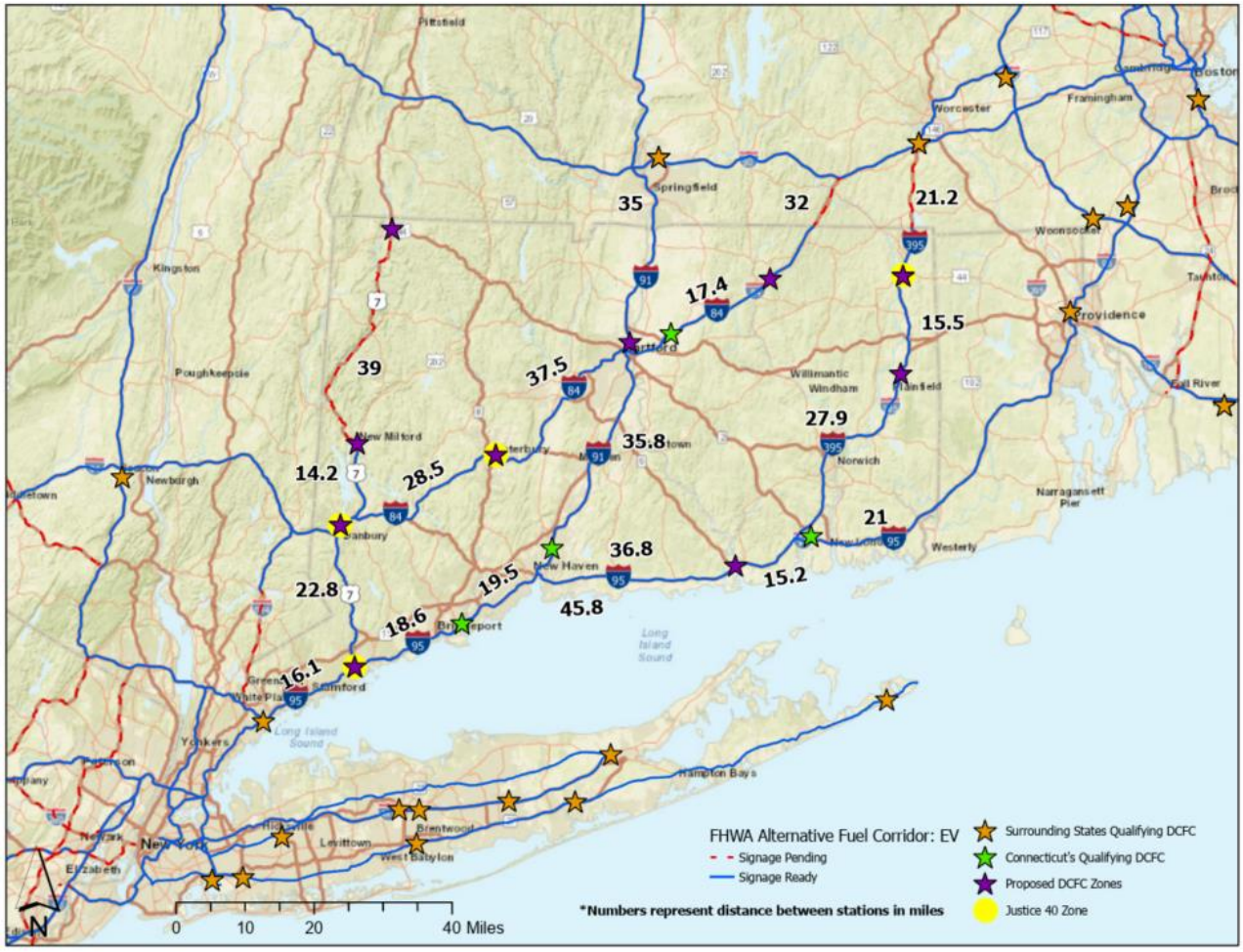
*Represents maximum funding levels by applicant type per port.

2022 Infrastructure Deployments/Upgrades

CTDOT examined existing charging locations along our designated Electric Alternative Fuel Corridors using the Alternative Fuel Data Center application and applied Round 6 requirements to identify stations that met all the federal NEVI requirements. Coverage gaps greater than 50 miles were examined for proximity to commercial zones, annual average daily traffic, proximity to Justice40 Disadvantaged Communities (DACs), suitable electrical supply, and the ability for chargers to provide coverage to more than one interstate/state route.

Input received during CTDOT's Spring Stakeholder listening sessions indicated that stakeholders would support, when feasible, placing fast chargers less than 50 miles between hubs, especially if there was an ancillary benefit to state routes in addition to interstate travel. CTDOT took that feedback under advisement when selecting zones (Figure 4) for Phase 1 of the NEVI program.

Figure 4: NEVI Phase 1: Alternative Fuel Corridors Proposed DCFC Zones (July 2022)



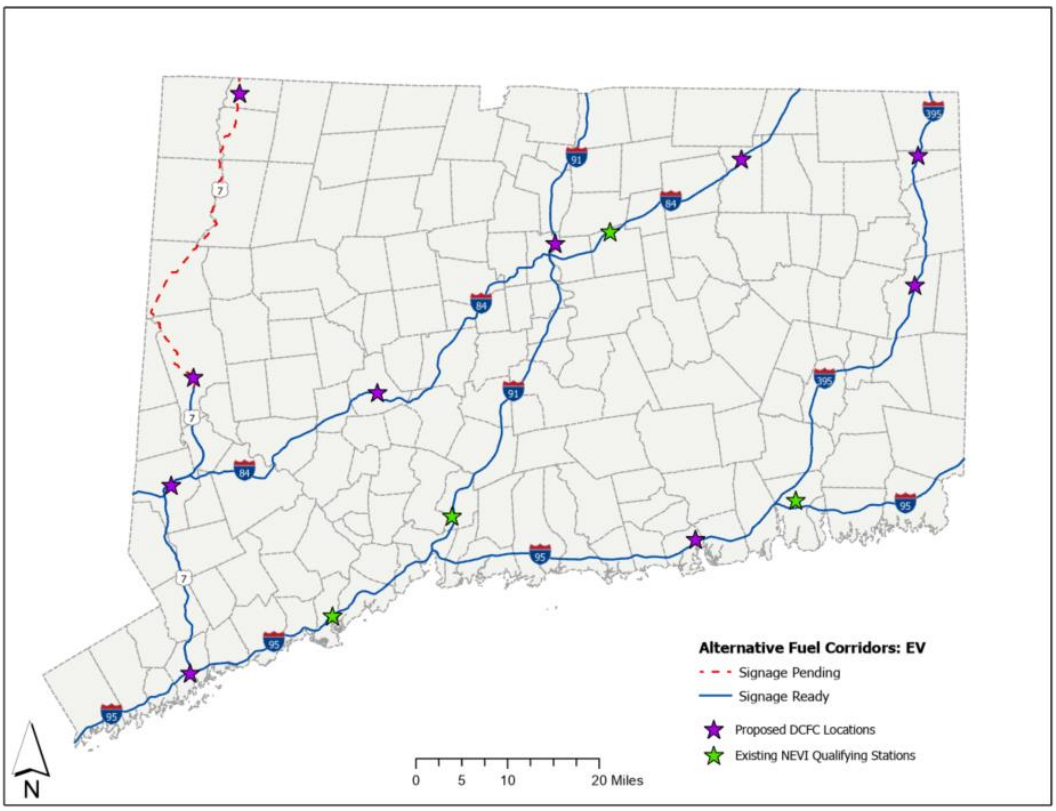
Upgrades of Corridor Pending Designations to Corridor Ready Designations

Since 2016, CT has successfully designated five EV Alternative Fuel Corridors (AFCs), totaling over 350 miles of roadway throughout the state. The designation includes interstates 95, 91, 84, 395, and part of US Route 7. Connecticut's one EV Pending Corridor is the Northern section of US Route 7 (New Milford to CT/MA border), indicated by the red dotted line on the map below. There are currently not enough fast chargers North of New Milford on Route 7 to meet FHWA's Alternative Fuels Corridor program requirements.

With Phase 1 of NEVI funding being awarded in 2022-23, Connecticut proposes to ensure the Route 7 corridor meets the new FHWA NEVI requirements and can transition from corridor-pending to corridor-ready. CTDOT has identified three potential zones for Phase 1 build-out of the NEVI program that will impact Route 7's AFC designation. CTDOT defines zones as predetermined exit numbers that CTDOT proposes as areas that would be eligible for funding under the NEVI program requirements. We will be

selecting NEVI grant applications for confirmed zones based on sites being within a one-mile drivable distance from the AFC exit ramp. We will also be prioritizing applications by how many criteria points an application satisfies. To build out the Route 7 corridor, we propose a zone in Danbury off exit number 5 (this exit meets the EJ Census Block Group (2020) and the Justice 40 criteria; location may change depending on the outcome of a Planning and Environmental Linkages (PEL) study currently underway in this area) and another zone in New Milford and also in North Canaan at the junction of Route 7 and Route 44. Once these zones are built out, which we anticipate happening in 2023-2024, then Route 7 will transition from corridor-pending to corridor-ready designation under FHWA's Alternative Fuel Corridor Program. Once the buildout of Route 7 EVSE infrastructure is complete, Connecticut will have no remaining EV Alternative Fuel Pending-Corridors.

Figure 5: Phase 1 AFC Expected Buildout



Increases of Capacity/Redundancy along Existing AFC

Connecticut has historically relied on private sector development of DC fast charging infrastructure throughout the state and has designated AFCs based on operational charging infrastructure that met FHWA criteria and was publicly available. When the new NEVI guidance was released, CTDOT inventoried all DCFCs within the state to see what existing stations met the new NEVI or Round 6 AFC criteria and found several gaps in

the state's EV network. In support of the federal government's goal to build a reliable, fast charging network nationwide, CTDOT sees an opportunity to enhance CT's fast charging network by increasing redundancy along many of CT's corridor-ready corridors.

CTDOT has identified ten zones throughout the state for consideration as priority areas for Phase 1 build-out of the NEVI program. Each zone would satisfy many of the federal guidance outlined criteria making them eligible for NEVI funding. These zones may also be optimal locations for EV owners, future AFC nominations, and equitable locations based on Census EJ Communities and Justice40 Disadvantaged Communities.

I-395 Locations:

Putnam – I-395/U.S. Route 44 intersection at exit 47 off I-395 NB/SB
Utility: Eversource Energy

This zone lies at a major intersection between I-395 and U.S. Route 44. U.S. Route 44 extends the entire East/West length of the state from the CT/RI border in Putnam to the CT/NY border in Salisbury, passing through the state's capital, Hartford. U.S. Route 44 has gained interest towards an AFC nomination for future FHWA rounds, and as such, this location may be optimal for future-proofing possible additions to CT's AFC list. The town of Putnam is also an EJ Distressed Municipality, according to 2020 Census data. This zone also encompasses a Justice40 Disadvantaged Community. The proposed zone is 8.5 miles from the Massachusetts border to the North and 21.2 miles to a currently operational DCFC charging location in Auburn, MA. The zone is also 15.5 miles from the proposed zone in Plainfield to the South.

**CTDOT is considering the Plainfield I-395 exit 32 location and the Plainfield I-395 NB/SB Plaza and will allow the application process to determine which location gets awarded.*

Plainfield – I-395 exit 32
Utility: Eversource Energy

This zone lies off I-395 NB/SB exit 32 in Plainfield and connects to State Route 14, East Main Street. The town of Plainfield has been identified as an EJ Distressed Municipality according to 2020 Census data. This proposed zone would also complete AFC I-395 requirements by placing a DCFC charging location 15.5 miles from the proposed zone in Putnam to the North and 27.9 miles from the existing DCFC location in Waterford to the South.

Plainfield – I-395 NB/SB Service Plaza
Utility: Eversource Energy

This zone lies on the service plazas located at mile marker 34.8, I-395 NB/SB in Plainfield. The town of Plainfield has been identified as an EJ Distressed Municipality according to

2020 Census data. This proposed zone will also complete AFC I-395 requirements by placing a DCFC charging location 12.6 miles from the proposed zone in Putnam to the North and 34.3 miles from the existing DCFC location in Waterford to the South.

I-91 Locations:

Hartford – I-91 exit 33
Utility: Eversource Energy

This zone lies off I-91 NB/SB exit 33 in Hartford. The city of Hartford has been designated as an EJ Distressed Municipality according to 2020 Census data. This central zone is 18 miles from the Massachusetts border to the North and 35 miles to a currently operational DCFC charging location in Chicopee, MA. The zone would also be 35.8 miles to a NEVI qualifying DCFC charging location to the South, operational in North Haven, CT. There are currently three existing DCFC locations within this zone, which have the potential to be upgraded to meet NEVI program requirements. This proposed zone would complete the NEVI requirements for the I-91 AFC.

I-95 Locations:

Old Saybrook – I-95/State Route 9 Intersection off I-95 exit 69 NB/SB
Utility: Eversource Energy

This zone lies at a major intersection between I-95 and CT State Route 9. CT State Route 9 plays a vital role as a North/South connector between I-95 to the South and I-84 to the North. The highly utilized route also intersects I-91, connecting numerous communities to economic centers throughout the state. CT State Route 9 has gained interest towards an AFC nomination for future FHWA rounds, and as such, this location may be optimal for future-proofing possible additions to CT's AFC list. The zone would be 15.2 miles from a NEVI qualifying DCFC charging location to the North, operational in Waterford, CT. Additionally, the proposed zone would be 45.8 miles from a NEVI qualifying DCFC charging location to the South, operational in Stratford, CT. An additional NEVI qualifying DCFC charging location is located off AFC I-91, just 36.8 miles from the proposed zone as well. Zone may change depending on the outcome of a PEL study currently underway in this area. If the outcome of the PEL study effects the Plan, we will update our grant solicitation to select another zone along the corridor.

Norwalk – I-95/U.S. Route 7 Intersection off I-95 exit 15 NB/SB
Utility: South Norwalk Electric and Water

This zone lies at a major intersection between I-95 and U.S. Route 7, both being designated AFC for EV vehicles, in Norwalk. The zone encompasses three EJ block group communities according to 2020 Census data, as well as three unique Justice40 Disadvantaged Communities. The zone is located 16.1 miles from the New York border to the South and 18.6 miles from a NEVI qualifying DCFC charging location to the North, operational in Stratford, CT. Following U.S. Route 7, the zone is located 22.8 miles from

the proposed zone in Danbury to the North. There are currently three existing Level 2 locations and one existing DCFC location within this zone, which have the potential to be upgraded to meet NEVI program requirements.

I-84 Locations:

Willington – I-84 exit 71
Utility: Eversource Energy

This zone lies off I-84 EB/WB exit 71 in Willington. This zone is located 10.5 miles from the Massachusetts border to the East and 32 miles to a currently operational DCFC charging location in Auburn, MA. The zone would also be 17.4 miles to a NEVI qualifying DCFC charging location to the West, active in Manchester, CT. This zone also encompasses a highly utilized truck stop location known as "TA Travel Center."

Waterbury – I-84 WB exit 22/EB exit 23
Utility: Eversource Energy

This zone lies off I-84 WB exit 22/EB exit 23 in Waterbury. The city of Waterbury has been identified as an EJ Distressed Municipality according to 2020 Census data. This zone also encompasses four unique Justice40 Disadvantaged Communities. The zone would be 37.5 miles to a NEVI qualifying DCFC charging location to the East, operational in Manchester, CT. The proposed zone would also be 28.5 miles from the proposed zone in Danbury, CT, to the West. There are currently four existing Level 2 locations within this zone that have the potential to be upgraded to meet NEVI program requirements.

Danbury – I-84 exit 5 (also U.S. Route 7)
Utility: Eversource Energy

This zone lies off I-84 EB/WB exit 5 in Danbury. This section of I-84 overlaps with U.S. Route 7, a designated AFC, and would fulfill both routes' NEVI Phase 1 build-out requirement. The zone encompasses an EJ block group community, according to 2020 Census data. This zone also encompasses three unique Justice40 Disadvantaged Communities. The zone is located 5.5 miles from the New York border to the West, and 28.5 miles from the proposed zone in Waterbury, CT to the East. There is currently one existing Level 2 location within this zone which has the potential to be upgraded to meet NEVI program requirements. Zone may change depending on the outcome of a PEL study currently underway in this area. If the outcome of the PEL study effects the Plan, we will update our grant solicitation to select another zone along the corridor.

U.S. Route 7

North Canaan - U.S. Route 7/U.S. Route 44 Intersection
Utility: Eversource Energy

This zone lies at a major intersection between U.S. Route 7 and U.S. Route 44 in North Canaan. U.S. Route 44 extends the entire East/West length of the state from the CT/RI

border in Putnam to the CT/NY border in Salisbury, passing through the state's capital, Hartford. U.S. Route 44 has gained interest towards an AFC nomination for future FHWA rounds, and as such, this location may be optimal for future-proofing possible additions to CT's AFC list. The zone also encompasses an EJ block group community, according to 2020 Census data. The zone is located just 1.7 miles from the Massachusetts border to the North. The proposed zone would also be 53.2 miles from the proposed zone in Danbury, CT, to the South.

New Milford - U.S. Route 7/U.S. Route 202 Intersection
Utility: Eversource Energy

This zone lies at the intersection between U.S. Route 7 and U.S. Route 202 in New Milford. U.S. Route 202 plays a critical transportation role, extending from the CT/NY border, connecting U.S. Routes 7 to U.S. Route 44, and continuing to the CT/MA border to the North. As such, this location may be optimal for future-proofing possible additions to CT's AFC list. The zone also encompasses an EJ block group community, according to 2020 Census data. The zone is located 39 miles from the proposed zone in North Canaan, CT to the North and 14.2 miles from the proposed zone in Danbury, CT, to the South. There is currently one existing DCFC location within this zone which has the potential to be upgraded to meet NEVI program requirements.

**Additional proposed locations fulfilling U.S. Route 7 build-out have been included in the aforementioned sections (I-84 Danbury & I-95 Norwalk)*

Electric Vehicle Freight Considerations

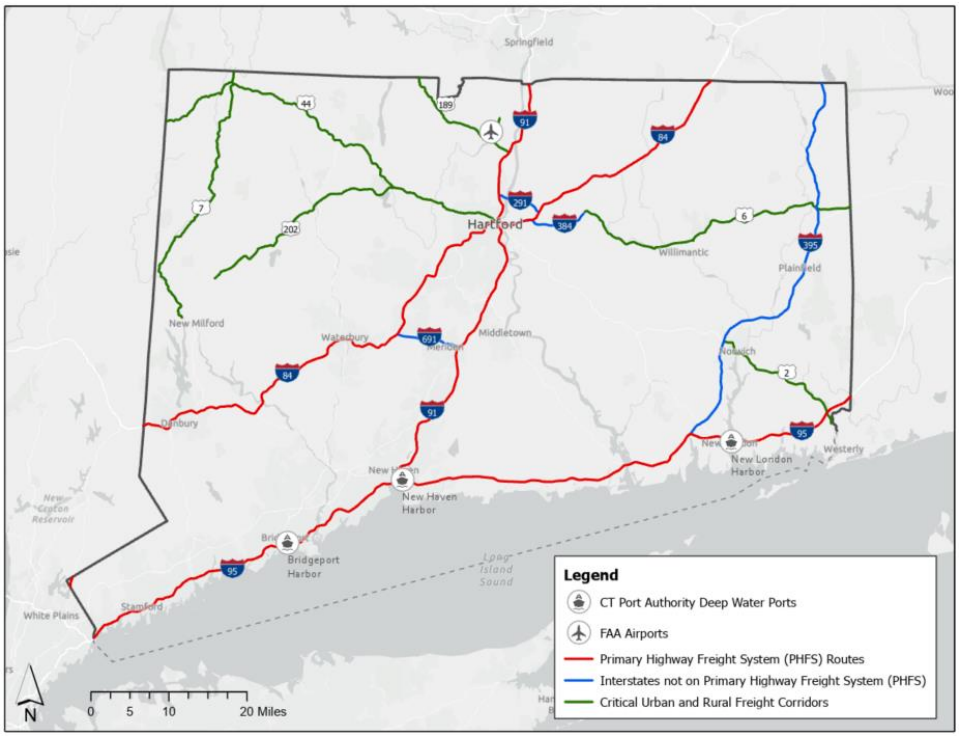
Connecticut's freight system is comprised of public and privately-owned infrastructure made up of roads, rails, ports, and airports; almost entirely operated by the private sector. Every business and resident in Connecticut depend on the freight transportation system for commodities used daily. People have relied on the convenience of ordering something online and receiving it within a couple of days or perhaps even several hours of placing an order. Yet, freight transportation requires significant energy expenditures to move large quantities of goods quickly and over long distances. Tractor-trailers specifically contribute significantly to mobile-source CO2 emissions by traveling relatively long distances, carrying heavy loads, and using higher-carbon content diesel fuels. Recent data shows that nearly 91 percent of the freight that travels to, from, or through Connecticut does so by truck. That truck traffic brings congestion and contributes to air quality concerns for health and the environment.

In response to emerging trends and technologies in the medium and heavy duty (MHD) sector, Connecticut has begun planning to support MHD fleets moving into the electric

space. The increased market penetration of MHD EVs is expected to create greater demand for and consequent investment in Connecticut's EV charging network. Additional infrastructure will be necessary to support the introduction of long-haul HD EVs designed for and destined to travel the interstates through Connecticut.

In preparation for the electrification of the MHD sector, CTDOT has included a specific goal in the state's Freight Plan, currently being drafted, that focuses on equity, environmental protection, and livability. The objective associated with that goal is to mitigate freight movement impacts on communities located near freight facilities or freight corridors and reduce freight transportation-related greenhouse gas emissions by increasing electric vehicle charging and alternative fueling infrastructure. Also, as part of the analysis for the Freight Plan, the state has identified freight corridors that are critical urban freight routes and critical to rural freight delivery. These maps will be helpful to the state as we begin to explore where we should prioritize fast charging buildout for the MHD sector.

Figure 6: Connecticut's Freight Network



As part of the state's Freight Plan development, CTDOT has reached out to stakeholders about their planning around the adoption of alternative fuels such as electricity. CTDOT has also actively participated in freight-related workgroups that follow freight electrification news and technology. CTDOT is closely monitoring for the ramp up of commercial MHD fleet electrification, and in preparation for the MHD EV wave, Connecticut has aligned itself with regional partners working to support the

advancement of MHD fleet electrification efforts. Connecticut is one of the 14 states, along with the District of Columbia, that has signed a Memorandum of Understanding (MOU) to advance the market and use of electric MHD vehicles. This MOU provides that 100 percent of all new MHD vehicle sales (including large pickup trucks and vans, delivery trucks, box trucks, and long-haul delivery trucks) be zero-emission vehicles by 2050, with an interim target of 30 percent ZEV sales by 2030.

The Connecticut state legislature has also shown support of advancing MHD fleet electrification. During the Spring 2022 session, the legislature passed An Act Concerning the Connecticut Clean Air Act[17] which creates a voucher program, to be managed by CTDEEP, to help electrify Class 5 to Class 13 FHWA classified vehicles and Class 3 to Class 8 school buses. CTDEEP plans to prioritize funding for projects that maximize air pollution reductions in environmental justice communities, and funds will help fleets purchase vehicles and install electric vehicle charging infrastructure for qualifying vehicles. Additionally, PURA has opened proceeding (Docket No. 21-09-17[18]) to explore solutions to advance ZEV bus and MHD fleet electrification within the state, and CTDOT and CTDEEP are actively participating in these docket proceedings.

The momentum in Connecticut around advancing MHD fleet electrification is growing. Connecticut anticipates that NEVI funding may be used in the future to help augment some of the efforts already underway to help build out charging for the MHD sector within the next five years. Many infrastructure challenges associated with MHD charging will have to be addressed before Connecticut moves forward to use NEVI funds for the MHD sectors. There needs to be a national standard outlet/plug in place for these vehicles to help ensure that the equipment that is installed can be used by all makes and models of the MHD sector and that the implications to the electric grid are understood.

Public Transportation Considerations

Connecticut is committed to working towards converting the diesel bus fleet (600 plus vehicles) to battery-electric buses (BEB) by 2035. As part of the state's initiative to electrify the bus fleet, CTDOT has also begun installing BEB chargers within depot

[17] Public Act No. 22-25. An Act Concerning the Connecticut Clean Air Act accessed on July 28, 2022 https://www.cga.ct.gov/2022/act/pa/pdf/2022PA-00025-R00SB-00004-PA.pdf#:~:text=Public%20Act%20No.%2022-25%20AN%20ACT%20CONCERNING%20THE,and%20House%20of%20Representatives%20in%20General%20Assembly%20convened%3A?msclkid=a9cb6e0acfa511ec87e86000f19b2a7f

[18] PURA Docket No. 21-09-17 https://www.dpuc.state.ct.us/dockcurr.nsf/(Web+Main+View/All+Dockets)?OpenView&StartKey=21-09-17

facilities. The transition to fully BEB will be instrumental in helping to advance the electrification of many of the on-demand and paratransit vehicles in the future because, in most cases, these vehicles are dispatched from the same depots or hubs as the transit buses. The user case for public transportation EV charging is to charge at the bus garages/depot facilities, typically overnight when the vehicles are generally not in use. These facilities are not open to the public for other vehicle owners to charge.

CTDOT is currently working in conjunction with the state's six CTtransit divisions, 11 transit districts in addition to the 22 bus service providers that provide dial-a ride, express bus, and other services to extend the reach of services and facilitate the expansion of the state's micro-transit or on-demand services throughout the state. In the Spring of 2022, the Greater Hartford Transit District was awarded a $250 thousand-dollar Federal Transit Administration "Areas of Persistent Poverty" grant to install charging infrastructure and to purchase paratransit electric Ford Transit vehicles. Limitations in procurement options have limited electrification of most on-demand and paratransit services but CTDOT has begun performing cost estimates for installing charging for these vehicles at depots across the state. In addition, both the Norwalk and the Estuary Transit District ran electric on-demand pilot projects within Connecticut. Later this year (2022), as part of an upcoming Request for Proposal, CTDOT plans to prioritize additional electric vehicle micro-transit pilot projects. The state anticipates exploring opportunities to build on the lessons learned within these pilots to help encourage more paratransit and micro-transit fleets in the future to consider moving towards electrification.

CTDOT is actively engaged and plans to work with ridesharing companies operating in Connecticut to understand their operational needs and challenges as they explore incorporating electric vehicles into their fleets. CTDOT anticipates that these conversations will be ongoing and informative to CTDOT's NEVI planning over the next several years.

FY23-26 Infrastructure Deployments

To support the expansion of its public charging network, Connecticut will continue to identify key destination locations for EVSE installation coincident with Connecticut's efforts to fill infrastructure gaps. Travel and tourism statistics will be analyzed to identify prime locations for consideration of destination charging. Potential locations should include interstate highways, parking lots and garages, airports, transit centers, retail sites including supermarkets, state parks, multi-use entertainment venues, and lodging and accommodations. In the future, this information could be made publicly available to encourage EVSE investment in these areas. Where possible, the state will work with the

private sector to increase the number of public chargers and increase data collection and analyses to adopt models that can help inform EVSE charger siting.

State, Regional, and Local Policy

As a key focus of the 2020 Electric Vehicle Roadmap for Connecticut, building codes and permitting requirements continue to drive state and local government efforts to establish the foundation for EVSE deployment. The state recognizes that the lack of zoning regulations for EVSE implementation is a significant barrier for the 169 municipalities in the state. While some Planning and Zoning Commissions in the state have implemented zoning regulations related to the use of EVSE in their respective municipalities, the state is exploring methods to help standardize the process. Connecticut currently seeks to establish a zoning regulations program that will train municipalities to develop and implement zoning regulations while educating them on best practices seen in similar programs across the nation.

In Connecticut's NEVI program, we will rely on the applicant to coordinate with local property owners and municipalities on zoning and permitting. Proposed applicants will also be required to demonstrate that they have begun coordinating with the utility territory in which the charger resides. Discussions with utilities and municipal officials during CTDOT's spring listening sessions revealed concerns over locations being awarded funding without consideration of the applicant's ability to secure utility and local government approvals and to get the equipment operational promptly. As a result, CTDOT anticipates the scoring criteria for our NEVI program will give greater weight to applications with charging station proposals already coordinated at the municipal and utility level.

Implementation

Strategies for EVSE Operations & Maintenance (O & M)

The need for support for the continued operation and maintenance of the NEVI-funded DC fast charging infrastructure was identified throughout outreach efforts as an important factor in NEVI planning. Many EV drivers shared that, too often, they plan to use a specific fast charger as part of their travel, and upon arrival, find that the station is inoperable or in disrepair. Ensuring reliability and uptime is a high priority for the Connecticut NEVI program. We have been exploring different strategies to ensure these stations stay viable for years to come and are still evaluating which approaches we will be utilizing.

Potential Strategies for EVSE O&M

- To be eligible for funding under the NEVI program, the applicant must have considered if an applicable utility-led DC fast charging managed charging program or enrolling in an EV-specific Time of Use (TOU) rate, if available, is feasible
- Grant criteria may require the awardee acquire a minimum-year service contract/maintenance contract, regardless of whether the expense may be reimbursed
- O&M funding may be based on tiers, and higher amounts may be given to priority locations (rural, underserved) but ramped down over time
- CTDOT will monitor station up time through vendor reported usage data and general user satisfaction found on publicly accessible third-party charging web sites
- CTDOT expects the enforcement of idle fees, usage guidelines, and time limits will be the responsibility of the vendor/station operator
- Withholding of a portion of the NEVI reimbursement amount conditional on proof of satisfactory up-time of at least (97%) over a certain time period

Applicants will be required to submit an O&M Plan that addresses:

- That the equipment will be operational at least 97 percent of the time based on the hours of operation
- Customer service, site host training, process and timelines for upkeep, and repair turnaround
    - Connecticut expects most types of malfunctions and repairs to be addressed within 48 hours of notice and 2-5 days for significant or complex issues
- The party responsible for payment of all operating cost (payment of leases, rents, royalties, licenses, fees, taxes, revenue sharing, utilities, and electric power supply) for the EVSE
- The ability to operate and maintain EVSEs for a minimum of five years or as otherwise required within future federal rulemaking

Strategies for Identifying Electric Vehicle Charger Service Providers and Station Owners

Phase 1 of our Plan prioritizes filling the DC fast charging gaps within key corridors to mitigate range anxiety and ensure charging infrastructure is located within a reasonable distance (at least 50 miles) between fast charging locations and within a mile off the interstate ramp. The CTDOT has identified zones within the state where the buildout of fast chargers along our alternative fuel corridors would be strategic for both consumers

and application of the NEVI Phase 1 requirements. We have developed an initial draft map depicting these potential zones.

CTDOT presented a first draft of this map during our initial public outreach session in January and received indication from the private sector that some of the initial zones we identified might be fulfilled by August of 2022 by private-sector projects already in the pipeline and may meet the new NEVI guidelines. In addition, we also heard from many charging providers and potential site hosts that they don't want the state to be too prescriptive in telling them where to install charging infrastructure. We will keep abreast of all fast charging infrastructure buildout within the state. We understand that it is paramount to continue an open dialog with EV service providers and potential site hosts and owners.

Strategies for Identifying EV Charger Service Providers and Station Owners

- Establish an email distribution list for NEVI, which interested parties can sign up and be notified of NEVI announcements
- Work with our Utility Partners to ensure utilities' existing hosting capacity and other information is available on our NEVI website
- Publish our Phase 1-proposed DC Fast Charging Zone Map any other applicable EVSE planning resources on our website
- Continue to have an open dialog with stakeholders (listening sessions, webinars, etc.)
- Explore incentivizing providers/site hosts to put chargers in rural or low utilization locations
- Broad and multi-platform announcement of program solicitation when the application period opens

Strategies for EVSE Data Collection & Sharing

As Connecticut seeks to expand EV fast charging infrastructure statewide, integrating new and existing data and resources will be vital to ensuring optimal network EVSE build-out. Data is essential, especially for planning future EV charging infrastructure and optimizing infrastructure to meet EV drivers' changing needs. Ensuring that our program has a transparent tracking mechanism of how the infrastructure performs, including data collection and regular reporting requirements, would provide ongoing NEVI program evaluation and modification.

CTDOT Strategies for EVSE Data Collection & Sharing

- Grant would require all NEVI-funded chargers to use open, non-proprietary communications protocols to avoid stranding assets and improve interoperability within the public charging network
- Grant would require site hosts to collect and aggregate anonymized EV charging data (for example, dates, times, durations, and electricity usage (kWh) per charging sessions as well as monthly total electric load (kWh) from EV charging)
    - To protect confidentiality, the collection of personally identifiable data should be minimized and ensure that the data remains encrypted using secure industry-standard techniques

Strategies to Address Resilience, Emergency Evacuation, Snow Removal/Seasonal Needs

With the increasing frequency of extreme weather events exacerbated by climate change, resiliency is increasingly vital to growing EV adoption. Having EV chargers readily accessible and operable during emergency situations is essential. CTDOT has been tracking the technological innovations within the electric vehicle industry and is aware of various solutions (battery backup, solar arrays, etc.) available to bolster EV charging resiliency. The challenge will be finding solutions that make economic sense and meet the needs of the proposed charging locations.

In Connecticut, it is the responsibility of the local jurisdiction to identify and determine the most appropriate evacuation route(s) for its community, as well as initiate the evacuation based on the timing of the incident impacts. Evacuation route identification may occur prior to an incident requiring evacuation or may be identified based on the current status of the transportation network during an emergency and the timing of the onset of impacts. There is not currently a CT state map identifying all the emergency evacuation routes within the state, but it is anticipated that state roads may be used for local evacuations, either as primary or secondary routes. Given the coastal topography in Connecticut, reaching higher elevations to avoid a threat of severe coastal flooding is often a short distance away from the low-lying areas.

The CTDOT has coordinated with the Department of Emergency Services and Public Protection's Division of Emergency Management and Homeland Security (DEMHS) to establish a State Evacuation Response Framework to support municipalities and state departments. The state's evacuation study predicts that as many as 17,000 residents will have some degree of a transportation need during a Category 1 or 2 tropical storm, but that most residents and tourists will evacuate an area using their own means of transportation in most evacuation scenarios.

Strategies to Address Resiliency, Emergency Evacuation, Snow Removal/Seasonal Needs:

- Consideration is being made for site applications that integrate EV charging infrastructure with resiliency measures such as solar and battery storage applications [19]
- Exploring using a portion of funds during Phase 2 to purchase portable EV chargers for various purposes
- Practical commitments for snow clearing to keep the EV charging equipment accessible, and overheating of equipment issues, will be required as part of the grant solicitation application and terms of agreement

Strategies to Promote Strong Labor, Safety, Training, and Installation Standards

To perform electrical work in Connecticut, a person must maintain an active license with the CT Department of Consumer Protection. Electrical work means the installation, erection, maintenance, inspection, testing, alteration or repair of any wire, cable, conduit, busway, raceway, support, insulator, conductor, appliance, apparatus, fixture or equipment that generates, transforms, transmits or uses electrical energy for light, heat, power or other purposes. On the job training, classroom training and an examination are required for licensure.

Strategies to Promote Strong Labor, Safety, Training, and Installation Standards:

- Program will require all EV charging installers and maintainers to hold an Electric Vehicle Infrastructure Training Program (EVITP) certification and Electrical Contractors and Journeypersons must hold a license issued by the Connecticut Office of Consumer Protection
- CTDOT will coordinate with CTDOL Office of Apprenticeship to inform all registered apprenticeship related instruction providers that an EVITP certification program is available
- CTDOT to coordinate with CTDOL Office of Apprenticeship to encourage EVITP training be offered to registered apprentices nearing the end of their term.
- Connect with contractors working in the field to identify what resources are needed to expand certification and overcome workforce hurdles in the EVSE field

[19] Battery storage incentive programs administered by the EDCs and the Connecticut Green Bank: CT Energy Storage Solutions Program, https://energystoragect.com/ CT Non-Residential Renewable Energy Solutions Program, https://portal.ct.gov/pura/electric/office-of-utility-programs-and-initiatives/clean-energy-programs/non-residential-renewable-energy-solutions-program

- All other non-electrical laborers directly working on EVSE must have appropriate licenses, training, and certification in support of providing a safe and quality charging station.

Connecticut Clean Cities approached leaders within the national EVITP to discuss ways to promote online certification for prospective Connecticut workers interested in obtaining certification within the EV charging field. CTDOT plans to stay abreast of program developments and work with our Clean Cities partners to encourage the development of this online program and promote public outreach throughout the state.

Civil Rights

All proposed planned guidelines and recommendations for the deployment of EV charging stations will be created pursuant to all federal, state, and local laws, regulations, and statutes to ensure compliance with the Americans with Disabilities Act (ADA) and Title VI of the Civil Rights Act of 1964 (Title VI). The ADA prohibits discrimination against persons with qualified disabilities regarding the usability and/or participation of all programs, services, activities, or benefits offered by the CTDOT. Title VI prohibits discrimination on the basis of race, color, or national origin. Recipients may not deny any individual service, financial aid, or benefits on the basis of race, color, or national origin; Provide any service, financial aid, or benefit that is different from that provided to others Subject an individual to segregation or separate treatment.; Restrict an individual in the enjoyment of any advantage or privilege enjoyed by others; Treat individuals differently in terms of whether they satisfy admission, eligibility, or membership; Deny an individual the opportunity to participate in the provision of services; Deny a person the opportunity to participate as a member of a planning or advisory body.

CTDOT ensures that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity.

To comply with ADA requirements;

- CTDOT will develop EV charging stations in accordance with ADA standards related to accessible parking spaces, including but not limited to Public Right-of-Way Accessibility Guidelines (PROWAG)
- CTDOT's solicitation process will ensure that NEVI-funded chargers can accommodate EV drivers and passengers with various levels of physical abilities and individuals using a wheelchair on an accessible path in accordance with federal guidelines

To comply with Title VI Requirements:

- Develop and complete an environmental checklist to identify and address any potential Title VI requirements and to meet Environmental Justice requirements.
- Educate low-income, minority and limited English proficient communities regarding the availability of EV charging stations
- Conduct inclusive public outreach events to foster the engagement of traditionally underrepresented communities and provide translation and interpretation services when requested

Equity Considerations

Connecticut will be using the Electric Vehicle Charging Justice40 Map tool developed by the U.S. Department of Energy (DOE) and the U.S. Department of Transportation (DOT) to identify disadvantaged communities that may directly or indirectly benefit from this program. This tool incorporates publicly available data on vulnerable populations, health, transportation access and burden, energy burden, fossil dependence, resilience, and environmental and climate hazards.

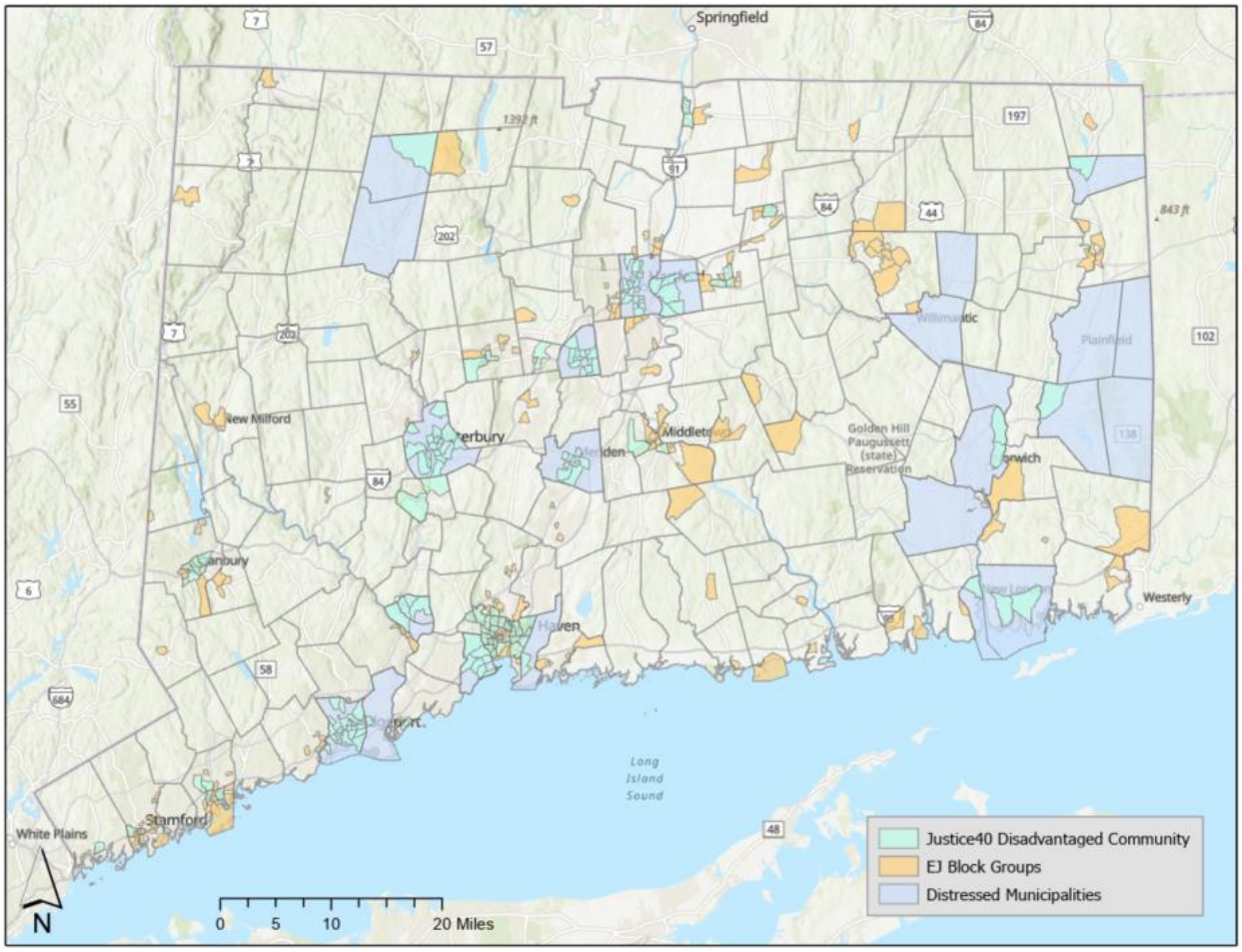
CTDOT also plans to use Connecticut's 2021 Environmental Justice Community map[20], see figure 7 below, which represents the environmental justice communities in Connecticut as defined by section 22a-20a of the Connecticut General Statutes. The EJ communities include distressed municipalities as defined by DECD, as well as census block groups that are not in distressed municipalities in which 30% or more of the population lives below 200% of the federal poverty level. Additional data is also listed in this map that indicates the percent of the population in the general area that identifies their race as a race other than white alone and/or identifies their ethnicity as Hispanic and the percent of households in the given area that identify as having limited English proficiency. This map is widely utilized in many existing state incentive programs related to EVs, including DEEP's Volkswagen Settlement, DEEP's Diesel Emission Reduction Act (DERA), and PURA's EV Charging Program. CTDOT has heard from many in the EJ community that they would like consistency in how the state defines EJ communities and that they have concerns with CTDOT only relying on the Justice40 tool to define disadvantaged communities since it much narrower than the state tools.

To stay consistent with the equity and environmental justice work being done within Connecticut, CTDOT plans to use both the Justice40 mapping tool and the CT 2021

[20] Connecticut's 2021 Environmental Justice Community Map accessed on July 28, 2022 from https://ctdeep.maps.arcgis.com/apps/webappviewer/index.html?id=d04ec429d0a4477b9526689dc7809ffe

Environmental Justice Community map and will balance siting charging stations in locations that provide reasonable access for vehicle owners in these communities as well as potential air quality benefits.

Figure 7: Merged Layers of Connecticut's Justice40 Map and the 2021 Environmental Justice Community Map



Identification and Outreach to Disadvantaged Communities (DACs) in the State

Attention to community equity concerns and engaging diverse stakeholders in the process, particularly people from the communities most vulnerable to transportation pollution, will continue to be an essential part of CTDOT's NEVI program development.

There have been several state-organized Equity & Environmental Justice Working Groups over the past several years that CTDOT has participated in. These include the Equity & Environmental Justice Working Group of the Governor's Council on Climate Change, and the EJ Working group organized to provide input on the regional Transportation Climate Initiative (TCI). CTDOT presented to the TCI-related EJ working group several times about the NEVI program during 2022 and plans to continue to

ensure over the course of the NEVI program that outreach materials and notifications are broadly disseminated within EJ communities.

As a result, recommendations were brought forward that for future outreach, the state should partner with leaders of EJ communities to ensure that residents' perspectives are incorporated into planning decisions and program design from the beginning. In response to this, CTDOT will develop its program structure to have targeted community outreach and input prior to final selection of NEVI-funded charging station locations. This public outreach will include identification of DACs in the area of a proposed station and targeted notification and outreach to those communities. CTDOT also anticipates as part of the grant solicitation, we will require applicants to include an outreach plan or details regarding how the public (including DACs) were engaged or will be engaged as part of the site selection process.

CTDOT recognizes that we must engage directly with underserved and overburdened communities to develop responsive approaches to communities' needs.

In December of 2021, Governor Lamont signed Executive Order No. 21-3[21] establishing, within DEEP, a Connecticut Equity and Environmental Justice Advisory Council (CEEJAC) in which CTDOT participates. One of the goals of the CEEJAC is to integrate environmental justice considerations into the programs, policies, and activities to improve the health and environment of Environmental Justice Communities, in key areas including, but not limited to: (1) rulemaking, (2) permitting standards and processes, (3) compliance and enforcement, (4) science and data, and (5) equitable program delivery; providing mechanisms for Environmental Justice Communities to have a meaningful opportunity to participate. CTDOT intends to present its NEVI program, as it develops, to CEEJAC and obtain its input.

Benefits to DACs through this Plan, and Process to Identify, Quantify, & Measure
Below are examples of benefits that were brought forward to CTDOT during our comment/listening sessions in the Spring of 2022 and which CTDOT is intending to fold into our NEVI program in Phase 1 (other benefits/metrics will be discussed for Phase 2 in future annual updates to this plan):

- Reduction of exposure to harmful transportation-related emissions,
    - DACs often abut major transportation corridors and centers such as highways and ports. As such, these communities have often borne

[21] Connecticut Executive Order No. 21-3 signed on December 16, 2021 https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Orders/Lamont-Executive-Orders/Executive-Order-No-21-3.pdf

disproportionate transportation-related air pollution. To attempt to mitigate the air emissions, CTDOT plans to use both the Justice40 mapping tool and the CT 2021 Environmental Justice Community map both in program planning under Phase 2 and as a criterion for reviewing applications under the state's NEVI grant program. The reason CTDOT focuses this more on Phase 2, is because under Phase 1 the locations for stations are heavily influenced by the NEVI Program Phase 1 requirements (e.g., only AFCs, 50 miles maximum between stations, and 1 mile maximum from exits). Nonetheless, CTDOT will use these same mapping tools as part of location selection evaluation in Phase 1 to the extent possible.
    - Criteria pollution and carbon emissions reduction are measurable by the vehicle (EV displacement of ICE vehicle), not necessarily by the charging station. CTDOT anticipates capturing these emission benefits by using available tools from the federal government and other available resources.
- Improving clean transportation access through the location of charging stations,
    - The benefits of access to charging stations can be measured at least in terms of distance to the stations. To comply with federal NEVI program requirements, NEVI Phase 1 will be directed to fast charging buildout within one mile of AFC exits. Therefore, CTDOT anticipates that specific targets to support this benefit will be more fully applicable to Phase 2 of the program.

CTDOT plans to further engage with DACs over the next year to determine which benefits the state will measure and track for this program.

In measuring benefits to DACs CTDOT anticipates the Joint DOE/DOT office or FHWA will establish national standards for measuring the benefits to the public, such as air quality or job creation. In the meantime, CTDOT will evaluate examples from industry, other states, and current practices to begin to internally track, measure, and assess our performance through the lifecycle of managing the NEVI program.

In addition to benefits, the NEVI program will also consider the avoidance of potential burdens associated with establishing new charging stations. An example of burdens may include a community's desire to avoid siting a charging station in or adjacent to residential or mixed-use areas, where the station would attract an increase in vehicle traffic and associated corridor safety and congestion-related concerns, as well as time of day/evening use, lighting, and other quality of life elements.

Labor and Workforce Considerations

Over 100 years ago, Connecticut was home to the Columbia Electric Vehicle Company, the first mass-producer of electric vehicles in American history.[22] Unfortunately, electric vehicles were quickly supplanted by more powerful and less expensive gasoline-powered vehicles. With advances in technology and a focus on improved air quality and climate change mitigation, EVs are once again part of America's mainstream automobile culture. Vehicle electrification draws large investments from both the public and private sectors, and Connecticut is well prepared to maximize both the economic and environmental benefits of EV deployment.

Connecticut anticipates that installing, operating, and maintaining the NEVI Formula Program's EV charging infrastructure will create new opportunities for the state's workforce. We expect to see new jobs become available, particularly in the electrical and other construction trades, while also creating opportunities within labor sectors tangentially connected to alternative transportation. In 2020, all value chain segments in Connecticut's alternative transportation sector experienced growth, with the majority of job growth concentrated in manufacturing, wholesale trade, and other services, including automotive repair and maintenance.[23] Moreover, Connecticut's hybrid electric and electric vehicle industries added 188 new jobs to the Connecticut clean energy labor market in 2020 collectively.[24] Connecticut expects that the injection of NEVI funding into the state's alternative transportation sector will further bolster job growth in this sector of the state's clean economy.

Recognizing the importance of developing a robust and well-trained workforce equipped with the skills needed to respond to the labor demands of Connecticut's clean economy, Governor Lamont established the Connecticut Clean Economy Council (CCEC) in December of 2021 under Executive Order 21-3[25]. The Council will serve to identify opportunities to leverage state and federal funding to scale economic opportunities with a focus on maximizing economic development benefits from investments needed to meet the state's climate, air quality, resiliency, and sustainability goals. The CCEC is also tasked with supporting equitable economic development opportunities, including for Small Business Enterprise and Minority Business Enterprise firms and job seekers

[22] KathyFoley21, P. by. (2022, May 13). May 13: The Electric Car Debuts. in Hartford. in 1897. Today in Connecticut History. Retrieved May 16, 2022, from https://todayincthistory.com/2022/05/13/may-13-the-automobiles-electric-future-debuts-in-1897-2/#:~:text=Today%20in%201897%2C%20outside%20his,electric%20car%20in%20American%20history.

[23] Connecticut Green Bank: Connecticut Clean Energy Industry Report, September 2021, accessed on July 28, 2022 from https://www.ctgreenbank.com/wp-content/uploads/2022/01/2021-CT-Clean-Energy-Industry-Report.pdf

[24] Id.

[25] Executive Order 21-3, December 2021, Available at: https://portal.ct.gov/-/media/Office-of-the- Governor/Executive-Orders/Lamont-Executive-Orders/Executive-Order-No-21-3.pdf

from Connecticut's black, indigenous, and people of color populations. This newly formed CCEC will be an asset in identifying ways that EV infrastructure investments facilitate the growth and diversification of the workforce including broadening workforce participation and opportunities for residents in Connecticut's underserved and underrepresented communities.

Connecticut will also incorporate guidance from the Connecticut Office of Workforce Strategy (CTOWS), in coordination with CTDECD that serves as the administrative staff to the Governor's Workforce Council (GWC)[26], in its EVSE deployment planning and contracting efforts. The GWC has identified four priority areas to address skills and opportunity gaps to ensure that Connecticut's workforce is poised to meet the demands of the 21st century economy:

1. Creating partnerships between educators and businesses that focus on aligning curriculum with the needs of Connecticut employers and industries.
2. Ensure that Connecticut's educational system is accessible, equitable, and aligned with in-demand career pathways in Connecticut.
3. Develop a support service system that increases workforce participation through improved access to childcare, transportation, food, and behavioral health services.
4. Develop a comprehensive set of workforce and education data systems that provides resources to students or job seekers to learn about different programs across the state that will allow them to progress their overall education or enter the workforce.[27]

The CTDOT and CTDEEP will coordinate with the CTOWS and the CTDOL and our CT Clean Cities partners to identify opportunities for leveraging NEVI investments to advance the priority areas identified by the GWC.

In addition to developing a collaborative process between CTDOT, CTDEEP, CTDOL, CCEC, and the OWS, Connecticut will also explore incorporating workforce considerations into any grant solicitation for the installation, operation, and maintenance of EVSE deployed with NEVI program funding.

[26] The Governor's Workforce Council has been tasked with setting strategy and policy for the state's Pre-K through retirement workforce pipeline, and to serve as the prime coordinator for businesses, educators, trainers, state agencies, state workforce boards, non-profits, and others. More information available at: https://portal.ct.gov/gwc/

[27] Governor's Workforce Council Priority Areas, available at: https://portal.ct.gov/GWC

CTDOT has coordinated closely with the CTDOL Office of Apprenticeship Training (CTDOL/OAT) in drafting the labor and workforce section of the NEVI plan. CTDOL/OAT is a State Apprenticeship Agency that is the sole entity federally authorized to operate and administer Registered Apprenticeship Programs (RAPs) for Connecticut employers. The Registered Apprenticeship is an employer-designed workforce development program that an employer enrolls their new hires into. In Connecticut, apprentices are a company's paid employee and only become Apprentices upon hire. As such, an employer's Registered Apprenticeship program is a legally binding agreement between the employer, the employer's new hire (apprentice), and CTDOL/OAT.

For the electrical trade in Connecticut, an apprenticeship program duration is 4 years, and the regimen includes the installation, maintenance, and repair of EV charging stations, which are a very small fraction of the overall scope of the electrical industry, not a stand-alone job. This 4-year long multi-scope portion of a registered apprenticeship is referred to by the industry as On-The-Job Training (OJT).

CTDOT is exploring opportunities in which we can assist Registered Apprenticeship employer programs, administered by the CTDOL/OAT to encourage diversity, equity, inclusion, and accessibility (DEIA) into those employers Registered Apprenticeship Programs. Broadening the diversity of recruitments will future-proof Connecticut's workforce by cultivating talent and reflecting the diversity of Connecticut's economy and people.

CTDOT is committed to integrating diversity, equity, and inclusion throughout all levels of the agency. CTDOT has a standing committee to set the disadvantaged business enterprises (DBEs) goals for projects, and we utilize our standard process to determine DBE goals for the NEVI program.

Cybersecurity

As the number of electric vehicles increases in Connecticut, so will the need for more EV charging infrastructure to connect to the electric grid. Each EV fast charger that CTDOT funds under NEVI will be required to be networked, thus requiring an internet connection. A networked charger is critical for collecting and reporting data and for the charger to receive control signals if participating in a specific utility management program. In addition, research and workgroups developed at the national level indicate that EV chargers are a potentially vulnerable point where cyber security attacks could occur.

In 2018, a multi-disciplinary team of state government, local government, education, and private business developed the State of Connecticut's Cybersecurity Action Plan[28]. This Action Plan outlines how to plan, respond to, and recover from threats to the state's cybersecurity infrastructure at the state, local, and private-sector levels. While EV infrastructure is not explicitly called out within the plan, there is an emphasis on the fact that the state, businesses, and organizations need to stay engaged with the latest threats that might impact our residents and rely on organizations and industry standards when initiating new programs and services.

The Connecticut Electric Distribution Companies (EDCs) have created a Cybersecurity and Privacy Framework that incorporates cybersecurity best practices and industry standards consistent with leading cybersecurity authorities to address new and emerging threats. The EDCs rely on this Framework to apply the principles and best practices of risk management to improve the security and resilience of critical infrastructure. This Framework enables every EDC to provide a consistent approach to establishing cybersecurity and privacy objectives, managing risks, and implementing relevant cybersecurity capabilities and controls. CTDOT will ensure that any cybersecurity measures included in the NEVI program stay consistent with the EDC's Framework.

When the Connecticut Department of Administrative Services (CTDAS) was putting together the state's electric vehicle supply equipment (EVSE) contract in 2022, the team found no set standard regarding security for EV chargers. Therefore, CTDOT expects to follow the model that other EV infrastructure state-led programs have used and require all vendors participating in our NEVI grant program to abide by UL 2594 and Open Charge Point Protocol (OCPP) 2.0.1 standards in tandem with ISO 15118 which target the communication aspects of a networked EV charger. We also expect any charging station management system used with the fast charging equipment to have an OCPP 1.6 Security Certificate. It will be the charger manufacturer's responsibility to ensure that their chargers use the most recent OCPP and UL standards to communicate with other chargers or with a third party to aggregate data while also maintaining strict data security procedures.

In PURA's Final Decision in Docket No. 17-12-03RE04 that established the EDC's EV Charging Program, PURA directed Eversource and United Illuminating utilities to develop a comprehensive Data Privacy and Security Plan for the EV charging Make Ready program. The planning framework ensures that adequate attention is given to

[28] Connecticut's Cyber Security Plan, May 2018, Available at: https://portal.ct.gov/-/media/DAS/BEST/Security-Services/CT-Cybersecurity-Action-Plan-Final.pdf?la=en

cybersecurity and customer privacy challenges to address new and emerging threats. All EV charging vendors participating in the utility make-ready program must follow strict security standards, and CTDOT anticipates utilizing those set security standards in our NEVI program requirements.

Program Evaluation

CTDOT will be re-evaluating the state's charging network bi-annually using U.S. DOE's Alternative Fuel Data Center and monitoring private sector charger development. CTDOT also anticipates working closely with our utilities and other planning partners/stakeholders to identify new locations and make necessary improvements to existing locations. CTDOT also hopes to examine usage data returned from installed equipment to help correlate the need for additional charging locations at developed sites.

CTDOT and CTDEEP, in conjunction with Atlas Public Policy, are currently developing an EV-specific dashboard to track charging stations and EV registrations. The state hopes to utilize that data to help guide future NEVI investments.

CTDOT will update its NEVI Plan annually. Future updates will address Phase 2 of the NEVI program. Phase 2 starts after FHWA certification that the AFCs have been built-out in accord with NEVI requirements, though CTDOT's planning for Phase 2 will begin in more detail with the 2023 annual update to this plan.

Discretionary Exceptions (if any)

Connecticut plans to install fast charging to meet the NEVI requirement of a maximum of 50 miles between NEVI-compliant stations along the state's AFCs, and in some instances, the distance between charging stations will be considerably under the 50-mile threshold. As previously mentioned, CTDOT is identifying zones within our plan that would meet the requirements for Phase 1 funding opportunities. CTDOT has identified these zones using a variety of data layers, including looking at the percentage of commercial verse residential zoned properties available within the zones and referencing the utilities hosting capacity maps. At this time, CTDOT does not anticipate that it will request exemptions to installing chargers within the 1-mile drivable distance from an interstate exit. CTDOT will be evaluating any need for exemptions on a case-by-case basis after it receives applications and will coordinate with the Joint Office on any such future requests. CTDOT expects that any potential issues with placement, utilities, communications, or security for stations will be communicated and coordinated with FHWA as the program develops.

Appendix

FHWA Round 6: Electric Alternative Fuel Corridor Parameters
RE: Public DC Fast Charging

Corridor Ready	Corridor Pending
• No greater than 50 miles between one station/site on corridor.	• A strategy/plan and timeline for public DC Fast Charing stations separated by more than 50 miles.
• No more than 1 mile (drivable distance) from Interstate exists or highway intersections along the corridor.	• Locations of stations/site that are no more than 1 mile from Interstate exists or highway intersections along the corridor
• Stations should include four Combined Charging System (CCS) connectors that are Type 1 ports (simultaneously charging 4 EVs at once).	
• Site power capability should be no less than 600 kW (supporting at least 150 kW per port simultaneously across 4 ports).	
• Maximum charge power per DC port should not be below 150 kW.	

Existing Locations of Charging Infrastructure Along AFCs
NEVI Guidance Qualifying Station Data

State EV Charging Location *Unique ID*	Charger Level (DCFC, L2)	Route	Location	Number of EV Connectors	EV Network (if known)
121739	DCFC	I-95	411 Barnum Ave Cutoff, Stratford, CT, 06615	**4** dual-headed 150kW CCS **2** dual-headed 350kW CCS **1** dual-headed 50kW CCS **1** dual-headed 50kW CHAdeMO/ 150kW CCS	Electrify America
189349	DCFC	I-91	410 Universal Dr, North Haven, CT, 06473	**2** dual-headed 350kW CCS **1** dual-headed 150kW CCS **1** dual-headed 50kW CHAdeMO/ 150kW CCS	Electrify America

164399	DCFC	I-84	420 Buckland Hills Dr, Manchester, CT, 06042	**2** dual-headed 150kW CCS **3** dual-headed 350kW CCS **1** dual-headed 50kW CHAdeMO/ 150kW CCS	Electrify America
121737	DCFC	I-395/I-95	915 Hartford Tpk, Waterford, CT, 06385	**2** dual-headed 350kW CCS **3** dual-headed 150kW CCS **1** dual-headed 50kW CHAdeMO/ 150kW CCS	Electrify America

*Defined by the state-this should match the unique ID in the state's applicable GIS databases
*Data extracted April 1, 2022

Existing Locations of Charging Infrastructure Along AFCs

DCFC Within 1 mile of AFC (Non-Qualifying)

State EV Charging Location *Unique ID*	Charger Level (DCFC, L2)	Route	Location	Number of EV Connectors	EV Network (if known)
198765	DCFC	US-7/I-84	7 Backus Ave, Danbury, CT, 06810	**1** dual-headed 50kW CHAdeMO/CCS **1** single 50kW CHAdeMO	eVgo Network
182677	DCFC	I-95	1335 Boston Post Rd, Darien, CT, 06820	**1** single 24kW CCS	ChargePoint Network
198862	DCFC	I-95	25 Old Kings Hwy, Darien, CT, 06820	**1** dual-headed 50kW CHAdeMO/CCS	eVgo Network
60900	DCFC	I-95	930 Kings Hwy E, Fairfield, CT, 06825	**1** single 50kW J-1772	Non-Networked
44435	DCFC	I-91	165 W Service Rd, Hartford, CT, 06120	**1** dual-headed 50kW J-1772	Non-Networked
50448	DCFC	I-91/I-84	777 Main St, Hartford, CT, 06103	Unknown	Non-Networked
89777	DCFC	I-91/I-84	71 Asylum Street, Hartford, CT, 06103	**1** single 24kW CCS	ChargePoint Network

State EV Charging Location *Unique ID*	Charger Level (DCFC, L2)	Route	Location	Number of EV Connectors	EV Network (if known)
164606	DCFC	I-91	1 Weston Park Rd, Hartford, CT, 06120	**1** single 24kW CCS	ChargePoint Network
223850	DCFC	I-95	1 South Street, Madison, CT, 06443	**1** dual-headed 130kW CHAdeMO/CCS	Applegreen Electric
198244	DCFC	I-84	1205 Tolland Tpke, Manchester, CT, 06042	**1** dual-headed 50kW CHAdeMO/CCS	eVgo Network
192580	DCFC	I-95	55 Coogan Blvd, Mystic, CT, 06355	**1** single 24kW CCS	ChargePoint Network
198250	DCFC	I-95	189 Forbes Ave, New Haven, CT, 06512	**1** dual-headed 50kW CHAdeMO/CCS	eVgo Network
202905	DCFC	I-95	488 Colman Street, New London, CT, 06320	**1** single 23kW CCS	ChargePoint Network
207656	DCFC	I-95	452 Broad St, New London, CT, 06320	Unknown	ChargePoint Network
198298	DCFC	US-7	116 Danbury Rd, New Milford, CT, 06776	**1** dual-headed 50kW CHAdeMO/CCS	eVgo Network
44447	DCFC	I-91	900 Universal Dr N, North Haven, CT, 06473	**1** dual-headed 44kW CHAdeMO/CCS	Non-Networked
198997	DCFC	I-91	100 Universal Dr, North Haven, CT, 06473	**6** dual-headed 50kW CHAdeMO/CCS **6** dual-headed 100kW CHAdeMO/CCS	eVgo Network
151880	DCFC	I-95/US-7	100 N Water St, Norwalk, CT, 06854	**1** single 60kW CCS	Volta
44450	DCFC	I-95	295 Middlesex Turnpike, Old Saybrook, CT, 06475	Unknown	Non-Networked

State EV Charging Location *Unique ID*	Charger Level (DCFC, L2)	Route	Location	Number of EV Connectors	EV Network (if known)
80416	DCFC	US-7	746 Danbury Rd, Ridgefield, CT, 06877	**1** single 23kW CCS	ChargePoint Network
198865	DCFC	I-95	200 E Main St, Stratford, CT, 06614	**1** dual-headed 50kW CHAdeMO/CCS	eVgo Network
105196	DCFC	I-84	175 Hartford Turnpike, Vernon, CT, 06040	**1** single 25kW CCS	Non-Networked
198247	DCFC	I-84	471 New Park Ave, West Hartford, CT, 06110	**1** dual-headed 50kW CHAdeMO/CCS	eVgo Network
198223	DCFC	I-95	355 Campbell Ave, West Haven, CT, 06516	**1** dual-headed 50kW CHAdeMO/CCS	eVgo Network
44464	DCFC	US-7	978 Danbury Rd, Wilton, CT, 06897	**1** single 50kW CHAdeMO	Non-Networked

*Data extracted April 1, 2022