

Chargers to Promote Resilience: A Recharge Maine Community Project
Maine Department of Transportation

Charging and Fueling Infrastructure (CFI)
Discretionary Grant Program Round 2

U.S. Department of Transportation (USDOT)
Federal Highway Administration (FHWA)

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PROJECT NARRATIVE

The *Chargers to Promote Resilience: A Recharge Maine Community Project* (“Project”) consists of deploying **64 electric vehicle (EV) charging ports** in **16 community locations**, including **six (6) hospitals**, to increase transportation resiliency in flood- and storm-prone areas. Maine Department of Transportation (“MaineDOT”) is the Project applicant. The Project is supported by the Efficiency Maine Trust (“Efficiency Maine”). The MaineDOT and Efficiency Maine collaboration—referred to herein as the “Partnership”—is experienced in efficiently deploying Federal- and State-funded electric vehicle supply equipment (EVSE).

The State of Maine (“State”) is steadily embracing electric vehicles (EVs) as part of its commitment to energy independence. The State is working to alleviate hesitation Mainers may have regarding the lack of chargers and the ability to confidently charge vehicles before and during climate change-related severe storms. The state’s residents increasingly face storm-related power outages that create uncertainties about where and how to charge EVs. Some communities are experiencing a growing number of devastating climate change-related flooding and power outages. Other communities serve as evacuation hubs or regional support centers for impacted areas. According to the [U.S. Energy Information Administration](#) (EIA), in 2019, Maine ranked among the highest in the country for average total annual power interruption duration per customer at more than 15 hours. The [EIA also reports](#) that Maine experienced the highest average number of power interruptions in 2020. The Project will help alleviate concerns many Mainers have about how to charge their EV during power outages and storms as well as improve EV adoption rates in the Pine Tree State.

The \$18.75 million Project, which includes a \$3.75 million match from MaineDOT and private operators, supports the *Recharge Maine* State EV charging network (Figure 1). This statewide initiative is expanding the availability of charging infrastructure for EVs on Maine’s highways and in communities. The focus will make the charging network convenient, reliable, and accessible, especially along Maine’s most traveled roads and highways which also serve as evacuation routes during natural disasters. The Project builds upon already successful planning and deployments made possible by National Electric Vehicle Infrastructure (NEVI) Formula Program funding and Charging and Fueling Infrastructure (CFI) Discretionary Grant Program Round 1 funding.

The Project will:

- Improve charger availability during widespread power outages;
- Ensure communities statewide, including disadvantaged and rural areas, have equitable access to charging infrastructure; and
- Help Maine meet its goals to decrease greenhouse gas emissions 45 percent by 2030, 80 percent by 2050, and achieve carbon neutrality by 2045.

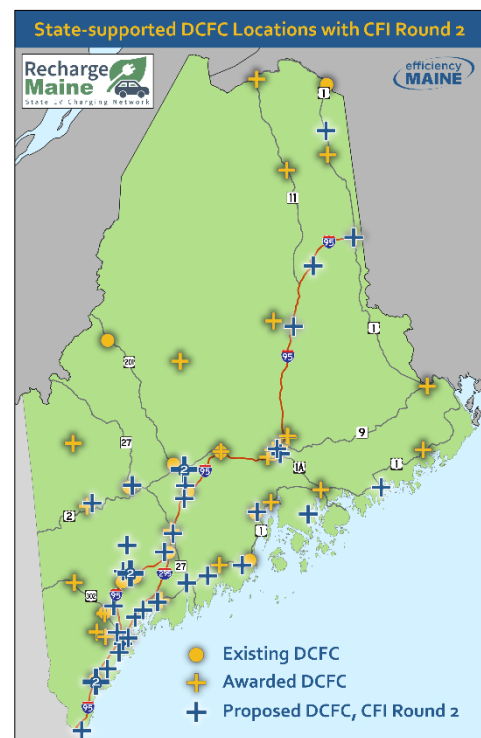


Figure 1. All existing, awarded, and proposed DCFC sites in Maine as of August 2024.

Improving climate-related resiliency for Mainers is a core objective of the Project. Recent storm events—with devastating effects to coastal and river communities—have amplified the urgency to expand EV charging access to rural and disadvantaged communities that are increasingly impacted by flooding and power outages.

In December 2023, Maine was hit by a severe storm that caused catastrophic flooding and widespread power outages (Figure 2). The storm left more than 400,000 customers without power at its peak, with more than 132,000 still in the dark after three days. The flooding was particularly severe along the Kennebec and Androscoggin Rivers and led to evacuations in low-lying areas and stranded vehicles. According to the Disaster Declaration Request from Governor Janet Mills, ten counties—Androscoggin, Franklin, Hancock, Kennebec, Oxford, Penobscot, Piscataquis, Somerset, Waldo, and Washington—faced \$20 million in estimated storm-related damage.

The severe weather continued into January 2024, with back-to-back storms causing more significant disruptions across the state. These storms brought a mix of snow, rain, and high winds, resulting in power outages for tens of thousands of customers. The alignment of an astronomical high tide cycle, storm surge, and large battering nearshore waves caused catastrophic flooding in Cumberland, Hancock, Knox, Lincoln, Sagadahoc, Waldo, Washington, and York counties. Central Maine Power reported more than 42,000 outages, while Versant Power had more than [18,000 customers affected](#). According to the Major Disaster Declaration request from Governor Mills, there was more than \$70.3 million in estimated damages across eight coastal counties.

Maine has requested eight disaster declarations in the past two years. With the increasing frequency and intensity of storms in Maine over the last 24 months, emergency management officials across all levels of government remain stretched in their fiscal and programmatic capacity to respond to and recover from disasters. In response to the storms, Governor Mills issued an [Executive Order](#) in May 2024 to establish the Commission on Infrastructure Rebuilding and Resilience. The Commission is “charged with reviewing and evaluating Maine’s response to the recent storms, identifying crucial areas for near-term investment and policy needs, and developing the state’s first long-term infrastructure plan to ensure that Maine is ready for the harsh storms ahead.” This effort is critical to the state’s overall resilience and reflects the Partnership’s collective commitment to long-term infrastructure planning and building resiliency.

Significant weather events underscore the challenges EV owners face and explain why some residents remain hesitant to adopt EVs, especially with concerns about charging during power outages. Through the Project, the Partnership will install 64 charging ports across 16 locations. Users will have access to Direct Current Fast Charger (DC Fast Charger or DCFC) ports, and stations will have at least four ports available. The Partnership is committed to ensuring Project chargers are accessible



Figure 2. Flooding from the Kennebec River in Skowhegan during December 2023 storms.

and reliable for all users and comply with the NEVI Formula Program Guidance and the NEVI Standards and Requirements (Title 23 of the Code of Federal Regulations 680 [23 CFR 680]), effective March 2023. All infrastructure will be designed to accommodate diverse EV models and consider emerging technologies.

Background

The Project is led by MaineDOT and supported by Efficiency Maine. Efficiency Maine is a quasi-state agency established to administer statewide energy conservation measures and greenhouse gas (GHG) emissions reduction programs. [Their efforts include](#) implementing EV rebates and developing a statewide network of EV chargers. Efficiency Maine and MaineDOT have been formal partners since 2018 and most recently collaborated to align EV-related programming to Federal and State policies and plans. The Project aligns with several State initiatives focused on preserving and improving the environment—one of Maine’s most critical resources.

Maine Won’t Wait

In 2019, Governor Mills and the State legislature recognized climate change as the most pressing concern facing the state and laid out a bold set of strategies to combat the threat. As a result, the State created the Maine Climate Council (“Council,” MCC) composed of scientists, business leaders, bipartisan state and local lawmakers, and concerned citizens. The Council collaborated and developed the State’s Climate Action Plan (“Plan”) titled [Maine Won’t Wait](#). The comprehensive Plan details aggressive but achievable goals to combat climate change—as well as eight overarching strategies to achieve them.

First among the strategies is for the State to “Embrace the Future of Transportation in Maine,” which recognizes and addresses the transportation sector’s impact on the climate. Transportation is responsible for 49 percent of Maine’s annual greenhouse gas emissions, according to the [Maine Department of Environmental Protection’s \(“MaineDEP”\) Bureau of Air Quality](#).¹ The strategy calls for reducing the transportation-related emissions by:

- (1) accelerating Maine’s transition to electric vehicles,
- (2) increasing fuel efficiency and alternative fuels, and
- (3) reducing vehicle miles traveled.

The Project aligns directly with these action steps and will build upon results realized thus far through implementation of the Plan. In their [2023 Annual Report](#), the Council reported double the amount of EV charging stations since 2019 (459 stations in 2023, up from 235 in 2019) and triple the amount of EVs on Maine roads since 2020 (12,369 EVs in 2023 up from 4,268 in 2020).² These figures continue to rise quarterly.

Maine Clean Transportation Roadmap

Developed as an action initiative under *Maine Won’t Wait*, the [Maine Clean Transportation Roadmap](#) (“Roadmap”) identifies the policies, programs, and regulatory changes needed to meet the State’s EV and transportation emissions reduction goals. EVs represent the largest focus of the Roadmap. It cites an analysis of existing charging infrastructure as well as Maine’s priority areas for expanding charger access. The Roadmap includes expanding the charging network

¹ Page 2

² Pages 5, 8

through a Public DCFC Incentive and/or Ownership program. These initiatives contribute to the goals of the Project as there is a demonstrated positive relationship between DCFC access and EV sales. Expanding the DCFC network will help the State achieve the Plan's emission reduction goals.³

Maine PEVID

To comply with NEVI Formula Program funds requirements, MaineDOT submits an updated plan, [Plan for Electric Vehicle Infrastructure Deployment](#) (PEVID), annually to the Federal Highway Administration (FHWA). The most recent PEVID, published in August 2023, complies with 23 CFR 680. The plan includes strategies for Level 2 and DCFC deployment and considers several funding sources such as the NEVI, CFI, and Maine Jobs and Recovery Plan (MJRP) programs.

Maine's PEVID also describes how the various State agencies coordinate public engagement efforts and EV charging infrastructure deployment. PEVID is part of a larger effort, *Recharge Maine*, which represents the State's effort to expand EV charging infrastructure across the state.

Recharge Maine

Maine recognized the need to build a reputation of reliability for EV charging infrastructure. Thus, in 2022 the *Recharge Maine* brand was born to represent the State's effort to build a convenient, reliable, affordable, and equitable charging network statewide. The initiative receives support from MaineDOT, Efficiency Maine, the Governor's Office of Policy Innovation and the Future (GOPIF), the Governor's Energy Office (GEO), and MaineDEP, ensuring a coordinated approach to build out EV charging infrastructure. *Recharge Maine* is guided by strategies and priorities outlined in Maine's PEVID.

The *Recharge Maine* initiative guides and coordinates projects utilizing NEVI, CFI, American Recovery Plan Act (ARPA), and New England Clean Energy Connect (NECEC) settlement funding. *Recharge Maine* creates cohesion between each of the related projects which maximizes EV network deployment efficiency. The Project allows the Partnership to expand public charging access in communities, in alignment with *Recharge Maine* goals. Progress on the initiative—including both EV registrations and charger distribution—is updated frequently on the [Recharge Maine dashboard](#).

Related Projects and Funding

Through its collaboration, the Partnership has completed numerous projects that contribute to the state's growing EV charging network. The Project relates to these Partnership projects as well as several energy efficiency initiatives.

In 2023, Efficiency Maine announced planned awards of more than \$5 million in NEVI Program funds authorized by the Federal Bipartisan Infrastructure Law (BIL). The awards fund new DCFC ports throughout the state. [In April 2024](#), the first of these NEVI-funded stations in the country opened in Rockland where the Partnership installed eight charging ports—five of which were funded with NEVI funds (Figure 3). The Rockland charging station supports U.S. Route 1

³ Hardman, S. (2019). "Understanding the impact of reoccurring and non-financial incentives on plug-in electric vehicle adoption – A review." *Transportation Research Part A: Policy and Practice*, 119, 1-14. <https://escholarship.org/uc/item/7v13w987>

which is one of Maine’s Alternative Fuel Corridors (AFCs) serving the communities on the Atlantic coastline.

The achievement made Maine just the fifth state to open NEVI-funded chargers and the first to have an operational NEVI-funded charging location open in conjunction with Tesla. Because of their efficient deployment of NEVI-funded chargers, Maine has been identified as a member of the *Cheetah Team*—the designation given to the five states which have quickly activated NEVI-funded chargers in their respective states. This status indicates the Partnership’s readiness and capability to continue implementing related projects expeditiously.



Figure 3. FHWA Administrator Bhatt speaking at the opening of the first NEVI-funded EV charging station in Maine. The Project complements NEVI formula funds and CFI Round 1 discretionary funds to buildout the State’s AFCs.

The Partnership has [awarded additional funds](#) from the MJRP, ARPA, and the NECEC Settlement programs to develop DCFC stations throughout the state.

The Partnership received a \$15 million award from Round 1 CFI funding for the [Recharge Maine Project](#). Requests for Proposals (RFP) for the *Recharge Maine Project* are currently published on the Efficiency Maine website and receiving bids. The project includes installing Corridor and Community charging ports throughout Maine that support AFCs, regional service centers, multifamily buildings in disadvantaged areas, community locations, and large workplaces. The focus of the *Recharge Maine Project* is to target gaps in the existing EV charging network.

In addition to this Community program application, MaineDOT has submitted a related application under the Corridor program, *Delivering the Charge: A Recharge Maine Corridor Project*, which also advances the expansion of the *Recharge Maine* EV network.

Beyond expanding the *Recharge Maine* EV network, Efficiency Maine also provides marketing, education, training, rebates, loans, and many other initiatives supporting energy efficiency for homes and businesses. Related programs include heat pump and weatherization incentives, energy-efficient appliance rebates, and income-eligible home energy loans.

Location

Maine’s geography features a diverse landscape of forests, mountains, lakes, rivers, and coastline. Maine’s coastline stretches approximately 3,500 miles due to numerous inlets, bays, and estuaries.⁴ Forests cover approximately seven million acres—or 90 percent—of the state’s land area, making it the most forested state in the U.S. (by percent). Power outages in heavily forested areas are common due to falling branches during wind and winter storms.

⁴ <https://www.maine.gov/legis/general/facts/facts.htm>

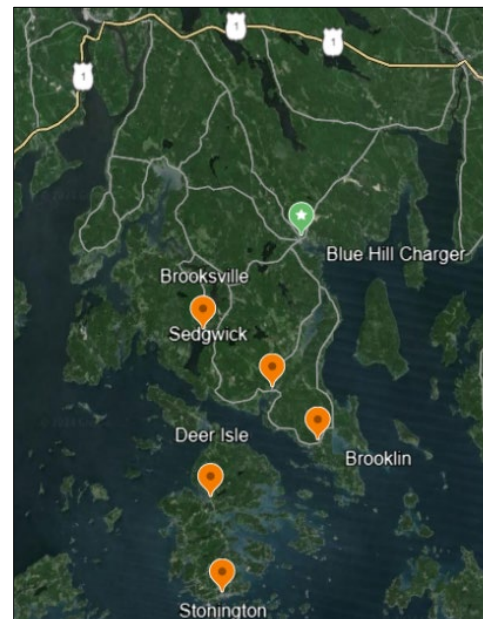
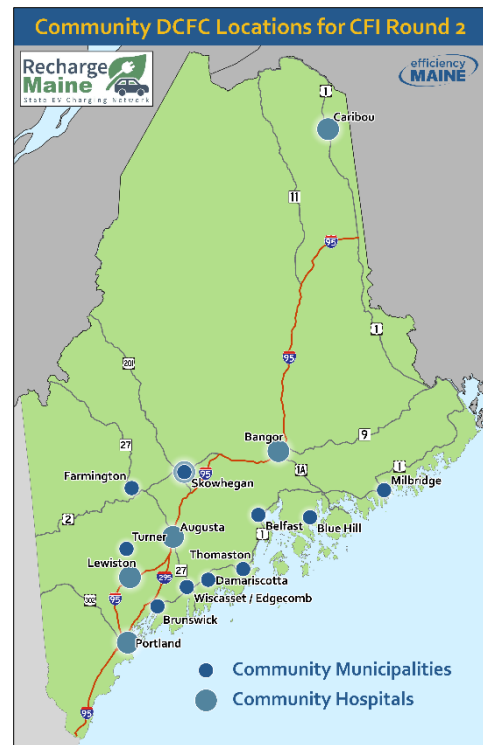
Maine is a largely rural state with few concentrated population clusters. Despite its land area, Maine has only three Census-Designated Urban Areas with populations that exceed 50,000—Bangor (UACE 04951), Lewiston (UACE 49339), and Portland (UACE 71263). Other municipalities are Urban Areas, per the 2020 Census definition, but fall below the 50,000-population threshold.

The Project consists of installing 64 DCFC ports across 16 locations statewide (Figure 4, Attachment A). Ten stations—totaling 40 ports—will serve flood-prone areas or nearby evacuation hubs. The remaining six stations—24 total ports—will be installed at hospitals, all located in disadvantaged or rural areas. Each site will be built with four 150 kW ports and a total power capability per site of no less than 600 kW as well as other requirements to meet the standards outlined in 23 CFR 680.

Community charger locations are focused on areas that provide charging opportunities to those municipalities which have experienced coastal or inland flooding and storm damage. Brunswick, Belfast, Thomaston, Wiscasset/Edgecomb, Milbridge, and Blue Hill are all communities that directly serve and are part of evacuation routes for coastal municipalities. As an example, the DCFC charger in Blue Hill would serve the coastal Towns of Stonington, Deer Isle, Sedgwick, Brooklin, and Brooksville—all communities isolated on peninsulas that have limited evacuation routes (Figure 5). Many selected communities are also on U.S. Route 1—a designated AFC.

The Partnership will issue RFPs for work in the locations listed in Table 1. RFPs will request bidders to propose sites within these locations that are resilient to flooding and power outages and that are generally prioritized for power restoration when outages occur.

For the purposes of this application, the Partnership selected Census Tracts based on their proximity to each municipality's town center to illustrate the disadvantaged status of the Project areas. As such, the following Census Tracts noted with an asterisk (*) denote tracts that are *likely* to host Project chargers but other adjacent tracts in the same municipality may be selected. Due to the nature of the Project, charger users from outside the Census Tract are likely—possibly more likely—to utilize the



Figures 4-5. Project map with proposed municipality and hospital locations. Also included as Attachment A (top). Example of how residents from communities impacted by coastal flooding and power outages (orange) evacuate on limited corridors from the peninsulas and islands to reach safety, evacuation routes, and power sources (green) in nearby cities where chargers will be installed (bottom).

chargers than those within the Census Tract. Locations used for this analysis are visible on the [dynamic Project Map](#).

Table 1. Community Charger Locations

Charger Location	Resiliency Risk/Medical Facility	Urban/Rural	Disadvantaged Status ⁵
Belfast	Coastal Flooding Evacuation Route	Rural <i>UACE 06355, Belfast, ME (pop. 3,754)</i>	N/A
Blue Hill	Coastal Flooding Evacuation Route for Stonington, Deer Isle, Sedgwick, Brooklin, Brooksville	Rural	N/A
Brunswick*	Coastal Flooding Evacuation Route for Harpswell, Bath	Rural <i>UACE 11040, Brunswick, ME (pop. 31,361)</i>	N/A
Damariscotta*	Coastal Flooding Evacuation Route for South Bristol	Rural	N/A
Farmington	Inland Flooding Support for New Vineyard, New Portland, Strong, Wilton, New Sharon	Rural	N/A
Milbridge	Coastal Flooding Evacuation Route	Rural	HDC (Tract 9565)
Skowhegan*	Inland Flooding Support for Athens, Canann, Madison, Solon	Rural <i>UACE 82387, Skowhegan, ME (pop. 4,795)</i>	HDC (Tract 9666)
Thomaston*	Coastal Flooding Evacuation Route	Rural <i>UACE 75799, Rockland, ME (pop. 9,868)</i>	N/A
Turner	Inland Flooding Support for Jay, Rumford	Rural	N/A
Wiscasset/Edgecomb*	Coastal Flooding Evacuation Route for Boothbay, Boothbay Harbor, Southport	Rural	N/A
Augusta	Maine General Medical Center (44.36238, -69.78088)	Rural <i>Outside of UACE 04195, Augusta, ME (pop. 24,005)</i>	N/A
Bangor	Northern Light Eastern Maine Medical Center (44.80959, -68.74897)	Urban <i>UACE 04951, Bangor, ME (pop. 61,539)</i>	HDC (Tract 2) APP (Tract 2)
Caribou	Cary Medical Center (46.87970, -68.00756)	Rural	HDC (Tract 9513) APP (Tract 9513)
Lewiston	Central Maine Medical Center (44.10242, -70.21385)	Urban <i>UACE 49339, Lewiston, ME (pop. 60,743)</i>	HDC (Tract 202) APP (Tract 202)
Portland	Maine Medical Center (43.65324, -70.27572)	Urban <i>UACE 71263, Portland, ME (pop. 205,356)</i>	APP (Tract 13)
Skowhegan	Reddington-Fairview General Hospital (44.75904, -69.71207)	Rural <i>UACE 82387, Skowhegan, ME (pop. 4,795)</i>	HDC (Tract 9667) APP (Tract 9667.01)

As described in the [Equity, Community Engagement, and Justice](#)⁴⁰ section of the Merit Criteria, the Partnership conducted a thorough equity assessment using the Climate and Economic Justice Screening Tool (CEJST), Census maps, and Equitable Transportation Community (ETC) Explorer and evaluated whether the locations were Urban or Rural, a Historically Disadvantaged Community (HDC),⁶ or an Area of Persistent Poverty (APP).⁷ Table 1 demonstrates that, of the

⁵ Historically Disadvantaged Community, according to CEJST and/or Area of Persistent Poverty, as defined by BIL

⁶ As designated by CEJST: <https://screeningtool.geoplatform.gov/en/#3/>

⁷ As designated by BIL definitions: <https://www.transportation.gov/RAISEgrants/raise-app-hdc>

16 locations, 13 are in rural areas,⁸ six are in an HDC, and five—all of which are hospital locations—are in an APP.

Safety

Safety is the foundation of every infrastructure project the Partnership undertakes. Maine is very experienced in designing infrastructure, guided by the [Maine Department of Transportation Standard Specifications](#) which incorporates Federal adherence measures. As with all previously built charging locations statewide, the Project will fully comply with FHWA guidelines and the Americans with Disabilities Act (ADA) standards. The Partnership also consults with the [National Roadway Safety Strategy](#) (NRSS) website extensively to incorporate USDOT safety measures and ensure the Project is designed to prevent roadway deaths through the Safe Systems Approach. Charger installation plans will include all traffic and safety measures required by Federal and State governments.

The Partnership will work with utility providers and contracted entities to evaluate final site determinations. Each competitively selected charging site will undergo a thorough safety assessment prior to a successful applicant receiving funding. The Partnership will mitigate safety risks by ensuring each site has safe ingress and egress with adequate signage and lighting; marked pedestrian facilities; ADA compliant parking spots; a safe, open space void of visual obstructions; and safe, comfortable, and convenient amenities to use while charging.

Cybersecurity

As with physical safety risks, the State takes cybersecurity threats seriously. The Partnership works closely with Federal agencies to ensure cybersecurity systems are in place and considers security when designing and constructing infrastructure that could be vulnerable to physical or cyber-attack. The RFP requires that station operators provide a secure payment method that collects, processes, and retains only the personal information strictly necessary to provide the charging service to a consumer. Operators are required to take reasonable measures to safeguard consumer data. Additionally, chargers and networks should be compliant with appropriate Payment Card Industry Data Security Standards for the processing, transmission, and storage of cardholder data. The Partnership will reference the Joint Office of Energy and Transportation's [Cybersecurity Procurement Language Clauses for RFPs and EVSP Contracts](#) when developing RFPs.

Equitable Access

All Community ports will be publicly accessible. RFPs will ask bidders to address location, nearby amenities, and other factors that are likely to affect the successful operation of the charging stations in terms of reliability and convenience. The Partnership will consider the availability and proximity of onsite amenities when selecting award sites.

The Project consists of funding 64 DCFC ports and associated demand charge incentives at 16 locations in Maine. The Partnership selected communities that support multiple municipalities during and after storm events and related power outages. Such storm events are becoming more frequent and contribute to some Mainers hesitating to adopt EVs. The Project will alleviate concerns many residents in these communities have about how to charge their EV during power outages and storms.

⁸ As defined in the NOFO as locations outside of Urbanized Areas (UZA) with populations of less than 50,000

Project funding, which will be used to contract with private entities who successfully respond to RFPs, is necessary to serve two critical needs: (1) expanding a resilient and strategically dispersed EV charging network throughout the state and (2) adding additional ports on heavily traveled corridors that are frequently used for evacuations. Recognizing the results of climate concerns, the Project will ensure EV owners can power their vehicles to prepare for evacuation orders.

The Partnership will build on experience gained over the past four years when issuing Project RFPs and awards. Efficiency Maine has updated [all RFPs](#) utilizing NEVI and CFI funds to ensure compliance with 23 CFR 680. RFP specification compliance includes the technical aspects of chargers, such as connector types, power levels, minimum number of charging ports per station, minimum uptime (reliability standards), and payment methods; data submittal requirements; workforce requirements for installation, operation, or maintenance by qualified technicians; interoperability of EV charging infrastructure; traffic control devices and signage; network connectivity; and publicly available information.

Several EV manufacturers have announced that they will adopt Tesla's North American Charging Standard (NACS) technology and charging ports starting in 2025. Maine will continue to follow 23 CFR 680 requirements for Combined Charging System (CCS) connectors on all NEVI and CFI funded chargers and encourage vendors to consider an additional connector or adapter for NACS compatibility, while ensuring the sites meet other requirements, such as cybersecurity.

Responsiveness to Technology Advancements

Maine considers and plans for future technological advancements that may impact charging stations. The Partnership employs a "dig once" approach at all *Recharge Maine* stations. The Partnership equips each location with the appropriate electrical infrastructure *today* so it is ready for future expansion and technological advancements.

As previously stated, the Partnership's RFPs note the required connector types that are consistent with Federal regulations. To keep Project chargers in demand, the Partnership is encouraging operators to include NACS compatibility while ensuring the sites meet Federal requirements.

The Partnership's RFP specifically requires successful applicants to adhere to all Buy America requirements set forth in 23 U.S.C. §313. All chargers will provide information to the public in real time and payment methods will be secure, convenient, fair, and equitable for all to access. All chargers will accept credit and debit card payments to equitably serve individuals who may not have access to traditional banking.

Ongoing Maintenance and Operation

The Partnership's RFP requires the recipient to operate and maintain each EV charger for at least five years. Responsibilities include maintaining the minimum average annual uptime of 97 percent or greater; ensuring all primary and ancillary equipment, shelters, and display kiosks receive all needed repairs; and keeping equipment safe and presentable.

Given the state's harsh winter climate, utility companies are experienced in strengthening grid infrastructure, responding to emergencies, and restoring power safely and quickly. Utilities typically install electrical components underground, if possible, to aid in resiliency and insulate

infrastructure from snow and severe weather. The Partnership requests bidders to identify a plan for snow removal that ensures charging areas are prioritized.

Per the RFP, the recipient must provide customer support services such as ensuring customers have a mechanism to support outages, malfunctions, and other issues with charging infrastructure in multiple languages; be available 24/7 via a toll-free phone number posted at the charger; provide customer service for the duration of the contract; and be able to resolve customer issues over the phone.

The Partnership's RFPs detail specific Federally guided regulations for data capture and reporting requirements. Recipients must collect and report data as outlined by the Partnership consistent with reporting requirements based on those found in 23 CFR 680 at § 680.112 and § 680.116(c). Recipients may also be required to report this information directly to the [Joint Office of Energy and Transportation's EV Charging Analytics and Reporting Tool \(EV-ChART\)](#).

CFI Program Focus Areas

Maine is committed to supporting ongoing, equitable EV adoption. The State has offered incentives for new EV purchases since 2019, with a total of \$9,134,500 applied to 5,120 rebates as of June 30, 2024. Efficiency Maine continues to offer EV incentives and has taken steps to increase low- and moderate-income participation.

Despite the State's efforts to incentivize EV purchases, range anxiety remains a significant barrier to EV adoption, as are concerns about being able to charge in areas prone to flooding during extreme storms, and the resulting flooding and high winds that threaten the power grid. Maine believes continued, deliberate improvements on evacuation routes, in regional support hubs, and at hospitals in disadvantaged communities will promote wider EV adoption and increase demand.

EV Adoption

Demand for EVs in Maine—and the respective charging infrastructure—is steadily increasing (Figure 6). As of [July 2024](#), Maine has approximately 16,000 EVs on the road. The state is on pace to exceed 5,000 original EV registrations in 2024. Year-to-date EV registrations (2024 Q1

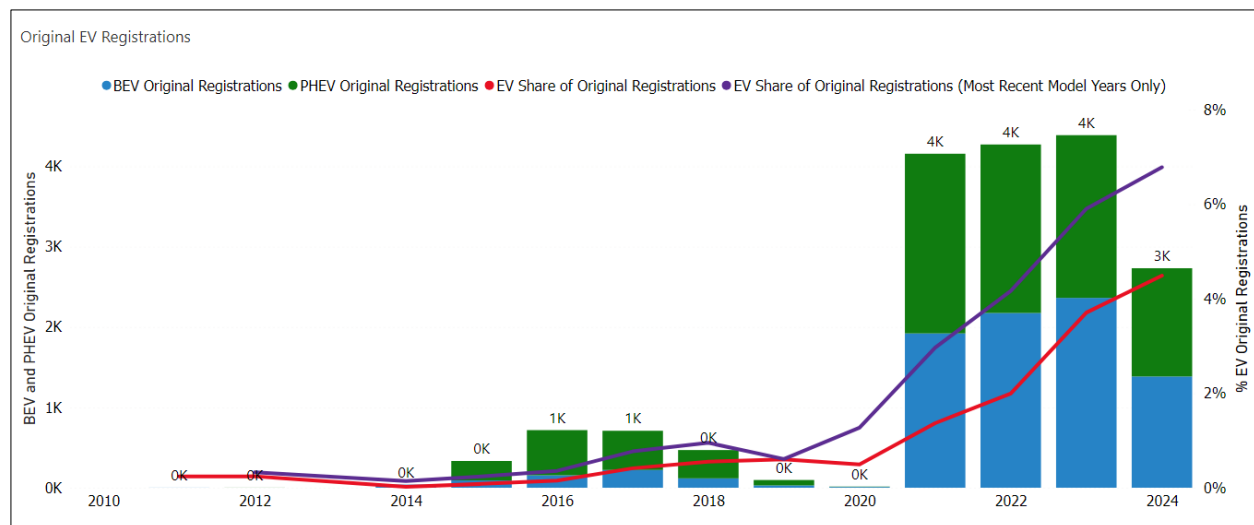


Figure 6. Original EV registration rates in Maine are increasing. Year-to-date for 2024 demonstrates registrations are expected to rise for the year.

and Q2) have totaled 2,732 original registrations. From 2021 to 2023, *annual* EV registrations ranged from 4,150 to 4,390. Although EVs account for only 1.35 percent of LDVs on the road in Maine, light-duty EV registrations represented 6.3 percent of original registrations in Quarter 2 of 2024. EVs on Maine roads increased more than 10 percent between April and July of this year.

As of July 2024, the *Recharge Maine* network has 816 public Level 2 and 255 DCFC ports (Figure 7). The chargers span 17 public EV Charging Networks, including ChargePoint, Tesla, Blink, EVgo, and others. It is estimated that there are 19.54 EVs per Level 2 port in Maine.

Tourism

Maine's abundant natural resources, including Acadia National Park which hosts four million visitors annually—seventh most of all National Parks—make the state an attractive tourist destination. The state is less than a 12-hour drive from major metropolitan areas such as Philadelphia, New York, and Boston in the Northeast and welcomes visitors from Canadian provinces, including Quebec and New Brunswick, where EV adoption rates are higher than in Maine. As a result, a significant share of Vehicle Miles Traveled (VMT) in Maine comes from visitor vehicles registered in other states and Canada. This out-of-state EV charging demand increases the urgency in providing accessible charging opportunities, especially on routes and in areas reliant on tourism income.

Charging Demand

In developing the [Clean Transportation Roadmap](#), data and listening session feedback demonstrated public charging availability will grow in importance in the future as more EV owners, especially those in multi-unit dwellings, may not have access to home charging options.⁹ In an Efficiency Maine EV Rebate survey of 250 EV owners, 12 percent stated they primarily relied on public charging locations.¹⁰ Since 2019, charging sessions at existing DCFCs in Maine have doubled every year.

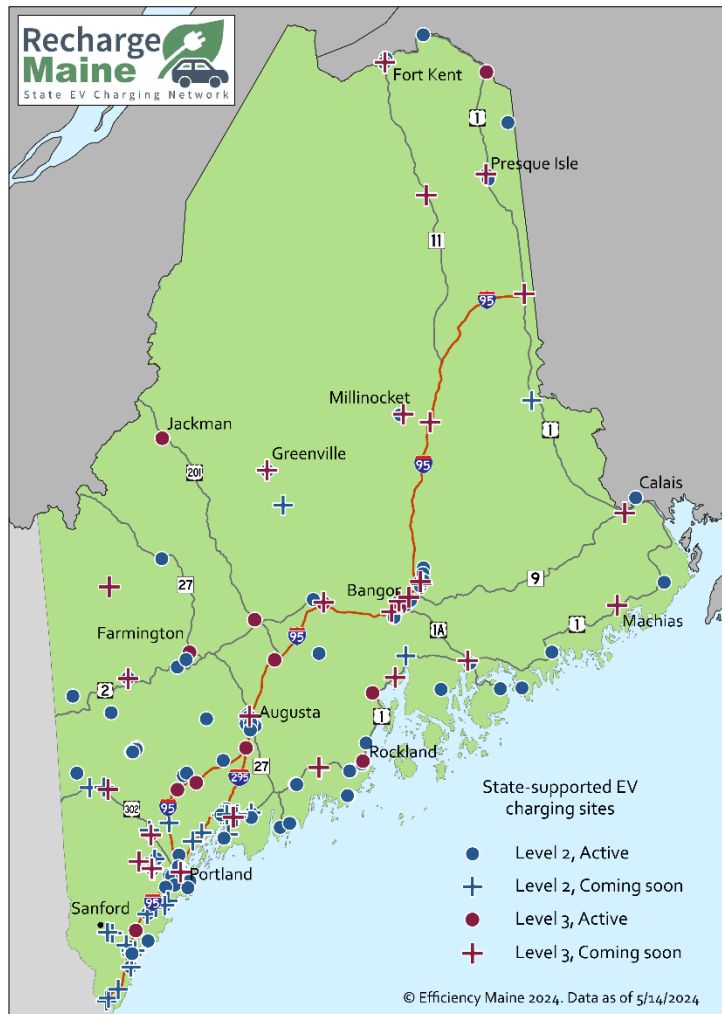


Figure 7. Map of existing Recharge Maine network (Level 2 and DCFC) and awarded State-supported EV charging sites, not including chargers proposed for Round 2 CFI funding.

⁹ Clean Transportation Roadmap, Pages 31-32

¹⁰ Clean Transportation Roadmap, Page 67

The Project expands EV charging access in communities where the private sector is unlikely to invest heavily in the coming decade. The rural and disadvantaged nature of the Project locations necessitates Federal funding support to provide adequate charging infrastructure. Because many of these communities are not directly located on an AFC, more deliberate placement is needed to address their charging demands.

Focus: Multi-Purpose Workplace and Destination Charging

Although resiliency during storms and related power outages is a critical component of the Project, the Partnership is committed to selecting locations that experience viable EV traffic year-round. Selected communities that serve as evacuation hubs during storms have the capacity to support residents from nearby communities and are also large enough to necessitate EV charging demand during periods without storms. The chargers will be available to all residents and visitors at public locations near available restrooms and meal options. Chargers installed at the six hospital locations will greatly benefit patients, visitors, employees, and community residents.

BUDGET INFORMATION

The Partnership is requesting \$15,000,000 in CFI program funding (80 percent) for Community Project chargers. CFI funding is matched by \$3,750,000 (20 percent) in State and private funds. The total Project cost is \$18,750,000. There are no other Federal funds allocated for the Project. MaineDOT has included a match commitment letter with this application (Attachment B).

The Project budget includes costs for procuring and installing the 64 ports (\$13,375,000) as well as \$4,000,000 in demand charge incentives. These incentives are calculated using a model that inputs current utility demand rates, expected charger usage, and projected demand profiles for each site depending on the number and power level of chargers installed. The budget includes \$375,000 to fund RFP and contracting activities. Contingencies are included in these cost estimates and are reflected in the detailed budget (Attachment C).

The Project includes \$1,000,000 to support Workforce Development. The Maine Department of Labor is working with the Partnership to coordinate activities and opportunities that the award will fund.

MaineDOT has a Memorandum of Understanding (“MOU”) with Efficiency Maine covering the financial responsibilities of private entities and will amend or create another specifically for Round 2 CFI funding.

Table 2. Project Component Costs and Percentages

Task	Task Name/ Project Component	Pre-/Post-NEPA	Responsible Entity (For Match)	Cost	Percent of Total Cost
1	Workforce Development	Pre-NEPA	MaineDOT/Partnership	\$1,000,000	5.3%
2	Project Administration (RFP, Contracting, Contingencies)	Pre-NEPA	MaineDOT/Partnership	\$375,000	2.0%
3	Final Design/Equipment/Construction (Procurement, Installation, Contingencies)	Post-NEPA	Selected Private Entities through RFP	\$13,375,000	71.3%
4	Operation Costs (Demand Charge Incentives, Contingencies)	Post-NEPA	Selected Private Entities through RFP	\$4,000,000	21.3%
Total Project Cost				\$18,750,000	100%

Table 3. Source and Percentage of Funds

Source of Funds	Amount	Percent of Total Cost	Detailed Source of Funds
CFI Program Funding Request	\$15,000,000	80%	CFI Program
Other Federal Funding	\$0	0%	N/A
Non-Federal Funding (State)	\$275,000	1.5%	MaineDOT
Non-Federal Funding (Local)	\$0	0%	N/A
Non-Federal Funding (Private Sector)	\$3,475,000	18.5%	Selected entities through RFPs
Total	\$18,750,000	100%	

The Partnership is not currently requesting funding from any other grant program to cover costs for this Project. The Partnership’s competitive RFP process allows the marketplace to equitably compete for available funding. The Partnership has an extensive track record of administering fair and successful competitive bidding opportunities.

Project Scalability

Full Project implementation is best suited to meet NEVI and CFI objectives. Receiving only a portion of the CFI grant funding requested would delay improving charging resiliency statewide. The Project is, however, scalable should full funding not be granted and a portion of the Project need to be completed at a later time. If the Partnership were to receive a portion of Community Program funding, prioritization would be given to sites in close proximity to the most severely disadvantaged communities, tribal communities, and rural areas.

MERIT CRITERIA

Safety

Safety is the foundation of every infrastructure project the Partnership undertakes. The Partnership follows FHWA guidelines and employs the [*Americans with Disabilities Act \(ADA\) Standards Adopted by the U.S. Department of Justice \(2010\)*](#) and the [*U.S. Department of Transportation \(2006\)*](#) to ensure all projects follow all safety requirements and comply with national standards.

Each competitively selected charging site will undergo a thorough safety assessment prior to a successful applicant receiving funding. The Partnership will mitigate safety risks by ensuring each site has safe ingress and egress, dusk-to-dawn lighting, parking spots of adequate size that are ADA compliant, safe and open space void of visual obstructions as well as safe, comfortable, and convenient businesses/amenities to visit while charging.

NRSS actions and goals are integrated into all Project plans—ensuring the Project leads to zero roadway deaths through the [*Safe Systems Approach*](#). The Partnership selects locations following a proactive approach to safety and will continue to do so. MaineDOT is guided by a [*Complete Streets Policy*](#), recognizing that pedestrian and bicycle infrastructure such as sidewalks, bicycle lanes, separated facilities, transit stops, ADA-accessible routes, and travel lanes are embedded elements of the transportation system and must be addressed during all aspects of a project. To the extent the Project interacts with active transportation modes, the Partnership will be diligent to ensure safety for all.

Climate Change, Resilience, and Sustainability

The urgency to meet climate goals is the primary reason the state and nation are investing heavily in EV infrastructure. MaineDOT, using data from MaineDEP, concludes that a typical gasoline vehicle in Maine emits approximately 5.5 metric tons of CO₂ per year while an EV emits only 1.12 metric tons of CO₂ annually.

Increasing EV adoption rates is critical in addressing climate change in Maine. As of July 2024, Maine has 15,925 electric vehicles on the road. Publicly available charging ports are in demand—the *Recharge Maine* network has only 816 Level 2 and 255 DCFC ports available. The *Clean Transportation Roadmap* estimates that expanding public DCFCs by 15 percent by 2030 will boost EV sales by 7 percent. According to the [Recharge Maine dashboard](#), EV registrations are currently outpacing that prediction—in 2024 Quarter 2, the State opened 16 new DCFC ports—a 7 percent increase—but experienced a 10 percent increase in EV registrations. The Project represents a 29 percent increase in the number of publicly available DCFC chargers available in Maine today. The Partnership views the Project as in direct correlation with future EV adoption rates as drivers become more confident in the charging network available to them.

AFLEET

The Partnership utilized the [Alternative Fuel Life-Cycle Environmental and Economic Transportation \(AFLEET\) CFI Emissions Tool](#) to estimate reduced emissions for the Project. The Project is expected to result in 1,996 fewer short tons of GHG emissions (Table 4).

Table 4. Annual CFI Tool – Emissions Reductions

AFV Fueling Infrastructure	GHGs (short tons)	CO (lb)	NOx (lb)	PM10 (lb)	PM2.5 (lb)	VOC (lb)	Sox (lb)	Fuel Dispensed (fuel unit)	Fuel Unit
Level 2 EVSE	-	-	-	-	-	-	-	-	kWh
DCFC EVSE	1,995.6	16,883.7	467.0	57.9	37.2	1,512.2	6.8	1,972,000	kWh
Hydrogen	-	-	-	-	-	-	-	-	kg
Propane	-	-	-	-	-	-	-	-	gal
CNG	-	-	-	-	-	-	-	-	GGE
LNG	-	-	-	-	-	-	-	-	gal
Fueling Infrastructure Total	1,995.6	16,883.7	467.0	57.9	37.2	1,512.2	6.8	-	-

The detailed AFLEET calculations are included in this application’s supplemental materials as Attachment D. For the purposes of this analysis, LDV stations are assumed to be 31 percent Low, 38 percent Medium, and 31 percent High Utilization.

As State officials consider the long-term benefits of EVs, they also monitor the source of electricity for EVs. The vehicle and origin of electricity must work in concert to benefit the environment. Electricity must be generated from low-emissions power sources for the State to reach climate goals. Maine relies heavily on hydroelectric and wind energy to generate electricity. According to the [U.S. Energy Information Administration](#), renewable sources generated 64 percent of Maine’s electricity in 2022. Maine’s share of wind generation is the largest in New England, while its share of power from wood biomass and municipal waste is the largest in the U.S. The State’s forward-thinking approach to how electricity is generated ensures environmental tradeoffs between vehicle and power source are minimized.

Maine has 3,500 miles of coastline and 2,300 square miles of inland water area. As a coastal state, Maine leaders recognize the importance of sea level rise and its connection to a warming climate. Maine has increasingly faced significant storm events and natural disasters both on the coast and inland. Hurricanes that move up the Atlantic coast are maintaining their intensity longer and impacting the state. According to the [Maine Energy Sector Risk Profile](#) from the U.S. Department of Energy, flooding was the natural hazard contributing to the greatest overall property loss between 2009 and 2019. As a result, chargers will not be placed in areas vulnerable to high water even in cities and towns near the coastline. Project infrastructure will be subjected to challenging weather events and natural disasters more often (Figures 8-10). Maine receives the fourth-highest annual snowfall in the U.S. behind Alaska and neighboring New Hampshire and Vermont. The state is experienced combating winter weather and snow removal. Project infrastructure will be built with resiliency in mind—to withstand high winds, treacherous rainfall, ice storms, and large snowfalls.

As part of a changing global climate, frequent extreme low temperatures in Maine present challenges for EVs, including reduced range and longer charging times. Cold weather impacts EV battery performance especially when a vehicle is parked outside and unplugged. Cold temperatures will also result in rapid battery drain while a car's cabin is being heated. A study by [Recurrent](#) found EVs can lose 30 percent or more of their EPA-rated range in freezing conditions. A Norwegian study estimated that winter fast charging lowers average charging power by 24 percent compared to summer charging “because the onboard battery management system limits the charging rate in cold conditions to avoid



Figures 8-10. Damage from storms in December 2023 included a flooded road in Medford (top), flooding through the night in Bethel (center), and downed trees across Route 113 in Gilead (bottom).

detrimental effects on the battery cells.”¹¹ Although some EVs have battery preconditioning features that will warm the battery when navigating to DCFC in winter to increase charging power, rural Mainers have fewer charging options than their urban counterparts. The Project helps ensure rural users of EVs without preconditioning features have more regular charging opportunities in areas where charging stations are already fewer and more separated. The Partnership continues to monitor advances in technology that will help EVs sustain performance in cold temperatures.

MaineDOT’s Environmental Office has conducted an initial environmental screening and has determined that the Project will not create additional adverse environmental impacts to landscape, wetlands, or endangered species because most charging stations will be located in existing parking areas. All charging infrastructure is expected to be built on already developed land or known sites. At locations with existing parking, the Partnership will ensure any electrical grid-to-charger upgrade work will carefully consider the environment and leave the landscape in the same condition that it was found.

Equity, Community Engagement, and Justice⁴⁰

Maine’s climate change mitigation strategies have a strong base in broad public representation and engagement to ensure *all* Mainers have equitable access and say in a project’s result. Like all Federally funded transportation projects in Maine, the Project aligns with long-standing Federal and State policies regarding equity, community engagement, and Justice⁴⁰.

Equity

Maine has developed extensive policies, which it frequently updates, to ensure all decisions are guided by a far-reaching focus on equity. In 2022, GOPIF developed a public policy titled [*An Act To Require Consideration of Climate Impacts by the Public Utilities Commission and to Incorporate Equity Considerations in Decision Making by State Agencies*](#). The policy required a report detailing recommendations to State agencies regarding how to incorporate equity considerations into actions overseen by MaineDEP and the Maine Public Utilities Commission and to ensure that environmental justice is a required consideration in the development and implementation of all State programs and infrastructure plans.

In line with this policy, the Partnership conducted a thorough equity assessment using the CEJST, Census maps, and ETC Explorer. The equity assessment found that 15 of the 16 selected locations meet the parameters for “disadvantaged communities” as defined in the NOFO (E.1.iv.b). Project locations include six areas that are in or adjacent to an HDC and 13 areas that are outside of Census-Designated Urbanized Areas (with a population that exceeds 50,000). Six locations are both Rural and in an HDC. Additionally, the sole location not in an HDC or rural area is in an APP, as defined by the BIL. Although no chargers will be placed within a Tribal community, DCFC installations in Caribou support members of the nearby Mi’kmaq Nation.

The Maine Climate Council (MCC) issued *Maine Won’t Wait* in 2020—the plan included the call for an Equity Subcommittee (ESC). The ESC was formed to support ongoing planning and implementation of the State’s climate strategies to ensure shared benefits across diverse populations in Maine and is co-chaired by a representative from one of Maine’s tribal

¹¹ *Maine Clean Transportation Roadmap*, Page 23. Source: <https://www.maine.gov/future/sites/maine.gov/future/files/inline-files/Maine%20Clean%20Transportation%20Roadmap.pdf>

communities and includes a representative from the Maine Public Health Association, Maine Equal Justice, Aroostook County Community Action Program, the AARP, and the Maine Council on Aging.

The ESC discovered several reasons why disadvantaged communities face greater challenges related to transportation, including:

- Vehicles in rural areas tend to be older, less efficient, less reliable, and more expensive to operate than vehicles in urban areas
- The upfront costs of high-efficiency vehicles can be cost-prohibitive for Maine drivers with low or moderate incomes

Combating these barriers to EV adoption requires significant investment and outreach. Perhaps the most important recommendation the MCC made to increase EV adoption was launched by Efficiency Maine in 2019—an EV rebate program. Today, that EV rebate program reflects several design elements to encourage equitable outcomes, such as:

- Offering higher tiers of rebate amounts for low-income and moderate-income applicants
- Excluding the most expensive vehicles (cars/SUVs costing more than \$55,000; trucks/vans costing more than \$80,000) so funding can be directed to more affordable vehicles
- Offering rebates on used EVs eligible for low-income applicants
- Granting instant rebates at the point-of-sale (overcoming a participation barrier identified in *Maine Won't Wait*)

The cost of incentives issued since that time totals \$9.1 million, applied to more than 5,120 EVs, an average of about \$1,800 per vehicle.

The Project expands the *Recharge Maine* network at a time when EV adoption rates are increasing due to the benefits of rebate programs as well as the confidence that Mainers will be able to charge their EVs, even if forced to evacuate due to flooding or power outages.

MaineDOT's Title VI assurances can be found online in the [Title VI/Nondiscrimination Guide](#). These assurances are updated annually and signed by the MaineDOT Commissioner. MaineDOT also strictly adheres to the [Complete Streets Policy](#), as noted previously.

The Project fully complies with the Americans with Disabilities Act guidelines as do all State infrastructure projects. The Partnership ensures all charging stations and parking are accessible to individuals with disabilities by requiring that at least one parking space fully comply with the U.S. Access Board's [Design Recommendations for Accessible Electric Vehicle Charging Stations](#). MaineDOT has an [extensive website](#) outlining its plans and actions. The site includes the 2019 [Americans with Disabilities Act \(ADA\) Title II Transition Plan](#), a comprehensive written commitment to ADA deliverables. MaineDOT also has an [ADA Compliance Policy for Construction and Maintenance](#) which states, "Newly constructed, reconstructed, or rehabilitated pedestrian facilities will fully meet current ADA accessibility standards. MaineDOT will maintain its design guides to ensure all elements of current ADA compliance are incorporated into roadway improvements as required by this policy." MaineDOT is also guided by the [U.S. Access Board Technical Guidance for Parking Spaces](#).

Community Engagement

The Partnership engages the community and State agencies extensively through webinars, notices, and meetings to ensure that equity- and inclusion-focused planning are a part of charging infrastructure. There are 16 committees the Partnership reaches out to for public comment on the [Maine PEVID](#), eight environmentally focused committees and the remaining half more specifically focused on EV transportation.¹² The Partnership has a comprehensive [public education and outreach plan](#) targeted at potential EV buyers, including multiple YouTube videos. Efficiency Maine has produced four instructional videos on EV chargers, including “*Reasons to Install a Public EV Charger*” and “*What Makes a Good EV Charging Site?*” The videos answer questions potential charger owners considering installing chargers may have.

MaineDOT reports their NEVI-related public engagement efforts in the PEVID annually. These ongoing public engagement efforts have guided the decisions and planning for this Project since it aligns with the State’s plan to build-out AFCs, as required under NEVI. Since the State’s PEVID was published in July 2022, Maine has hosted and participated in more than 25 public events that have engaged more than 120,000 members of Maine’s general public. The events range from presentations and booths for general EV engagement and test drives to informational sessions for project bidders.

The Partnership considers public comments from these events when developing plans and projects throughout the State. One commenter stated, “As climate change worsens and extreme weather conditions increase in frequency, electric vehicles can provide another layer of resiliency to our grid through their batteries.” Some Mainers have expressed cold weather as a limiting factor for personal or commercial EV adoption, especially in rural communities. Public comments include positive recognition from Mainers on the State’s work to expand EV charging availability on pace with EV adoption growth and interest in technologies such as bi-directional charging and improved cold weather capacity.

In August 2024, the Partnership launched the [Virtual Public Involvement \(VPI\) website presentation](#) specific to this Project. The Partnership notified more than 1,000 stakeholders, towns, counties, and residents that the VPI forum was open for comment. As of August 20, 2024, the Partnership has received more than 25 public comments. Select comments include:

- *“I support the direction and goals of this plan. I would like to see more outreach from MaineDOT to municipal officials sharing about how this plan can benefit towns. I have talked with my Select Board about EV charging and they know very little about it and do not understand the benefits of bringing Level 2 and Level 3 charging to our town (Wiscasset), which is a major pass-through town for thousands of drivers each year.”*
- *“My concern is charging opportunities north of Rt 2. If I travel from Rangeley to The Forks or Greenville and back, or to Millinocket via Dover-Foxcroft, there is no infrastructure at this time. I don’t see much in the proposed infrastructure plan to improve this. This is the challenge in rural states. I installed a level 2 charger at my home in the Rangeley area. Without it, I could not drive an EV. There are many places I cannot go with it, as it cannot make the round trip without charging infrastructure.”*
- *“I am currently a Tesla owner and drive a lot for work. The reason I chose a Tesla is because they have a great network of DCFC stations. I believe it’s important to add more*

¹² Page 4

non-Tesla DCFC stations to the state. That way you'll have more people feeling comfortable adopting the technology."

Additional public engagement comments are included in this application as Attachment E.

Justice40

Consistent with NEVI Formula Program guidance and CFI grant requirements, the Project will exceed the goal to deliver at least 40 percent of EV charging investments in disadvantaged communities. At least 60 ports of the total 64 ports to be installed, 94 percent, will be located in or immediately adjacent to disadvantaged communities (rural and/or HDC), as defined by the Justice40 Initiative.

The Partnership recognizes, as the Federal government does, that climate change disproportionately affects disadvantaged communities. The U.S. Department of Energy published [*The U.S. National Blueprint for Transportation Decarbonization*](#) which states, "Particular attention and investment will be needed...to ensure these benefits extend to disadvantaged communities. These actions will be critical for overburdened communities looking to increase access to and adoption of EVs."¹³ That is why the Partnership is taking a thoughtful approach to locate EV infrastructure where all will benefit from access to EVs and the resulting air quality improvements as more individuals purchase electric vehicles.

The Partnership considered Maine's designated evacuation routes when selecting Project locations. As climate-change related weather events, such as flooding, impact Mainers more frequently, reliable evacuation routes to safely move people and emergency supplies are vital. Disadvantaged areas, especially rural coastal communities on Maine's many peninsulas, are disproportionately affected by severe weather events and are often faced with evacuations that utilize the state's AFCs. The Project allows residents to have a reliable power source away from home during already worrisome evacuations.

Workforce Development, Job Quality, and Wealth Creation

Charging infrastructure projects are and will continue to create new, high-paying job opportunities for workers in electrical and other trades while also creating opportunities for the skilled incumbent workforce. The State is focused on job training to prepare for the rapidly changing labor market and needed shift in skills.

Several initiatives are currently underway to build Maine's clean energy workforce. These include the Clean Energy Partnership, a public-private partnership that awards grants to clean energy employers, educational institutions, industry associations, and nonprofit organizations to develop new curricula, provide technical training and experiential learning, deploy new job placement services and perform other activities related to workforce development and training.

The Clean Energy Partnership complements an initiative set forth by Governor Mills to create 30,000 clean energy and energy efficiency jobs by 2030. The MCC includes representation from the Maine AFL-CIO and Maine-based installers of charging infrastructure. In their [2020 report](#), the Transportation Working Group of the MCC recognized the EV revolution as transformational as traditional automotive-based jobs shift to EV-related careers.¹⁴ According to the [2021 Maine](#)

¹³ Page 50-51

¹⁴ *Expand Electrification of Vehicles* section, page 9 of 14

[Clean Energy Industry Report](#), between 2016 and 2019, clean energy jobs grew by 11 percent—the second fastest growing segment of the state’s economy.¹⁵

To support EV-related careers, the State is helping expand skilled trade schools that will ready a larger workforce for EV jobs that pay family wages. Southern Maine Community College recently launched an [Electric Vehicle Repair Certification program](#), and Kennebec Valley Community College was awarded a [Clean Energy Partnership grant](#) in 2022 to deliver new Electric Vehicle Technician and NABCEP-Certified Solar Photovoltaic Installer trainings for two cohorts of learners. The White Mountains Community College in neighboring New Hampshire offers an [Electric Vehicle Technician certificate](#).

Consistent with Maine’s fair and equitable hiring practices, companies involved in charging station infrastructure must provide hiring practices, diversity measures, résumés, and workforce development backgrounds. These requirements ensure workers have the appropriate certifications and training required and that installation companies and their employees meet or exceed State guidelines and Federal government requirements outlined in NEVI and CFI Program guidance. The Partnership encourages company owners and workers of underrepresented groups including Disadvantaged Business Enterprises, Minority-owned Businesses, and Women-owned Businesses to apply for all available opportunities. All State EV projects comply with [Davis-Bacon Act](#) wage requirements.

Maine ranks near the middle of the U.S. for states with employees who are members of a union workforce across all industries. MaineDOT is supportive of a worker’s choice to join a union. Maine is not a right-to-work state.

Strengthening Maine’s workforce of electricians is critical to installing, operating, and maintaining the proposed EVSE. Representing one of the state’s most [in-demand occupations](#), as measured by annual job openings, Maine’s electrician apprentices benefit from robust job quality, earning a median income of \$69,710 two years after completing their program—far exceeding the state’s median income across all occupations. Moreover, strengthening electrician pathways presents an opportunity to create quality jobs for underrepresented communities, ensuring that they benefit from investment in Maine’s EVSE infrastructure.

To accomplish these goals, MaineDOT, in partnership with the Maine Department of Labor, proposes to train up to 143 new and upskilled EVSE apprentices through several workforce strategies. The strategy that aligns with the Project includes administering a request for applications (RFA) process to invest in certified pre-apprenticeship and registered apprenticeship programs that will build a diverse pipeline of electricians. These apprenticeships would train EVSE technicians on how to perform high voltage installations, including Level 2 and DCFC equipment, and include charger-specific training, such as the Electric Vehicle Infrastructure Training Program (EVITP) certification. These programs would be supported by dedicated sector expertise on the Maine Apprenticeship Program to create new programs aligned with registered apprenticeship and certified apprenticeship standards and support successful implementation. The RFA will place specific emphasis on creating women-in-trades pre-apprenticeship cohorts and dedicated outreach initiatives to increase the representation of women in construction, advancing [Governor Mills’ Executive Order](#). Previously, the Maine Apprenticeship Program has

¹⁵ Page 2

awarded \$12 million in ARPA funds to 14 grantees to expand apprenticeship and pre-apprenticeship statewide, and they have successfully created 51 new apprenticeship programs and doubled the number of active apprentices. These programs expand access to electrician pathways by partnering with re-entry centers, Workforce Innovation and Opportunity Act participants, Adult Education centers, and Vocational Rehabilitation programs to recruit under-represented communities into the field, with a focus on women, the re-entry community, and immigrants and refugees.

CFI Program Vision

As outlined in the *Project Description*, the Project thoughtfully addresses a key Focus Area: Multi-Purpose Workplace and Destination Charging. The Partnership is focused on providing equitable charging access to at-risk communities which are often destinations during evacuations or storm events (Table 5).

Table 5. Charger Locations and Quantities

LDV Charger Location	# of DCFC Ports	Resiliency Risk	Equitable Access
Belfast	4	Coastal Flooding Evacuation Route	Rural
Blue Hill	4	Coastal Flooding Evacuation Route for Stonington, Deer Isle, Sedgwick, Brooklin, Brooksville	Rural
Brunswick	4	Coastal Flooding Evacuation Route for Harpswell, Bath	Rural
Damariscotta	4	Coastal Flooding Evacuation Route for South Bristol	Rural
Farmington	4	Inland Flooding Support for New Vineyard, New Portland, Strong, Wilton, New Sharon	Rural
Milbridge	4	Coastal Flooding Evacuation Route	Rural area in an HDC
Skowhegan	4	Inland Flooding Support for Athens, Canann, Madison, Solon	Rural area in an HDC
Thomaston	4	Coastal Flooding Evacuation Route	Rural
Turner	4	Inland Flooding Support for Jay, Rumford	Rural
Wiscasset/Edgecomb	4	Coastal Flooding Evacuation Route for Boothbay, Boothbay Harbor, Southport	Rural
Augusta	4	Maine General Medical Center	Rural area in an HDC and APP
Bangor	4	Northern Light Eastern Maine Medical Center	HDC and APP
Caribou	4	Cary Medical Center	Rural area in an HDC and APP
Lewiston	4	Central Maine Medical Center	HDC and APP
Portland	4	Maine Medical Center	APP
Skowhegan	4	Reddington-Fairview General Hospital	Rural area in an HDC and APP
Total	64		

Multi-Purpose Workplace and Destination Charging

The Partnership selected locations that are *destinations* for both residents and visitors. Hospital employees, patients, and visitors will utilize the chargers at the six medical facilities. As previously stated, these six hospitals are in HDCs and/or APPs. Three are in rural communities and three are in urban areas.

Chargers located in municipalities will be strategically distributed at facilities that are frequented by residents but also nearby evacuation routes and hubs for visitors who are forced to flee their homes during storm events. The Partnership will coordinate with utility companies and selected

bidders to identify exact locations that are less likely to experience power outages or are likely to have power restored quickly due to utility priority restoration plans. The Partnership will be careful to balance accessibility during storm events while also considering everyday use by residents. All locations will have DCFC ports to expedite charging and provide the most flexibility for everyday *and* evacuation use.

Another Project-supported resiliency benefit involves bi-directional charging. A growing number of EV owners are able to use bi-directional systems commonly referred to as Vehicle to Home (V2H) or Vehicle to Load (V2L) to provide backup power for critical household needs. These systems deplete EV batteries with extended use, so the availability of highly resilient DCFC hubs in at-risk communities will enable EV owners to charge up and return home as necessary. This innovative approach not only provides a sustainable energy solution but also offers a backup power source during outages, enhancing energy resilience and efficiency.

Statutory Selection Priorities

The Project expands access to EV charging infrastructure in rural areas (13 of the 16 locations) and in areas designated as HDC or APP, both of which indicate low income as well as other burdens (7 of the 16 locations). *All 16 locations* are designated as either one or multiple categories: Rural, HDC, and/or APP.

Community Program Considerations

Project chargers complement existing NEVI and CFI investments as part of the *Recharge Maine* network. The Project fills gaps in the state's EV network primarily in rural and disadvantaged areas that private investors are unlikely to address. The Partnership is promoting geographic diversity, as visible on the [Project map](#), primarily in rural coastal and inland communities. All urban locations are also in disadvantaged communities.

PROJECT READINESS AND ENVIRONMENTAL RISK

Statement of Work

A detailed Statement of Work is included with this application as Attachment F. The document outlines the process the Partnership will take to publish RFPs, receive bids, and award contracts to the selected contractors.

If awarded, CFI funds will come to MaineDOT then be transferred to Efficiency Maine upon reimbursement requests from private operators. Efficiency Maine will administer the RFP and disburse funds as charging infrastructure projects are completed. The Partnership has more than three years of experience operating in this way. MaineDOT and Efficiency Maine are well-versed in Federal procurement and Buy America rules and are prepared to ensure compliance with them in administering CFI program and NEVI Formula Program funds, consistent with available guidance. Contracts with the EV charging station installers/owners will be consistent with Build America/Buy America Regulations.

The Partnership will distribute CFI Program funds through multiple RFPs. It is experienced issuing and administering RFPs through a market-based competitive process as well as overseeing project implementation in a fair and equitable manner. The RFPs detail the numerous requirements potential organizations *must* meet to be eligible to provide charging construction and services; each requirement listed follows strict State and Federal standards.

Utility Engagement

Efficiency Maine and utility companies work closely together to plan and deliver sufficient electrical capacity to serve EV charging stations. Most existing and proposed DCFCs for the Project are within the territory of the state's two largest utility companies. The Partnership is in close communication with all affected utilities regarding planned charging investments associated with this Project, as with all previous charger installations. The Partnership confers with utilities when selecting charger sites to avoid needing costly electrical grid upgrades. This ensures successful RFP applicants obtain utility cost estimates that are expeditious and accurate. The utility companies are also in communication about power restoration priorities so the Partnership can consider locations that are unlikely to be without power or have power restored in early waves.

Transportation Plans

MaineDOT communicates thoroughly with the public about the details of all State projects. The Project will be amended to Maine's *Statewide Transportation Improvement Program* (STIP) for 2024–2027 and will be detailed in the 2025 Edition of *MaineDOT's Three-Year Work Plan* once awarded. The Project is consistent with the statewide EV plan which details EV infrastructure deployment. It is also consistent with MCC directives and [*Maine's Long-Range Transportation Plan*](#).

Partnership Experience

MaineDOT is an accomplished, experienced, and responsible recipient of previous successful FASTLANE, TIGER, INFRA, RAISE, BUILD, and CFI grants and can be relied upon to fully fund and commence the Project well in advance of the obligation date and to complete the Project well in advance of the completion date requirement without risk.

The Partnership is proud to be recognized as a *Cheetah State* for its expeditious deployment of NEVI-funding chargers. RFPs for Round 1 CFI funding are already published and receiving bids. There is little risk in awarding the Partnership Round 2 CFI funds.

Environmental Risk/Required Approvals

The Partnership recognizes that assuring the sustainability of habitats, ecosystems, and transportation infrastructure can occur together for the mutual benefit of all. MaineDOT exercises reasonable stewardship over natural resources and transportation infrastructure through its commitment to addressing aquatic organisms and wildlife habitat in cooperation with natural resource agencies.

Environmental Risk

Sites selected for use of discretionary funds to support improvements to charging infrastructure in Maine are expected to have minimal environmental risk (Table 6). For example, charging infrastructure is typically expected to be adjacent to existing development and parking areas with limited site disturbance, minimal or no property rights needed, and in areas that avoid natural resources areas and floodplains. The MaineDOT Environmental Office will work with the project team and grant recipients to ensure that the Project goals and community needs can be met while avoiding, minimizing, and mitigating potential environmental impacts.

Table 6. Risks and Mitigations

Project Risks	Mitigations
Review of Individual Project components to ensure compliance with FHWA NEPA requirements	MaineDOT Environmental Office will screen Project components for potential environmental impacts and for eligibility under the ACHP Exemption for EVSE and compliance with FHWA NEPA requirements

Required Approvals

MaineDOT expects the Project to require several approvals. For all required approvals, MaineDOT expects the Project will have *no* or *minimal impact* or will qualify for *exemptions*. The MaineDOT Environmental Office has conducted an initial analysis for the Project and has determined the following *Required Approvals* will be necessary:

- National Environmental Policy Act (NEPA)
- Historic and Archeological
- Section 4(f) of the Department of Transportation Act
- Endangered Species Act (ESA) and Essential Fisheries Habitat (EFH):
- Section 404 Clean Water Act Permit (U.S. Army Corps of Engineers):
- Natural Resources Protection Act (Maine Department of Environmental Protection):
- Stormwater (Maine Department of Environmental Protection):
- Floodway/Floodplains

Detailed descriptions for each of the Required Approvals are included with this application as Attachment G.

Anticipated Project Schedule

The anticipated date of NEPA completion is August 15, 2025, when all site-specific NEPA and utilities reviews are complete.

Table 7. Anticipated Project Schedule

Activity	Date	Responsible Party
Submit application	08/28/2024	MaineDOT
Anticipated award announcement by FHWA	12/31/2024	FHWA
Award agreement initiated	03/31/2025	MaineDOT/FHWA
Project RFP issued	04/30/2025	Efficiency Maine
RFP Webinar #1	05/13/2025	MaineDOT/Efficiency Maine
RFP Webinar #2	06/10/2025	MaineDOT/Efficiency Maine
RFP response proposal deadline	07/28/2025	Potential Subrecipients
Site-specific NEPA & utilities review	08/15/2025	MaineDOT/Efficiency Maine
Anticipated subrecipient award Date	08/29/2025	MaineDOT/Efficiency Maine
Subrecipient award agreement initiated/Project commencement	10/02/2025	Potential Subrecipients/MaineDOT/Efficiency Maine
Project completion	12/31/2027	Subrecipients/Efficiency Maine

Programmatic Agreements

The parties involved in this grant application are also applying an innovative means with respect to NEPA and permitting for this Project through Programmatic Agreements to ensure timely and consistent reviews and accelerate Project delivery.

MaineDOT and various other State and Federal departments have executed agreements to expeditiously but thoroughly review environmental impacts from projects. MaineDOT will take

advantage of the several agreements, where applicable, to streamline the environmental review and approval process. The agreements are included with this application as Attachment H.

MaineDOT's Federal Guidelines Commitment

MaineDOT adheres to all Federal and State guidelines, policies, and laws for all Federally funded projects. MaineDOT's statements and commitments to the following are included with this application as Attachment I:

- Climate Change and Environmental Justice Impact Consideration
- Racial Equity and Barriers to Opportunity
- Labor and Work
- Critical Infrastructure Security and Resilience
- Domestic Preference Requirements
- Civil Rights and Title VI
- Federal Contract Compliance
- Compliance with Section 508 of the Rehabilitation Act of 1973

Project Support

In addition to a high level of readiness, the Project also has support from numerous public and private entities. The application includes numerous letters of support (Attachment J) from a wide range of municipalities, lawmakers, civic organizations, and more, that see the transformational value the Project will bring to the state.

SUPPLEMENTAL MATERIALS

- A. Project Maps
- B. Funding Commitment Letter
- C. Project Budget
- D. AFLEET Emissions Tool
- E. Public Engagement Comments
- F. Statement of Work
- G. Required Environmental Approvals
- H. Programmatic Agreements
- I. Federal Guidelines Commitment
- J. Letters of Support