PROJECT NARRATIVE

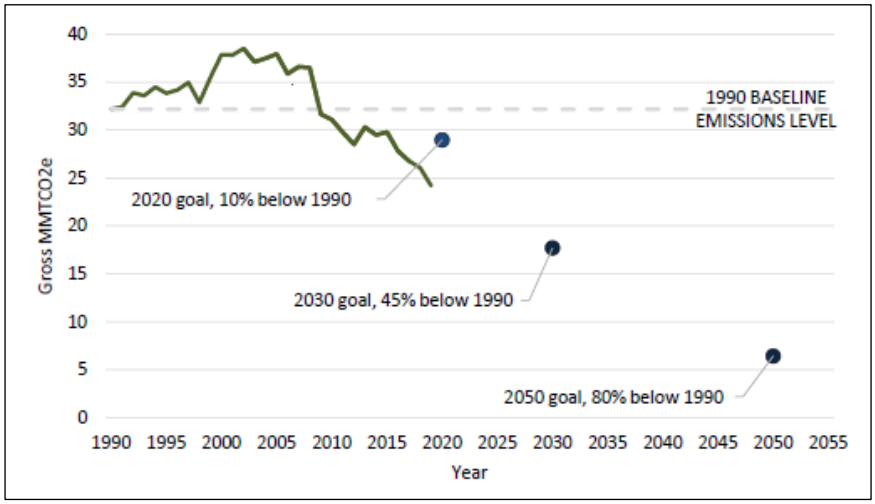
Recharge Maine Project
Maine Department of Transportation

U.S. Department of Transportation (DOT)
Federal Highway Administration (FHWA)
Charging and Fueling Infrastructure Discretionary Grant Opportunity
Number 693JJ323NF00004

The *Recharge Maine Project* ("Project") will:

1. Help Maine meet its goal to reduce greenhouse gas emissions ("GHG") by 45 percent by 2030 and 80 percent by 2050 and achieve carbon neutrality by 2045.
2. Expand charging infrastructure serving disadvantaged urban and rural communities to make EV adoption more equitable.
3. Help the Maine Department of Transportation ("MaineDOT", "Agency") meet electric vehicle ("EV") charging requirements along Federally-designated Alternative Fuel Corridors ("AFCs").
4. Strengthen Maine's economy by reducing transportation costs for residents.
5. Aid the state's $8 billion tourism industry and associated jobs by increasing the number of chargers in areas tourists visit.

The Project will help MaineDOT and the Efficiency Maine Trust (collectively referred to herein as the "Partnership") fund the installation of EV chargers in areas devoid of sufficient charging infrastructure while simultaneously filling the gaps between chargers already in place. In 2019, Governor Janet Mills and the state legislature recognized the most pressing concern facing the state – climate change – and charted a path to immediately elevate the battle against it. As a result, the state created the Maine Climate Council ("Council"). The Council includes scientists, business leaders, bipartisan state and local lawmakers and concerned citizens, all collaborating to develop the state's Climate Action Plan ("Plan") titled *Maine Won't Wait*. The comprehensive Plan details aggressive but achievable goals to combat climate change. The Project is a key



Maine climate goals

component in helping the Pine Tree State meet its GHG emissions reduction targets. The state has drafted a series of studies and reports detailing numerous climate initiatives including expanding EV infrastructure. The application frequently references these documents:

- *Maine Won't Wait – A Four-Year Plan for Climate Action* authored by the Maine Climate Council, December 2020[1]; *Maine Won't Wait Progress Report*, Maine Climate Council, December 2022[2]
- *Maine Clean Transportation Roadmap* authored by the Governor's Energy Office and the Governor's Office of Policy Innovation and the Future, December 2021[3]
- *Maine Plan for Electric Vehicle Infrastructure Deployment* ("Maine PEVID") authored by MaineDOT, submitted to the Federal Highway Administration July 2022[4]
- *Requests for Proposals for Electric Vehicle Charging Stations* authored by the Efficiency Maine Trust ("Efficiency Maine", "Trust")[5]

Transportation is responsible for 49 percent of Maine's annual greenhouse gas emissions.[6] The *Maine Won't Wait* climate action plan lays out a comprehensive roadmap to carbon neutrality with eight high-level strategies to get there; the first addresses the steps required to meet the state's vehicle electrification plans:[7]

- Achieve emissions-reduction goals by putting 219,000 light-duty EVs on the road in Maine by 2030: *Ongoing*
- Develop a statewide EV Roadmap[8] to identify necessary policies, programs, and regulatory changes needed to meet the state's EV and transportation emissions reduction goals: *Complete*

[1] https://www.maine.gov/climateplan/sites/maine.gov.climateplan/files/inline-files/MaineWontWait_December2020_printable_12.1.20.pdf

[2] https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/MWW_Climate%20Plan%20Update%20December%202022_digital.pdf

[3] https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/Maine%20Clean%20Transportation%20Roadmap.pdf

[4] https://www.maine.gov/mdot/climate/docs/pevid-2022.pdf

[5] https://www.efficiencymaine.com/opportunities/rfp-em-011-2023/

[6] https://www.maine.gov/climateplan/sites/maine.gov.climateplan/files/inline-files/9th_GHG_Report_FINAL%20%282%29.pdf, page 2

[7] *Maine Won't Wait*, page 10

[8] https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/Maine%20Clean%20Transportation%20Roadmap.pdf

- Create policies, incentives and pilot programs by 2022 to encourage the adoption of electric, hybrid, and alternative-fuel medium- and heavy-duty vehicles:[9] *Complete*
- Continue to support increased Federal fuel-efficiency standards: *Ongoing*
- Establish a time-limited incentive program, targeted to low- and moderate-income drivers, to encourage drivers to upgrade to higher-efficiency vehicles in the near term: *Ongoing*

The Efficiency Maine Trust, also known as "Efficiency Maine" or the "Trust", is a quasi-state agency established to administer statewide energy conservation measures and GHG emissions reduction programs – including the implementation of electric vehicle rebates and the development of a statewide network of EV chargers. Efficiency Maine provides marketing, education, training, rebates, loans and many other initiatives supporting energy efficiency. Efficiency Maine and MaineDOT have been formal partners since 2018. The Partnership's role in administering EV charger funding is detailed throughout this application.[10]

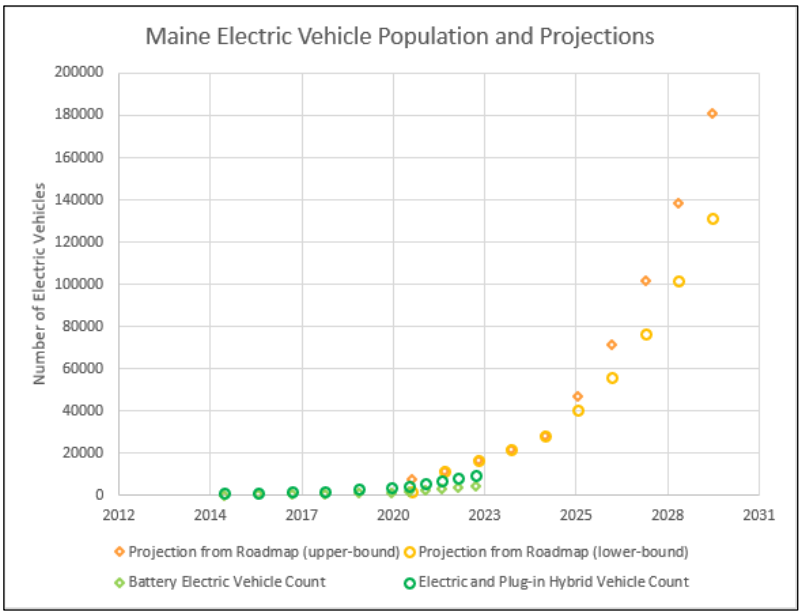
The Partnership will distribute CFI Program funds through one or more Request for Proposals ("RFPs"). The Partnership is very experienced issuing and administering RFPs through a market-based competitive process as well as overseeing project implementation in a fair and equitable manner. The RFPs detail 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.[11] The Partnership, guided by a Strategic Advisory Group consisting of MaineDOT and other state agencies, identifies where EV chargers are needed most. A geographic approach includes strong consideration of disadvantaged communities, including rural communities, given the number of rural areas in Maine. The RFP process provides these communities the opportunity to apply for EV charging funding. The Partnership has strong relationships with several charging infrastructure service providers, businesses that serve the driving public and property owners who participate in numerous stakeholder discussions. The Partnership publicizes RFPs on Efficiency Maine's website and through its mailing list of more than 1,600 individuals. All are notified of new solicitations fairly and equitably. Work resulting from the Project will meet all National Electric Vehicle Infrastructure ("NEVI") standards and requirements under 23 CFR Part 680 including standards and requirements for the installation, operation and maintenance of EV charging infrastructure.

In addition to recently received NEVI funds, which will be expended in the next few years, the Partnership actively pursues other charging infrastructure funding sources. The Partnership has also received:

- Volkswagen settlement funding: $3.4 million (significantly expended)
- American Rescue Plan funding via the Maine Jobs & Recovery Plan: $8 million
- Grant funding from the Maine Public Utilities Commission: $240,000

[9] https://www.maine.gov/mdot/climate/docs/pevid-2022.pdf, page 6
[10] https://www.efficiencymaine.com/at-work/electric-vehicle-charging/
[11] https://www.efficiencymaine.com/docs/Phase5_RFP_011_2023.pdf

- Funding from a litigation settlement involving the New England Clean Energy Connect utility transmission line: $2 million



Maine currently has approximately 9,500 electric vehicles on the road. EV sales were 5.9 percent of new vehicle sales in 2022. As of May 2023, Maine only has 364 public Level 2 charging stations (687 total Level 2 ports) and 54 public universal DCFC stations (67 total DCFC ports).[12] In addition, 87 Tesla charging stations are available to Tesla users. There are maps accompanying the application that show Maine's existing Level 2 and DCFC locations. Since 2018, the Partnership has used VW settlement funding to establish the backbone of Maine's EV fast-charging network along AFCs, including spacing chargers no more than 50 miles apart. This approach continues with a recent release of the state's first RFP using NEVI funding, which is filling gaps along the state's AFCs and adding capacity in high-traffic areas. The Partnership employs a 'dig once' approach to equip each location with the right electrical infrastructure *today* so it is ready for expansion *tomorrow*.

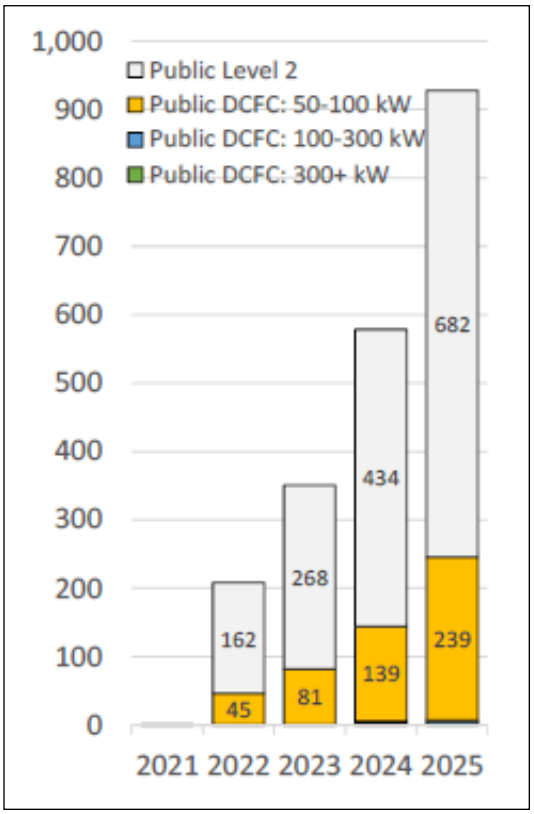
The Governor's Office of Policy Innovation and the Future has projected the ratio of plugs per EV required to support the population of EVs in the next few years. Data and listening sessions demonstrate that home charging will diminish in importance in the future because a greater proportion of EV owners will not have access to the necessary electrical equipment, especially equipment unavailable in multi-unit dwellings.[13]

Vehicle Category	Actual in 2021[100]	2021	2022	2023	2024	2025
Residential Level 1	0.34	0.34	0.34	0.33	0.32	0.32
Residential Level 2	0.52	0.52	0.51	0.50	0.49	0.48
Public Level 2	0.09	0.06	0.06	0.06	0.06	0.06
Public DCFC: 50-100 kW	0.027	0.0136	0.0151	0.0165	0.0177	0.0191
Public DCFC: 100-300 kW	0.0001	0.0001	0.0002	0.0002	0.0002	0.0003
Public DCFC: 300+ kW	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002

Ratio of needed plugs per vehicle

[12] U.S. Department of Energy Alternative Fuels Data Center, Alternative Fueling Station Location

[13] https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/Maine%20Clean%20Transportation%20Roadmap.pdf, pages 31-32



Plugs needed to support projected EV population

Charging station requirements under all RFPs mirror Federal guidelines mandated by FHWA. The Partnership understands some requirements may be challenging for rural communities to implement and is very experienced and thoughtful regarding how incentive strategies can attract private investment and foster successful projects in disadvantaged neighborhoods and rural areas. Strategies include:

- Offering 80 percent project funding and partial operating support during the first five years of the contract term with the remaining amount funded privately – to establish a sizeable amount of private funding in high traffic areas.
- Not requiring bidders to bid on multiple sites.
- Offering bidders the option to bundle low and high traffic sites together, affording them greater assurance of financial viability.

Efficiency Maine and utility companies work closely together to plan and deliver sufficient electrical grid capacity to serve EV charging stations. The Partnership has already been in close communication with the state's major utilities regarding planned charging investments associated with this Project. 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.

Maine's abundant natural resources, including Acadia National Park which hosts four million visitors annually, make the state an attractive tourist destination and less than a 12-hour drive from most cities in the Northeast. Maine also welcomes tourists 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 ("VMTs") in Maine comes from cars and trucks registered in other states and Canada – locations that have broadly embraced EVs.

COMMUNITY PROGRAM

The Community Program component of the Project consists of a strategically- and geographically-driven plan to locate charging stations in cities and towns with the following:

- the highest number of multi-unit dwellings ("MUDs")
- those in or near USDOT-designated disadvantaged communities ("DACs")
- those with median income levels below the state average
- those serving as Regional Service Centers.[14]

The Community Program is designed to install chargers in this manner:

COMMUNITY PROGRAM	Total Locations	Total Ports
Level 2 Chargers-Large Workplaces	10	100
Level 2 Chargers-Community Locations	12	48
Level 2 Chargers-USDOT Disadvantaged Communities Multi-Unit Dwellings (MUD)	38	152
Level 2 Chargers-Regional Service Centers Most are Disadvantaged	55	220
DC Fast Chargers-Community Locations	17	34
TOTAL:	132	554

The Community Program component covers:

- Level 2 chargers in cities or towns with large workplaces (manufacturing facilities, grocery stores, restaurants, offices) and community centers (libraries, parks, and city offices) including those with hourly workforces – to expand community charging in rural and urban areas.
- Maine's top 8 cities with the highest number of MUDs, most with disadvantaged areas, and those currently lacking a sufficient number of plugs. Maps accompanying the application highlight possible charger locations:

City	USDOT DAC
Auburn	Yes
Augusta	Yes
Bangor	Yes
Biddeford	Yes
Dover-Foxcroft	No
Lewiston	Yes
Oxford/Norway	Yes

[14] https://www.maine.gov/dacf/municipalplanning/service_centers.shtml

Portland	Yes
Sanford	Yes
South Portland	Yes
Westbrook	Yes

All of these cities and towns, with the exception of Portland, are Census-designated rural.[15]

- 53 municipalities meeting the Partnership's 'Regional Service Center' criteria: towns that residents rely heavily on – especially rural residents – for goods and services as well as employment opportunities. Regional Service Centers host supermarkets, doctor's offices, hardware stores, restaurants and more. A map accompanying the application highlights the Service Centers. All of these towns are also Census-designated rural:[16]

Town	USDOT DAC
Ashland	No
Augusta	Yes
Bath	Yes
Bethel	Yes
Biddeford	Yes
Bingham	Yes
Blue Hill	No
Boothbay Harbor	No
Brewer	No
Bridgton	Yes
Calais	Yes
Caribou	Yes
Cornish	No
Damariscotta	No
Dexter	No
Dixfield	Yes
Dover-Foxcroft	No
Eastport	No
Fairfield	Yes
Farmington	Yes
Fort Kent	No
Gardiner	No
Greenville	No
Guilford	No

Town	USDOT DAC
Limestone	Yes
Lincoln	No
Machias	Yes
Madawaska	No
Mars Hill	No
Mexico	Yes
Milbridge	Yes
Millinocket	No
Newport	Yes
Norway	Yes
Old Orchard Beach	Yes
Old Town	Yes
Orono	No
Oxford	Yes
Pittsfield	Yes
Presque Isle	Yes
Rangeley	No
Rockland	Yes
Rumford	Yes
Sanford	Yes
Skowhegan	Yes
Southwest Harbor	No
Thomaston	No
Van Buren	Yes

[15] http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/

[16] Same as above

Houlton	No
Jackman	Yes

Waterville	Yes
Winslow	No
Wiscasset	No

Underserved Focus – Disadvantaged:
Of the 53 municipalities listed above 29 of them, or 55 percent, are USDOT-designated Disadvantaged Communities. All fall below the state's median household income level of $63,182. For Level 2 charging installation, Maine will prioritize a variety of locations in Regional Service Centers including areas with low to moderate income levels, affordable housing MUDs, workplaces – especially those with an hourly workforce – and retail locations. This plan is consistent with, and able to enhance, the Maine PEVID, which focuses on Level 2 plugs supporting residents of multi-unit dwellings as well as other community-based charging in urban and rural areas. The Partnership used the *Electric Vehicle Charging Justice 40 Map* to identify disadvantaged communities that will benefit from the Project.[17]

Underserved Focus – Rural:
Additional funding provided by this grant will fill gaps *between* disadvantaged communities and add capacity *within* disadvantaged communities. In Maine, many disadvantaged communities are also Rural Service Centers which, for many, are the only proximate location for goods and services in the rural region. With community chargers located here, a trip to the supermarket, doctor's office and other essential businesses will provide an opportunity to charge a vehicle.

Maine is a rural state with a population heavily dependent on vehicle transportation. The state has 44.2 people per square mile compared to the U.S. average of 93.8 people per square mile according to the U.S. Census Bureau. As a rural state, Maine faces a great contextual challenge. It has several passenger and freight corridors with relatively low Annual Average Daily Traffic (AADT), some designated AFCs. The Partnership estimates that it may be challenging to support DCFC stations on corridors with AADT under 7,500. Low AADT means demand for EV charging is likely to be low and remain low for an extended period of time in those areas. Private investors realize this. That's why the Partnership offers subsidies to incentivize the installation of chargers in remote areas, encouraging private investment.

Underserved Focus - Conclusion
The Partnership upholds its focus on equity through all steps of a Federally-funded transportation project – from public input discussions to project development to implementation. It has an extensive record of successfully receiving and administering state and Federal funding equitably and under strict adherence to funding requirements. It will ensure the Project addresses overnight charging needs in urban areas, prioritizes locations with high concentrations of MUDs, connects affordable housing neighborhoods in urban areas and reaches Regional Service Centers to provide EV charging convenience for rural and disadvantaged residents living in regions far from cities.

The Partnership designs projects with public transportation in mind; however, Maine's large cities do not have the same population levels as those of many nearby New England cities.

[17] https://anl.maps.arcgis.com/apps/webappviewer/index.html?id=33f3e1fc30bf476099923224a1c1b3ee

Therefore, this grant application focuses on personal vehicles, not public transportation vehicles, although Maine examines the use of low- or no-emissions when studying public transportation expansion. MaineDOT funded a recent study about transit electrification and Maine has a growing number of electric school buses.

Price and Payment
The Partnership's RFPs communicate requirements regarding price and payment that mirror Federal guidelines. Each charger is required to:

- Provide for secure payment methods, accessible to persons with disabilities, which at a minimum shall include a contactless payment method that accepts major debit and credit cards, and either an automated toll-free phone number or a short message/messaging system (SMS) that provides the EV charging customer with the option to initiate a charging session and submit payment
- Charge a vehicle without the driver needing a membership
- Not delay, limit, or curtail power flow to vehicles on the basis of payment method or membership
- Provide access for users that are limited in English proficiency and accessibility for people with disabilities. Automated toll-free phone numbers and SMS payment options must clearly identify payment access for these populations.

The Partnership requires the price and any other fees be clearly displayed on the charging unit prior to charging and be based on the price for electricity in $/kWh. The price for charging cannot be changed during the session. Chargers must have a point-of-sale and supporting network that is compatible with other public networks in Maine and, to the greatest extent practicable, employs roaming agreements providing compatibility with commonly used systems, including those networks used in neighboring Quebec and New Brunswick. For the first five years of the contract, the Project intends to require developers to indicate in their applications the charge rate or fee for each charging event equal to the starting rate proposed in the RFP bid. The Project also intends to allow increases to the rate or fee during the five-year period by not more than the Consumer Price Index, as measured using the online CPI Inflation Calculator published by the US Bureau of Labor Statistics.

All of the Partnership's RFP requirements, including those involving price and payment, are located in the Statement of Work, Sections 6 and 7.

Greenhouse Gas Emissions
Maine's transportation sector produced 49 percent of statewide fossil-fuel GHG emissions in 2019[18] or approximately 7.5 million metric tons of carbon dioxide equivalent (MMTCO2e).[19] Of that, light-duty cars and trucks emitted approximately 60 percent of the share. Light-duty vehicles must achieve near-zero emissions by 2050 for Maine to reach its 2050 GHG goal.

[18] https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/MWW_Climate%20Plan%20Update%20December%202022_digital.pdf, page 5
[19] https://www.maine.gov/climateplan/sites/maine.gov.climateplan/files/inline-files/9th_GHG_Report_FINAL%20%282%29.pdf, page 29

While many strategies can reduce emissions, deploying electric vehicles would be critically important. Advances in EV technology, falling vehicle prices and cleaner utility power-generation must all continue for the Pine Tree State to meet emissions goals.[20]

Community Program - Conclusion

All Partnership RFPs, including those advertising CFI grant program funding, will fund infrastructure only in locations the public can easily access. Chargers will be located where people congregate such as MUD's, supermarkets, publicly accessible parking facilities, libraries and other locations. Funding will cover eligible Project costs only, including the acquisition and installation of eligible infrastructure. The Project does not cover property acquisition; however, it will cover the Partnership's back-office activities relating to the RFP process, to the extent allowed by the grant, and contracting with successful applicants. The Partnership is extremely focused on communicating with stakeholders about EVs. It provides numerous educational resources about EVs and chargers and has done so for years; therefore, the Partnership does not plan to allocate educational funding under the CFI Program. To inquire about interest in the Project, the Partnership has already conducted an RFI that received 31 responses, as well as a webinar with 50 attendees and numerous other public presentations and meetings related to this Project. The community is showing great interest in moving this Project forward. More than 20 letters of support from communities, organizations, utilities and more accompany this application.

CORRIDOR PROGRAM

The Corridor Program component consists of funding 28 DCFC ports and associated demand charge incentives in seven cities along Alternative Fuel Corridors not scheduled to be completed with NEVI funding. These locations are all along AFC Pending or AFC Ready corridors that will need additional charging capacity to either meet FHWA's requirements to be considered 'fully built-out' or additional charging capacity to meet the high demand for charging. The Partnership will ensure all AFC charging locations are located not more than one mile from highway exits or highway intersections along designated corridors. All of these towns are Census-designated rural.[21]

CORRIDOR PROGRAM	Total Locations	Total Ports
DC Fast Chargers	7	28
Demand Charge Incentives (5 years)	7	28

[20] https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/Maine%20Clean%20Transportation%20Roadmap.pdf, page 1

[21] http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/

City	USDOT DAC
Bar Harbor	No
Bethel	Yes
Bingham	No
Boothbay	No
Carrabassett Valley	No
Old Orchard Beach	Yes
Wells/Ogunquit	No

Corridor Program funding, which will be used to contract with private entities who successfully respond to RFPs, is necessary to serve two critical needs – creating charging locations to fill gaps along Maine's AFCs and adding additional ports in current AFC locations with existing DCFCs. The Partnership is actively working toward a full-build out of all Maine's AFCs using an equitable approach given the current funds available. CFI funding, when combined with NEVI funding, will allow full build-out of several Alternative Fuel Corridors in Maine, including Route 2, Route 27, Route 201, and Route 3, all located in west & central Maine. These corridors serve rural residents and are important connecting corridors to neighboring New Hampshire and Quebec.

DCFC installation in Bar Harbor, Old Orchard Beach, Boothbay and Wells/Ogunquit will add new charging ports along ready and pending corridors in rural locations heavily dependent on tourism and critical to the state's $8 billion tourism industry which supports 151,000 jobs. The Corridor Program will augment the Partnership's NEVI-funded locations and will provide the state with the only viable pathway to build out all AFC corridors.

Maine currently has 210 miles of EV Corridor Ready roads and 275 miles of EV Corridor Pending roads. The state recently extended the Interstate 95 AFC from previous endpoint, Bangor, to Houlton on the Canadian border – a distance of 100 miles. This is the northernmost stretch of I-95 in the U.S.

Under the Corridor Program, the Partnership will offer an incentive to cover partial operating support for the first five years of charger operation. This incentive will be structured to provide no more than 80 percent of the estimated cost of utility demand charges during the first five years of operation and will be based on actual incurred demand charges, not to exceed the maximum 80 percent Federal share. The remaining operating expenses will be the responsibility of the charging station host or successful bidder to the Partnership's RFP.

ADDITIONAL INFORMATION – BOTH PROGRAMS

Charger installation plans under both programs will include all traffic and safety measures required by Federal and state governments. Maine is very experienced designing infrastructure,

guided by the *Maine Department of Transportation Standard Specifications*[22] which incorporates Federal adherence measures. Installation work will also follow all state and Federal guidelines. 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 though the Safe Systems Approach.[23] Chargers will be installed in existing parking locations and the Partnership will ensure ingress and egress points and the parking lot are designed consistent with all roadway safety rules. As with all previously-built charging locations statewide, the Project will fully comply with the Americans with Disabilities Act to ensure all can access chargers with ease.

All plugs will be publicly accessible. The Partnership will ensure it contracts with numerous private entities for installation and operation of charging infrastructure under CFI, allowing the Project to cover a variety of potential charging locations convenient to the broadest number of individuals. Five of the 53 Regional Service Centers to host chargers are located near Federally-recognized Tribal communities including the Houlton Band of Maliseet Indians, the Mi'kmaq Nation, the Passamaquoddy Tribe and the Penobscot Nation.[24]

Private investment from Electrify America, EVgo, Tesla and auto dealerships are contributing to additional capacity along AFCs. This is creating welcome charger redundancy and complementing publicly-funded ports. The Partnership continues to encourage such private investment.

The Partnership's RFP specifically requires successful applicants to adhere to all Buy America requirements set forth in 23 U.S.C. §313. Required connector types are noted in the Partnership's RFPs and are consistent with Federal regulations.[25] 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 be not have access to traditional banking.

The urgency to meet climate goals is a primary reason the state and nation are investing heavily in EV infrastructure. The following estimation of reduced emissions for the Project is conducted using the *Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) CFI Emissions Tool*.[26] After assessing the state's utilization trends, inputs included: 62 DCFCs (where one charger equals one port) and 260 L2 chargers (where one charger equals two ports). As recommended following the state charger analysis, chargers have been evenly split between moderate and high utilization.

22 https://www.maine.gov/mdot/contractors/publications/standardspec/docs/2020/2020%20Standard%20Specification.pdf

23 https://www.transportation.gov/NRSS

24 https://www.bia.gov/service/tribal-leaders-directory/federally-recognized-tribes

25 https://www.efficiencymaine.com/docs/Phase5_RFP_011_2023.pdf, page 13

26 AFLEET CFI Tool (anl.gov)

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	2,104.9	17,808.3	492.6	61.0	39.3	1,595.0	7.1	2,080,000	kWh
DCFC EVSE	2,509.7	21,233.0	587.3	72.8	46.8	1,901.7	8.5	2,480,000	kWh
Hydrogen									kg
Propane									gal
CNG									GGE
LNG									gal
Fueling Infrastructure Total	4,614.7	39,041.3	1,079.9	133.8	86.1	3,496.7	15.6		

The acquisition and installation of traffic control signage to direct traffic to chargers and note charger-specific parking locations devices is an element of the Project. Charger owners without 3-phase power or those who intend to mitigate demand charges may choose to install on-site battery storage although batteries are not a state requirement. At numerous public outreach sessions, the Partnership addressed concerns entities have about the financial viability of installing chargers in rural areas. The Partnership monitors concerns to avoid a financial scenario that could result in private vendors and/or property owners "becoming disillusioned with the economic burden of owning/hosting this critical infrastructure."[27] Significant EV adoption will need to take place in these locations to ensure hosts recover charger capital costs within a few years.

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.

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 NEVI Standards and Requirements (23 CFR 680) at § 680.112 and § 680.116(c). Recipients may also be required to report this information

[27] Maine PEVID, page 22

directly to the FHWA in a manner set forth accordingly.[28]

Americans are aware of the growing popularity of EVs and Maine communicates publicly in great detail about EV-related Projects statewide. Efficiency Maine conducts numerous in-person and online webinars, seminars and information sessions detailing state EV programs and encouraging participation. In March and April 2023 alone, Efficiency Maine hosted seven webinars with more than 100 attendees.

The Project will be amended to Maine's *Statewide Transportation Improvement Program* (STIP) 2023 – 2026 and will be detailed in the 2024 Edition of *MaineDOT's Three-Year Work Plan*[29] once awarded. It is consistent with the statewide plan detailing EV infrastructure deployment and directives from the Maine Climate Council. The following *Long-Range Transportation Plan* components connect strongly to the overall Project mission:[30]

- Pages 48-49: *One of the top needs identified by Maine people is for "lower environmental impacts" and how "Maine's customers want comprehensive solutions to address the impacts of climate change".*
- Page 57: *How Maine is positioning to take advantage of discretionary grant programs from the Bipartisan Infrastructure Law ("BIL").*
- Page 65: *Mainers desire to have confidence in driving around the state with safe, convenient and reliable EV infrastructure to support widespread charging.*
- Pages 73-75: *Goals, objectives and strategies to pursue grant funding.*
- Page 81: *Transportation funding – both formula and special funding – is a critical aspect of achieving Maine's transportation vision.*
- Page 85: *"…position for an electric vehicle future…" and is the most relevant in supporting the pursuit of this funding.*

BUDGET NARRATIVE

The Partnership is requesting an 80-percent Federal match, or $15,191,400 in Federal funding and is providing a 20 percent funding match of $3,797,850. There are no other Federal funds allocated for the Project. MaineDOT has included a match commitment letter accompanying this application. The total Project cost is $18,989,250 consisting of $11,025,000 to fund the

28 https://www.efficiencymaine.com/docs/Attachment_D_RFP_EM_011_2023_Data_Capture_and_Reporting_Requirements.pdf

29 https://www.maine.gov/mdot/projects/workplan/docs/2023/WORK%20PLAN%20FINAL%202023_2024_2025-3.pdf, begin page 70

30 https://uploads.mainedotpima.com/300823a7-ddcf-4ccc-9ca9-53d6425d1c4c.pdf

Community Program and $7,413,000 to fund the Corridor Program. An additional $551,250 will fund the Partnership's RFP and contracting activities. Funds will only be spent on charging infrastructure, demand charge incentives and the Partnership's RFP and contracting activities. MaineDOT has a Memorandum of Understanding ("MOU") with Efficiency Maine covering the financial responsibilities of private entities and will create another specifically for CFI funding. The Partnership will ensure private entities are responsible for the match portion of costs as required under the Corridor Program.

Community Program funding includes $5,925,000 for 520 Level 2 charging ports, $5,100,000 for 34 DCFC ports and associated installation costs. Corridor Program funding includes $6,363,000 for 28 DCFC ports and associated installation costs as well as $1,050,000 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 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 administering fair and successful competitive bidding opportunities.

Project Scalability

Maine needs to construct all Project components of both Programs to advance the transportation well-being of disadvantaged communities, tribal communities and the state's large rural population. Full Project implementation is best suited to meet NEVI and CFI objectives. Receiving only a portion of the CFI grant funding requested would delay build-out of AFC corridors as well as the charging network across rural Maine and in disadvantaged communities. 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, such as 50 percent, of Community Program funding then prioritization would be given to Level 2 sites in close proximity to disadvantaged communities, tribal communities and rural areas. The Partnership would also propose one DCFC site in the top eight MUD cities as well as sites in Sanford, Oxford/Norway and Dover-Foxcroft.

If the Partnership were to receive a portion, such as 50 percent, of Corridor Program funding then prioritization would be given to sites in Bethel, Boothbay Harbor, Carrabassett/Eustis, and Bingham.

The RFP/contracting activities under the Project, as well as implementation activities, will both be abbreviated by removing some Community Program and Corridor Program sites. The following chart details the financials under a 50 percent Community Program and Corridor Program scenario, where only half of the recommended sites and half of the recommended ports are built:

SCALED COMMUNITY PROGRAM	Total Sites	Total Ports	Description	Overall Costs per Port	*Equipment* Cost per Port	*Installation* Cost per Port	Total Project Cost
Level 2 Chargers-Large Workplaces	5	50	Supermarkets/Restaurants/Offices/etc.	$ 12,000	$ 8,640	$ 3,360	$ 600,000
Level 2 Chargers-Community Locations	6	24	Libraries/Parks/City Halls/etc.	$ 11,250	$ 8,100	$ 3,150	$ 270,000
Level 2 Chargers-USDOT Disadvantaged Communities/Multi-Unit Dwellings (MUD)	19	76	Communities with a high concentration of MUDs within 1/4 mile of a USDOT DAC	$ 11,250	$ 8,100	$ 3,150	$ 855,000
Level 2 Chargers-Rural Service Centers	27	110	Rural Service Centers; contains a USDOT DAC or meets Efficiency Maine's definition of 'economically disadvantaged'. May be near a Tribal Community.	$ 11,250	$ 8,100	$ 3,150	$ 1,237,500
DC Fast Chargers-Community Locations	11	17	Two 150kW ports per site; located in top 8 MUD cities as well as Sanford, Dover-Foxcroft, Oxford/Norway	$ 150,000	$ 93,000	$ 57,000	$ 2,550,000
Partnership's RFP/Contracting Activities	-	-	Partnership's RFP/Contracting Activities (5% of Community Program Total)	-	-	-	$ 275,625
Scaled Community Program Total (at 50% of full Community Program Project):	**68**	**277**	-	-	-	-	**$ 5,788,125**

SCALED CORRIDOR PROGRAM	Total Sites	Total Ports	Description	Overall Costs per Port	*Equipment* Cost per Port	*Installation* Cost per Port	*Operating* Cost per Port	Total Project Cost
DC Fast Chargers	4	16	Four 150kW = 600kW ports per site/4 sites; match provided by private entities	$ 227,250	$ 104,535	$ 122,715	-	$ 3,636,000
Demand Charge Incentives (5 years)	4	16	Aids in insulating charger host from utility company demand charges for the first 5 years	$ 37,500	-	-	$ 37,500	$ 600,000
Scaled Corridor Program Total (at approx. 50% of full Corridor Program Project):	**4**	**14**	-	-	-	-	-	**$ 4,236,000**

GRAND TOTAL:	$10,024,125

The Project schedule would be adjusted down from two years to one year to complete the scaled-down version of the Project.

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.[31] 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, adequate lighting, parking spots of adequate size that are ADA compliant, safe open space void of visual obstructions as well as safe, comfortable and convenient businesses to visit while charging.

NRSS actions and goals are integrated into all Project plans – ensuring the Project leads to zero roadway deaths though the Safe Systems Approach.[32] The Partnership selects locations following a proactive approach to safety and will continue to do so.[33] MaineDOT is guided by a *Complete Streets Policy*[34], recognizing that pedestrian and bicycle infrastructure such as sidewalks, bicycle lanes, separated facilities, transit stops, ADA-accessible routes and travel

[31] https://www.access-board.gov/ada/

[32] https://www.transportation.gov/NRSS

[33] https://www.transportation.gov/sites/dot.gov/files/2022-02/USDOT-National-Roadway-Safety-Strategy.pdf, page 6

[34] https://www.maine.gov/mdot/completestreets/docs/MaineDOTCompleteStreetsPolicyFinal.pdf

lanes are imbedded 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 MaineDOT, using data from the Maine Department of Environmental Protection, concludes that a typical gasoline vehicle in Maine emits approximately 5.5 metric tons of CO_2 per year while an EV emits only 1.12 metric tons of CO_2 annually.

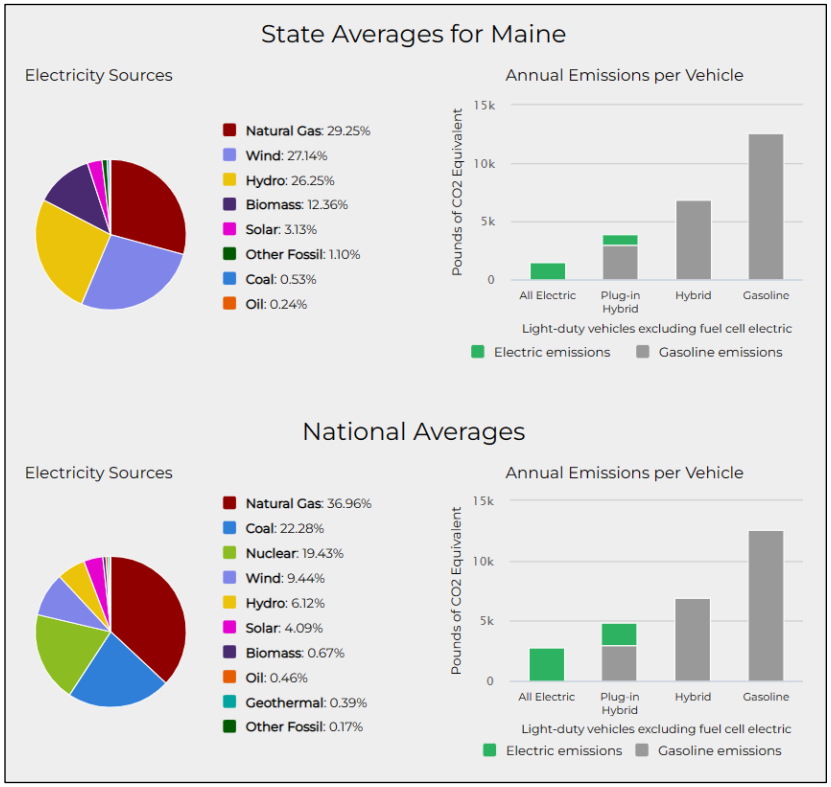
Facts and Figures 2019	Calculation	Data Source
Emissions conversion factor for gasohol for LDV (MTCO2/gal)	0.00848	Maine DEP
Emissions conversion factor for gasohol (MTCO2/LDV-mile)	0.000439	Maine DEP
Fuel Efficiency-weighted average for light duty vehicles (MPG)	19.3	Maine DEP
Emissions conversion factor for Battery Electric Vehicles (BEV) MTCO2e/mile	0.000128	Efficiency Maine
EV Projection (lower limit)	131,293	Maine Clean Transportation Roadmap
EV Projection (upper limit)	180,689	Maine Clean Transportation Roadmap
Total Vehicle Miles Traveled (VMT) for Maine LDV	13,447,638,869	Maine DEP
Total Population LDV	1,130,500	Maine DEP
Miles per year per LDV	11,895	Maine DEP

	Battery Electric Vehicles (BEVs)	Internal Combustion Engines (ICEs)
Number of vehicles	131293	131293
Miles per year/Vehicle	11895	11,895
Emissions factor MTCO2e/mile	0.000128	0.000439
Total Emissions (MTCO2)	199907	685617
APPROXIMATE Savings 2030 (MTCO2e)	**485710**	Approximate Lower Limit

	Battery Electric Vehicles (BEVs)	Internal Combustion Engines (ICEs)
Number of vehicles	180689	180689
Miles per year/Vehicle	11,895	11,895
Emissions factor MTCO2e/mile	0.000128	0.000439
Total Emissions (MTCO2)	275117	943565
APPROXIMATE Savings 2030 (MTCO2e)	**668448**	Approximate Upper Limit

The accompanying chart details the MTCO2e *estimated savings* between BEVs and internal combustion engines generated by the projected number (low and high range) of EVs on the road in 2030. Note that for simplicity, these conversions assume that 100 percent of the projected electric vehicle population will be battery electric. The emissions reduction that results from converting the projected number of vehicles from internal combustion engine to battery electric vehicle by 2030, or *savings*, is estimated to be between 485,710 and 668,448 metric tons of CO_2.

Maine currently has 9,500 electric vehicles on the road and only has 364 public Level 2 charging stations (687 total Level 2 ports) and 54 public DCFC stations (67 total DCFC ports). The *Clean Transportation Roadmap* suggests that expanding public fast chargers by 15 percent in 2030 will boost EV sales by 7 percent in 2030 relative to business as usual. Maine environmental leaders continue to monitor the somewhat improved efficiency of gasoline engines while simultaneously focusing on the larger role EV's will play in meeting climate change goals – including Maine's overarching goals of reducing greenhouse gas emissions by 45 percent by 2030, 80 percent by 2050 and reaching carbon neutrality by 2045.



The Partnership conducted an emissions reduction analysis in May 2023 using the *Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) CFI Emissions Tool* noted previously in the 'Additional Information – Both Programs' section. As state officials consider the long-term benefits of EVs, they also study and 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 to enable the state to reach climate goals. Fortunately, Maine relies heavily on hydroelectric and wind energy to generate electricity. According to the U.S. Energy Information Administration, renewable sources generated 74 percent of Maine's electricity in 2021 – one of the top-five U.S. states in this category. 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.[35] The state's forward-thinking approach to how electricity is generated ensures environmental tradeoffs between vehicle and power source are minimized.

While Maine is not a state that experiences prevalent natural disasters as frequently as other parts of the country, hurricanes that move up the Atlantic coast are maintaining their intensity longer as they reach Maine. As a result, Project infrastructure will be subjected to challenging weather events and natural disasters more often. Maine receives the fourth-highest annual snowfall in the U.S. behind Alaska and neighboring New Hampshire and Vermont. For resiliency, infrastructure

[35] https://www.eia.gov/state/analysis.php?sid=ME

is built to withstand high winds, treacherous rainfall, ice storms and large snowfall. The state is very experienced combating winter weather and snow removal. 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, as described in *Maine Won't Wait*. As a result, chargers will not be located in areas where they would be vulnerable to high water even in cities and towns near the coastline.

As part of a changing global climate, frequent extreme low temperatures in Maine present challenges for EVs, including reduced range and longer charging times. As a result, the Maine PEVID encourages bidders to locate DCFCs closer than the required 50-mile increments where possible and to target state priority corridors in addition to AFCs. 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 led by the Norwegian Automobile Federation estimated that "EVs lose approximately 20% of their range in winter conditions in Norway compared to test cycle ranges." Another Norwegian study estimated that winter fast charging lowers average charging power by 24 percent compared to summer charging. "This is because the onboard battery management system limits the charging rate in cold conditions to avoid detrimental effects on the battery cells."[36] The Partnership continues to monitor advances in technology that will help EVs sustain performance in cold temperatures.

Because most charging stations will be located in existing parking areas, the Project will not create additional adverse environmental impacts to landscape, wetlands or endangered species. No charging infrastructure will be built on undeveloped land. 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

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, the Governor's Office of Policy Innovation and the Future ("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.*[37] The policy required a GOPIF report detailing recommendations to state agencies regarding how to incorporate equity considerations into actions overseen by the Department of Environmental Protection 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.

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[36] *Maine Clean Transportation Roadmap:* https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/Maine%20Clean%20Transportation%20Roadmap.pdf, page 23

[37] https://www.maine.gov/dep/publications/documents/GOPIF%20Report%20Pursuant%20to%20Public%20Law%202021%20Chapter%20279%20(LD%201682)_2-25-2022.pdf

Since its inception, the Maine Climate Council has also included equity considerations extensively while planning initiatives that reduce greenhouse gases, including a focus on advancing equity, promoting economic opportunity and preparing communities and individuals for the impacts of climate change. The Maine Climate Council Equity Subcommittee[38] was formed, co-chaired by a representative from one of Maine's tribal communities and included representatives from the Maine Public Health Association, Maine Equal Justice, Aroostook County Community Action Program, the AARP and the Maine Council on Aging. The Subcommittee discovered many reasons why disadvantaged communities face greater challenges: "Vehicles in rural areas tend to be older, less efficient, less reliable, and more expensive to operate than vehicles in urban areas. Increasing ownership of high efficiency vehicles has the potential to reduce emissions and reduce a household's spending on transportation, particularly given the recent volatility in, and increasingly high, fuel prices. However, the upfront costs of high efficiency vehicles can be cost-prohibitive for Maine drivers with low or moderate incomes. Programs that incentivize clean transportation should prioritize…low- and moderate-income…people, especially those in rural areas."[39]

Perhaps the most important recommendation the Maine Climate Council made was launched by Efficiency Maine in 2019 to increase EV adoption by means of an EV rebate program. Today, that EV rebate program reflects several design elements to encourage equitable outcomes, such as:

- Excluding the most expensive vehicles (cars/SUVs costing more than $50,000; trucks/vans costing more than $73,000) so funding can be directed to more affordable vehicles.
- Offering higher tiers of rebate amounts for low-income and moderate-income applicants.
- Making 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 total $4.9 million, applied to more than 2,700 light duty EVs, an average of about $1800 per vehicle.

MaineDOT's Title VI assurances can be found online in the "*Title VI/Nondiscrimination Guide*".[40] These assurances are updated annually and signed by the MaineDOT Commissioner. MaineDOT also strictly adheres to the *Complete Streets Policy*[41] 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

[38] https://www.maine.gov/future/initiatives/climate/climate-council/equity-subcommittee

[39] https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/Maine%20Climate%20Council_Equity%20Subcommittee%20Final%20Report_March%202023.pdf, page 20

[40] https://www1.maine.gov/mdot/civilrights/docs/title6/2021/FHWA%202022%20Title%20VI%20Subrecipient%20Guide.pdf

[41] https://www.maine.gov/mdot/completestreets/docs/MaineDOTCompleteStreetsPolicyFinal.pdf

U.S. Access Board's *Design Recommendations for Accessible Electric Vehicle Charging Stations*[42]. MaineDOT has an extensive website outlining its plans and actions.[43] The site includes the 2019 *Americans with Disabilities Act (ADA) Title II Transition Plan*, a comprehensive written commitment to ADA deliverables.[44] 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."[45] MaineDOT is also guided by the *U.S. Access Board Technical Guidance for Parking Spaces*.[46]

Community Engagement

As noted in USDOT's *Charging Forward – A Toolkit for Planning and Funding Rural Electric Mobility Infrastructure*, Version 2, May 2023, "Poor or lacking infrastructure signage along roadway corridors, along with generally insufficient information on the availability of charging infrastructure…stymies the EV market. For these reasons, public outreach efforts by entities…are critically important for bolstering EV awareness, equitable access, and adoption among rural and Tribal entities."[47]

The Partnership engages the community and state agencies extensively through webinars, seminars, 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.[48] MaineDOT has also set up the *EV Charging Infrastructure Plan* on its Virtual Public Involvement (VPI) website. The Partnership has a comprehensive public education and outreach plan targeted at potential EV buyers, including seven YouTube videos.[49] 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 common questions potential charger owners considering installing L2 chargers may have.

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 DACs. At least 280 ports of the total 582 ports to be installed, 48 percent, will be located in or immediately adjacent to DACs. This includes all DCFCs, in both the Community & Corridor Programs, as well as Level 2 chargers in 29 Regional Service Centers. 'Adjacent' denotes installations located within

[42] https://www.access-board.gov/tad/ev/

[43] https://www.maine.gov/mdot/civilrights/ada/

[44] https://www.maine.gov/mdot/civilrights/ada/docs/2019/MaineDOT-Final-ADA-TP-Plan-Sept2019.pdf

[45] https://www.maine.gov/mdot/civilrights/docs/ada/ADACompliancePolicy.pdf

[46] https://www.access-board.gov/ada/guides/chapter-5-parking/
https://www.maine.gov/mdot/civilrights/title-vi/

[47] https://www.transportation.gov/sites/dot.gov/files/2023-05/Rural%20EV%20Toolkit_Version%202_May4_2023.pdf,page 22

[48] Maine PEVID, page 4

[49] https://www.efficiencymaine.com/ev/

¼ mile of a USDOT DAC.

Five of the 53 Regional Service Centers to host chargers are located near Federally-recognized Tribal communities including the Houlton Band of Maliseet Indians, the Mi'kmaq Nation, the Passamaquoddy Tribe and the Penobscot Nation.[50] The state is very mindful of the need to foster healthy relationships with tribal communities and has developed numerous initiatives to ensure tribal equity and inclusion in environmental and transportation issues.[51] Some initiatives addressing tribal concerns include:

- Creating a commission to promote, implement and coordinate programs that create and improve opportunities and eliminate disparities for historically disadvantaged racial, indigenous and tribal populations.
- Putting into place the nation's strictest water quality standards to protect sustenance fishing in certain tribally significant waters.
- Passing a law to resolve transferring ownership of a culturally significant parcel of land in Meddybemps from the State of Maine back to the Passamaquoddy.
- Passing a law to ban Native American mascots in all public schools.
- Passing a law to require review of all legislation for potential impacts on historically disadvantaged populations.
- Recreating the Maine Indian Tribal State Commission to promote various problem solving and dispute resolution.

The Partnership recognizes, as the Federal government does, that climate change disproportionally 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."[52] That is why the Partnership is taking a very 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.

Workforce Development, Job Quality, and Wealth Creation

Not only is Maine doing an exemplary job planning, preparing and installing EV infrastructure, the state is also 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 has awarded $2.5 million in 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 Janet Mills to create 30,000 clean energy and energy efficiency jobs by

[50] https://www.bia.gov/service/tribal-leaders-directory/federally-recognized-tribes

[51] https://www.maine.gov/governor/mills/issues/state-tribal-relations

[52] https://www.energy.gov/sites/default/files/2023-01/the-us-national-blueprint-for-transportation-decarbonization.pdf, page 50, 51

2030. The Maine Climate Council includes representation from the Maine AFL-CIO and Maine-based installers of charging infrastructure. The Council recognizes the EV revolution is transformational, shifting traditional auto-based jobs to EV-related careers to "…capitalize on the growth of this innovative new technology, including supportive infrastructure. It will result in the need for more installation and maintenance of EV charging infrastructure. Traditional auto jobs may be displaced by new auto jobs."[53] The job shift is already significant. "The number of clean energy jobs increased by 11% between 2016 and 2019, while Maine's economy grew by 3% during the same time. This makes clean energy employment the second-fastest growing segment of the economy behind Management of Companies and Enterprises (NAICS 55)."[54] Over the last several years, renewable fuel-related jobs saw the greatest rate of job growth – 20 percent, while energy efficiency added the greatest total number of jobs – 800.[55]

All state EV projects comply with Davis-Bacon Act wage requirements.[56] 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 will soon launch a program. The White Mountain Community College in neighboring New Hampshire added a new Electric Vehicle Technician certificate to its Automotive Technology program.

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.

Consistent with Partnership and NEVI standards, all electricians installing, operating, or maintaining EVSE must meet one of the following requirements:

- Possess a certification from the EVITP.
- Have a graduation or a continuing education certificate from a registered apprenticeship program for electricians that includes charger-specific training and is developed as a part of a national guideline standard approved by the Department of Labor in consultation with the Department of Transportation.
- For projects requiring more than one electrician, at least one electrician must be enrolled in an electrical registered apprenticeship program.

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[53] https://www.maine.gov/future/sites/maine.gov.future/files/inline-files/TransportationWG_FinalStrategyRecommendations_June2020.pdf, *Expand Electrification of Vehicles* section, page 9 of 14

[54] https://www.maine.gov/energy/sites/maine.gov.energy/files/inline-files/2021%20ME%20Clean%20Energy%20Industry%20Report.pdf, page 2

[55] Same, page 5

[56] https://www.efficiencymaine.com/docs/2023_HV_Davis-Bacon_Wage_Rates.pdf, by county

- Ensure all other onsite, non-electrical workers directly involved in the installation, operation, and maintenance of chargers have graduated from a registered apprenticeship program or have appropriate licenses, certifications, and training as required by the state.[57]

Maine ranks near the middle of the U.S. for states with employees who are part of a union workforce. MaineDOT is supportive of a worker's choice to join a union. Maine is not a right-to-work state. The Bureau of Labor Statistics May 2022 State Occupational Employment and Wage Estimates for Maine, calculated with data collected from employers, reveal that electrical and electronics installers and repairers of transportation equipment in Maine receive a salary of $45,430.[58]

CFI Program Vision

CFI funding will significantly help the Partnership cover the cost of installing EV chargers in areas without adequate charging infrastructure *and* fill voids between active chargers.

The **Community Program** design aligns with the CFI Program Vision because more than 50 percent of chargers installed in the eight cities and 53 Regional Service Centers will be located in or very near disadvantaged communities and four tribal lands and will be installed in safe and convenient locations. Successful RFP applicants may desire to locate chargers in any number of areas, including multi-unit dwellings, businesses, retail centers, parks, community centers, parking lots, places of employment, commercial districts, tourism destinations and cultural sites. Regardless of income level, these towns are the magnet that attracts residents from far away to meet their *essential* needs: jobs, food, healthcare, retail and more. The Partnership is very experienced managing RFPs that culminate in the overarching goal of connecting businesses in cities and towns with chargers.

The **Corridor Program** design is also consistent with the CFI Program Vision. Most of the existing DCFC stations on AFCs do not yet meet NEVI requirements for being fully built out. CFI funding only, with DCFC installation in Bethel, Bingham and Carrabassett Valley, will contribute to complete build-out of the AFCs along Route 2, Route 27 and Route 201.

Following cost studies to build new stations and update existing DCFC stations on current AFCs up to NEVI standards, Maine concluded that doing so would drain virtually all charging infrastructure funding that can reliably be expected and would not lead to acceptable results, especially for disadvantaged and rural communities. With costs rising, the Partnership is concerned current NEVI funding will not be enough to fully complete all AFC routes at 50-mile intervals. That's why Federal grant funding is critical to advancing state EV plans. Along AFCs, the Partnership is allowing enough coverage during NEVI funding periods to meet the 50-mile or less charger spacing requirement.

MaineDOT is very experienced integrating *Complete Streets* design patterns into city

[57] https://www.efficiencymaine.com/docs/Phase5_RFP_011_2023.pdf, page 12
[58] https://www.bls.gov/oes/current/oes_me.htm#49-0000

infrastructure improvements to support active transportation; however, the Partnership is not considering funding for 110-volt bicycle charging under this application.

PROJECT READINESS AND ENVIRONMENTAL RISK

MaineDOT is an accomplished, experienced, and responsible recipient of previous successful FASTLANE, TIGER, INFRA, RAISE and BUILD 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.

Maine's utility companies continue to plan for expanded charging infrastructure. Most existing and proposed DCFCs on AFCs and other priority corridors are within the territory of the state's two largest utility companies. The Trust works closely with all utilities to administer energy efficiency programs and plan high-performing transmission and distribution systems. The Partnership will continue to coordinate with utilities when selecting charging station sites in order to choose locations that will not require major grid upgrades to the extent possible. It will also work with utilities to communicate the process and timeline by which bidders can expect to obtain interconnection cost estimates when submitting RFP proposals.

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) 2023 – 2026 and will be detailed in the 2024 Edition of *MaineDOT's Three-Year Work Plan*[59] once awarded. The Project is consistent with the statewide EV plan which details EV infrastructure deployment. It is also consistent with Maine Climate Council directives and *Maine's Long-Range Transportation Plan*.[60]

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. 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 and floodplains. The MaineDOT Environmental Office will work with the Project team and RFP awardees to ensure Project goals and community needs can be met while avoiding, minimizing, and mitigating potential environmental impacts.

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59 https://www.maine.gov/mdot/projects/workplan/docs/2023/WORK%20PLAN%20FINAL%202023_2024_2025-3.pdf, begin page 70

60 https://uploads.mainedotpima.com/300823a7-ddcf-4ccc-9ca9-53d6425d1c4c.pdf

Required Approvals

1. **National Environmental Policy Act (NEPA)**: The NEPA process will inform design efforts. Each component of the Project with independent utility, is expected to be classified as Categorical Exclusion(s) in accordance with 23 CFR 771.117(c) (23) or c(25). MaineDOT will review each element of the Project and prepare NEPA documentation in accordance with the *Programmatic Agreement between the Federal Highway Administration, Maine Division and the Maine Department of Transportation Regarding the Processing of Actions Classified as Categorical Exclusions for Federal-Aid Highway Projects*. Should any issues arise, MaineDOT will work directly with the Project team and respective agencies to quickly resolve them. Public involvement will be completed in accordance with *MaineDOT Public Involvement Plan* and the *MaineDOT NEPA Public Involvement Plan*. These plans can be found at this link: https://www.maine.gov/mdot/env/NEPA/public/index.shtml.

   The anticipated date of NEPA completion is September 30, 2024, when all site-specific NEPA and utilities reviews are complete.

2. **Historic and Archeological**: The components of the Project are expected to meet the Advisory Council on Historic Preservation's *Exemption Regarding Historic Preservation Review Process for Undertakings Involving Electric Vehicle Supply Equipment.*[61] To be eligible for the exemption from Section 106 requirements, EVSE and Level 1, 2, or 3 charging stations must:

   (1) take place in existing parking facilities with no major electrical infrastructure modifications and are located as close to an existing electrical service panel as practicable; (2) use reversible, minimally invasive, non-permanent techniques to affix the infrastructure; (3) minimize ground disturbance to the maximum extent possible, and ensure that it does not exceed previous levels of documented ground disturbance; (4) use the lowest profile EVSE reasonably available that provides the necessary charging capacity; (5) place the EVSE in a minimally visibly intrusive area; and (6) use colors complementary to surrounding environment, where possible.

   Should a component of the Project not meet the exemption, MaineDOT and FHWA will complete the Section 106 process for components of the Project in accordance with the *Programmatic Agreement among Federal Highway Administration, Federal Transit Administration, the Advisory Council on Historic Preservation, the Maine State Historic Preservation Officer, and Maine Department of Transportation Regarding Implementation of the Federal Aid Highway and Federal Transit Programs in Maine*.

3. **Section 4(f) of the Department of Transportation Act**: The MaineDOT Cultural Coordinator will review the Project components to identify Section 4(f) resources. Project details and right-of-way information will be evaluated to avoid and minimize potential

[61] https://www.achp.gov/sites/default/files/exemptions/2022-11/Exemption%20for%20Electric%20Vehicle%20Supply%20Equipment%2010.26.22.pdf

Section 4(f) uses. Based on the Project scope, any Section 4(f) use that is unavoidable is expected to be no more than *de minimus*.

4. **Endangered Species Act (ESA) and Essential Fisheries Habitat (EFH)**: EVSE infrastructure is not expected to include in-water work that would affect Essential Fish Habitat or Federally Endangered Aquatic Species. Effects to terrestrial species is expected to be minimal because they will involve little to no habitat alteration or tree removal and will occur within or adjacent to existing development. MaineDOT and FHWA will coordinate with Federal agencies during Project design to avoid and/or minimize effects to terrestrial ESA species and to complete any required consultations as applicable in accordance with the Project schedule.

5. **Section 404 Clean Water Act Permit (U.S. Army Corps of Engineers)**: Freshwater wetland and stream impacts are not expected to install EVSE or charging stations. If encountered, MaineDOT will avoid and minimize temporary and permanent wetland and waterbody impacts to the extent practicable and will obtain authorizations under the Maine Programmatic General Permit if applicable.

6. **Natural Resources Protection Act (Maine Department of Environmental Protection)**: Wetland and stream impacts are regulated by the Maine Natural Resources Protection Act. Freshwater wetland and stream impacts are not expected when installing EVSE or charging stations. If encountered, MaineDOT anticipates that wetland and stream impacts associated with the Project will be eligible for Permit-By-Rule Chapter 305, Section 11, which is a streamlined permit process for State Transportation Facilities.

7. **Stormwater (Maine Department of Environmental Protection)**: The Project will incorporate Best Management Practices for temporary and permanent management of soil erosion and sedimentation. Permanent measures for treatment of stormwater quantity and quality will be incorporated in accordance with Chapter 500 regulations and the Memorandum of Agreement for Stormwater Management Between the MaineDOT, MTA and Maine Department of Environmental Protection.

8. **Floodway/Floodplains:** The Project components will be designed to avoid and minimize encroachments into designated flood zones in accordance with Executive Order 11988.

MaineDOT will review individual Project components to ensure compliance with FHWA NEPA requirements and will screen Project components for potential environmental impacts and for eligibility under the ACHP Exemption for EVSE and compliance with FHWA NEPA requirements.

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:

Programmatic Agreements

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 following agreements, where applicable, to streamline the environmental review and approval process:

1. Programmatic Agreement between the Federal Highway Administration, Maine Division and the Maine Department of Transportation Regarding the Processing of Actions Classified as Categorical Exclusions for Federal-Aid Highway Projects;

2. Programmatic Agreement among Federal Highway Administration, Federal Transit Administration, the Advisory Council on Historic Preservation, the Maine State Historic Preservation Officer, and Maine Department of Transportation Regarding Implementation of the Federal Aid Highway and Federal Transit Programs in Maine;

3. Cooperative Agreement between U.S. Department of the Interior Fish and Wildlife Service (USFWS), FHWA and the MaineDOT for State Transportation Reviews by the USFWS in Maine;

4. Maine Atlantic Salmon Programmatic Consultation finalized January 23, 2017;

5. Programmatic Agreement for the State of Maine concerning identification of listed and proposed species and designation of non-Federal representative under the Federal Endangered Species Act between FHWA, Maine Division USACE and MaineDOT;

6. Memorandum of Agreement for Stormwater Management Between the MaineDOT, MTA and Maine Department of Environmental Protection.

7. Memorandum of Agreement between United States Army Corps of Engineers (USACE), New England District and MaineDOT for Expediting Permit Application Evaluations under Section 214 of the Water Resources Development Act of 2000, as amended, and Section 139(j) of Title 23, United States Code, Assistance to Affected State and Federal Agencies, July 2022.

MaineDOT's Federal Guidelines Commitment

Climate Change and Environmental Justice Impact Consideration: All MaineDOT projects include consideration of climate change and environmental justice impacts. MaineDOT utilizes the EPA EJSCREEN for all Federally-funded projects. The team will engage the public and work to ensure impacts will not disproportionately affect people of color, low-income individuals or disadvantaged populations. MaineDOT recently updated its Public Involvement Plans, which outline the Department's efforts to ensure disadvantaged populations are afforded meaningful opportunities for public involvement. The Plan is available at: https://www.maine.gov/mdot/env/NEPA/public/index.shtml**.**

Racial Equity and Barriers to Opportunity: MaineDOT recently updated its Public Involvement Plans to ensure disadvantaged populations and underserved areas are afforded meaningful opportunities for public involvement, available at: https://www.maine.gov/mdot/env/NEPA/public/index.shtml. MaineDOT has also launched a new Diversity, Equity and Inclusion (DEI) initiative that includes an external equity statement of the commitment to ensure all Mainers have access to safe and reliable transportation options.

Labor and Work: MaineDOT is responsible for managing and funding the transportation system statewide. The Agency also manages the state's relationship with transportation-related private entities. Employing approximately 1,800 people, the agency expends and disburses more than $675 million annually in Federal, state and local funds. MaineDOT works to create good-paying jobs that incorporate strong labor standards.

Critical Infrastructure Security and Resilience: MaineDOT takes physical and cyber security threats seriously. The Agency works closely with Federal agencies to ensure cybersecurity systems are in place. MaineDOT considers security when designing and constructing infrastructure that could be vulnerable to physical or cyber attack.

Domestic Preference Requirements: MaineDOT follows all applicable domestic preference laws including Executive Order 14005, '*Ensuring the Future Is Made in All of America by All of America's Workers*' (86 FR 7475) and ensures the use of goods, products and materials produced in the United States for all infrastructure projects.

Civil Rights and Title VI: MaineDOT complies with all Federal civil rights obligations and nondiscrimination laws. "In accordance with Title VI of the Civil Rights Act of 1964 and other authorities, MaineDOT is committed to ensuring that the fundamental principles of equal opportunity are upheld in all decisions involving our employees and contractors/consultants, and to ensuring that the public-at-large is afforded access to our programs and services. To that end, no person shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any MaineDOT program or activity on the grounds of race, color or national origin. MaineDOT will work with staff, sub-recipients, contractors and service beneficiaries to promote awareness for the provisions of Title VI and the responsibilities associated with that Act."[62]

Federal Contract Compliance: As a condition of grant award and consistent with EO 11246, Equal Employment Opportunity (30 FR 12319, and as amended), MaineDOT will make good faith efforts to meet the goals of 6.9 percent of construction project hours being performed by women as well as meeting or exceeding goals for work being performed by people of color or those with disabilities.

Compliance with Section 508 of the Rehabilitation Act of 1973: MaineDOT recognizes the importance of providing all information and communication technology to be accessible to individuals with disabilities.

[62] https://www.maine.gov/mdot/civilrights/title-vi/

ACCOMPANYING DOCUMENTS

Budget Information
Project Schedule
Statement of Work
Maps
Match Commitment Letter
Letters of Support
Efficiency Maine Trust Request for Proposals (RFP)
Efficiency Maine Trust Contract for Charging Incentives
Efficiency Maine Trust Data Capture & Reporting Requirements

LETTERS OF SUPPORT

Letters from numerous supporters in Maine accompany the application. They outline the need for additional EV charging sites. The Partnership's grant request for CFI funds is supported by a diverse group of elected officials and stakeholders who understand the significant reduction in harmful emissions the Project will generate. The Partnership will post all support letters at https://www.maine.gov/mdot/grants/cfi and additional letters may be posted to the site at a later time. The list of supporters includes:

Members of Congress: *(letters will be sent directly to the Secretary's office)*
U.S. Senator Susan Collins (R-ME)
U.S. Senator Angus King (I-ME)
U.S. Congresswoman Chellie Pingree (D-ME)
U.S. Congressman Jared Golden (D-ME)

State Elected Officials/Offices: *(letters will be sent directly to the Secretary's office)*
Governor Janet Mills

Additional Supporters:
Auburn, Maine
Augusta, Maine
Avesta Housing
Bangor, Maine
Bar Harbor, Maine
Bethel, Maine Chamber of Commerce
Biddeford, Maine
Bingham, Maine
Carrabassett Valley
Central Maine Power Company
Lewiston, Maine Housing
Lewiston, Maine
Maine Clean Communities
Natural Resources Council of Maine
Old Orchard Beach, Maine
Portland, Maine
Sierra Club Maine Chapter
South Portland, Maine
The Nature Conservancy Maine
Versant Power
Wells, Maine
Westbrook Economic Development
Westbrook Housing