

Joint Office of Energy and Transportation

Building a Future Where Everyone Can Ride and Drive Electric

Stephen Costa Julie Peacock

Electrify the South Collaborative 11/30/23

driveelectric.gov

BIL Priorities for the Joint Office

The Joint Office will provide unifying guidance, technical assistance, and analysis to support the following programs:



- National Electric Vehicle Infrastructure Formula Program (U.S. DOT FHWA) \$5 billion for states to build a national EV charging network along corridors
 - Electric Vehicle Charger Reliability & Accessibility Accelerator (Discretionary, \$100M FY22-23)



Charging & Fueling Infrastructure Discretionary Grant Program (U.S. DOT - FHWA) \$2.5 billion in corridor and community grants for EV charging, as well as hydrogen, natural gas, and propane fueling infrastructure



Low-No Emissions Grants Program for Transit (U.S. DOT - FTA) \$5.6 billion in support of low- and no-emission transit bus deployments



Clean School Bus Program (U.S. EPA)

\$5 billion in support of electric school bus deployments

Eligible Infrastructure / Costs for the CFI Grant Program



Acquisition and installation of EV charging or alternative fueling infrastructure –

- Electric Vehicle (EV) Charging (DC Fast & Level 2)
- Hydrogen Fueling
- Natural Gas Fueling (Compressed Natural Gas/CNG & Liquified Natural Gas/LNG)
- Propane Fueling

Other related costs -

- Costs associated with the acquisition of a site and any related planning/preconstruction or reconstruction that directly relates to a project.
- Operating & maintenance assistance for the first 5 years of operations.
- Educational and community engagement activities to develop and implement education programs (*Community Program*).
- Roadway directional signage / traffic control devices.

Community Grant Program

Community Program grants are expected to reduce GHG emissions and expand or fill gaps in access to charging or alternative fueling infrastructure.

FY22/23: \$350M

Min/Max Award: \$500k - \$15M





Corridor Grant Program

The Corridor Grant Program will strategically deploy publicly accessible EV charging infrastructure and hydrogen, propane, and natural gas fueling infrastructure along designated Alternative Fuel Corridors.





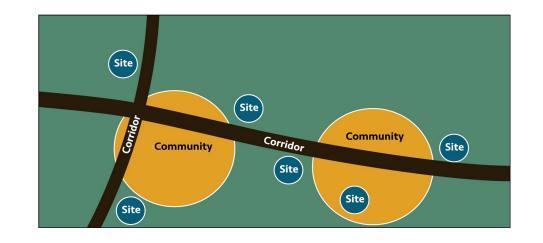
FY22/23: \$350M

Min/Max Award: \$1M – No Max



Eligible Entities

- States or political subdivision of States
- Metropolitan planning organizations
- Unit of local governments



- Special purpose districts or public authorities with a transportation function, including port authorities
- Indian tribes
- U.S. Territories
- Authorities, agencies, or instrumentalities or entities owned by one or more entities listed above
- Group of entities listed above
- State or local authorities with ownership of publicly accessible transportation facilities (*Community Program only)

CFI Program – Next Round (FY24)



- Timing TBD, Tentative target March 2024
- Funding Estimated \$500M

NOFO – Subject to changes from Round 1?

- Lessons learned from first round
- JO providing FHWA input & recommendations, informed by stakeholders
- <u>Areas of feedback:</u> Timing/window; improving clarity of NOFO: criteria, project eligibilities, application requirements & format; accessibility for smaller applicants; more comprehensive FAQs; quicker response to inbox Q's; more TA for prospective applicants.

Technical Assistance Strategies

- Specialized assistance for states, communities, Tribal Nations, transit agencies, and school districts.
- One-on-one meetings with states to address questions and concerns related to NEVI.
- Concierge service (phone, email, web form) to efficiently route technical assistance requests for NEVI, electric school buses, and transit buses.
- TA Help Sheets, topical webinars, and tools.
- Technical assistance support team has 50 staff members across 10 organizations.

Technical Assistance

The Joint Office of Energy and Transportation (Joint Office) provides technical assistance on planning and implementation of a national network of electric vehicle chargers and zero-emission fueling infrastructure as well as zero-emission transit and school buses.

States and Communities	Tribal Nations
The Joint Office provides technical assistance for	The Joint Office provides technical assistance to <u>t</u>
states and communities creating and executing state	nations electrifying their transportation systems.
plans under the National Electric Vehicle	Learn more about zero-emission transportation
Infrastructure Formula Program and the Charging	funding opportunities for tribal nations.
and Fueling Infrastructure Discretionary Grant	
5	
Program.	
School Districts	Transit Agencies
	Transit Agencies The Joint Office provides technical assistance to
School Districts	
School Districts The Joint Office provides technical assistance to	The Joint Office provides technical assistance to

driveelectric.gov/technical-assistance
driveelectric.gov/bus
driveelectric.gov/transit

Concierge Service Contact Methods: 833-600-2751 | doe-dot.jo.ta@nrel.gov | driveelectric.gov/contact/

JO Technical Assistance Resources

Joint Office of Energy and Transportation

TECHNICAL ASSISTANCE HELP SHEET

Public EV Charging Station Site Selection Checklist

The Joint Office of Energy and Transportation (Joint Office) provides technical assistance on planning and implementation of a national network of electric vehicle (EV) chargers and zeroemission fueling infrastructure, as well as zero-emission transit and school buses. There are several considerations that should be addressed when selecting a site for EV charging stations. The following is a checklist to assist with site selection for publicly available EV charging stations.

For more technical assistance resources please review DriveElectric.gov/technical-assistance. If you would like detailed help or assistance with charging station site selection, please contact the Technical Assistance team at DriveElectric.gov/contact.

Background Research for EV Charging Station Site Selection

Below are supplemental resources that can help stakeholders during the EV charging station site selection process:

- Identify current laws and incentives for the project location. Consider whether the incentives and funding have site selection or location requirements.
- Use the Alternative Fuels Data Center (AFDC) Laws and Incentives database to identity current incentives, laws, and regulations.
- Use the NEVI U-Finder tool to locate utility partners and incentives by zip code.
- Contact your city or local organizations (such as a Clean Cities coalition) for further help with determining if there are applicable local programs with incentives.
- Determine the location of existing EV charging stations in the target area using the AFDC Alternative Fueling Station Locator map.
- Estimate the number of EV charging stations needed in the target area. Consider direct-current fast charging (DCFC), Level 2, and e-micromobility charging for e-bikes or e-scooters.
- Refer to local, regional, and state National Electric Vehicle Infrastructure (NEVI) Formula Program EV charging plans (may be referred to as a master plan, roadmap, etc.) for information on planned EV charging station locations (if available).

 The Electric Vehicle Infrastructure Projection Tool Lite can be used to help estimate future charging station needs for the entire state and metropolitan areas.

 If planning to use federal funds for the project, refer to the NEVI Formula Program Standards and Requirements for information such as minimum number of charging ports, connector type, power levels, availability, payment methods, equipment certifications, and uptime requirements.

- Review building, zoning, and parking codes for specific EV-related regulations that may impact the project. Search for applicable local and state codes that may apply.
- Some local and/or state codes have minimum requirements for the number of EV charging stations and/or accessible EV charging stations. The AFDC Laws and Incentives database tracks state requirements. While not an exhaustive list, the Southwest Energy Efficiency Project manages a list of municipalities that have adopted EV infrastructure building codes and zoning ordinances.
- Identify if the site location is in an area likely to be flooded by reviewing U.S. Department of Homeland Security Federal Emergency Management Agency flood maps.

Site Selection Process for EV Charging Stations

Below are high-level steps to guide stakeholders through selecting an EV charging station site. The figure provides an overview of the process flow, with the following steps providing more details.

1	2	3	4	5	6	7
Target	ldentify	E ngage	> Power	Service	Expansion	Cost
Target high-priority EV charging stations.	Identify locations suitable for users to spend time while waiting for their vehicle to charge.	Is site host willing to add EV charging stations to site? If YES, proceed to Step 4. If NO, return to Step 1.	Does local utility have enough power available for the charging stations? If VES, proceed to Step 5. If NO, return to Step 1.	Confirm wireless internet or cellular service.	Consider future site expansion.	Estimate costs. Are costs anticipated to be within the allocated funding for the project? If YES, proceed to next steps. If No, return to Step 1.

- Target high-priority EV charging locations that have been identified in local, regional, and state NEVI Formula Program plans.
- 2. Identify potential charging station locations that are:
- Available and safe for public access including Americans with Disabilities Act accessibility, signage, lighting, and vandalism prevention.
- In a location that is a highly visible and trafficked area.
- Appropriately distanced from other charging stations considering vehicle range and routes.
- In an area with amenities such as public access restrooms, drinking fountains, or Wi-Fi hot spots.
- Conducive for customers to spend 2 or more hours for Level 2 charging stations and around 30 minutes for DCFC stations.
- In an area with sufficient space to accommodate the typical vehicle uses and types, such as a pullthrough station for a vehicle with a trailer.
- In a location less likely to be inundated by floodwaters.
- Engage with the site host to determine if they are willing to add EV charging stations to their site (if request is not coming from the site host).

(?) If site host is not willing, return to Step 1.

4. Engage with the area power utility partner to understand site limitations and costs related to electricity supply at the potential site location, including grid-level constraints. Confirm that the utility can support the full power of the electricity required by the charging stations.

If there is not sufficient electrical capacity at the location, **return to Step 1**.

- Confirm availability and suitability of wireless internet connection or cellular service for EV charging stations. Engage with the EV service provider to understand the charging station model connection speed and signal strength requirements.
- Consider opportunities for future site expansion, such as increased electrical capacity and sufficient space to accommodate additional EV charging stations as demand increases.
- Estimate costs, including available incentives, project costs, ongoing expenses/fees, construction costs, and electrical upgrade costs.
 - Consider whether the costs are prohibitive in building EV infrastructure at this location.

(?) If costs are prohibitive, return to Step 1.

COMMUNITY ENGAGEMENT RESOURCES



Community Engagement Tips for EV Infrastructure Deployment

This help sheet provides tips for conducting community engagement to support electric vehicle (EV) infrastructure planning and deployment. This document is a tool and an informative resource to be used in conjunction with other guidance. It is not intended to set policy or establish or replace any standards under state or federal law applicable to public notice or community engagement.

Integrating Equity in the Clean Transportation Transition

The Joint Office United Support for Transportation (JUST) Lab Consortium conducts actionable research on integrating equity into federally funded EV infrastructure deployment efforts.

For more information on the JUST Lab Consortium, please visit <u>DriveElectric.gov/just-lab-consortium</u>.

An overarching consideration is that engagement for deploying EV infrastructure should not assume that EVs are the primary or exclusive solution of interest for community mobility needs, and should include information about opportunities for broader access to EVs (e.g., purchase incentives, EV car-sharing). Ideally, engagement about EV infrastructure will also include opportunities for community input that can inform more holistic investments in a safe transportation system with access to multiple modes that meet everyone's needs.

Demonstrating Meaningful and Ongoing Community Engagement

To develop meaningful and ongoing engagement strategies while implementing and deploying EV infrastructure, it is important to conduct background research by asking a few questions:

- Developing goals: What are the goals of your community engagement strategy with disadvantaged communities (DACs) regarding EV infrastructure planning and implementation? How will you document and respond to non-EV-related input?
- Determining roles: How will you include members of DACs in the development of a meaningful, ongoing community engagement strategy? What opportunities will be created for stakeholders to participate as leaders or decision-makers through the engagement process?
- Implementing strategies: How will you operationalize community engagement? Will
 you need to hire additional assistance? How much of your budget will you spend on
 community engagement efforts? Can you leverage other existing efforts?
- Establishing a process: What does your community engagement process look like over time? How will quality engagement be maintained consistently?

https://driveelectric.gov/technical-assistance

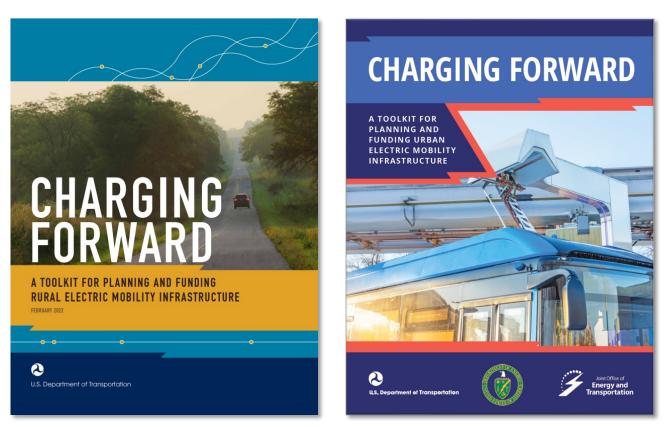
Charging Forward

Two Toolkits for Planning and Funding Rural and Urban Electric Mobility Infrastructure

- Electric Mobility Basics
- Benefits and Challenges of Rural & Urban Mobility Electrification
- Rural & Urban Electrified Transit & School Buses
- Micromobility
- Infrastructure Planning
- Building Codes, Fleets & Curbside Charging
- Accessible Design
- Partnership Opportunities
- Funding and Financing

Includes...

- $\checkmark\,$ Grant and loan opportunities
- $\checkmark~$ Planning tools and resources
- ✓ Success stories



transportation.gov/urban-e-mobility-toolkit

transportation.gov/rural/ev/toolkit

Additional TA Resources in Development for 2024

JO-led NOFO Webinars –

- Supplement FHWA webinars
- Cover problem topics such as EJ Tools, equity analysis, safety analyses, floodplain analysis, workforce, etc.

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Transportation

Tracking Funding Opportunities –

• Dynamic online funding matrix compiling urban, rural, and tribal focused programs for funding EV infrastructure

EV Infrastructure Funding Matrix The toolkits includes a comprehensive list of federal programs and eligibilities.

AGENCY/ OFFICE	PROGRAM NAME	PROGRAM TYPE	PROGRAM DESCRIPTION	ELIGIBLE PARTIES	LDV CHARGING	TRANSIT CHARGING	COMMERCIAL CHARGING	MICROMOBILITY	INFRASTRUCTURE PLANNING	WORKFORCE DEVELOPMENT	VEHICLE ACQUISITION
Advaı Trans and C Mana Techr	Advanced Transportation and Congestion Management Technologies Deployment	Grant (Discretionary)	This program provides grants to eligible entities to develop model deployment sites for large- scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment. Demonstration projects could include EV charging infrastructure integrated with intelligent transportation systems with the Smart Grid and other energy distribution and charging systems or associated with advanced mobility and access technologies such as dynamic ridesharing.	States, Localities, Transportation Providers, Research or Academic Institutions	-	-					
<	Carbon Reduction Program	Grant (Formula)	This formula grant program provides funding to States for projects designed to reduce transportation emissions.	States	•	•	•		•	•	•
DOT FHWA	Charging and Fueling Infrastructure Grant Program	Grant (Discretionary)	This program will strategically deploy publicly accessible EV charging infrastructure and hydrogen, propane, and natural gas fueling infrastructure along Alternative Fuel Corridors and in community locations such as parking facilities, public schools, public parks, or along public roads.	States, Tribes, Metropolitan Planning Organizations, Localities, U.S. Territories; State or local authorities with ownership of publicly accessible transportation facilities (for community-based projects only)	•	•	•		•		
	Congestion Mitigation & Air Quality Improvement Program	Grant (Formula)	Provides a flexible funding source to State and Localities for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce correction and improve air quality	States, Tribes, Localities; Transportation providers and nonprofits if they enter into an	•	•	•	•			

EVSE "How to" Playbook – Coming in February



- An **online guide** based on DOE Clean Energy to Communities course
- Each module provides videos and course material
- Provides more of a "how-to" than the rural/urban toolkits

Community Project Development Technical Assistance



Program Offerings

C2C offers three types of support to communities: in-depth partnerships, peer-learning cohorts, and expert

match.





Expert Match >

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Upcoming EV focused Peer-Learning Cohort

https://www.energy.gov/eere/clean-energycommunities-program

Community Project Development Technical Assistance



Program Offerings

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https://www.energy.gov/eere/clean-energycommunities-program **Concierge Service:** Email inbox/helpdesk

1:1 SME Advice/TA: Free, short-

term technical assistance to address near-term EVSE challenges and questions, with 40-60 hours of expert technical assistance



Upcoming Webinar Topics

December 5^{th*}

Ride Electric: The Importance of Multimodal Transportation



vehicles and plan for charging infrastructure.

driveelectric.gov/webinars

Dates may be subject to change



Questions and Answers