

FY23 Ride and Drive Electric Program Funding

OVERVIEW

On May 18, 2023, the Joint Office of Energy and Transportation (Joint Office) announced \$51 million for the Ride and Drive Electric Program to fund activities that support the Bipartisan Infrastructure Law (BIL) Section Title VIII, Division J, and Federal Highway Administration - Highway Infrastructure Program. This Ride and Drive Electric Funding Opportunity Announcement (FOA) Number DE-FOA-0002881 and related activities align with the Joint Office's mission to provide a modernized and interagency approach to support the deployment of zero-emission, convenient, accessible, and equitable transportation infrastructure. Specifically, this FOA will directly advance the goal of building a national network of electric vehicle (EV) chargers for all Americans by supporting EV charging reliability, resiliency, equity, and workforce development. Through this FOA, the Joint Office will fund: 1. EV charging resiliency planning for continuity of operations and services for all EV users; 2. Equitable business model development and deployment for EV charging; 3. Workforce development to support EV charging; 4. Increased industrial capacity, competition, and redundancy for validation testing and certification in the United States of Alternating Current (AC) Level 2 and/or Direct Current (DC) fast chargers; 5. Assessing the performance and reliability of DC fast charging stations.

ELIGIBLE ENTITIES

The following entities are eligible applicants for this FOA: institutions of higher education; non-profit organizations; for-profit entities; states; local governmental entities; Indian Tribes; incorporated consortia; and, unincorporated consortia.

FUNDING

This FOA provides \$51 million in Federal funding for 24-40 awards over five (5) topics.

		# of	Minimum	Award Size
Topic	Title	Awards	Cost Share	(Fed Share)
1	Enhancing EV Charging Resiliency	10-15	20%	\$1M - \$1.5M
2A	Community-Driven Models for EV Charging Deployment	5-8	0% (nondeployment) - 50% (deployment)	\$250k - \$1.5M
2B	Workforce Development	5-10	0%	\$1M - \$1.5M
3A	Increasing Commercial Capacity for Testing & Certification of High Power EV Chargers	2-3	50%	\$2M - \$3M

	Validating Public EV Charging			
3B	Infrastructure Real-World Performance	2-4	0%	\$2M - \$4M
	and Reliability			

PERIOD OF PERFORMANCE

DOE anticipates making awards that will run 24 months maximum duration, except for Topic 3B awards that will run 30 months maximum duration. Project continuation will be contingent upon several elements, including satisfactory performance and DOE's Go/No-Go decision.

CRITICAL DATES

Concept papers are due June 16, 2023, and the deadline for full applications is July 28, 2023.

TOPIC OBJECTIVES

<u>Topic 1 Objective</u> – This topic will establish and fund a cohort of diverse teams from across the United States to develop, share, and refine specific and actionable plans and strategies that ensure the continuity of operations and services of EV charging infrastructure for all EV users in a given region. Plans developed in these projects will enhance ongoing federal investments in EV charging and transportation electrification, as well as, complementary or similar investments at the state and local levels.

<u>Topic 2A Objective</u> – This topic funds projects that will assess, develop, and/or test business models that integrate EV and/or charger deployment in ways that deliver mobility, economic, or other benefits to Justice40 and underserved communities. Projects can be some combination of an analysis, business model development, or limited-scale pilot/deployment to provide proof of concept. The project may include limited test EV charger deployments (Level 2 or DCFC) to test business models, capped at 50 percent of the total project budget. Test deployment projects should be designed to inform further deployment of EV chargers and associated mobility systems funded by other taxpayer or ratepayer funding, including federal grant programs and tax incentives.

The Joint Office is interested in business models that benefit targeted communities by: Increasing revenue to local adjacent businesses (particularly small or independent businesses); Reducing costs by leveraging a "digonce" approach for multi-modal hubs; Creating good job opportunities, including unionized job opportunities; Increasing clean mobility options for carless households and individuals, especially options that improve access to employment, health care, child-care, and other social services; Providing affordable, reliable access to EV charging infrastructure; Training community organizations and businesses in best practices for acquiring, installing, maintaining, and monetizing EV chargers; Reducing charging costs by capturing the value that EVs provide through grid services; Integrating electric mobility with the delivery of other critical services for community members: Examples include utilizing eligibility criteria for assistance programs (e.g., Low Income Home Energy Assistance Program, Supplemental Nutrition Assistance Program, etc.) or integrating with programs that provide energy, housing, or transit assistance; and, Leveraging partnerships with established organizations, such as community development corporations and affordable housing entities, that provide services to disadvantaged community members.

<u>Topic 2B Objective</u> – This topic supports a diverse and highly skilled workforce within the electrified transportation industry to support the deployment and maintenance of EV charging-related equipment including equipment supported by the Federal Highway Administration's National Electric Vehicle Infrastructure and Charging and Fueling Infrastructure grant programs. The key outcome of interest is expanded access to career-track training and employment in EVSE installation and maintenance work for a diversified pipeline of individuals. Projects selected under this Topic Area will be demand-driven and worker-centric, leverage existing infrastructure and resources, be sustainable and replicable, and prioritize energy justice issues. Projects will employ data-driven strategies to quantify their impacts (such as placement and retention rates of training graduates) and document best practices for diversifying a skilled workforce.

<u>Topic 3A Objective</u> – This topic aims to increase industrial capacity, competition, redundancy, and broad access to validation testing and certification in the United States of DC fast chargers with rated power capacities between 150 kW and 1 MW. Applications for projects are requested to rapidly increase commercial testing capacity and capabilities necessary to validate, improve, and certify the efficiency, safety, security, interoperability, measurement accuracy, and longevity of high-power DC fast chargers. Activities of interest include: Upgrades to independent commercial testing facilities; Development of new, low-cost tools that test and certify equipment conformance to standards and performance requirements; Creation and maintenance of open-source libraries of conformance test cases and procedures; Creation and documentation of systems and procedures for testing charging devices to failure across a wide range of real-world conditions; and, Other innovative approaches to certify and validate DC fast charging equipment performance.

Topic 3B Objective – This topic establishes teams to assess the performance, reliability, and usability of AC Level 2 charging and/or DC fast charging (DCFC) stations across the United States. The teams will develop a scalable, in-field methodology to assess AC Level 2 and/or DCFC performance, reliability, and customer experience. The teams will then use that methodology to conduct field assessments of AC Level 2 and/or DCFC charging performance and reliability by periodically visiting a statistically significant sample of charging stations operated by numerous charging station operators. Through these in-field assessments, the teams will first establish a national baseline for AC Level 2 and/or DCFC charging performance and reliability. The teams will then track the performance and reliability of an industry-wide sample of AC Level 2 and/or DCFC stations, relative to the national baseline. To ensure the long-term reliability of the national charging network and to help state departments of transportation manage NEVI and other Title 23 programs, the teams will also develop and execute a training program for states. In this program, the teams will teach state officials how to conduct their own field assessments of AC Level 2 and/or DCFC charging performance and reliability, using a single, nationally consistent methodology. This training program will include a curriculum on procedures and tools necessary to measure AC Level 2 and/or DCFC charging metering accuracy and meet any other requirements related to weights and measures, as defined in NIST Handbook 44 Device Code Requirements for Electric Vehicle Fueling.

KEY APPLICATION/AWARD PROVISIONS

Community Benefits Plan

Full applications must include a Community Benefits Plan that describes how the proposed project would incorporate the following four objectives: (1) support meaningful community and labor engagement; (2) invest in America's workforce; (3) advance diversity, equity, inclusion, and accessibility; and (4) contribute to the

President's goal that 40 percent of the overall benefits of certain federal investments flow to disadvantaged communities (the Justice40 Initiative).

ADDITIONAL INFORMATION

Relevant Links: News · Joint Office of Energy and Transportation (driveelectric.gov)