

Electric Vehicle Charging Infrastructure Implementation Guide

How States Can Maximize Benefits for Workers and Communities

Introduction

The Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act together provide billions of dollars to states, local governments, and private entities to support transportation decarbonization through the installation of electric vehicle (EV) charging infrastructure, or EV supply equipment (EVSE). States—even when not the direct grantees or program administrators—have the capability to shape what these historic EV charging infrastructure provisions mean for the workers and communities impacted by the infrastructure, manufacturing facilities, and new job opportunities that come with them.

This guide supports states seeking to maximize the employment and economic benefits that can accompany EV charging infrastructure provisions in the BIL and Inflation Reduction Act.

The package of provisions supporting EV charging infrastructure installation in the BIL and Inflation Reduction Act consists of direct investments, competitive grant programs, and tax credits. The most significant of these provisions are the National EV Infrastructure (NEVI) Formula Program, the Charging and Fueling Infrastructure (CFI) Discretionary Grant Program, and the Alternative Fuel Infrastructure Tax Credit, which are narrowly focused on building a nationwide EV charging infrastructure network. Other programs—like the Clean School Bus Program and Clean Heavy Duty Vehicle Grant Program—primarily fund fleet electrification, and include EV charging infrastructure as an eligible use of funds. See Figure 1 for more details on each of these programs.

Figure 1: EVSE Provisions in the BIL and Inflation Reduction Act

NEVI Formula Program To install publicly available EVSE along designated alternative fuel corridors	Funding Level: \$5 billion Eligible Recipients: States
CFI Discretionary Grant Program To install publicly available EVSE and other alternative fueling infrastructure along designated alternative fuel corridors and within communities	Funding Level: \$2.5 billion Eligible Recipients: State and local governments, Indian tribes, metropolitan planning organizations, other public entities
Alternative Fuel Infrastructure (30C) Tax Credit To reduce the cost of installing EVSE for both residential and commercial uses by up to 30% of the cost of the EVSE	Funding Level: Uncapped Eligible Recipients: Residential and Commercial Entities
Clean School Bus Program To provide the full replacement cost of conventional diesel school buses with zero emission alternatives, including fueling infrastructure such as EVSE	Funding Level: \$5 billion Eligible Recipients: School districts, state and local governments, Indian tribes, non-profit transportation associations, bus manufacturers/vendors
Clean Heavy Duty Vehicle Grant Program To provide the full replacement cost of conventional fossil-fuel powered class 6 & 7 vehicles (school and transit buses, delivery vans, refuse trucks, etc) with zero emission alternatives, including fueling infrastructure such as EVSE	Amount: \$1 billion Eligible Recipients: State and local governments, Indian tribes, non-profit school transportation associations, eligible contractors

EV Charging Infrastructure Can Support Workers and Communities

Building a nationwide network of public and private EVSE has the potential to create and protect a range of community-supporting jobs requiring diverse expertise and training. These include jobs manufacturing EV chargers and their components, and jobs installing, operating, and maintaining EVSE to ensure reliability and safety. Through their implementation of, and influence over, EVSE provisions in BIL and the Inflation Reduction Act, state agencies have the opportunity to set a high bar for the quality of jobs in this nascent and essential industry.

EVSE Manufacturing

Part of maximizing the economic benefits of federal EVSE provisions is requiring that the technology itself is produced here in the U.S. by manufacturing workers with good union jobs. The Build America, Buy America Act—which was enacted as a part of the BIL—ensures that taxpayer dollars induce market signals that build domestic manufacturing capacity and create jobs that will support the infrastructure of the future—from roads and bridges to EV chargers. The U.S. Federal Highway Administration (FHWA) issued [guidance in the form of a two-phase-waiver on the application of Buy America requirements to federally-assisted EV charging infrastructure projects](#). In the first phase, effective March 23, 2023, federal funding—including NEVI funds—may only be used to acquire and install EVSE “whose final assembly occurs in the United States.” The second phase will apply to EV chargers that are manufactured after July 1, 2024, “whose final assembly occurs in the United States, and for which the cost of components manufactured in the United States is at least 55 percent of the cost of all components.” FHWA further requires that “[f]or all phases, EV charger housing components that are predominantly steel and iron” comply with FHWA’s longstanding Buy America steel and iron “all manufacturing processes” requirement. Many states are urging the installation of fully Buy America compliant charging infrastructure before the second phase of the regulation comes into effect, in an effort to streamline and harmonize charging infrastructure throughout the state.

The automotive manufacturing industry—including its upstream supply chain—has a long legacy of high unionization rates resulting in good wages and benefits and pathways to the middle class, [particularly for Black and other marginalized workers](#). However, [poor trade, labor, and industrial policies of the past 50 years](#) have put this legacy at risk by permitting auto manufacturers to offshore their facilities to other countries where they benefit from lower labor costs and loose environmental regulations—[all at the expense of auto manufacturing workers and communities here in the United States](#). The right policies and guardrails—starting with commonsense Buy America requirements—must be firmly applied and to ensure that EVSE manufacturing does not follow the same trajectory.

The Electric Vehicle Infrastructure Training Program (EVITP) is a 20-hour safety-centric curriculum that equips licensed electricians to work with EVSE. It is a non-profit, brand-neutral program developed by labor, automakers, energy companies, and utilities. The course is available in every state and online, and its fees are often an eligible use of federal funds.

EVSE Installation, Operation, and Maintenance

The electrical work required for the installation, operation, and maintenance of EVSE represents one of the most significant employment opportunities stemming from the widespread deployment of EVs. This workforce will install EV chargers, service and maintain electrical components, and ensure high uptime throughout the lifetime of the equipment. Thousands of licensed and trained electricians will be needed to [meet the significant and diverse EV charging needs of the future](#), from single and multi-family home charging to heavy duty fleets depots in every geography and climate. Electricians living near and within the communities where chargers are installed can meet this need, ensuring rapid servicing of EVSE, as well as the dissemination of high quality jobs in the clean energy economy to every community across the country. It is up to state agencies to make sure that these jobs on which critical transportation infrastructure will depend are desirable and accessible to all—meaning that they provide community-supporting wages and benefits, the free and fair choice to join a union, and adequate training opportunities.

The FHWA recently finalized [guidance that, among other key provisions, set minimum standards for the training required of electricians installing, maintaining, and operating](#) most federally-funded EVSE. The guidance affirms the importance of creating and protecting high-quality jobs installing, maintaining, and operating EVSE, as well as the need to leverage training and apprenticeship programs to ensure that this work is executed to the highest standards of safety. Electricians working on EVSE covered by the guidance—which includes the NEVI and CFI programs—are required to be fully licensed electricians with at least 8,000 hours of real-world experience, and additional EVSE-specific training through the EV Infrastructure Training Program (EVITP). Moreover, the NEVI Formula Program requires that all projects requiring more than one electrician use at least one apprentice electrician who is participating in a Registered Apprenticeship Program (RAP). Such requirements facilitate the safe installation of high-voltage public infrastructure, while providing crucial training opportunities for new entrants and seeding a deep pipeline of workers to support every state’s EV charging network. States should prioritize projects and contractors that balance expert installation, operation, and maintenance with the provision of training opportunities for the next generation of electricians.

A Checklist for EV Charging Infrastructure Projects

Many state agencies will select contractors to plan, install, maintain, and operate federally funded EVSE projects. The following checklist can help recipients of federal funds, like states, choose contractors and subcontractors who will maximize the local employment and economic benefits that accompany EVSE projects.

Supporting EVSE Manufacturing Workers & Communities

1. Adhere to the phased Buy America requirements for the acquisition and installation of EV chargers (“whose final assembly occurs in the United States, and for which the cost of components manufactured in the United States is at least 55 percent of the cost of all components”).
2. Require or preference contractors that commit to installing EVSE manufactured in facilities where workers are protected by a collective bargaining agreement, or, at minimum, are guaranteed the free and fair choice to join a union through a labor peace agreement or union neutrality agreement.
3. Embed criteria for evaluating manufacturing worker protections in the contractor application scoring/selection process for all EV charging infrastructure projects.

Supporting EV Charging Installation, Operation, and Maintenance Workers

1. Require robust community benefits plans for all EV charging infrastructure projects that demonstrate meaningful and sustained cooperation with labor unions and community-based organizations. Community benefits plans should include, at minimum:
 - a. Letters of support from labor unions and community-based organizations;
 - b. Negotiated labor agreements (Collective Bargaining Agreements, Community Benefits Agreements, Good Neighbor Agreements, Project Labor Agreements, etc.);
 - c. Description of plans to attract, train, and retain a skilled, qualified, local, and diverse workforce for construction and installation of EVSE, and for ongoing operation and maintenance activities; and
 - d. Projected numbers and descriptions of new permanent and temporary jobs being created or supported by the project.
2. Require that all contractors and subcontractors conducting installation, operation, and maintenance activities for EVSE provide wages that are equal to, or exceed, Davis-Bacon prevailing wages.
3. Require that all contractors and subcontractors conducting installation, operation, and maintenance activities utilize electricians who have received EVITP certification.
4. Require or preference contractors and subcontractors conducting installation, operation, and maintenance activities who are connected to U.S. Department of Labor or State Apprenticeship Agency RAPs.
5. Require or preference contractors and subcontractors conducting installation, operation, and maintenance activities who are connected to quality pre-apprenticeship programs that connect participants with RAPs.

Additional Resources

[Final Minimum Standards for NEVI \(And Other Federally Funded\) Charging Infrastructure](#)

[Buy America Guidance for NEVI \(And Other Federally Funded\) Charging Infrastructure](#)

[EVITP Find-A-Contractor Page](#)

[DOT’s Checklist on Quality Jobs & Workforce Planning for Competitive Grants in BIL](#)

[BlueGreen Alliance Inflation Reduction Act & Bipartisan Infrastructure Law Resource Center](#)

