

IOWA'S ELECTRIC VEHICLE INFRASTRUCTURE

The Iowa DOT is preparing to implement the National Electric Vehicle Infrastructure Formula (NEVI) Program in compliance with its associated requirements, including those that affect the workforce required to install, maintain and operate NEVI-compliant chargers.

Electrical work, and therefore electricians, will be crucial to the roll-out and success of the NEVI program. The workforce supporting this nationwide effort must adhere to NEVI-specific regulations. This fact sheet provides a high-level overview of the NEVI program and workforce requirements.



NEVI IN IOWA?



- A federal program administered by Iowa DOT with a goal to locate EV charging sites at least every 50 miles along designated alternative fuel corridors (AFCs). Within Iowa, AFCs are I-29, I-35, I-80, and I-380.
- Iowa DOT will select sites and funding recipients through a competitive application process.
- The recipients will own, operate, and maintain the charging sites.



EV CHARGING SITES



The NEVI program specifications requirements for EV charging sites include:

- At least four direct current fast charging (DCFC) ports per site
- Provide a minimum 600kW of demand capacity per site and deliver at least 150kW per port at any time
- Ports must support output voltages of 250 to 920 volts DC



To learn more, visit iowadot.gov/IowaEVPlan or email iowa.evplan@iowadot.us

ELECTRICAL INSTALLATION REQUIREMENTS

Federal regulations pertaining to workforce requirements for EV charger installation, maintenance and operations under NEVI are found in 23 CFR 680.106 (J). In summary:

- All electricians must either be certified by the **Electric Vehicle Infrastructure Training Program (EVITP)** or hold a continuing education certificate from a registered apprenticeship program meeting the NEVI requirements
- If more than one electrician is required per site, at least one must meet the requirements above and at least one must be enrolled in an electrical registered apprenticeship program
- All other on-site, non-electrical workers directly involved in the installation, operation, and maintenance of chargers must have graduated from a registered apprenticeship program or have appropriate licenses, certifications, and training as required by the State
- Prevailing wages (Davis-Bacon) must be paid and certified payrolls provided for review
- All other applicable state permitting and licensing requirements

ELECTRIC VEHICLE INFRASTRUCTURE TRAINING PROGRAM

The Electric Vehicle Infrastructure Training Program (EVITP) curriculum was developed through collaboration of industry stakeholders. A state-licensed electrician may take the online course, which takes 20 hours and is followed by an online test. The training costs \$275 and is updated based on industry trends. EVITP certification expires three years after the date of completion. To recertify, the latest version of the class must be taken and passed.

COURSE TOPICS

- Utility interconnect policies and requirements
- Utility grid stress precautions
- Charging station fundamentals
- National Electrical Code standards and requirements
- First responder safety and fire hazard measures
- Electric vehicle supply equipment troubleshooting, repair and commissioning

Additional Resources:

- EVITP website: <https://evitp.org>
- Iowa Electrical Licensing and Inspection website: <https://iowaelectrical.gov/>
- Contractors in Iowa which employ EVITP-certified electrician(s): <https://evitp.org/iowa>
- Iowa NEVI website: <https://iowadot.gov/iowaevplan>
- Registered apprenticeship programs: <https://www.earnandlearn-iowa.gov/apprentice>
- Federal Requirements (23 CFR 680.106): <https://www.ecfr.gov/current/title-23/chapter-I/subchapter-G/part-680>
- Build America Buy America: <https://www.fhwa.dot.gov/construction/cqit/buyam/implementation.cfm>
- Davis-Bacon Act: <https://www.fhwa.dot.gov/construction/cqit/dbacon.cfm>