



Reliability and Accessibility Accelerator (RAA)

Participant Briefing
August 27, 2024

House Keeping

- This webinar will be recorded and available on the IDOT Drive Electric Illinois website. Just Google "Drive Electric Illinois"
- All participants are currently muted and are encouraged to stay muted until after the presentation for question & answer.
- If we do not answer your question in this meeting someone from IDOT will reach out with a follow-up email.



Today's Agenda

- Background
- Program requirements/details
- Procurement
- Timeline





BACKGROUND

Background

- The most recent federal transportation funding law – Infrastructure Investment and Jobs Act established the National Electric Vehicle Infrastructure (NEVI) Program
 - NEVI dedicated funding for the construction of publicly available electric vehicle (EV) chargers
 - NEVI established under Title 23 United States Code Part 680 (23 CFR 680)
- Electric Vehicle Charger Reliability and Accessibility Accelerator(RAA) funding is a set-aside of NEVI funds
 - Based on ‘temporarily unavailable’ charging ports from the Department of Energy’s Alternative Fuels Data Center as of October 12, 2023
 - Focus to repair or replace broken/non-operational EV chargers



Illinois Department
of Transportation

Background

- **September 13, 2023:** The Federal Highway Administration (FHWA) released a Notice of Funding Opportunity (NOFO) for RAA, including a list of ‘broken or unavailable chargers’ gathered from the Department of Energy’s Alternative Fuels Database. Submissions were due November 13th, 2023.
- **September 21, 2023:** An informational webinar was given by FHWA explaining the actual list of eligible chargers would be released “Four weeks after NOFO publication.” Four weeks before applications are due.
- **October 12, 2023:** List from FHWA only included the station’s address and the ‘current’ EV charging station provider. Statewide there were 110 charging ports in total.
- **October 2023:** IDOT worked with EV charging station providers to come up with preliminary charger upgrade information.
- **November 12, 2023:** IDOT submitted Illinois application to FHWA.
- **January 10, 2024:** Illinois awarded \$7.1 million to repair or replace broken chargers.
- **July 18, 2024:** IDOT sent out the first letter to all site locations about interest in participating in the RAA Program
- **August 8, 2024:** IDOT sent out second letter to site hosts
- **August 21, 2024:** A follow up email to the letters was sent to any site host who had not responded to the previous two letters





PROGRAM REQUIREMENTS/DETAILS

Examples of Repair and Replace

Repair

- Repairing or replacing broken components or subcomponents (e.g. connector, screen, cord, payment terminals)
- Upgrading broken hardware or functional hardware as necessary to meet 23 CFR 680
- Repairing or replacing a broken connector port, and adding an additional port as needed to comply with 23 CFR 680

Replace

- Fully replacing EV chargers
- Fully replacing related equipment (e.g. switchgear, utility distribution equipment, battery storage) that is intrinsically related to the Electric Vehicle Supply Equipment (EVSE) and solely dedicated to the operation of EVSE.
- Upgrading hardware as necessary to meet 23 CFR 680

Program Requirements/23 CFR 680

- Funding cannot be used on EV chargers that were covered under a warranty to cover needed repairs as of October 12, 2023
- New/upgraded EV charging stations and ports must be NEVI compliant which means charging stations:
 - Must be maintained for at least five years of operation
 - Must have annual uptime of greater than 97%
 - Must be open at least as frequently as the business hours of site and available to the public (in most cases)
 - Direct Current Fast Chargers (DCFC) located along Alternative Fuel Corridor (primarily along Interstates – 1 mile from exit) must be available 24/7
 - Include a contactless payment method that accepts major debit and credit cards
 - Must provide four ports
 - Each port must have permanently attached Combined Charging System (CCS1) for DCFC and J1772 for Level 2 (L2) charger
 - DCFC ports must have continuous power of at least 150 kW if located on Alternative Fuel Corridor
 - DCFC ports not on Alternative Fuel Corridor may have continuous power less than 150 kW
 - L2 ports must have continuous power of at least 6kW



Program Requirements/23 CFR 680

- Upgrades can include bringing site into compliance with Americans with Disabilities Act
- Power supply at site should be adequate without significant distribution capacity upgrades
 - Minor grid upgrades allowable if work is necessitated by construction/upgrade of EV station
 - Major grid upgrades (i.e. longer line extension/upgrades, improvements to offsite power generation, bulk power transmission, or substations) are ineligible
- Repair/replacement of broken EV charger at existing location

Program Requirements/23 CFR 680

- Can upgrade Level 1 EV charger to L2 EV charger
- Can upgrade L2 EV charger to DCFC (power contingent on location along Alternative Fuel Corridor)
- EV charger must be on a charging network
- EV charging customers must have mechanisms to report outages, malfunctions, and other issues with charging stations
- Data submittal
 - *Must provide quarterly and annual data submittals that detail the status/usage of EV chargers for five years*
- Physical and cyber security to protect consumer data
- Broken/non-operational equipment cannot be redeployed – must be recycled or scrapped



Program Details

- Funding can be used for both publicly and privately owned charging infrastructure
- Funding can be used for both DCFC and L2 infrastructure
 - Many combinations could work
 - Replace two unavailable L2 ports with four ports
 - Add two level 2 ports if existing L2 EV charger has two ports that are now available and provide 6 kW continuous power at each port
 - Replace four L2 ports with four DCFC ports
 - Replace one DCFC port with four DCFC ports
 - Level 1 EV chargers that broken may be replaced with L2 charging equipment



Program Details

- Cost Share
 - Federal share shall not exceed 80% of total project cost
 - Awardees must provide at least 20% of the total project cost
 - Example: L2 charger with four ports costs \$60,000 – station owner would be responsible for \$12,000 of the cost
 - Costs for operations and maintenance/data collection for up to five years after station operational eligible for reimbursement
- EV chargers will belong to the charging station operator
- ANY WORK COMPLETED PRIOR TO IDOT APPROVAL NOT ELIGIBLE FOR REIMBURSEMENT



Program Details

- Ineligible projects
 - Projects that exceed the standards and requirements of 23 CFR 680 including:
 - Distributed energy resources that are not intrinsically needed to make the charger operational
 - Replacement of L2 chargers with DCFC chargers along alternative fuel corridors that do not provide at least four ports/150 kW of continuous charging for each port (and other requirements of 23 680)
 - Repair projects for which costs would exceed the cost to replace the broken or non-operational charger with new equipment
 - Replacement projects that could be returned to a reliable operational status with less costly repairs

[*23 CFR Part 680 -- National Electric Vehicle Infrastructure Standards and Requirements](#)

Charger Repair/Replacement Examples

- Charging Station with inoperable L2 charging port(s) on Alternative Fuel Corridor

Option 1

- Repair or replace the L2 port(s) with a L2 port(s)
- Add additional L2 ports for minimum 4 ports



Charger Repair/Replacement Examples

- Inoperable DCFC charging port(s) **not** located on Alternative Fuel Corridor

Option 1

- Repair or replace the DCFC port(s) with a DCFC port(s)
- Add additional DCFC ports for total of 4 ports

Option 2

- Replace the DCFC port(s) with a DCFC port(s)
- Add additional ports any combination of L2 or DCFC for minimum 4 total ports

Charger Repair/Replacement Examples

- Charging Station with inoperable L2 charging port(s) **not** located on Alternative Fuel Corridor

Option 1

- Repair or replace the L2 port(s) with a L2 port(s)
- Add additional L2 ports for minimum 4 ports

Option 2

- Replace the L2 port(s) with a DCFC port(s)
- Add additional DCFC for minimum 4 ports



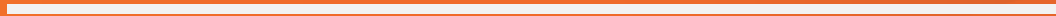
PROCUREMENT

Agreements/Procurement

- Reminder that we must follow all Federal and State procurement rules for transportation projects
- Exploring procurement/grant options with path of least resistance
- Most likely IDOT will issue a Notice of Funding Opportunity (NOFO) through our Grant Portal (GATA Portal) interested parties (folks on this call) will register in the portal
- To respond to the NOFO you will show proof that you are partnering with an EV Charging provider you competitively bid and will work with to repair or upgrade your station
- This is a learning process for all parties



TIMELINE



Draft Program Timeline

- September 20, 2024 – Site owners complete IDOT EV charger survey
- September 30, 2024 – Site owners inform IDOT if they intend to move forward with program
- Fall 2024 – Final selection of EV chargers for each site (pending Federal Highway approval)
- Winter 2025 – Procurement of EV chargers
- Winter 2026 – Finalize installment of EV chargers
- Winter 2031 – Five-year data collection period/reporting complete





QUESTIONS?



THANK YOU!

- Email: DOT.DriveElectric@Illinois.gov



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of Transportation