Electric Vehicle Council
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Infrastructure Investment and Jobs Act Oversight Summary and Recommendations

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OVERVIEW

The Infrastructure Investment and Jobs Act[1] (IIJA or Act) establishes two funding programs for new electric vehicle (EV) infrastructure investment: the National Electric Vehicle Formula Program and the Discretionary Grant Program for Charging and Fueling Infrastructure. Depending on their locations, retail businesses may be eligible as site hosts for both programs if they meet specified conditions.

- The **National Electric Vehicle Formula Program** (NEVI Formula Program) provides $5 billion of funding to all 50 states; Washington, D.C.; and Puerto Rico to strategically deploy publicly accessible DC fast charging infrastructure and establish an interconnected network to facilitate data collection as well as access and reliability.[2]
- The **Discretionary Grant Program for Charging and Fueling Infrastructure** (Corridor Charging Grant Program) provides competitive grants totaling $2.5 billion for the strategic deployment of EV infrastructure, hydrogen infrastructure, natural gas infrastructure, and propane infrastructure along alternative fuel corridors (AFCs) or in certain other locations.[3]

The Department of Energy (DOE) and Department of Transportation (DOT) are jointly overseeing the planning, funding, implementation, charger utilization data collection, and evaluation of these two programs. These agencies formed the Joint Office of Energy and Transportation (Joint Office), which will guide and oversee the NEVI Formula Program.[4] DOT will provide guidance for the Corridor Charging Grant Program by September 30, 2022, and will oversee its implementation.[5]

[1]Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021).
[2]An interconnected network will facilitate data collection, access, and reliability for future EV charging infrastructure deployment. Such interconnected data will demonstrate whether the type and amount of charging installed is adequate to meet consumers' needs and whether the grid is adequate to service the charging load. This knowledge will improve future siting decisions and help advance the future-proofing objective.
[3]Federal Highway Administration. "Alternative Fuel Corridors." U.S. Department of Transportation. Updated February 10, 2022. https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/. Established by the U.S. Department of Transportation Federal Highway Administration, AFCs are a national network of alternative fueling and charging infrastructure situated along the national highway system. These corridors are selected based on criteria that promote the build-out of a national network. AFCs cover approximately 165,722 miles of highway across 49 states and Washington, D.C., representing approximately 74% of the highway system.
[4]Federal Highway Administration. *The National Electric Vehicle Infrastructure Formula Program: Bipartisan Infrastructure Law; Program Guidance.* U.S. Department of Transportation. Retrieved May 23, 2022. https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/90d_nevi_formula_program_guidance.pdf. The FWHA provided guidance on February 10, 2022; additional guidance is forthcoming.
[5]While data collection is mandatory for the NEVI Formula Program, it is not required for the Corridor Charging Grant Program. The Center for Sustainable Energy (CSE) recommends that the DOT consider establishing a feasible and incentivized data reporting protocol for the Corridor Charging Grant Program. Doing so would enable DOT and stakeholders to include the data from the Corridor Charging Grant Program in the analysis that will form the data-driven understanding of charging usage. CSE recommends that data collection within the Corridor Charging Grant Program follow the guidance for the NEVI Formula Program.

NEVI FORMULA PROGRAM

Eligibility for participation in the two programs varies. The NEVI Formula Program funds are being directed to the states, which will work with stakeholders to determine the placement and ownership model of the charging infrastructure. Each state's portion of the five-year funding program has been calculated using the NEVI Formula.[6] Under this program, roadways eligible for electrification funds include AFCs.

Under the NEVI Formula Program, states will be responsible for planning, implementing, operating, and maintaining their EV charging infrastructure along designated AFCs. If a state and the Secretary of Transportation certify that sufficient charging infrastructure already exists along AFCs, charging infrastructure can be installed in other locations. The states are relying on data from the Alternative Fuels Data Center[7] and other databases to determine if saturation has occurred.

Because the NEVI funding is unlikely to meet all future EV charging needs, states will doubtless take a variety of approaches to defining saturation depending on whether they want to concentrate charging along AFCs or want the flexibility to also invest in community charging. Interested retail businesses are encouraged to provide feedback through the state stakeholder process. The NEVI funding covers 80% of the project costs, including installation and any power upgrades needed to accommodate the minimum of four networked 150 kW chargers required at each location.

States can use funds to contract with private entities to acquire and install infrastructure, and the private entity may pay the nonfederal share (20%) of the project cost. States must submit their infrastructure plans to the Joint Office by August 1, 2022. States are required to consider the proximity to fuel retailers[8] in their planning, and since states are starting the stakeholder feedback process, interested retail businesses are advised to engage with the states now. Some states with mature EV plans are further along in creating the required EV infrastructure plan, while others with less advanced or nonexistent EV plans are looking for external support. The DOT and FHWA will review and approve the plans by September 30, 2022. The Act also requires DOT and DOE to provide a report of the states' plans to Congress.

The NEVI Formula Program establishes data collection procedures for each funded project's entire life cycle, including development, commissioning, and operation. The data collected will include charger reliability (uptime) and utilization information that the states must submit to the Joint Office. The data will most likely be collected from the EV service providers (EVSPs) by the states and is likely to include the location type, which will enable creating 24/7 utilization profiles for interested retail businesses. It is therefore recommended that interested retail businesses select EVSPs with robust network communications and data reporting capabilities. Interested retail businesses who host chargers that receive NEVI funding and contract with multiple EVSPs are advised to use technology that can easily aggregate the data to better understand charging activity across their entire portfolio.

COORIDOR CHARGING GRANT PROGRAM

States are also eligible for the Corridor Charging Grant Program, as are several other entities: political subdivisions of a state; metropolitan planning organizations; units of local government; special purpose districts or public authorities with a transportation function, including port authorities; American Indian

[6]Federal Highway Administration. "Notice: Apportionment of Fiscal Year (FY) 2022 Highway Infrastructure Program Funds for the National Electric Vehicle Infrastructure Formula Program Pursuant to the Infrastructure Investment and Jobs Act." U.S. Department of Transportation. February 10, 2022. https://www.fhwa.dot.gov/legsregs/directives/notices/n4510863.cfm.

[7]https://afdc.energy.gov/

[8]Federal Highway Administration. "Bipartisan Infrastructure Law: Fact Sheets; National Electric Vehicle Infrastructure Formula Program." U.S. Department of Transportation. Updated February 10, 2022. https://www.fhwa.dot.gov/bipartisan-infrastructure-law/nevi_formula_program.cfm.

tribes, and territories of the United States. Federal funding will provide up to 80% of the project costs for infrastructure and planning, feasibility analysis, revenue forecasting, environmental review, preliminary engineering, design work, and operating and maintenance costs. Participation in the Corridor Charging Grant Program is determined through a competitive grant process outlined in the IIJA that will be managed by the DOT.[9]

Half of the Corridor Charging Grant Program funds are reserved for community grants, with priority given to applicants in rural areas, low- and moderate-income neighborhoods, and communities with either a low ratio of private parking spaces to households or a high ratio of multiunit dwellings to single-family homes. Software tools such as Caret,[10] from the Center for Sustainable Energy (CSE), will be used to identify which retail businesses are located in areas that are likely to be prioritized. All entities eligible under the Corridor Charging Grant Program are eligible for the community grants; eligibility for the community grants also extends to state or local authorities with ownership of publicly accessible transportation facilities. This program requires the status of charging and equipment availability to be made available in real time, but it does not specify a minimum power rating for the EV charging equipment, so Level 2 equipment is eligible.

Projects may include roadways with AFC designation but are not limited to AFCs. Projects may be located on any road or publicly accessible location, expanding the number of eligible retail business locations. The Corridor Charging Grant Program also requests that programs consider "the availability of onsite amenities for vehicle operators, such as restrooms or food facilities."[11] Retailers are encouraged to identify the local planning and community organizations that are likely to pursue community grants for the eligible fuel types so that their locations may be considered.

STATE PLANS FOR ELECTRIC VEHICLE INFRASTRUCTURE

NEVI Formula Program funds are designed to be available to build out an accessible and reliable public charging network along designated AFCs, and states are expected to prioritize investments along these highway systems. The locations of charging infrastructure must be within one mile of an AFC exit, which can include various retail businesses and refueling stations.

The analysis of EV charger saturation along AFCs will be conducted by the Joint Office, allowing a state to make a case that their highways have adequate charging available to satisfy projected charging demand. If a network of AFCs in a state is verified as fully built out, funding may be used on any public road or in other accessible locations.

It is recommended that grant recipients invest in clear and visible signage as the NEVI funding does include the cost of signs to promote EV charging availability.

[9] Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021).
[10] https://energycenter.org/software/caret
[11] Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, 135 Stat. 429 (2021).

Some states are reaching out to stakeholders for input into their EV infrastructure plans, and interested retail businesses can participate in this process. The FHWA will review plans and determine whether they are approved by September 30, 2022. It is suggested that these plans follow the templated guidance[12] issued by the FHWA and include the following sections:

- Public Engagement
  - Stakeholders Involved in Plan Development
- Plan Vision and Goals
- Contracting
- Existing and Future Conditions Analysis
- EV Charging Infrastructure Deployment
  - Nonfederal Cost Share Sources
  - Maps with the Approximate Locations of Planned EV Charging Infrastructure
- Implementation
  - Strategies for EVSE (Electric Vehicle Supply Equipment) Data Collection and Sharing
- Civil Rights
- Equity Considerations
- Labor and Workforce Considerations
- Cybersecurity
- Program Evaluation

SUGGESTIONS FOR PARTICIPATION

State offices developing proposals for NEVI funds are likely to work with local stakeholders to recommend sites and develop a vision that aligns with the priorities of regional businesses and communities. (A more in-depth review of state considerations is available on CSE's website[13].) Interested stakeholders, including retailers, should familiarize themselves with the FHWA guidance[14] and considerations for the strategic deployment of EV charging infrastructure and identify the people in their states responsible for gathering stakeholder input.

The available capacity of the local distribution grid impacts the cost of implementing the 600 kW minimum in charging power, and limitations in capacity could prevent some locations from being considered. Prospective site hosts should engage with the local utility to better understand the capacity of potential

[12] Joint Office of Energy and Transportation. "State Plan Template" (Microsoft Word document download). Retrieved May 23, 2022. https://driveelectric.gov/files/state-plan-template.docx.

[13] https://energycenter.org/thought-leadership/research-and-reports/recommendations-oversight-iija-electric-vehicle-charging

[14] Federal Highway Administration. *The National Electric Vehicle Infrastructure Formula Program: Bipartisan Infrastructure Law; Program Guidance.* U.S. Department of Transportation. Retrieved May 23, 2022. https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/90d_nevi_formula_program_guidance.pdf.

sites, as this information will be important to the decision-making process.

To optimize charging station locations, states should consider the FHWA guidance for proximity to existing charging stations and highway corridors, and their plans should reflect the following attributes:

- Convenience: Ideal charging sites should be well lit and safe and offer amenities such as restrooms or shopping.
- Visibility: Charging stations funded under the NEVI program will need to be publicly accessible, and visible chargers with clearly marked signage directing EV drivers to them are more likely to be used and can help increase awareness.
- Dwell time: Drivers afforded options to shop or eat at a restaurant can appreciate the ability to charge while parked at their destination. The NEVI program will fund only DC fast chargers that require dwell times likely to be 15–30 minutes.

Retailers looking to identify the NEVI-eligible locations that are most likely to be highly utilized should consider variables such as regional vehicle miles traveled, traffic patterns, impact on the local energy grid conditions, and forecasted regional EV adoption. Optimally siting chargers using a predictive methodology such as CSE's Caret[15] software can enable retailers to reach the utilization goals for a charging site and increase revenue from other services.

Selecting ideal charging locations typically requires experience and knowledge of EV charging with a strong understanding of what services interest EV drivers and how long they will stay when visiting a charging site. By using a data-driven approach, fuel providers can quickly determine locations that will both serve the EV driver and offer opportunities to preserve customer engagement and increase revenue. Evaluating charger data to ensure high utilization of charging assets is critical for achieving profitability[16]. High utilization also corresponds to a high dwell time, which can have extensive co-benefits for retail businesses.

About the Fuels Institute

Founded by NACS in 2013, the Fuels Institute is a nonprofit tax-exempt social welfare organization under section 501(c)(4) of the Internal Revenue Code. We are dedicated to evaluating issues affecting the vehicles and fuels markets. We commission comprehensive, fact-based research projects that are designed to answer questions, not advocate a specific outcome. Our reports address the interests of industry stakeholders—from business owners making long-term investment decisions to policymakers considering legislation and regulations that affect these markets.

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[15] https://energycenter.org/software/caret
[16] Satterfield, C. and N. Nigro. Public EV charging business models for retail site hosts. Washington, D.C.: Atlas Public Policy, 2020. Retrieved April 19, 2022. https://atlaspolicy.com/wp-content/uploads/2020/04/Public-EV-Charging-Business-Models-for-Retail-Site-Hosts.pdf.