

January 28, 2022

**Re: Docket No. FHWA–2021–0022, Development of Guidance for Electric Vehicle Charging Program and Charging and Fueling Infrastructure Program, Request for Information**

The Business Council for Sustainable Energy (BCSE) appreciates the opportunity to provide comments on the development of guidance for the Electric Vehicle Charging Program and Charging and Fueling Infrastructure Program.

The Council, founded in 1992, is a broad-based clean energy trade association. Its members span many industry sectors, including energy efficiency, energy storage, natural gas, renewable energy, sustainable transportation and emerging decarbonization technologies. BCSE also has an independent small- and medium-size businesses initiative under its banner, the Clean Energy Business Network (CEBN). Together, the BCSE and CEBN represent a broad range of the clean energy economy, from Fortune 100 companies to small businesses working in all 50 states supporting over 3 million U.S. jobs.

Transportation sector emissions currently are the largest contributor to U.S. greenhouse gas emissions and reducing transportation-related emissions is essential to achieving the nation's climate mitigation goals.

BCSE commends Congress and the Biden Administration for enactment of the Infrastructure Investment and Jobs Act (IIJA) and seeks to serve as a resource to federal agencies implementing the IIJA programs.

As such, the Council offers the following comments in response the Department of Transportation's open RFI. Of note, as a diverse coalition, not all members take a position or endorse the recommendations included in this submission.

**General Principles to Shape Guidance as the Department of Transportation (DOT) Implements the Electric Vehicle Charging Program and the Charging and Fueling Infrastructure Program**

- ***States should coordinate early and often with all private sector partners, including third-party providers, electric utilities, and other private sector stakeholders, in the planning and implementation of electric vehicle (EV) charging infrastructure programs.*** This engagement is critical both for the energy grid planning and investment necessary to support planned EV charging station deployment, as well as for ensuring states are leveraging current private sector and utility programs and expertise.
- ***DOT should encourage the utilization of third-party finance as it implements the EV Charging Program and the Charging and Fueling Infrastructure Program to expand the impact of the federal investments,*** and also to help achieve federal, state and local government climate, environmental justice, and sustainability goals.
- ***DOT should provide flexible approaches as it implements the EV Charging Program and the Charging and Fueling Infrastructure Program*** to allow for innovation in EV charging and infrastructure build out.
- ***To meet current and future market demands for EV charging, a holistic and long-term planning approach must be taken.*** The approach should include private sector coordination and consideration of the relationships between corridor and community-based or at-home charging, all use cases and vehicle types, grid readiness, and technology choices/availability.

- **Funding programs should be made available to hydrogen fueling infrastructure as much as is feasible,** as this program will play a critical role in building out interstate hydrogen corridors to enable the decarbonization of light-, medium-, and heavy-duty transportation.<sup>1</sup>

## **Responses to DOT Questions in the Electric Vehicle Charging Program and the Charging and Fueling Infrastructure Program**

### Question 1: The distance between publicly available EV charging infrastructure.

- The distance between public EV fast charging facilities to enable long-distance travel should be determined by customer and community need, which will vary by market. Flexibility is essential as the needs will evolve as EV adoption increases. Further, while basic standards for a viable network should be provided, they should not be overly constrained by one metric (i.e., distance between stations).
- FHWA guidance should be based on planning principles, considering key parameters, including (but not limited to):
  - The expected typical battery electric vehicle (BEV) range at highway speeds and across all weather conditions and temperature fluctuations.
  - Customer expectations/preferences for driving time between stops and charging time, with consideration that EV charging times will be longer than liquid fueling times.
  - The expected charging power levels of BEV and Electric Vehicle Supply Equipment (EVSE).
  - Expected number of ports per location.
  - Sufficient coverage for resiliency, emergency response, and utility power restoration scenarios. This becomes increasingly important as critical service vehicles electrify, such as police, fire, medical and utilities.
- To serve as the refueling backbone for the nation's highways, as well as additional charging for adjacent communities, the system needs to be sufficiently built out, extremely reliable, and accessible for customers.
  - This not only includes light-duty passenger vehicles but must be planned to accommodate medium- and heavy-duty freight electrification.

### Question 2: State plan consideration of integrating energy storage and/or distributed generation into charging facilities.

- Integrating energy storage and/or distributed generation into charging facilities should be driven by the local needs of the plan and the DOT should make every effort to coordinate with the third-party providers as well as local electric company to leverage clean energy investments.

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<sup>1</sup> Please see the [comments submitted by the Fuel Cell and Hydrogen Energy Association](#) for additional information.

- As part of both the EV Charging Program and the Charging and Fueling Infrastructure Program, DOT should prioritize projects that integrate pre-existing, commercially viable yet innovative technologies. DOT should also allow new technologies to be integrated into projects, even where technical analysis has not been fully performed, as long as the contractor is willing to take the performance risk. This will allow contractors to deploy technologies that could have a substantial climate impact and improve the operation of the grid, without any risk to the government if the results do not materialize.
- Third-party providers as well as electric companies may be able to offer innovative solutions to enable EV charging in places where energy grid in rural or underserved communities where capacity is limited.

Question 3: The proximity of existing off highway travel centers, fuel retailers, and small businesses to EV charging infrastructure acquired or funded under the Program.

- EV drivers' charging experiences will benefit from access to amenities that are co-located to corridor charging. Given that current fast charging times are still significantly longer than gasoline fueling times (depending on the vehicle and state of charge), drivers want access to other resources to maximize their time and serve their broader travel needs.
- While it is not recommended to require all corridor charging to be located at or near these types of facilities, it would serve EV drivers if these types of deployments are encouraged.
- To ensure equitable and broad access to EV charging, we recognize that there are rural locations where co-locating could be burdensome or unrealistic. Siting proximity requirements related to other amenities would disproportionately impact these communities. Where co-located deployment is feasible it should be encouraged, but not required.

Question 4: The need for publicly available EV charging infrastructure in rural corridors and underserved or disadvantaged communities.

- It is critical to ensure electric transportation benefits are reaching all communities and DOT should encourage opportunities to leverage private sector dollars to expand the impact of its public investments to expand access rural and underserved communities.
- State and local coordination with stakeholders in rural and underserved communities will be critical to deploy an equitable network of EV chargers.
- As noted in the RFI, the Charging and Fueling Infrastructure Program will be directed toward EVSE deployment in these rural or underserved communities through the 50 percent set aside for community grants. These grants can support EVSE deployment at publicly accessible locations such as public buildings, public schools, and public parking facilities.

- While EVSE is needed in these sites, many of these same public buildings are significantly outdated and in need of energy efficiency and resilience upgrades. This presents a great opportunity for DOT to leverage the limited community grant funding with private sector financing vehicles such as Energy Savings Performance Contracts (ESPC) or Utility Energy Service Contracts (UESC) to expand its impact. If new electrical work will be required for these sites to deploy EVSE, DOT should also use the opportunity to encourage deeper building retrofits that cut carbon, improve indoor health, and support resilience.
- DOT could incentivize this work by providing points to proposals that utilize public-private partnerships in this manner.

Question 5: The long-term operation and maintenance of publicly available EV charging infrastructure to avoid stranded assets and protect the investment of public funds in that infrastructure.

- A risk in these new programs is that funding will be awarded to install charging stations and the stations will be built but then allowed to fall into despair. DOT should ensure safeguards are included in contracts to protect against this risk.
- Contracting vehicles like ESPCs, which can support EVSE, include a contractual guarantee that energy savings will be achieved, along with a measurement and verification (M&V) requirement for the life of the contract to ensure installed technologies are performing as promised. Other public-private partnerships contain performance assurance safeguards that place performance responsibility on the private sector rather than the government.
- These contracting vehicles allow agencies to transfer oversight risk and responsibility for EVSE to the private sector. Given the historic amount of funding that will come from DOT over the next five years, these contracts will enhance oversight and optimize use of DOT staff resources.
- By incentivizing projects to include an M&V or performance assurance guarantee, DOT will help avoid situations that arose during ARRA in which new energy equipment was purchased via design-build contracts (without an M&V requirement), allowed to fall into disrepair, and in some instances mothballed. Again, additional credit could be provided to projects that offer an M&V or performance assurance guarantee.

Question 6: Existing private, national, State, local, Tribal, and territorial government EV charging infrastructure programs and incentives.

- State plans should be cognizant of all EV charging programs in the state and design its plan such that federal money complements, but does not displace, existing programs. As mentioned in response to question 4, DOT should seek to leverage government dollars with public-private partnership mechanisms.