



January 28, 2021

Stephanie Pollack
Deputy Administrator
Federal Highway Administration
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

RE: Request for Information on Development of Guidance for Electric Vehicle Charging Infrastructure Deployment, Docket No. FHWA-2021-0022 (86 FR 67782)

Dear Deputy Administrator Pollack:

The U.S. Chamber of Commerce appreciates the opportunity to file comments in response to the request for information (RFI) issued by the Federal Highway Administration (FHWA) pertaining to electric vehicle charging programs funded by the recently enacted Infrastructure Investment and Jobs Act (IIJA).

The Chamber has long led the business community efforts to ensure progress toward a cleaner, stronger, and more resilient transportation system, and the historic investments provided by IIJA will do just that. Effective implementation of programs such as the Electric Vehicle Charging Program (EVCP) and Charging and Fueling Infrastructure Program (CFIP) are critical to realizing this vision.

Currently, there are more than 2 million electric vehicles (EVs) on the road in the U.S.—a rapid increase from just a few years ago but just a fraction of the 22 million projected to be in operation by 2030. It is well understood that realization of these forecasts is dependent on overcoming a number of market and technological barriers, including shortcomings related to the nation’s EV charging infrastructure system. As Vice President Kamala Harris stated upon announcing rollout of the Biden Administration’s EV charging infrastructure plan in December 2021, “when we ask people what is the biggest barrier for them to buy an electric car, the answer is almost always figuring out where and how to charge it.”¹

Indeed, recently released polling from Deloitte found that range anxiety, the lack of publicly available EV charging infrastructure, and charging time were three of the four most commonly cited concerns among U.S. consumers that are not considering purchasing an electric vehicle.² This challenge is particularly evident beyond densely populated urban areas, where accessibility

¹ Vice President Harris speech at Prince Georges County, Maryland charging facility, December 13, 2021. Available at <https://www.rev.com/blog/transcripts/kamala-harris-electric-vehicles-speech-transcript>

² 2022 Global Automotive Consumer Study, available at <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Consumer-Business/us-2022-global-automotive-consumer-study-global-focus-final.pdf>



to charging for those traveling longer distances is far less consistent and reliable. In fact, in order to meet automakers' goals for widespread EV deployment, one analysis estimated that nearly \$40 billion in spending for public charging facilities is required.³

The EVCP and CFIP programs present an enormous opportunity to begin ameliorating these concerns by addressing shortcomings within the current charging infrastructure system. In this spirit, the Chamber makes the following program implementation recommendations pursuant to the RFI:

- **Stakeholder consultation opportunities** (questions 7 and 9 of the RFI). Because implementation of these programs is the foundation to advancing longer-term national goals regarding EV infrastructure, the Department should ensure stakeholders representing diverse interests can formally communicate priorities to States and the Administration on an ongoing basis. As part of this outreach effort, states should be required to consult with a broad cross-section of interests when developing master EV charging plans. This will provide additional opportunity for input from local governments, charging vendors and their suppliers, auto manufacturers, utilities, consumer groups, environmental organizations, and academia, among others. Similarly, FHWA should establish an advisory panel of similarly diverse interests to provide input on implementation of the EVCP and CFIP programs on an ongoing basis. Such a forum will help facilitate adjustments and improvements based on best practices and lessons learned.
- **Distance and underserved areas** (Q1 and Q4). To address key consumer concerns and facilitate completion of a full national network of charging infrastructure, the program should focus first on filling “charging deserts” along highway corridors with fast-charging stations. A distance of no more than 100 miles should be the rule of thumb, with ideal distances of approximately 70 miles or less, varying based on factors such as host siting availability and access to existing travel amenities.
- **Grid considerations** (Q2). According to a 2019 study sponsored by the Department of Energy, between 2025 and 2050, growth in annual generation necessary to serve EV charging could exceed more than 10 Terawatt-hours and peak at more than 25 TWh (for perspective, the state of New Mexico currently consumes about 25 TWh annually).⁴ Proper planning and coordination to ensure additional power demand associated with EV

³ Atlas Public Policy analysis, April 2021, available at <https://atlaspolicy.com/how-much-should-the-u-s-invest-in-public-ev-charging-39-billion>

⁴ Summary Report on EVs at Scale and the U.S. Electric Power System. November 2019. Available at <https://www.energy.gov/sites/prod/files/2019/12/f69/GITT%20ISATT%20EVs%20at%20Scale%20Grid%20Summary%20Report%20FINAL%20Nov2019.pdf>



charging can be reliably served is essential. We recommend that as part of the EVCP program, DOT require states to undertake analysis in coordination with relevant power providers to affirm their ability to serve additional charging loads well into the future. More broadly, it is critical that utilities are engaged early in the EV charging infrastructure deployment process to prevent delays, abate costs and mitigate the need for additional grid upgrades in the future. This early engagement between the EVSE vendor, site host and utility should be a requirement to secure federal funding.

- Additionally, we do not recommend vehicle-to-grid applications as a priority focus for this funding. Because drivers on a road trip are typically interested in reducing the length of time off the highway, the potential for drivers seeking to return energy to the grid while traveling is highly limited.
- **Access to off-highway amenities (Q3).** Ideally, charging stations should be sited within two miles of interstate and highway corridors, at least as an initial program priority. Access to amenities such as travel centers and retail businesses help to enhance the customer charging experience by offering food and restrooms, as well as well-lit premises and onsite employees that can assist travelers and improve security. These locations serve as ideal sites for charging stations, and thus should receive priority siting consideration under the program.
- **Operations and maintenance (Q5).** The buildout of a robust national charging network alone is insufficient to boosting consumer confidence in public EV charging; it must be accompanied by proven reliability and resiliency. This is a common consumer complaint with existing infrastructure, and should be a central focus of FWHA's program implementation. We recommend that state applications include plans for ongoing operation and maintenance of charging stations. Potential options include escrow account set-aside requirements for equipment maintenance or engaging public service commissions to allow utilities to manage EV charging maintenance needs.
- **Interaction with existing programs (Q6).** Leveraging federal resources to maximize synergy with existing state, local, and private sector led existing charging programs is an essential ingredient to the program's success. The benefits of this opportunity not only allow EVCP to complement and coordinate with existing programs and infrastructure, but extend to the valuable experience and expertise of private businesses and state and local agencies as well. Accordingly, state plans should be required to demonstrate how existing programs and resources can be best aligned with federal efforts to achieve maximum impact.
- **Speed, interoperability and customer experience (Q8).** While faster charging stations tend to be more costly and thus accompanied by important resource tradeoffs that the



administration must address, we encourage FHWA to set a minimum speed for charging stations constructed on highway corridors. For perspective, according to automakers, every 50 kilowatts (kw) of capacity allows for approximately three miles of battery charge to be restored per minute of charging.⁵ Because consumers are demanding faster charging options—and because automakers are delivering vehicles capable of charging at high speeds—we therefore recommend that a capacity of 150 kw be set as the preferred minimum speed for stations placed along highway corridors, with the understanding that flexibility to deviate from this target may be warranted based on circumstances such as resource tradeoffs, grid impacts, technology uptake, and anticipated demand, among others.

- Equally important, in order to maximize benefits to the largest number of vehicles and consumers, priority consideration should be given to features that further promote consumer convenience and ease of use when charging, including interoperability standards that allow users of other charging networks access to charging networks at all federally-supported locations, not unlike the current system of access to ATM machines.
- We also recommend that the program seek to maximize networking of the charging system information for DC Fast Chargers and for Level 2 charging as needed. This will enhance reliability and the customer experience by enabling both consumers and station operators to know if a station is offline or malfunctioning. This also facilitates consumer use of mobile applications to simplify the charging experience through access to station information and charging details before, during, and after use. Finally, networked charging infrastructure facilitates data collection that can improve system management and guide future EV charger deployments. Importantly, FHWA should establish uniform standards for data collection, reporting and use that facilitate system improvements and other beneficial uses while protecting consumers' private data and confidential business information.

Thank you for the opportunity to comment on this important issue.

Sincerely,

Marty Durbin
Senior Vice President, Policy
U.S. Chamber of Commerce

⁵ Comments of 15 leading auto manufacturers on this RFI, available at <https://www.regulations.gov/comment/FHWA-2021-0022-0036>