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August 22, 2022

Stephanie Pollack
Deputy Administrator
Federal Highway Administration
1200 New Jersey Ave SE
Washington, D.C. 20590

RE: Docket No. FHWA-2022-0008 response request for comments to Notice of Proposed Rule on regulations setting minimum standards and requirements for projects funded under the National Electric Vehicle Infrastructure Program

Submitted electronically

Dear Ms. Pollack,

ChargePoint, Inc. (ChargePoint) respectfully submits these comments in response to the proposed minimum standards for the National Electric Vehicle Infrastructure (“NEVI”) Program issued by the Federal Highway Administration (FHWA) and published in the Federal Register on June 22, 2022.

The Infrastructure Investment and Jobs Act (“IIJA”) includes critical investments for new programs to address climate change, including the historic NEVI Formula program to enable states to place charging infrastructure along alternative fuel corridors. We offer the following comments to help FHWA and the Joint office of Energy and Transportation (“Joint Office”) develop the final minimum standards for the NEVI program.

We thank you for the opportunity to submit these comments and look forward to continued collaboration with FHWA, The Joint Office, DOT, DOE and state DOTs on the development of these guidelines and implementation of the resulting programs.

Sincerely,

Anne Smart
Vice President, Global Public Policy
ChargePoint, Inc.

Background, ChargePoint:

Founded in 2007, ChargePoint is a leading global electric vehicle charging network headquartered in Campbell, California. To date, we have delivered 123 million charges, enabled four billion electric miles and avoided the use of 160 million gallons of gasoline. At ChargePoint, EV charging is all we do, and we do it all. Passenger cars, delivery vehicles, buses, and more—we charge any EV, anywhere it goes. We have built a fully integrated portfolio of hardware, cloud services and support with the best technology in the industry. We offer solutions for home, government, multi-family, commercial, and fleet electric vehicle charging infrastructure. Additionally, ChargePoint has successfully deployed both level two and fast charging infrastructure along major highway corridors in states such as Maine and Colorado while working in tandem with industry and government to enable a more accessible electric future.

ChargePoint's hardware offerings include Level 2 (L2) and DC fast charging (DCFC) products, and ChargePoint provides a range of options across those charging levels for specific use cases including light duty, medium duty, transit fleets, multi-unit dwellings, residential (multi-family and single family), destination, workplace, and more. ChargePoint's software and cloud services enable EV charging station site hosts to manage charging onsite with features like access control, charging analytics, and real-time availability. With modular design to help minimize downtime and make maintenance and repair more seamless, all products are UL-listed, and CE (EU) certified, and most Level 2 solutions are ENERGY STAR® certified.

ChargePoint's primary business model consists of selling smart charging solutions directly to businesses and organizations and offering tools that empower station owners, or site hosts, to deploy EV charging designed for their individual application and use case. ChargePoint provides charging network services and data-driven, cloud-enabled capabilities that enable site hosts to better manage their charging assets and optimize services. For example, with those network capabilities, site hosts can view data on charging station utilization, frequency and duration of charging sessions, set access controls to the stations, and set pricing for charging services. These features are designed to maximize utilization and align the EV driver experience with the specific use case associated with the specific site host. Additionally, ChargePoint has designed its network to allow other parties, such as electric utilities, the ability to access charging data and conduct load management to enable efficient EV load integration onto the electric grid.

§ 680.106(a) Transparency in pricing

Pricing for stations on the ChargePoint network are clearly communicated to drivers, and we are generally supportive of price transparency requirements for NEVI sites. ChargePoint empowers our customers to determine fair prices for charging that maximize station utilization, assist in the cost recovery of the investment, and lend to market competitiveness while considering price variance in operational costs. These costs may come in the form of land costs, leasing issues, utility tariffs, and maintenance and repairs.

FHWA suggests public disclosure for the documents concerning the operations of EV charging stations where price setting is involved, including the procurement process used, the number of bids received, the identification of the awardee, the proposed contract with the awardee and, in accordance with State law, the financial summary of contract payments (including the price and cost data), and any information describing how prices for EV charging are to be set under the contract. Some of the requested information is considered Confidential Business Information or trade secret information and we suggest states allow the use of CBI, trade secret, and other relevant intellectual property protections when gathering and submitting their reports on the pricing activities of charging networks. We are able to provide more detailed breakdowns of costs that impact the price of charging in ways that protect CBI and are easily digestible by consumers.

Finally, the station-by-station assessment of additional fees such as idle fees or any other dwell time related charges should remain the responsibility of site hosts and network operators not any outside entity.

§ 680.106(b-d) Charging Stations

In the minimum standards, FHWA proposes a requirement for four networked DCFC fast charging ports per station capable to dispensing up to 150kW per port.

ChargePoint recommends flexibility in the number of charging ports required at each station and recommends a phase in period for each station to have at least four charging ports dispensing 150kW each at all locations along the alternative fuel corridors. When possible, future site expansion should be considered in build out so additional chargers may be added without a need for major construction

ChargePoint encourages FHWA to provide greater flexibility to states and localities in program guidance to determine the distance between chargers along corridors. In doing so, states may consider the need for shorter intervals on high traffic corridors, near higher population and EV driver densities, or in mountainous areas with steep inclines. Flexibility can similarly allow states and localities to consider the vast expanses of highway in the west or other parts of the country where the required infrastructure or services to offer drivers may not exist to site DCFC every 50 miles.

When it comes to proximity from the nearest highway interchange or exit, within one mile is preferred, but flexibility should be given for areas and stretches of highway where suitable options may not exist. We recommend a maximum limit of five miles from an interstate exit and allowing states to develop scoring criteria accordingly. Distance should be measured by way of driving and not "as the crow flies."

Additionally, ChargePoint suggests further flexibility in the minimum power levels and suggests states allow exemptions in certain areas to allow power levels below the mandated 150kW. Many rural areas, notably sparsely populated and mountainous western states, may require more power level flexibility to ensure charging services are provided without the need for excessive buildouts of power infrastructure and broadband services. Rural areas are home to 70% of America's road miles, and Americans living in rural areas drive and spend more on average on internal combustion engine vehicle operations and

maintenance than suburban and urban dwellers, further solidifying the need for power level flexibility exemptions in these areas.¹

ChargePoint also has concerns regarding any mandates of power levels above 150kW (e.g., 350kW) due to grid constraints in many areas, causing an increase in the cost of power expansion. While 150kW or 350kW may be appropriate for some locations, 50kW or 100kW may be suitable for sites that lack access to power, have high utility demand charges, or not enough projected utilization to provide a positive return on investment within a reasonable timeframe. Additionally, while some sites may fit the use case where a driver is looking to charge as quickly as possible and get back on the road, other sites may warrant a longer visit if drivers are shopping, eating, or visiting a point of interest. Providing flexibility with respect to charging speeds will allow states and station owners to best align charging speeds with the drivers they are serving and the particular use case for EV charging at the site.

§ 680.106(e) Floodplains

FHWA requested specific comment on considerations made to ensure EVSE resilience/reliability in floodplains during natural disasters. As sea levels rise and flood inundation continues to increase in severity and event activity, states should place careful consideration in site selection in areas prone to flooding as stations in high flood risk areas may create stranded assets. To further protect EVSE and increase reliability in a flooding event we also suggest:

- States should allow flexibility in distance from corridor requirements when placing stations to move deployments from lower elevation areas.
- States should consider siting along evacuation routes and anticipate additional demand from highly populated, low-elevation coastal areas to higher-elevation areas along AFCs.
- NEVI funded networked charging equipment should have the ability to operate on multiple cellular networks to increase reliability in a serious weather event.
- Stations should meet rigorous environmental standards to reduce intrusion by the elements. Chargers should be designed to meet all applicable safety standards and the National Electrical Code (NEC). Furthermore, chargers should pass UL testing to achieve UL listing, ensuring consumer and commercial protection to operation.

§ 680.106(f) Payment Methods

ChargePoint applauds the FHWA's direction on proposed payment requirements within the NEVI guidance. To allow the market to best respond to consumer preferences, minimize costs, provide reliable customer experiences, and mitigate security risks, FHWA should require that EV charging stations participating in the EV Charging Program provide drivers with multiple payment options. Further, FHWA should not mandate further specific methods for processing payment methods beyond contactless.

When drivers plug into networked EV chargers that require a fee, they can pay in a variety of ways, including:

- Credit and debit cards;
- Radio frequency identification (RFID) cards;
- "Tap-to-charge," which involves an app-based payment;
- 24/7 phone support lines operated by EV charging networks; and
- Payment through third party network with roaming agreement, which allow drivers from one network to initiate charging sessions on EVSE operated through another network.

¹ Charging Forward, A Toolkit for Planning and Funding Rural Electric Mobility Infrastructure, US Department of Transportation, <https://www.transportation.gov/rural/ev/toolkit>

FHWA should encourage states to implement contactless credit and debit card technology and not require legacy options such as magstripe readers (MSRs) or EMV chip readers, for the following reasons:

- **Obsolete Technology:** The payment industry is rapidly shifting away from MSRs and EMV chip readers for processing card-based payments and over 80% of consumers have used contactless payments in the past 12 months.² Furthermore, 94% of debit cards will be contactless by the end of 2023.³ and all major credit card companies are offering contactless cards.⁴
- **Security:** MSRs and EMV chip card readers are widely known to be insecure and are routinely exploited by “skimmers” and “shimmers”, which are hard-to-detect and are readily available devices that steal credit card data. Skimmers and shimmers are already a serious problem at gas stations and other point-of-sale terminals because they can be installed on legacy card readers in a matter of seconds. Recent reports have detailed how EV charging stations are a ripe target for fraud⁵, and the Federal Trade Commission has warned that physical credit card terminals at outdoor points-of-sale (like gas pumps or EV chargers) are prime targets for fraudsters, while contactless payment options are safer, cleaner, and quickly being adopted by more and more Americans.⁶
 - As FHWA requests feedback on whether additional payment options should be required at NEVI sites, we raise security as the top reason for why FHWA should not add non-contactless payments technologies like MSR and EMV chip to the minimum standards and guidance. The IJA specifically requires “secure” payment methods, and if non-contactless technologies like MSR and EMV chip readers were mandated it would inherently increase fraud risks.
- **Reliability:** MSRs and EMV chip readers are designed with openings for inserting a card, which when exposed to weather, and other natural elements, are known to have reliability issues. For Americans to embrace EVs, charging stations need to be reliable and available. Mandating legacy payment processing methods will reduce overall reliability and limit drive access while stations are down, leading to a poor consumer experience and disincentivizing EV adoption. As the draft minimum standards and guidance call for 97% reliability, MSRs and EMV chip readers inherently undermine the ability for sites to meet a high uptime requirement.
- **Cost:** MSRs and EMV chip readers have been estimated to add approximately \$3,000 to the cost of a charging station over its lifetime. This would represent a 50% to 100% increase in capital costs for Level 2 charging stations and is an unnecessary expenditure for DC fast charging stations. However, all existing cost estimates for this technology are likely to be higher as they do not consider contemporary factors. Costs will be greater due to inflation, labor shortages, supply chain delays and programmatic specific factors like Buy America and a 97% uptime requirement will also increase costs to operate and maintain a physical card reader.
- **Climate:** While some states have temperate weather, others have dust storms, wildfires, hurricanes, and harsh winter environments with subzero temperatures. Due to the varied climate, and the fact that charging stations may be exposed in open parking lots, the FHWA must acknowledge that MSR and EMV chip readers may not be practical or designed to function in all the locations NEVI sites will be deployed. FHWA should not require physical points of entry like an MSR and EMV chip reader as a minimum standard and must allow flexibility on payments

² Raydiant, State of Contactless Payments 2021 Report, May 12, 2021 <https://www.raydiant.com/blog/state-of-contactless-payments/>

³ <https://content.pulsenetwork.com/debit-issuer-study/2021-debit-issuer-study-white-paper>

⁴ <https://www.bankrate.com/finance/credit-cards/credit-card-issuers-that-offer-contactless-cards/>

⁵ Digital Citizens Alliance. Charging in the Crosshairs: How EV Drivers Could Become Cyber Criminals’ New Target. Available at https://www.digitalcitizensalliance.org/clientuploads/pdf/Charging_in_the_Crosshairs.pdf

⁶ <https://www.consumer.ftc.gov/blog/2018/08/watch-out-card-skimming-gas-pump>

technology so that states can deploy EV charging infrastructure that is resilient to site specific climate conditions.

- **Accessibility:** Contactless payment technology is almost ubiquitously available with or without a smart device. The U.S. now has the most contactless cards of any market globally at 175 million, with nine of the top ten U.S. issuers actively rolling out new contactless cards to customers.⁷ Within the next 12-18 months, nearly 100% of personal credit cards will support contactless. In the meantime, current MSR/EMV chip cards can be loaded into digital wallets, and contactless payment technology is being incorporated into prepaid cards.
 - Additionally, there are ways to ensure low-income EV drivers have access to multiple payment methods, without requiring a physical payment reader on a charging station:
 - A joint effort by Valley CAN and the State of California issued “preloaded, reloadable, contactless debit cards for low-income EV owners to use at any charging station”.⁸
 - Transit Agencies, which are necessarily focused on increasing equitable access to transportation, are recognizing the value of expanding access to transportation benefits through “open loop” payment systems. Examples include the Contactless Fare Payments on Santa Monica’s Big Blue Bus, the MTA’s NFC-enabled OMNY payment system for bus and subway access in New York City, and other current and planned contactless payment systems for the transit agencies in Austin, TX, Dayton, OH, and Portland, OR.⁹
- **Health:** The COVID-19 pandemic has accelerated the shift away from physical swipe and chip payment processing. A 2021 report by VISA identifies that overall contactless payment usage increased 150% between 2020 and 2021.¹⁰

§ 680.106(h) Safety & Security

ChargePoint applauds FHWA’s encouragement of physical and cybersecurity standards at NEVI sites.

Physical Security: We recommend that stations should be sited at off-highway travel centers, fuel retailers, small businesses, retail establishments, grocery stores, municipal parking lots and other locations that provide drivers with access to amenities and things to do while charging. Providing drivers with on-site or nearby amenities not only provides for a great driver experience, which helps promote adoption, but also supports those businesses by driving economic activity and establishing a strong business case for DCFC. Chargers must also be in areas that are safe, visible, and well-lit with dusk-to-dawn lighting.

FHWA should encourage access be provided to shelter, restrooms, and drinking water when possible – taking into consideration some rural sites may have less buildout. Charging stations sited at fueling centers can also help these businesses transition to providing electricity as a fueling source, while preserving jobs and creating new ones.

Cybersecurity: We encourage the FHWA to adopt cybersecurity standards that evolve and adapt over the length of the NEVI program. Further, we encourage FHWA to take a holistic approach when determining minimum standards and guidance for cybersecurity.

⁷ <https://usa.visa.com/visa-everywhere/blog/bdp/2020/04/30/merchants-and-consumers-1588276426783.html>

⁸ https://valleycan.org/wp-content/uploads/2022/08/ValleyCAN_PR_080122_Final.pdf

⁹ Bliss, Laura. “Contactless Transit Fares Get a Pandemic Boost,” Bloomberg CityLab. <https://www.bloomberg.com/news/articles/2021-02-01/covid-made-the-case-for-contactless-transit-fares>

¹⁰ VISA Back to Business Study – 2021 Outlook. Available at: <https://vi.sa/3nIjat4>

While states may add individual cybersecurity requirements, requirements should be rooted in existing federal best practices. Having fifty individual state level requirements on cybersecurity, that are not harmonized will result in undue costs and burdens to network operators and site hosts. Using existing GSA security requirements could provide a good guide for what FHWA and the states should consider for a base of cybersecurity requirements.

In its initial guidance, FHWA should specifically look at EV charging hardware and cloud communications to ensure a robust cyber security regime for the NEVI program:

EV Charging Hardware

- **Telecommunications Security:** Radio, modem, Wi-Fi, and Bluetooth chips used in stations can be susceptible to vulnerabilities and security threats. We recommend that FHWA align requirements with FAR Section 889¹¹ guidance on purchases of telecommunications equipment. FHWA should ensure equipment containing technology from companies like Huawei or ZTE are not proliferated through the deployment of NEVI stations.
- **Physical Penetration Testing:** In line with SOC 2 compliance which requires a software penetration test, we encourage network and station operators to provide an annual physical lab or factory penetration testing report for the model of product deployed, conducted by a third party at a factory or laboratory, with a remediation plan on how security gaps are being addressed.

Cloud Communications

- **PCI Certification:** We recommend a Payment Card Industry (PCI) Data Security Standard (DSS) attestation to be required. We believe implementing PCI DSS 3.2.1 or later would help ensure secure network systems, cardholder data protection, access controls, and ensure continuous monitoring and testing of networks.
- **Customer Data Protection:** We recommend attestation of data through either SOC 2 or ISO 27001 certifications. After 2024, we would encourage FHWA to consider enhanced security standards such as NIST 800-171 or an equivalent standard such as FedRAMP. However, we encourage the FHWA to not require NIST 800-171 or FedRAMP immediately, as the industry is still moving toward compliance with these standards.
- **Privacy Standards:** Adopting privacy standards and certifications such as ISO 27701 or NIST 800-172. These privacy standards attest the collection, use, disclosure, retention and destruction of customer data.

In subsequent guidance, FHWA could consider an update to certifications, standards, and best practices. Cybersecurity is an area of continuous improvement for all companies, and we encourage any changes in federal cybersecurity requirements to be phased, so that companies have adequate time to adapt and meet any requirements.

§ 680.106(i) Five Year Timeframe While ChargePoint is supportive of a time year time frame proposed in the minimum standards, we suggest FHWA first consider that station ownership and operations and maintenance responsibilities may fall on charging station owners/operators rather than on states directly. Additionally, FHWA suggests that states may “choose to retire infrastructure that has reached the end of its useful life and should consider upgrading or replacing the EVSE if necessary.” It is critical that FHWA understand that the useful life of a charger generally is 10+ years rather than five years, and we believe site hosts should be given the option of continuing to operate and maintain stations beyond the five years of the program using their own private capital.

¹¹ https://www.acquisition.gov/FAR-Case-2019-009/889_Part_B

FHWA should allow grant funds to be used for the O&M of EVSE during the five-year time for matters such as the expedited shipping and procurement practices as outlined in the original text of IJA which allows funds to be used for “operating assistance for the first five years of operations.”¹² Operational costs can be significant, especially in early years as EV adoption and utilization grow. Funding portions of these operational costs could be necessary in states with high demand charges or in rural or disadvantaged areas where utilization will be very low. Operational cost funding in the first years of operation will assist in the financial viability of new stations and will result in increased investment by station owners and operators. We recommend that grant applicants be required to provide a five-year operating cost model for each site, clearly identifying projected utilization, demand charges and kWh costs, and justify the need for operational funding support. Applicants should be aware of the risks of demand charges before investing in a site. Operational funding support should be provided on a reimbursement basis only so station owners do not profit from such funding support.

Finally, ChargePoint suggests that the third-party data sharing and data reporting provisions also be limited to FHWA’s five-year timeframe.

§ 680.106(j) Workforce

As states assess workforce readiness and prepare for NEVI deployment, we encourage FHWA allow states flexibility as the workforce scales up to meet installation need and to consider alternative pathways for certification for charging station routine O&M. We offer three considerations to ensure NEVI workforce requirements are balanced with facilitating expeditious project deployment:

- 1. FHWA must prioritize flexibility in labor certification standards.** The NOPR currently suggests only certification through the Electric Vehicle Infrastructure Training Program (“EVITP”) or a Registered Apprenticeship Program approved by the Department of Labor in coordination with DOT. While ChargePoint supports working with labor to create separate EVSE installation, operations, and maintenance training programs, concerns exist surrounding the scalability of training if certification is limited to the two aforementioned avenues for NEVI program deployments. States should consider the development of their own programs by building on current certification programs consistent with EVITP training to ensure greater flexibility and labor scalability.
- 2. FHWA must ensure an adequate workforce across all states.** We strongly suggest FHWA encourage states to assess the number of qualified electricians and technicians who currently have EVITP or Registered Apprenticeship training currently ready and qualified to work on EVSE installation, operations, and maintenance to assess the ready-workforce and better assess need. We also suggest states to work with EVSE manufacturers and other qualified entities to streamline and improve EVSE installation training programs and O&M standards.
- 3. Labor requirements must be tailored to job functions and project requirements.** Charging station installation requires different job skillsets than ongoing operations and maintenance. FHWA should consider separate training requirements for installation and O&M to prevent the elimination of qualified technicians from good-paying jobs. While some O&M may require a certified electrician’s expertise, most routine O&M work does not require ‘hot’ or complex electrical work. Rather, routine O&M can include working on and updating software, replacing broken connectors, routine cleaning, and performing diagnostic work. To this end, ChargePoint requests FHWA clarity staffing requirements for jobs in which noncritical electrical O&M takes place, which includes cleaning, light electrical work, or diagnostics. ChargePoint does not recommend the requirement of an electrician on site for any of the aforementioned maintenance.

¹² [23 USC §151](#)

§ 680.106(m) Use of Program Income by State DOTs and Third Parties

ChargePoint is concerned that the current language lacks clarity and could severely limit the ability of any site hosts to maintain and operate charging stations during and beyond the time frame of this grant program. ChargePoint encourages FHWA reconsider deeming state DOTs as the authorities on determination of a fair rate of return for charging infrastructure. We further suggest a market based formulaic approach considering costs for electricity, software, hardware, and routine O&M. The reasonable rate of return should apply for only the five-year timeframe prescribed in § 680.106(i) and not continue further into the life of the charger.

§ 680.108 Interoperability and ISO 15118

ChargePoint is committed to providing an excellent driver experience, and the interoperability of a national charging network is crucial in doing so. Among other things, ISO 15118 sets a global standard for vehicle to charger communication and allows for innovation in the market including Plug and Charge and smart charge management. It should be noted that Plug and Charge requires harmonization from vehicles, chargers, the mobility provider and the charge point operator for its functionality. While we appreciate FHWA's intent to create a long-term framework to the enablement of Plug and Charge, ISO 15118 is just one of many protocols that can be used for energy management and requires engagement and adoption from both the charger and vehicle for complete enablement. The standard is continuing to be improved, including the inclusion of security features to protect driver data. Adoption by automakers is also continuing to increase. However, 15118 is not uniform across every automaker model at this time and it may take years before uniformity is possible, if ever possible for existing vehicles.

To avoid diminishing competitiveness, ISO 15118 requirements should currently exist only at the hardware level to ensure NEVI funded hardware will support 15118 software updates moving forward. We encourage FHWA build flexibility into the deployment of the 15118 software requirement to allow for industry-wide adoption as the NEVI program deployments roll out. Additionally, we encourage FHWA to ensure the latest version of 15118 software is required for NEVI funded chargers so that states may take advantage of enhanced security features and provide a uniform starting point as an industry standard.

FHWA requested comment on the use of 15118 as a performance standard, which 15118 is not. We would encourage FHWA to consider uptime to measure performance, which is addressed separately in these minimum standards and in our comments.

§ 680.110 Traffic Control Devices or On-Premises Signs Acquired, Installed or Operated

ChargePoint appreciates FHWA's attention to signage and understands that an update to the Manual on Uniform Traffic Control Devices ("MUCTD") is anticipated to be updated in the coming months.

Although many drivers navigate to EV charging stations using their smartphone or in-dash display, others rely on physical signage. Physical signage may also assist in encouraging EV adoption as drivers see the wide-spread availability chargers along corridors. Signage proves critically important in areas with poor cellular coverage. Because EV chargers are often installed at businesses unrelated to fueling, it may prove challenging to see charger locations from the road without proper signage.

Signage should guide drivers through every off-ramp and intersection turn required to get from the highway or interstate to the EV charging site. Most commonly, this requires installing signage in two jurisdictions' rights of way ("ROW"): the state, which controls the highways and interstates, and the local jurisdiction, which controls the local roads.¹³ See Figures 1-3 below for examples of signage placement. While the boundary between state ROW and local ROW is often intuitive (e.g., where an offramp ends),

¹³ There are exceptions. If an EV charging site is located directly off state ROW, there is no need for signs on local ROW. It's also possible signs will be needed in more than one local jurisdiction's ROW, if the driver's route to the charging site would cross boundaries between local jurisdictions.

this is not always the case and signage installations can be significantly delayed by guessing incorrectly. To accurately determine which agencies must be engaged for which planned signage location, the EVSE project team must find the correct resource at the state DOT and/or local jurisdiction to provide information on the ROW boundaries along the desired signage route. Once the ROW boundaries are determined, the EVSE project team engages with the state and local jurisdiction as follows:

- **State right of way (ROW):** In most states, the state DOT installs signage on its ROW upon request from the EVSE project team. The state DOT typically must confirm that the request meets their rules and that additional wayfinding signs on local ROW will enable drivers to complete the route once they exit the highway or interstate. The latter confirmation may require an on-site assessment by the DOT. Whether the DOT charges the EVSE project team for the installation varies by state. The EVSE project team has no control over how quickly the state DOT installs the signage; it could take a couple months to well over a year.
- **Local right of way (ROW):** Typically, the EVSE project team installs these signs after securing permission from the local jurisdiction. Not all local jurisdictions will allow these types of signs to be installed; reasons cited to deny permission to install EV charging signs include the following:
 - All signs prohibited on public ROW
 - Signs directing drivers to private businesses prohibited
 - Signs directing drivers to a destination outside the jurisdiction prohibited (in the case where the route from the highway to the EVSE site takes the driver through a neighboring jurisdiction)

Signage installation can cost thousands of dollars, depending on permit fees, prevailing wage, the quantity of signs, whether new signposts must be installed and into what type of ground surface, and other factors.

ChargePoint would like to share the subsequent recommendations pertaining to the NEVI program:

- We recommend state DOTs publish online maps showing the boundaries of state ROWs to add to the efficiency of signage planning; we have seen excellent examples of this, specifically in the state of Colorado.¹⁴
- We recommend that signage on state ROW be removed from the NEVI scope of work and that state DOTs install signage on its ROWs within three months of completion of each NEVI site at no cost to the EVSE project team. State DOTs historically do not allow other entities to install signage on their ROWs meaning EVSE project teams on NEVI sites will have no control over the timing in which signage is installed. In this approach, EVSE project teams would not be responsible for requesting signage on state ROW or ensuring it is installed.
- Consider NEVI installation complete regardless of the status of signage on state ROW, ensuring the project team is able to recoup any grant reimbursements without waiting for state DOT to install signs. A commitment to install signs on state ROW quickly helps the DOT and the new EVSE owner meet their goals by encouraging station utilization.
- To prepare for the large number of NEVI sites and account for ongoing supply chain challenges, we recommend state DOTs order EV charging directional signs as early as possible. The number of signs required will vary depending on how many turns drivers must take on state ROW to get to each EV charging site. We recommend planning for an average of at least four signs per NEVI site.
- We recommend that EVSE project teams maintain responsibility for installing signage on local ROWs, with an exception granted where the relevant local jurisdiction denies permission to do so. As such, the deliverable for the signage requirement could be any of the following:
 - Photos and location identification of signs installed on local ROW

¹⁴ <https://dtdapps.coloradodot.info/MapViewExt/>

- Written documentation that the relevant local jurisdictions will not allow the requested signs to be installed on its ROW
- A map showing that signs are not needed on local ROW (i.e., that all signs needed to direct drivers from the highway or interstate to the EV charging site would be on state ROW)
- We recommend that costs associated with installing signs on local ROW (including permit fees, materials, labor, etc.) are included in eligible costs counted for grant reimbursements and/or match requirements.

Table 1. Summary of responsibilities for signs on state vs. local right of way.

Area of responsibility	Signs on state ROW	Signs on local ROW
Who typically installs	State DOT	EVSE project team
Who approves/denies ability to install	State DOT	Local jurisdiction
Who controls timing of installation, once signage location is approved	State DOT	EVSE project team
Who typically pays for installation	State DOT or EVSE project team	EVSE project team

Figure 1. Example EV charging site requiring 5 signs on state ROW and 1 sign on local ROW.

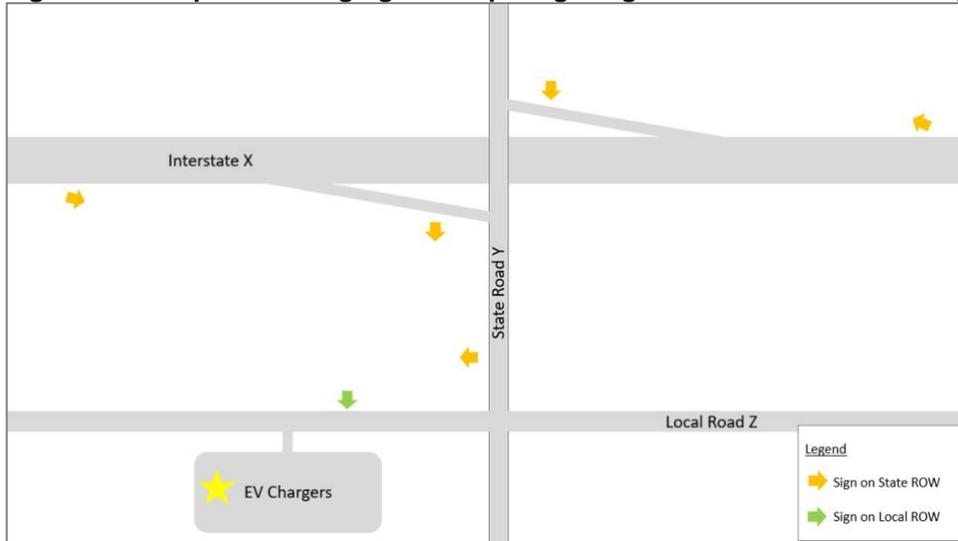


Figure 2. Example EV charging site requiring 5 signs on state ROW and no signs on local ROW.

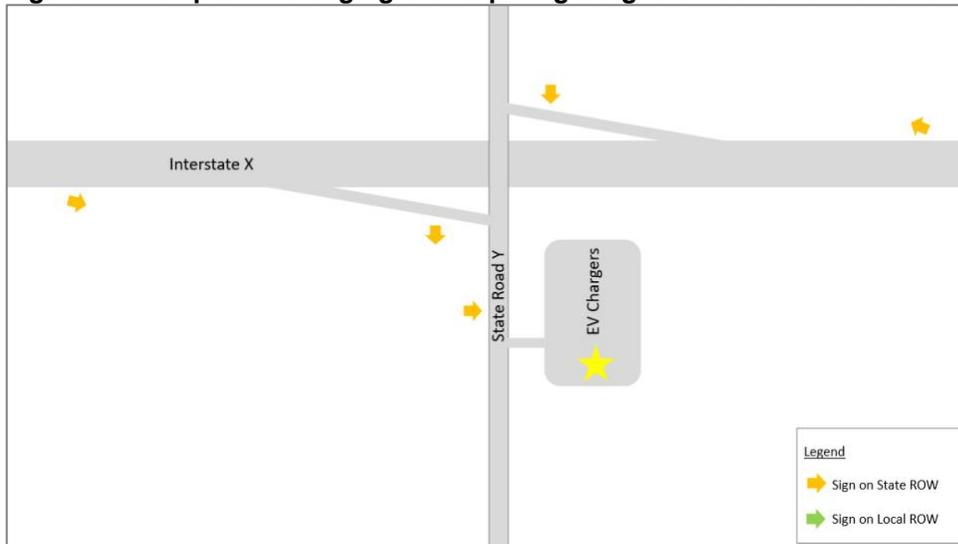
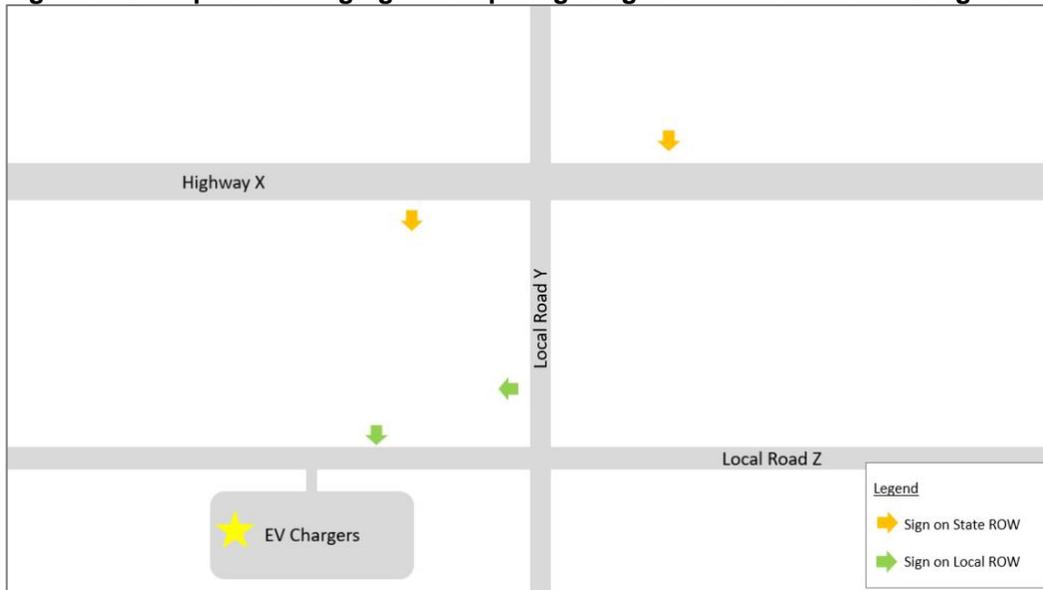


Figure 3. Example EV charging site requiring 2 signs on state ROW and 2 signs on local ROW.



§ 680.112 Data submittal

FHWA has requested quarterly, and annual submittal of an unprecedented number of data points. Not all of the requested data is easily accessible nor is the transfer process easily automated. These data points will require assessment of labor, cost, and commercial sensitivity by EV charging providers. Additionally, some data points are duplicitous or carry the possibility of levying an undue burden on states or station owners. FHWA suggest templates for data collection will be provided to state DOTs, and we urge FHWA to consider providing one standard reporting template to facilitate the collection of data and not create excessive reporting structures across state lines which will create further complications for grant recipients. We also urge FHWA to utilize the Alternative Fuels Data Center and an automated process for collection of this data.

The bulk of the data in 680.112 (b) is extremely commercially sensitive. While ChargePoint understands FHWA's need to ensure investments made in EVSE are being used to ensure the reliability of a national

charging network, it is critical that only the data necessary for this evaluation be collected and that the data be used for no other purposes which could commercially harm grant recipients or EV charging operators. Individual session level data is not necessary to evaluate the effectiveness of the NEVI program. Rather than individual session level data for each charging station location, ChargePoint's primary recommendation is that FHWA develop a reporting structure using aggregated data to be reported by grant recipients or their designee. While we understand the need to ensure that each grant recipient reports data, we also believe that FHWA's reporting structure should allow for data to be anonymized to protect sensitive information. Further, we recommend that guidance be provided to states that only aggregated and anonymized data be made public at the state level and that FHWA follow the same process for their purposes.

We understand and appreciate that the grant recipients have the responsibility to report data to remain in compliance with IIJA but grant recipients should not be required to share additional cost details or any commercially sensitive information which may hinder competitiveness or create an uneven playing field amongst applicants and station owners. While ChargePoint is supportive of some data requirements, other data requirements should be removed, some should be a reimbursable expense, and we seek additional clarity on one data piece.

1. **Support:** Should FHWA not accept ChargePoint's primary recommendation, to create a structure that allows for aggregated and anonymized data we recommend the following changes to FHWA suggested quarterly reported data. **ChargePoint is supportive of reporting the following:**
 - Charging Station Location for NEVI deployed stations
 - Charging station uptime for each of the previous three months with the following conditions:
 - FHWA consideration of the edits offered in comments pertaining to the uptime calculation formula in § 680.116(b).
 - FHWA consideration of flexibility in the implementation of the requirement of this data point as automation of the determination of downtime hours requires extensive review and labor and could prove overly burdensome for states, charging providers, and station owners.
 - FHWA should require any public reporting of this data by states or FHWA should be of the aggregated charging stations deployed in each state and that the data should be anonymized to protect sensitive business information.

2. **Remove:** ChargePoint believes the following data points collected at the session level and identifiable by the individual charging station is extremely commercially sensitive when provided for individual charging sessions or for a group of charging stations commonly owned or on a common network. We have concerns around this data's use to understand utilization and potential placement for competitors in the competitive marketplace. We do not believe this data is necessary to evaluate the NEVI programs successfulness. **We recommend that the following data reporting requirements be removed:**
 - Charging session start and end time and successful completion by port
 - Energy dispensed (kWh) to EVs per session by port
 - Peak Session Power (kW) by port
 - Cost of electricity to operate per station in each of the previous three months
 - Maintenance and repair cost per charging station for each of the previous three months
 - Distributed energy resource installed capacity in kW of kWh as appropriate, of asses by time per charging station

If these data requirements must remain, we recommend that this information be treated as confidential business information and that site host or charging networks be able to provide this data in an aggregated and anonymized fashion to the joint office or states and that any public reporting of this data only be done in an aggregated and anonymized fashion at the state or federal level.

3. **Support Only If Reimbursable:** ChargePoint believes the following data components that are considered reimbursable in the final rules and should only be required to be reported at a single time at the completion of the project. This information should be treated as confidential business information and the site host or their designee be able to provide this data in an aggregated and anonymized fashion to the joint office or states and that any public reporting of this data only be done in an aggregated and anonymized fashion at the state or federal level. **We recommend that the following data reporting requirements be reimbursable:**
 - Charging station property acquisition cost, charging equipment acquisition and installation cost, and grid connection and upgrade cost on the utility side of the electric meter
 - ChargePoint further recommends that costs reported via invoices should not be shared with the public and only reimbursable or match costs should carry a reporting requirement
4. **Clarity Requested:** In 680.112 (c) FHWA suggest data to be reported annually. ChargePoint seeks clarification on what information FHWA is seeking in 680.112 (c)(1) when it requests information on the “type of entity”.

§ 680.114 Charging Network Connectivity

ChargePoint supports Open Charge Point Protocol (“OCPP”), specifically OCPP 2.0.1, which offers advanced smart charging functionalities, support for ISO 15118 regarding plug and charge and smart charging requirements from EVs, and device management.¹⁵ At present, much of the industry is working to transition its hardware and software to OCPP version 2.0.1 from version 1.6. The Open Charge Alliance has made the OCPP 2.0.1 spec available and has announced that the ability to receive certification for this version soon.¹⁶ ChargePoint suggests FHWA recognize that this transition is currently in progress and offer industry a limited transition period to adopt OCPP 2.0.1 and for the Open Charge Alliance to complete the version 2.0.1 certification process.

During the transition period, we recommend building in flexibility in requiring OCPP 1.6 or later, which could include OCPP 2.0.1 through July 31, 2023. Once the transition period is expired, states should require OCPP 2.0.1 or later as the minimum standard for all NEVI projects. This period will provide Open Charge Alliance (“OCA”) with the time to ensure a certification process is widely available for both hardware and software on charging stations and charging station management systems (“CSMS”). States should require certification to prove compliance and request OCA certification for the installation of new chargers after the transition period has ended.

As OCPP 2.0.1 has been significantly changed in relation to version 1.6, it is not backwards compatible with older versions. Furthermore, the complexity of the enhanced features of version 2.0.1 makes a seamless transition from 1.6 extraordinarily challenging on charging hardware. Moving forward, OCPP versions should be backwards compatible, allowing for smoother transition, but certification protocol will still need time for completion by the OCA. Therefore, for subsequent versions of OCPP, ChargePoint recommends transition periods of twelve to eighteen months to allow for both transition and certification.

§ 680.116 (b) Uptime, Reliability

Robust reliability standards are critical in ensuring excellent driver experience and supporting increased consumer adoption of EVs. We are committed to providing charger maintenance and repair and ensuring resources are available to conduct inspections and diagnose problems over the five-year NEVI operational period. ChargePoint is generally supportive of an uptime requirement and agrees that each federally funded NEVI site should meet a minimum uptime of greater than 97%.

¹⁵ <https://www.openchargealliance.org/protocols/ocpp-201/>

¹⁶ <https://www.openchargealliance.org/certification/ocpp-201-certification/>

While FHWA proposed uptime be measured per port, ChargePoint has concerns surrounding a lack of consideration for redundancy, which is a common strategy for ensuring system-level reliability in critical infrastructure. Redundancy can operate at both the site level and within an individual charger. At the site level, a driver is impacted by station downtime to the extent none of the otherwise available ports at the site is able to dispense energy. Counting only those downtime events that rendered the last unoccupied port at a site inoperable would address the ability of a newly arriving driver to find a useable port while also incentivizing station owners to plan capacity beyond the four-port minimum. Additional ports reduce driver wait times and make sites more resilient to point failures (especially catastrophic ones, such as vehicle-station collisions that may require construction work and therefore be slow to resolve despite best efforts by all involved). Such a site level uptime computation could be an alternative to port level uptime standards for sites above a certain port count (such as eight ports).

At the charger level, reliability engineering principles would encourage building in redundancy for portions of the charger that are critical to drivers receiving energy on demand, including power modules that contribute to the rated or peak power of a charger. Chargers that can “fall back” on modular or reserve power electronics should be encouraged as a key reliability strategy, and therefore uptime definitions should not strictly tie to peak power ratings. Moreover, the power level that a charger makes available is often configurable by the station operator’s policy (for example, as part of an energy management strategy). Vehicles also may request less-than-rated power because of their onboard electronics, battery state of charge, or ambient conditions. For each of these reasons, ChargePoint requests clarity on the meaning in the proposed FHWA language of “successfully dispenses electricity *as expected* [emphasis added]”. We recommend that a charger be considered “up” when a charging port is able to successfully dispense electricity as “designed by the manufacturer, configured by the station owner within state NEVI requirements, and as requested by the electric vehicle being charged.”

To encourage modular design that supports resiliency, ChargePoint proposes a proportional credit through a modification to T_outage in the draft uptime formula, based on the minimum standard of 150kW:

$$T_{\text{outage}} = \text{sum of [hours of outage per downtime event} * (1 - \text{Power Derating per event)]}$$

where “Power Derating” is the power level that the charging station was capable of dispensing at the time of the event (based on hardware and software readiness and regardless of operator-configured policy) divided 150kW. Power Derating cannot exceed a value of 1.

Using the formula above if a charger is required to provide power at least 150kW, however due to a partial outage it is only able to dispense at 120kW for a period of 48 hours, the charger would have an outage time of 9.6 hours, rather than 48 hours $[48 * (1 - 120/150)]$.

ChargePoint is supportive of the proposed definition of T_excluded capturing all instances outside of the charging provider’s control, including those examples listed in the draft language. Additionally, ChargePoint would recommend that vandalism (i.e. cut cables, destroyed displays etc.) and theft be added to the list of exclusions provided by FHWA to emphasize that areas with higher instances of vandalism and/or theft should not be overlooked in the siting process in the interest of equitable access to EV charging. Additionally, we encourage FHWA to include unforeseen supply chain issues that impair the ability to dispatch repairs to stations despite reasonable efforts by providers to adhere to uptime expectations.

§ 680.116(c) Information on publicly available electric vehicle charging infrastructure locations, pricing, real-time availability, and accessibility through mapping applications.

ChargePoint understands and appreciates the intent and perceived driver benefit of FHWA’s proposed requirement to allow third party software developers access to certain data. While the benefit of a third-party mapping application with real time data would allow for further ease of experience for drivers, ChargePoint is concerned that making this data available through an open-source API to any developers could have a negative impact on electric vehicle service providers. The open and free availability of this

data may hinder competitiveness in the industry and create unfair business practices to draw customers to company specific mobile apps.

We strongly suggest FHWA offer clarity on which entities qualify as third-party software developers; we further suggest FHWA consider only government entities be considered within this definition. Additional clarity is required on how data may be used and how it may be monetized. We have concerns that developers may utilize sales of the provided data for monetary gain without sharing revenue with EV charging network operators who supplied the data.

As stated in the NOPR, much of the requested data is already provided to the Alternative Fuels Data Center (“AFDC”). While we understand the intent of streamlining the requested data through AFDC, we request clarity around this requirement as we find it duplicitous for providers and states.

ChargePoint believes the following data are already reported by ChargePoint to AFDC any may prove duplicitous to report through state DOTs. Additionally, these data points are static in nature and do not require real time updating. ChargePoint suggest this data be provided to the AFDC when the station is place into service and when information changes. More frequent updating is not needed.

- Address (city, state, and zip code) of the property where the station is located
- Global positioning system coordinates in decimal degrees of exact charging station location
- Charging Station Phone Number
- Charging station network provider name
- Number of charging ports
- Connector types available at each charging point
- Maximum power level of each charging port
- Date when charging station first became available for use
- Payment methods accepted
- Power Sharing by Port
- Date when charging station first became available for use
- Physical dimensions of the largest vehicle that can access a charging port at the charging station
- Number of ports accessible to persons with disabilities

ChargePoint believes the following data points collected in real time is extremely commercially sensitive when provided for individual charging stations or for a group of charging stations commonly owned or on a common network. We recommend that this data sharing requirement be removed. If this data sharing requirement remains, we recommend that this only be reported to the AFDC and that FHWA prohibit the use of the data from any additional parties. For each of these data points ChargePoint requests FHWA provide a reasonable definition of “real time” in order to gain clarity on the impact on station owners.

- Station Status (available or planned)
 - Additionally, we require clarification on when in project development a station is considered “planned.”
- Real time price at each charging port in terms defined by OCPI 2.2 updated at a frequency that meets reasonable customer expectations
- Real time status of each charging port, including identification of whether a port is accessible to persons with disabilities, in terms defined by Open Charge Point Interface 2.2 (incorporated by reference, see § 680.120), updated at a frequency that meets reasonable customer expectations.

In the event FHWA does not modify its proposal for real time data sharing as ChargePoint recommends above, ChargePoint is supportive aligning the definitions of the above data point with those contained in the Open Charge Point Interface (“OCPI”). ChargePoint products currently supports OCPI version 2.1.1

and are in the transition process to version 2.2.1. We suggest FHWA allow for transition period in future versions of twelve to eighteen months should versions be considered in the future.

§ 680.118 Other Federal requirements

Americans with Disabilities Act

ChargePoint appreciates FHWA's dedication to charging access for all Americans. While the Americans with Disabilities Act ("ADA") does not outline specific design standards for parking spots equipped with EVSE, ChargePoint supports the regulations outlined in § 680.118(c) which are defined but not limited to:

The American with Disabilities Act of 1990 (ADA), and implementing regulations, apply to EV charging stations by prohibiting discrimination on the basis of disability by public and private entities. EV charging stations must comply with 80 applicable accessibility standards adopted by the Department of Transportation into its ADA regulations (49 CFR Part 37) in 2006 and adopted by the Department of Justice into its ADA regulations (28 CFR Parts 35 & 36) in 2010.

We understand that the guidelines set by the US Access Board apply to the NEVI program in accordance with the ADA, and the Architectural Barriers Act (ABA), and still require clarification to promote greater accessibility to all drivers using EV charging infrastructure.

ChargePoint offers the following comments:

- Every NEVI project will require a permit from the authority having jurisdiction ("AHJ") which will review the site design for compliance with state/local codes. If the AHJ interprets these state/local codes in a way that conflicts with NEVI requirements, the project will be unable to obtain a permit without sacrificing compliance with NEVI requirements. For this reason, it is critical that NEVI programs include language stating that, if any NEVI accessibility requirements conflict with state/local codes enforced by the AHJ, the project may deviate from the NEVI requirements for the purposes of complying with the conflicting state/local codes.
- The Access Board guidelines for dimensions of the accessible stall (11' x 20') and the adjacent access aisle (5', with option to place the access aisle on either side of the accessible stall or to have two accessible stalls share one access aisle) are reasonable.
- Connecting the EV charger to an accessible route that serves the nearby building entrance should not be required in NEVI sites upon deployment
 - The EV charger itself (as opposed to a nearby business) is often the destination for customers along major highway corridors due to the speed of charging and the nature of highway travel rather than local travel.
 - DCFCs cannot easily be placed anywhere within a parking lot; proximity to three-phase power, the distance required for trenching, pre-existing easements and potential conflicts with underground utilities are among the constraints. Thus, the requirement for an accessible route to the nearest building can create major siting issues, potentially adding tens of thousands of dollars and extra time to site completion or eliminating some sites from hosting DCFC altogether.
- Consideration should be given to unpaved sites, which we anticipate along corridors in rural areas. At unpaved sites, we suggest chargers be installed far enough apart so that, should the parking lot be graded and paved in the future, there is room to stripe accessible stall(s) and adjacent access aisle(s) to meet the requirements of these guidelines without moving the dispensers.
- The number of EV chargers with accessible mobility features should scale based on the total number of EV chargers. We recommend a similar approach to that of the accessible parking spaces guidelines in section 208.2 of the ADA Accessibility standards.¹⁷

¹⁷2010 ADA Standards for Accessible Design, https://www.access-board.gov/ada/#ada-208_2

- In the context of NEVI sites, ChargePoint supports the option for “use last” signage rather than strictly reserving accessible stalls for persons with disability placards or license plates.

NEPA Streamlining

We recommend that FHWA explore ways to streamline National Environmental Policy Act (“NEPA”) review requirements for state DOTs to speed the deployment of EV charging stations. This would be consistent with the categorical exemption provided to the US Dept. of Energy and listed by the Office of NEPA Policy and Compliance under B5.23 - Categorical Exclusions Applicable to Conservation, Fossil, and Renewable Energy Activities¹⁸. “A categorical exclusion (CE) is a class of actions that a federal agency has determined, after review by CEQ, do not individually or cumulatively have a significant effect on the human environment and for which, therefore, neither an environmental assessment nor an environmental impact statement is normally required. The use of categorical exclusions can reduce paperwork and save time and resources.”¹⁹. In order to best streamline projects, we recommend the DOT point of contact and categorical exemption request paperwork is made readily available for all NEVI projects.

Additional Considerations

Medium and Heavy-Duty Vehicle (MHDV) Consideration

FHWA does not propose vehicle size considerations in the minimum standards as they are currently meant to address the needs of light-duty vehicle charging by the general public along AFCs and to facilitate EV adoption. At present, we believe any requirements to accommodate pull-through capabilities are premature and encourage FHWA to focus primarily on siting for light duty vehicles. In addition to differing site design considerations for parking MHDV verses a light duty vehicle, it is important to also consider that MHDV charging may allow for different or lesser power levels for longer dwell time during overnight charging. For these reasons, we believe pull through capabilities should not be mandated in NEVI at this time.

Buy America

ChargePoint and our manufacturing partner, SMTC Corporation produce Buy America compliant DC fast charging systems in Milpitas, California. Presently, we are working to scale up our Milpitas facility to meet demand and expand DCFC production.

ChargePoint applauds the Administration’s dedication to American labor and job creation through the Build America, Buy America Act (BABA) and through domestic content requirements outlined in the IJJA. The proposed standards indicate additional guidance and standards are forthcoming. In its consideration of these standards, we urge the Joint Office to work to harmonize BABA provisions and requirements interdepartmentally and provide direct guidance to states to promote uniformity in standards as industry works to scale our operations accordingly. More specifically, ensuring coordination with the Federal Highway Administration (FHWA), Federal Transportation Administration (FTA), and the Federal Aviation Administration (FAA) in its application of BABA provisions and requirements is crucial to industry’s ability to streamline sourcing, manufacturing, and deploying products to meet the NEVI program’s goals and timelines.

ChargePoint’s hardware offerings include Level 2 (L2) and DC fast charging (DCFC) products, and ChargePoint provides a range of options across those charging levels for specific use cases including light duty, medium duty, and transit fleets, multi-unit dwellings, residential (multi-family and single family),

¹⁸ <https://www.energy.gov/nepa/categorical-exclusion-cx-determinations-cx>

¹⁹ <https://ceq.doe.gov/nepa-practice/categorical-exclusions.html>

destination, workplace, and more. All products are UL-listed, and CE (EU) certified, and Level 2 solutions are ENERGY STAR® certified or in the certification process.

ChargePoint currently manufactures EV charging hardware in partnership with SMTC Corporation that complies with domestic content requirements as outlined in the Infrastructure Investment and Jobs Act (IIJA) FTA requirements for domestic final assembly and FHWA Buy America requirements for domestic steel. Our Express Plus is also set to meet Buy America compliance in the next few months.

Supply Chain Considerations Under Current OMB Guidance

With supply chain challenges affecting the whole of industry in the United States, the EV charging industry expects to face sourcing issues in years to come especially when it comes to iron and steel requirements as stated under the section 70914 of IIJA.²⁰

Manufacturing the steel subcomponents required for EV charger production the United States with US-origin steel material, is on average six times more than the cost of manufacturing those subcomponents overseas. This increased cost has led to a void in the supply chain as few domestic metal fabricators have developed the supply lines for the more expensive US stock resulting in limited domestic capacity that needs scaling in order to meet industry needs for compliance.

Even if we assume a sufficient market for Buy America compliant EV chargers, there are economy-wide factors outside of an EV charging manufacturer's control that could constrain its ability to deploy given numbers of domestic content compliant products in a timely fashion. For example, manufacturers cannot control whether there is sufficient allocation of steel raw material to meet the goals across NEVI and all federally funded infrastructure programs in the IIJA. The amount of steel required for the EV charger industry, even with growth projections, is a small fraction of overall steel demand, which would put availability and price predictability at risk. The specific costs of domestic steel for the EV charging industry may therefore be volatile and difficult to predict in the near-term.

As NEVI deployment begins, we urge the use of limited waivers in order to allow industry to scale manufacturing to achieve total BABA compliance as quickly as possible.

Workforce Challenges

Suppliers of certain Buy American compliant components and subcomponents have expressed additional cause for slowdown, which ChargePoint has seen in its procurement efforts. We urge FHWA to take workforce issues across supply chains into account.

Definitions

In its consideration of subsequent guidance and waiver procedures ChargePoint urges the Retention of definitions stated in FTA guidance, "Buy American Requirements; End Product Analysis and Waiver Procedures," in the following matters:²¹

- "End Product" as defined in 49 CFR §661.11; any vehicle, structure, product, article, material, supply, or system, which directly incorporates constituent components at the final assembly location, that is acquired for public use under a federally-funded third-party contract, and which is ready to provide its intended end function or use without any further manufacturing or assembly change(s)²²
- System as defined in 49 CFR §661.11; means a machine, product, or device, or a combination of such equipment, consisting of individual components, whether separate or interconnected by piping, transmission devices, electrical cables or circuitry, or by other

²⁰ <https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf>

²¹ [49 CFR 661](#)

²² [49 CFR §661.11](#)

devices, which are intended to contribute together to a clearly defined function. Factors to consider in determining whether a system constitutes an end product include: Whether performance warranties apply to an integrated system (regardless of whether components are separately warrantied; whether products perform on an integrated basis with other products in a system, or are operated independently of associated products in the system; or whether transit agencies routinely procure a product separately (other than as replacement or spare parts).²³

- Replacement parts should retain the “non-shift approach” outlined in 49 CFR §661.11 in that spare parts do not “shift” in subcomponent or component designation-- parts made available are replacement parts are same designation as in original complete End Product.²⁴

Waivers

In considering parameters regarding a limited waiver, ChargePoint suggests the following:

- Coordination on requirements with the Department of Transportation and the Department of Energy to ensure requirements for grantees of federal funds align with grantees of the FTA, FHWA, FAA, and other federal agencies
- Retention of FTA guidance, “Buy American Requirements; End Product Analysis and Waiver Procedures,” in the matters stated previously
- Consideration and understanding of supply chain and purchasing challenges facing EVSE manufacturers, which have become even more daunting in recent months
- Cross departmental harmonization on transition period via temporary waiver or by rule effectivity date for ease of purchasing for grantees and ease of market transition
- A clear, defined, and limited waiver end date and an overall regulatory timeline for achieving total BABA compliance and other domestic preference regulations especially pertaining to US steel.

Conclusion

ChargePoint applauds FHWA’s dedication to creating a safe, reliable, and accessible national electric vehicle charging network and we are appreciative of the opportunity to provide comment on the NEVI program minimum standards. We urge FHWA to carefully consider our comments and apply them to the final rule. We believe that equitable access, fair market competitiveness, accurate and acceptable data reporting, and mindful, streamlined siting processes will further strengthen the success of the NEVI program. ChargePoint has been a leader in deploying EV charging infrastructure for 15 years, and we are confident that FHWA will utilize our experience and comments to solidify the positive impact of the NEVI formula program in every state in the nation.

²³ Ibid

²⁴ Ibid