

MEMORANDUM

Date: September 22, 2021

Subject: Electrifying EV Charging: Recommendations from America's Largest EV

Charging Network to Successfully Implement the National Electric Vehicle

Formula Program

Overview:

Under President Biden's leadership, the United States is actively modernizing its transportation infrastructure, transforming electric vehicles from a niche product to part of the mainstream, and building the charging infrastructure needed to power them. To that end, Congress is on the verge of passing the Infrastructure Innovation & Jobs Act (IIJA). One of the key EV charging issues in the IIJA is a \$5 billion, five-year program to build out electric vehicle charging across the nation. This funding will be released beginning in 2022 through a program titled the National Electric Vehicle Formula Program (NEVFP), with funds provided by the Department of Transportation (DOT) through a state formula grant. Under the program, Federal dollars can be used for the installation, network connection, data sharing, operation, and maintenance of EV charging infrastructure.

Companies like **ChargePoint** – which has over a decade experience building the nation's largest EV charging network – are ready, willing, and able to partner at both the federal and state level to make charging available and accessible to all. These investments will also provide secondary benefits, including boosting local economies, creating jobs, helping cement the United States as a green technology leader, and, ultimately, by providing a positive experience to drivers and site operators alike, helping convince more Americans to drive electric and more businesses to become part of the national EV charging ecosystem.

The devil, however, is in the details. In this memo, **ChargePoint** draws on its experience over the last 14 years to provide best practices that will ensure federal dollars are used to their full potential – helping achieve the goals of the Biden Administration and Congress. **America's new electric transportation ecosystem will revolutionize how we move goods and people, but to ensure this momentum continues and the country further moves towards electrification, federal funds must be rolled out efficiently and successfully, as outlined below.**

Current Parameters & Eligibility Outlined in IIJA Legislative Text:

Under current IIJA legislative text, eligible programs include the acquisition or installation of EV charging stations, along with operation and maintenance costs for up to five years. States will receive funding on a proportionate basis, similar to the allocation for federal highway formula funds.

Public funds can cover 80 percent of costs, with the remaining 20 percent provided by the state or private-sector project partners. That means, in total, this \$5 billion federal investment could unlock an additional \$1.25 billion in non-federal (state or private) funding, for a total of at least \$6.25 billion dedicated for electric vehicle charging.

The White House has identified expected state allocations of formula funding, which could be augmented if states successfully attract additional proposals funded through a \$2.5 billion competitive grant program for EV charging and other alternative fuel technologies. States can put themselves in the best position to take advantage of formula funds and competitive grants by ensuring that their policies and regulations support electric vehicle infrastructure.

ChargePoint Best Practices for Implementing NEVFP:

Based on our 14 years of experience building out the nation's largest electric vehicle charging network, ChargePoint believes the Biden administration should establish rules and guidance for the NEVFP that:

- Maximize private sector investment to ensure taxpayers get the best "bang for their buck." Strategies include:
 - Requiring states to utilize a competitive application process that ensures the best private companies/vendors/partners and locations for driver access are selected;
 - Prioritizing use of public funding for accelerating the build out charging in underserved areas, including disadvantaged and rural communities;
 - Identifying priority corridors and ideal spacing without requiring deployments at specific locations;
 - Evaluating applications on an established set of criteria, including cost, benefits for charging station owner, location, experience, project partners, and completeness of application; and
 - Giving awardees 24 months to construct and activate chargers, so they have sufficient time to work through the realities of site selection, agreements, utility interconnection, construction, and permitting;
 - Learning from pre-existing state programs funded by the Volkswagen Settlement
 —like those in Florida, Maryland, and Michigan, which have proved successful to
 date.
- Expand eligible program costs to include design, planning, and site preparation work
 to allow flexibility for the program to cover the range of hard and soft costs, which can

greatly differ between sites. In addition to the acquisition and installation, covered costs should include:

- Equipment and shipping costs;
- Labor costs for design, engineering, permitting, site prep, construction, installation, and project management;
- Hard costs for site-prep material including concrete, conduit, wire, signage, etc.,
 as well as site-specific costs like landscaping, grading, and paving;
- Utility upgrades that are not already supported by state-specific Electric Vehicle Make-Ready programs;
- Network agreements & maintenance agreements for up to five years;
- Other operating costs, including the cost of electricity due to significant demand charges in commercial electricity rates.
- **Encourage States to develop policies that support EV chargers** so Federal dollars are not held up by local roadblocks. Policies should include:
 - Modernize electricity rates: modernizing the approach to electricity rate design is key to widespread adaption of EV charging – policies should encourage utilities to work with public and private entities and provide alternatives to traditional, demand-based electricity rates which overcharge Direct Current Fast Charging (DCFC) operators with demand charges, penalizing those who are early adopters;
 - Provide regulatory certainty for site hosts: states must clarify that EV charging is a service and not the sale of electricity; and
 - Streamline permitting: local permitting processes are roadblocks to constructing EV charging infrastructure – states and municipalities should streamline them to the greatest extent possible to avoid hitting the brakes on federal infrastructure funding.
- Maintain a positive experience for EV drivers & EV charging operators so more Americans join the electric revolution. Policies that improve the experience include:
 - For drivers, EV charging sites should:
 - Include a minimum of two (2) DCFC for redundancy
 - Be located within one mile from highway interchanges
 - Have 24-hour access to chargers
 - Require annual uptime of at least 95 percent for at least five years, so drivers know chargers will be operational when they need them
 - Provide minimum power of 50kW to provide enough electricity to charge appropriately,
 - Have the potential to accommodate additional chargers (including high power chargers) as the market evolves, which will minimize the cost of future upgrades and avoid gold-plating sites today.
 - For site operators:

- Charging services should be flexible to fit their business model -- for example, operators should be allowed to set appropriate prices or offer free charging as an amenity
- Charging networks should provide 24/7 access to customer support services
- Support innovation in EV charging hardware & software, to encourage the EV charging industry to grow. Policies should include:
 - Only basing hardware and software eligibility on standards adopted through internationally-accredited standards making organizations, such as the J1772 and CCS connector standards and the Open ADR energy management standard;
 - Supporting competition and allowing multiple EV charging business models, including the ability for businesses to own and operate their own charging equipment;
 - Enable customer choice by not restricting funding eligibility to one hardware or network option.
 - Enable multiple payment options and ensure that any requirements for credit or debit cards are future-proofed and secure by allowing contactless payment readers, rather than mandating chip or swipe readers.
- Align with existing utility infrastructure programs, so investments build on top of each other to produce a stronger charging ecosystem. To achieve this, separate programs should focus on separate parts of build-out:
 - State formula funding should fund EV charging equipment, networking and maintenance agreements, and final station bolt-down and commissioning.
 - Utility infrastructure programs should enable funding for installation costs, including "make ready" infrastructure needed to make a parking space ready to install a charger, or provide line extensions to upgrade utility infrastructure on the utility side of the customer meter, which stretches the value of private matching funds.
- Streamline federal rules and requirements to accelerate the deployment of EVSE:
 - Provide national direction for accessibility requirements for charger installation to ensure nation-wide consistency of accessibility requirements for installation of EVSE, which will make sure chargers are accessible to all, provide a consistent experience to drivers, and reduce deployment costs.
 - Streamline NEPA review requirements for projects funded through USDOT, which speed the deployment of infrastructure and would be consistent with the US Dept. of Energy's categorical exclusion for EV charging stations.