THIRD WAY

BLOG *Published March 3, 2022 • 10 minute read*

New EV Charging Guidance Sets States Up for Success

Alexander Laska
Senior Policy Advisor for Transportation, Climate and Energy Program
@ThirdWayEnergy

Key Takeaways

The buildout of electric vehicle (EV) charging infrastructure will help us unlock the climate, jobs, and environmental benefits of EVs—but only if we do it right. The U.S. Department of Transportation has released new guidance that will help states plan to spend their National Electric Vehicle Infrastructure Program funds effectively. If implemented properly, this program will result in a robust buildout of EV chargers that is equitable, convenient, and seamless for all drivers; that is inclusive of rural areas as well as underserved and disadvantaged communities; and that will maximize job creation for American workers.

Introduction

Last month, the U.S. Department of Transportation (USDOT) released new guidance on how states should plan to spend their National Electric Vehicle Infrastructure (NEVI) Program funds. Established by the Infrastructure Investment and Jobs Act (IIJA), NEVI will provide $5 billion over five years for states to deploy electric vehicle (EV) chargers along highway corridors. This buildout of EV chargers is critical to accelerating the adoption of EVs and enabling Americans to access the economic and air quality benefits of electrified transportation.

Third Way previously provided comments in the lead-up to this guidance stressing the importance of equity in charger deployment, the need to ensure the long-term operation and maintenance of federally funded chargers, and the need for state DOTs to coordinate with the private sector and other stakeholders to maximize how funds are spent. USDOT's guidance aligns with many of our recommendations and will help build out a national charging network that is fast, convenient, and reliable for all drivers.

Anchoring the new program are the State EV Infrastructure Deployment Plans, documents that state departments of transportation (DOTs) will need to submit to USDOT before they can access the funds. These plans will spell out the state's strategy for utilizing their NEVI funds and will address the establishment and evaluation of buildout goals, the role of contracting with third parties, public engagement, equity for rural and disadvantaged communities, workforce considerations, and much more.

As states begin developing their plans, here are eight things they should keep in mind to ensure efficient and successful deployment of EV infrastructure in their states.

Eight Things to Know About the NEVI Program Guidance

1. The Administration is all-in on DC fast charging

According to the guidance, states first need to build out their Alternative Fuel Corridors—highway corridors outfitted with EV charging and other alternative fueling infrastructure [1] —with 150kW+ DC fast chargers (DCFC). Once USDOT has certified that a state's corridors are fully built out, [2] they will have additional flexibility to determine the location and type of other chargers deployed using NEVI funds. This means that for the foreseeable future, NEVI funds will be used to deploy DCFC along highway routes.

There is an important tradeoff between DCFC, which are far more expensive but charge more quickly, and Level 2 (L2) chargers which are much cheaper but also much slower. The Administration has clearly prioritized faster charging, which aligns with what American drivers say they want in an EV, but this will make it more difficult to meet the Administration's goal of

deploying 500,000 chargers through 2030. As Third Way has previously calculated, a $5 billion investment in EV charging will only deploy approximately 50,000 chargers if they're all DCFC—far short of the 500,000 goal.

2. Coordination between stakeholders is essential

Building out a seamless, national network of EV charging stations will require an immense amount of coordination between state DOTs, local governments, utilities, private contractors, labor, and many other key players.

The guidance makes it clear that state DOTs aren't expected to develop and implement their plans by themselves—nor should they. Rather, they should do so in collaboration with other stakeholders, such as with permitting agencies at all levels of governments to streamline permitting processes; with utilities to streamline the planning of grid connections; with local governments, utilities, and businesses to maximize the use of NEVI funds along with other funding programs in their state; and with neighboring states to ensure a seamless network in their region.

There are examples across the country of states and utilities working together to coordinate the buildout of EV charging infrastructure. In 2017, governors from eight western states came together to establish the Regional Electric Vehicle West Plan with a goal of enabling drivers to seamlessly drive an EV across the states' major corridors. Their work includes coordinating the location of EV chargers in their states, using voluntary minimum standards for charging stations, and identifying opportunities to incorporate EV charging into building codes, renewable energy generation projects, and other planning and development processes. States along the West Coast have undertaken a similar effort known as the West Coast Electric Highway. And last year, six major utilities across the country established the Electric Highway Coalition to coordinate on providing EV drivers with DC fast charging in their respective service areas.

These and other regional efforts can serve as a model for the kind of multi-stakeholder coordination that will be essential to unlocking NEVI's full potential.

3. Funding is available to ensure the long-term viability of chargers

In crafting their deployment plans, states will need to include a strategy for ensuring the ongoing operation and maintenance of chargers. They also need to spell out who's responsible for the installation, maintenance, and ownership of the infrastructure after NEVI's five-year program period ends. This is critical to ensuring we don't let chargers fall into disrepair.

Importantly, states can use their funds for operating assistance for up to five years, which the guidance says will be particularly important for underserved communities where EV adoption is expected to be slower. The guidance says states should focus operating funds on where this assistance will help ensure a contiguous charging network or to address equity—in other words,

this assistance should be reserved for chargers that are not otherwise expected to be profitable on their own in the near-term.

4. This program will create jobs—and we need a well-trained workforce

The Administration recognizes that a widescale buildout of EV chargers provides us with an opportunity to grow jobs in manufacturing, construction and installation, and operations and maintenance (O&M). Just how many jobs NEVI could create depends on a lot of factors, including how many chargers are deployed and of what kind, with DCFC deployment generally creating more jobs than L2 charger deployment. [3] Third Way's Decarb America initiative previously calculated that a $5 billion federal investment in EV charging infrastructure could result in an average 3,100 annual jobs between now and 2030, not inclusive of ongoing O&M jobs.

We need to make sure we have enough well-trained electricians, contractors, and other professions to get all these chargers into the ground and keep them running. USDOT's guidance encourages states to ensure the local workforce is trained in high quality training programs and to take steps to grow and diversify their local workforce. This could be accomplished through the utilization of geographic, economic, or other hiring preferences to maximize job creation and economic benefits for local communities. The guidance also encourages states to consider how to expand registered apprenticeships and to invest in entry-level training programs like pre-apprenticeship programs.

5. Equity is front and center

The Biden-Harris Administration has put equity front and center in its climate efforts, including establishing the Justice40 Initiative to ensure 40% of the benefits of federal climate and clean energy investments go to disadvantaged and underserved communities.

NEVI is no different: states will need to explain in their plans how their charger buildout will meet the goals of Justice40. This doesn't mean 40% of chargers will need to be located in disadvantaged communities, but rather that 40% of the benefits of this buildout should be realized by the people who live in these communities. The Administration has released an EV Charging Justice40 Mapping Tool to help states make sure their NEVI investments will meet this threshold.

There are a lot of ways states can incorporate equity considerations into the development of their plans, and USDOT's guidance outlines just some of them. This includes conducting proactive public engagement in these communities to ensure their plans reflect diverse viewpoints, considering how disadvantaged communities can benefit from the job opportunities associated with the buildout (including through the use of apprenticeships and pre-apprenticeship programs and through outreach to minority- and women-owned businesses), and encouraging broader participation among women, minority, and other underrepresented groups as they develop their workforces.

6. Rural communities won't be left behind

The Biden-Harris Administration has made it clear that rural communities need to benefit from the charger buildout. As Third Way pointed out in our comments to USDOT, we risk leaving rural America behind in our transition to EVs unless we proactively ensure those communities are included in the charger buildout. Seeing publicly accessible EV chargers along heavily traveled rural corridors and within their communities will help rural Americans feel more comfortable purchasing an EV.

The Administration gets it, and they have been sure to incorporate planning for rural EV charging every step of the way. This includes publishing a toolkit for planning and funding rural electric mobility infrastructure. USDOT's guidance also encourages states to consult with rural communities as they develop their plans, identify gaps in existing service in rural areas, and prioritize operating assistance for chargers in places where EV uptake is slower, including rural areas.

7. The new Joint Office is here to help

As part of IIJA, Congress established a new Joint Office of Energy and Transportation to bring together USDOT and the U.S. Department of Energy (DOE) to ensure the successful implementation of NEVI and other programs established by IIJA. This new office will be able to leverage the combined expertise of USDOT, DOE, and the National Labs to help states spend their NEVI funds effectively.

As part of this mission, the Joint Office will provide technical assistance to help states develop their deployment plans, including helping them think through critical issues such as national interconnectivity, hardware and network procurement, deployment in rural corridors and in underserved and disadvantaged communities, data collection, and more. States that want to take advantage of the Joint Office's technical assistance program can do so here.

8. More money is on the way

In addition to NEVI, IIJA also established a $2.5 billion competitive grant program to help states deploy EV charging infrastructure as well as hydrogen, natural gas, and propane fueling infrastructure. Half of this funding ($1.25 billion) will go towards building out charging and fueling infrastructure along highway corridors, similar to NEVI, while the other half would be available to deploy charging and fueling infrastructure in publicly accessible locations throughout communities, such as at parking facilities, public schools, public parks, or along public roads.

USDOT will release the guidance for this program in the coming months. As part of our comments to USDOT, Third Way has encouraged the Department to focus the lion's share of this funding on EV charging as opposed to the other fuel types in order to maximize the emissions reduction benefits of this program and to help us meet the Biden Administration's EV charger buildout goals.

Conclusion

USDOT's new guidance for the NEVI program is the first step towards successful implementation of this program. If this money is spent the right way and in close coordination with key stakeholders, we will be on our way towards building out a seamless, convenient, and reliable experience for EV drivers on our highways. This will have the added benefits of ensuring rural and underserved communities are able to access EV charging and the benefits of EVs, and of putting thousands of Americans to work building out the transportation infrastructure of the future.

TOPICS

CLEAN TRANSPORTATION 85

ENDNOTES

1. As required by IIJA, the Federal Highway Administration has put out a request for nominations to establish additional Alternative Fuel Corridors. For more information visit https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/

2. Per USDOT's guidance, "fully built out" means that a state's Interstate highways all have EV charging stations installed every 50 miles, with each station having at least four 150kW D Cfast chargers with combined charging system (CCS) ports capable of charging four EVs simultaneously. See: "National Electric Vehicle Infrastructure Formula Program: Program Guidance." Federal Highway Administration, 10 Feb. 2022, Page 12. https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/90d_nevi_formula_program_guidance.pdf

3. Carr, Edward W. et al, "Workforce Projections to Support Battery Electric Vehicle Charging Infrastructure Installation." Energy and Environmental Research Associates, 8 June 2021, Pages 46-47. https://etcommunity.org/assets/files/Workforce-ProjectionstoSupportBatteryElectricVehicleChargingInfrastructureInstallation-Final202106082.pdf