

National Electric Vehicle Infrastructure Formula Program

ANNUAL REPORT | PLAN YEAR 2023–2024



List of Acronyms

AFC	Alternative Fuel Corridor
AFDC	Alternative Fuels Data Center
BIL	Bipartisan Infrastructure Law
CCS	Combined Charging System
CFI	Charging and Fueling Infrastructure
CFR	Code of Federal Regulations
ChargeX Consortium	National Charging Experience Consortium
DAC	disadvantaged community
DCFC	direct-current fast charging
DOE	U.S. Department of Energy
DOT	Department of Transportation
EV	electric vehicle
EV-ChART	Electric Vehicle Charging Analytics and Reporting Tool
EVITP	Electric Vehicle Infrastructure Training Program
EVSE	electric vehicle supply equipment
FHWA	Federal Highway Administration
FOA	funding opportunity announcement
FY	fiscal year
Joint Office	Joint Office of Energy and Transportation
NACS	North American Charging Standard
NEVI	National Electric Vehicle Infrastructure
RFI	request for information
RFP	request for proposal
USDOT	U.S. Department of Transportation

Executive Summary

The 2021 Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law (BIL), invests \$7.5 billion to build out a national electric vehicle (EV) charging network and created the Joint Office of Energy and Transportation (Joint Office) to “study, plan, coordinate, and implement issues of joint concern between the two agencies.” The BIL represents a historic effort to electrify the U.S. transportation system, which has significant potential to reduce U.S. greenhouse gas emissions and help tackle the climate crisis. The U.S. transportation sector accounts for one-third of the nation’s greenhouse gas emissions—the largest share of all primary sectors, including electricity production, industry, commercial and residential, and agriculture.¹

The National Electric Vehicle Infrastructure (NEVI) Formula Program, one of the BIL funding programs, was launched in February 2022, providing nearly \$5 billion over 5 years to help states, the District of Columbia, and Puerto Rico (hereafter referred to as “states”) create a network of EV charging stations beginning with designated Federal Highway Administration (FHWA) Alternative Fuel Corridors (AFCs), with an emphasis on the Interstate Highway System. The funding is made available to the states in allocations each year pending FHWA certification of the state’s annual deployment plan.

The NEVI program is in its third year, so there's a lot to celebrate. As of July 2024, 39 states have released solicitations for their NEVI programs and eight states have opened their first NEVI-funded stations (61 ports in total), which have already powered thousands of charging sessions for EV drivers across America. Additional stations are in the pipeline with more than 2,500 additional ports having been awarded or conditionally awarded by the states. All states released their Fiscal Year (FY) 2024 deployment plan updates to reflect the new minimum requirements and guidance, and several states added newly designated EV AFCs in their FY 2024 deployment plan updates, bringing the total AFC network of EV corridors to more than 81,000 miles.

In addition to the NEVI Formula Program, several other BIL-funded programs that the Joint Office supports have achieved milestones in 2023 and early 2024. These include:

- Charging and Fueling Infrastructure (CFI) Discretionary Grant Program, which announced awards for \$623 million in grants in 2023 and opened a second round with a historic \$1.3 billion in funding for zero-emission infrastructure in May 2024.
- Electric Vehicle Charger Reliability and Accessibility Accelerator program, which announced awards for approximately \$148.8 million in NEVI set-aside grant funding to fix broken or nonoperational chargers in 2023.
- Low or No Emission Vehicle Program for Transit, which announced awards for \$1.69 billion in 2023 and another \$1.5 billion July 2024 in grants to deploy low- and no-emission buses and update facilities.
- Clean School Bus Program, which announced awards for nearly \$1 billion in grants and rebates for the purchase of clean school buses in 2023.

¹ U.S. Environmental Protection Agency. 2024. “Sources of Greenhouse Gas Emissions.” Last updated Feb. 23, 2024. www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions.

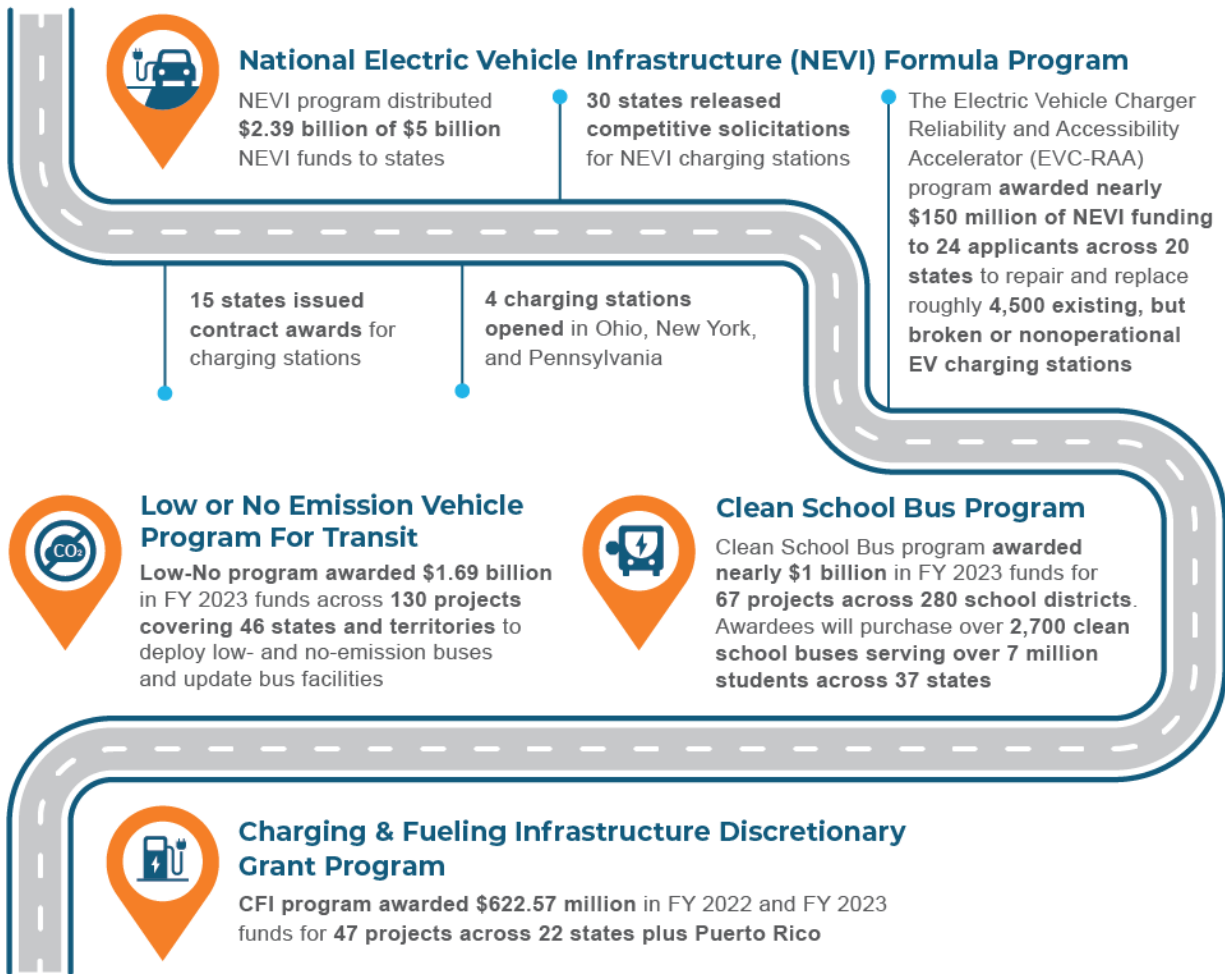


Figure ES-1. Major milestones for EV charging infrastructure by Bipartisan Infrastructure Law programs as of December 31, 2023

In 2023, the Joint Office also released its own funding opportunity announcement (FOA), called the Ride and Drive Electric FOA, and awarded \$46.5 million in grant funding for 30 projects across 16 states on Jan. 19, 2024. These grants will support the rapid transition to electrified transportation and catalyze private sector investments in clean transportation. Award recipients include academic, nonprofit, large and small businesses, state and local governments, and government-owned and government-operated entities from across the United States. In April 2024, the Joint Office also opened its second FOA, called the Communities Taking Charge accelerator with \$54 million in new federal funding for projects that will expand community e-mobility access and provide clean reliable energy.

In addition, the Joint Office has also developed new resources and supported major public and private sector efforts to facilitate enhanced cybersecurity for electric vehicle supply equipment (EVSE), helped standardize EV charging error codes, supported the development of a new SAE J3400 connector standard based on Tesla’s North American Charging Standard (NACS) for use by any manufacturer, and helped develop the EVerest open-source reference implementation for secure and interoperable EV

charging. These ancillary efforts have been pursued to assure a common, high-quality experience across the nation's EV charging network, bolstering the NEVI program, other federally funded EV charging programs in the BIL, and the EV charging ecosystem as a whole.

This document summarizes progress of the NEVI program through July 2024 and presents observations from the FY 2024 state deployment plan updates, including highlights and opportunities for improvements, most notably in community engagement and outcomes, equity, and workforce development. Lessons learned will help the Joint Office and partners move toward fully built-out status and get closer to the goal of a convenient, affordable, reliable, and equitable American-made charging network.

Key Findings from the Fiscal Year 2024 State Plan Updates

- All 52 plan updates were submitted and approved by FHWA, releasing another \$885 million of FY 2024 funds to support implementation of those plans. This is in addition to the \$1.5 billion released with approval of FY 2022/FY 2023 deployment plans.
- States continue to designate new AFCs. Approximately 6,000 miles of new AFCs were designated in 2023, increasing coverage of the Interstate Highway System to 94%. All states include designated portions of the National Highway Systems as AFCs, with roughly 81,000 miles in total, and prioritize build-out along the Interstate Highway System.
- Plan updates provided additional details in key areas such as contracting, planning, and station deployment descriptions, yet there is still room for improvement. General areas of plans that could be enhanced next year include cybersecurity, program evaluation, community engagement outcomes, and measuring and tracking Justice40 implementation. These topics will be emphasized in technical assistance provided by the Joint Office.
- Discretionary exceptions continue to be a tool that states are using to provide flexibility in their deployment to meet unique challenges, especially in areas of the rural West. A total of 71 exception requests (requirements for station spacing along highways or station locations from highways) were submitted; 29 were withdrawn after additional discussion with the requestor determined that they were not needed, 38 were approved, and 4 were denied.

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Introduction

This report provides an update on the National Electric Vehicle Infrastructure (NEVI) Formula Program² created through the Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law (BIL). It highlights the key activities of the Joint Office of Energy and Transportation (Joint Office) undertaken in 2023 and the first half of 2024, both generally and specifically in relation to the NEVI program, and provides an individual and collective summary of the NEVI deployment plan updates submitted by states, the District of Columbia, and Puerto Rico (hereafter referred to as “states”) in August 2023 and certified by the U.S. Department of Transportation (USDOT) Federal Highway Administration (FHWA).

The BIL, enacted in November 2021, authorized funding to states and other localities to strategically deploy electric vehicle (EV) charging infrastructure and establish an interconnected network to facilitate access, reliability, and data collection. The BIL also established the Joint Office, an interagency collaboration between the U.S. Department of Energy (DOE) and USDOT to support the successful implementation of BIL investments.

The Joint Office is initially focused on providing unifying guidance, technical assistance, and analysis to support the implementation of the federal programs in Table 1. Collectively, these programs account for \$18.1 billion in investment toward electrifying key components of our transportation system to envision a future where everyone can ride and drive electric.

Table 1. Bipartisan Infrastructure Law Programs Supported by the Joint Office

Program	Lead Agency	Funding
NEVI Formula Program	USDOT (FHWA)	\$5 billion
Charging and Fueling Infrastructure (CFI) Discretionary Grant Program – Community Charging and Fueling Grants	USDOT (FHWA)	\$1.25 billion
CFI Discretionary Grant Program—Alternative Fuel Corridor Grants ^a	USDOT (FHWA)	\$1.25 billion
Low or No Emission Vehicle Program for Transit	USDOT (Federal Transit Administration)	\$5.6 billion
Clean School Bus Program	U.S. Environmental Protection Agency	\$5 billion
		Total: \$18.1 billion

^a The CFI program is open to both EV and other alternative fueling infrastructure projects.

² “National Electric Vehicle Infrastructure Formula Program.” https://www.fhwa.dot.gov/bipartisan-infrastructure-law/nevi_formula_program.cfm.

National Network of EV Charging Infrastructure

Vision for the National EV Charging Network

The Joint Office envisions a future in which everyone can ride and drive electric. Realizing this vision will require a robust and reliable nationwide EV charging network that increases coverage and capacity while instilling key values that improve the overall charging experience and enable a variety of mobility solutions. Critically, the national EV charging network should seek to present a compelling alternative to our current fueling infrastructure. If successful, electrified transportation has the potential to make notable progress toward imperatives such as tackling the climate crisis, creating good-paying jobs that align with emerging economic opportunities, and supporting American innovation and energy independence.

Building out, maintaining, and sustaining a national EV charging network will require both public and private sector innovation and investment, as well as synchronized activities across a broad set of stakeholders, including all levels of government, auto manufacturers, EV charger manufacturers, EV charging operator networks, electric utilities, site hosts, and workforce and labor organizations.

The Federal Role in the U.S. EV Charging Network

The U.S. transportation sector accounts for nearly one-third of the nation's greenhouse gas emissions—the largest share of all primary sectors, including electricity production, industry, commercial and residential, and agriculture.³ Electrified transportation has great potential to reduce U.S. greenhouse gas emissions and help tackle the climate crisis.

As an important step, the Biden administration set out to expand the nation's EV charging network—establishing a goal of 500,000 public EV charging ports by 2030, which is a significant and necessary increase from the current network. Although the network is growing, with more than 192,000 ports as of August 2024 (a doubling since the Biden-Harris Administration took office), these federal investments in BIL and other programs are intended to accelerate that growth, complemented by continued and expanded investment by the private sector.⁴

The BIL invests up to \$7.5 billion in expanding the nation's EV charging network, and a multitude of additional federal programs and incentives include EV charging infrastructure in their scope. The actions in the BIL represent the single largest investment by the U.S. government in a public EV charging network.

Federal programs have been structured through corridor charging investments, which will enable long-distance travel of people and goods, and community charging investments, which will facilitate shorter day-to-day trips as well as greater overall

³ U.S. Environmental Protection Agency. 2024. "Sources of Greenhouse Gas Emissions."
<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.

⁴ The station/port numbers presented in this report are obtained from DOE's AFDC Alternative Fueling Station Locator: afdc.energy.gov/stations/#/find/nearest.

mobility. Figure 1 illustrates the ecosystem of EV charging, with corridor charging characterized by higher-power fast charging along major highways, and community charging focused on lower-power, ubiquitous charging at home as well as destinations such as retail locations and workplaces. It is expected that most EV charging will occur at private access sites such as single-family homes and multifamily housing, parking garages, and fleet depots, and that private charging ports will make up a significant majority of overall charging ports.



Figure 1. EV charging ecosystem

Federal investments in EV charging are intended to supplement, not supplant, private sector investment. Similar to other national infrastructure, federal investments will focus on building a more robust network and filling gaps to facilitate access to all, with a particular focus on underserved and disadvantaged communities (DACs). These investments are guided by key performance standards and federal minimum standards to ensure consistency and instill the values of convenience, affordability, reliability, and equity into the charging network.

Key Values of the EV Charging Network: Convenience, Affordability, Reliability, and Equity

Through the collaboration facilitated by the Joint Office, federal program guidance and minimum standards have been developed to promote a common, high-quality experience in our EV charging network. This whole-of-government approach is intended to increase effectiveness, simplify implementation, and drive critical outcomes.

Convenient

The U.S. EV charging network will need to successfully provide coverage and capacity to ensure that diverse needs are met. Geographic coverage is critical to ensuring that no matter where one is, there is charging available within a reasonable distance (e.g., within 1 mile of the highway). Charging capacity ensures that the number of available charging ports at a given location is proportional to current and projected future demand. To match the convenience of standard vehicle fueling, EV drivers need the confidence of knowing they can charge their vehicles where and when they need. The United States has the potential to make charging more convenient than fueling stations

by aligning the charging experience with places travelers are already traveling and dwelling, whether at home, work, commercial and retail establishments, or recreation locations.

A convenient charging experience is seamless and one that works for all vehicles, regardless of vehicle manufacturer or electric vehicle supply equipment (EVSE). Convenience means that charging is simple, with few steps required to locate, initiate, pay for, and complete the charge session with little to no wait time, sufficient charging speed, a variety of payment methods, and no or low barriers to entry (e.g., no prerequisite memberships, proprietary connector types, or complicated pricing models).

Convenience also means ensuring that EV chargers are accessible in that they are physically accessible to persons with disabilities, signage offers options for individuals with limited English proficiency, and accessible payment options are available to accommodate all consumers, including the unbanked.

Affordable

Estimates indicate that light-duty EVs have substantially lower fuel costs than conventional light-duty vehicles, saving consumers thousands of dollars.⁵ In addition, long-term trends show that electricity has a substantially more stable price compared to gasoline and other alternative fuels.⁶ To complement these trends, the national charging network should be built in a way that fosters an open, competitive market. This can be accomplished with transparent requirements based on open standards. By employing chargers with standardized connectors and communication protocols, existing and new charging providers can more easily launch and maintain charging services and focus on providing a great customer experience. This provides more options for EV charging customers and businesses wishing to host charging stations.

Reliable

Just as Americans expect fueling stations to be operational when they arrive and for lights to turn on when flipping a switch, they expect EV chargers to work. Charging sessions should be easy and quick to start, regardless of the payment method used or vehicle being driven. It is critical for EV drivers to have a consistent charging experience, with their vehicles receiving the same amount of power regardless of how many other drivers are plugged in at the station. It is also important that EV charging is resilient to power outages and severe weather events. The national charging network will only be as reliable as the electric system that underpins it.

Equitable

The transition to electrified transportation provides an opportunity to address existing inequities and improve mobility for all. Emphasizing equity and avoiding exacerbating

⁵ Vehicle Technologies Office. 2022. "FOTW #1251, August 15, 2022: Electric Vehicles Have the Lowest Annual Fuel Cost of All Light-Duty Vehicles." Aug. 15, 2022. www.energy.gov/eere/vehicles/articles/fotw-1251-august-15-2022-electric-vehicles-have-lowest-annual-fuel-cost-all.

⁶ Alternative Fuels Data Center. 2023. "Fuel Prices." Accessed Jan. 12, 2023. afdc.energy.gov/fuels/prices.html.

existing disparities is a cornerstone in the development and implementation of a national EV charging network. As laid out in the NEVI Formula Program guidance, “Many of the burdens from the transportation and energy systems have been historically and disproportionately borne by disadvantaged communities. Unequal distribution of benefits from the transportation and energy systems has prevented disadvantaged communities and minority-owned and women-owned businesses from realizing benefits from these systems, while other historic barriers to transportation have made facilities inaccessible to individuals with disabilities.”^{7,8} Thus, the potential benefits of federal EV charging investments for DACs could include, but are not limited to:

- Community engagement that leads to charging investments that are meaningful to individual communities.
- Improving clean transportation access through the location of chargers.
- Decreasing the transportation energy cost burden by enabling reliable access to affordable charging.
- Reducing environmental exposures to transportation emissions.
- Increasing the clean energy job pipeline, job training, and enterprise creation in DACs.
- Providing charging infrastructure for transit and shared-ride vehicles.

Status of the Current Charging Network

Stimulated by previous federal investments from the American Recovery and Reinvestment Act of 2009,⁹ the EV market and supporting EV charging network in the United States has been under development for more than a decade, with the first mass-market plug-in EVs moving into production in 2010. Since that time, the market has continued to see rapid growth. Analysis of EV sales data from Argonne National Laboratory shows that as of June 2024, about 5.4 million plug-in EVs have been sold in the United States. More than 1.4 million plug-in EVs (which includes both plug-in hybrid and battery-electric cars) were sold in 2023, an increase of more than 50% from 2022 sales. Battery-electric vehicles account for 80% of the total plug-in EV sales. In addition, the penetration of EV sales continues to grow as a percentage of overall vehicle sales. Plug-in EVs represented 9.84% of all passenger vehicles sales in 2023, up from 6.8% in 2022.¹⁰

⁷ DACs are those that have experienced disproportionately high and adverse human health, environmental, climate-related, and other cumulative impacts, including the economic challenges of such impacts.

⁸ Federal Highway Administration. 2023. “National Electric Vehicle Infrastructure Formula Program guidance (Update).” Memorandum, June 2, 2023. www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf.

⁹ For a summary of American Recovery and Reinvestment Act investments related to alternative fuel vehicles and fueling infrastructure, see “American Recovery and Reinvestment Act of 2009” from the AFDC: afdc.energy.gov/laws/arra.html.

¹⁰ Vehicle sales data obtained from Argonne National Laboratory’s “Light Duty Electric Drive Vehicles Monthly Sales Updates.” www.anl.gov/esia/light-duty-electric-drive-vehicles-monthly-sales-updates.

As EV sales continue to increase, the EV charging network simultaneously continues to grow. The current public EV charging network consists mostly of Level 2 and direct-current fast charging (DCFC) ports, with predominantly Level 2 ports.¹¹ The AFDC’s EV charging infrastructure trends reports illustrate changes in EV charging infrastructure in the United States since 2019. The latest report from the fourth quarter of 2023 shows the continued growth in public EV charging overall, and most recently an increase of 5.2% in public EVSE ports and 9.2% in public DCFC ports since the previous quarter (Figure 2).¹²

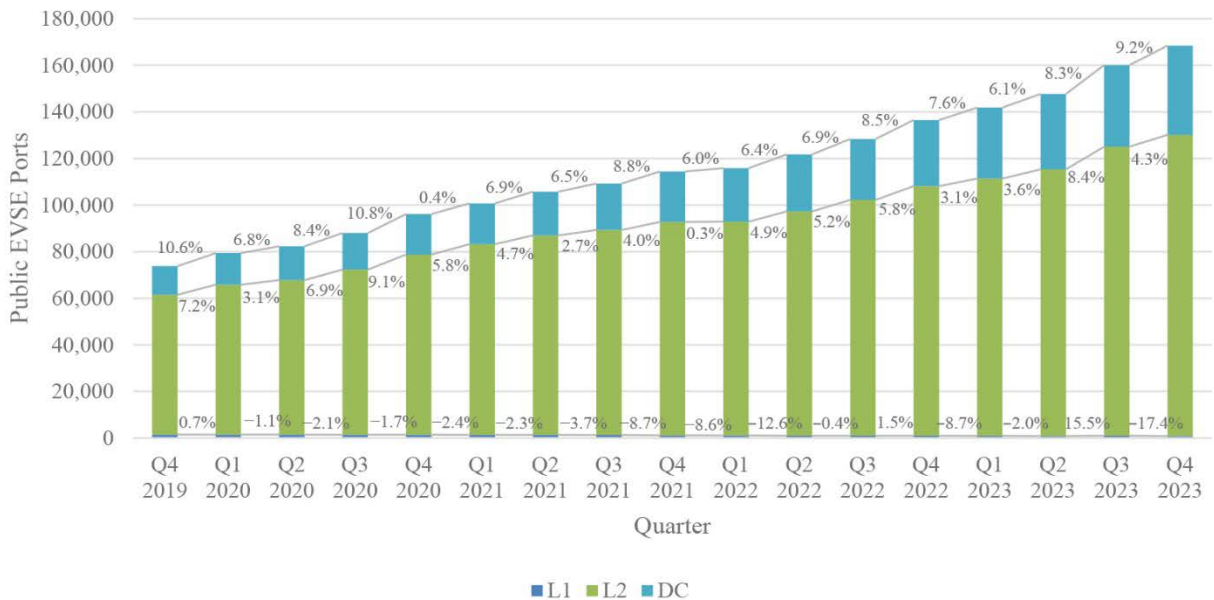


Figure 2. Quarterly growth of public EVSE ports by charging level

Level 2 alternating current (AC) charging is often found at destinations such as shopping centers, recreation areas, workplaces, and other locations where vehicles may be parked for an extended period of time. DCFC, which is faster, is often located along major roadways and highways targeting longer-distance travel. Research suggests that the EV charging network will need a combination of both public and private EV charging, and that Level 2 charging, which is sufficient for most travel, will need to be complemented by public DCFC for specific travel needs. A 2023 report from the National Renewable Energy Laboratory, *The 2030 National Charging Network: Estimating U.S. Light-Duty Demand for Electric Vehicle Charging*, estimates that a network comprising more than 180,000 public DCFC ports and more than 1 million

¹¹ For a primer on the different types of EV charging (Level 1, Level 2, and DCFC), see “Electric Vehicle Charging Stations” from the AFDC: afdc.energy.gov/fuels/electricity_infrastructure.html.

¹² Abby Brown, Jeff Cappellucci, Alexia Heinrich, and Emma Cost. 2024. *Electric Vehicle Charging Infrastructure Trends from the Alternative Fueling Station Locator: Fourth Quarter 2023*. Golden, CO: National Renewable Energy Laboratory. NREL/TP-5400-89108. afdc.energy.gov/files/u/publication/electric_vehicle_charging_infrastructure_trends_fourth_quarter_2023.pdf

public Level 2 charging ports (in addition to 28 million private Level 2 charging ports) is needed to support a 2030 mid-adoption scenario of 33 million EVs on the road.¹³

Continued growth in EV adoption and increases in station numbers, while encouraging, will not result in the national EV charging network that the Joint Office envisions. Reliability, interoperability, open access for all, and standardization of key elements of the charging experience such as connectors, payment, and pricing (e.g., \$/kWh) are all currently lacking in most existing charging networks.^{14,15} There are still notable gaps in the collective charging network along major corridors; redundancy and future-proofing along these corridors will also be key as the EV market grows.¹⁶ In communities, entire new business and charging models must be pursued to ensure that drivers who do not have dedicated parking spots have consistent access to charging and that benefits of charging infrastructure can be accrued by all.¹⁷ Critically, community charging business models must also sustain all forms of electric mobility to enable solutions that do not require vehicle ownership.

The BIL enables significant and necessary steps to realize the full opportunity of a national EV charging network. Many of the key performance needs identified are addressed in the Code of Federal Regulations (CFR), published by FHWA on Feb. 28, 2023.¹⁸ Actual construction, maintenance, and operation of charging stations are supported by a variety of formula and competitive federal funding programs (discussed below). Ongoing technical assistance and analysis by the Joint Office will be critical to ensuring that programs and policies lead to effective implementation, as reflected in the legislation that established the Joint Office.

Federal Support for the National EV Charging Network

Progress is being made within each of the key BIL programs that the Joint Office is supporting. Collectively, these efforts are moving the United States toward a transportation system in which everyone can ride and drive electric. Notable milestones are listed in Figure 3.

¹³ Eric Wood, Brennan Borlaug, Matt Moniot, Dong-Yeon (D-Y) Lee, Yanbo Ge, Fan Yang, and Zhaocai Liu. 2023. *The 2030 National Charging Network: Estimating U.S. Light-Duty Demand for Electric Vehicle Charging Infrastructure*. Golden, CO: National Renewable Energy Laboratory. NREL/TP-5400-85654. www.nrel.gov/docs/fy23osti/85654.pdf.

¹⁴ Niraj Chokshi. 2022. "A Frustrating Hassle Holding Electric Cars Back: Broken Chargers." *The New York Times*, Aug. 16, 2022. www.nytimes.com/2022/08/16/business/energy-environment/electric-vehicles-broken-chargers.html.

¹⁵ D. Rempel, C. Cullen, M. Bryan, and G. Cezar. 2022. "Reliability of Open Public Electric Vehicle Direct Current Fast Chargers." SSRN. papers.ssrn.com/sol3/papers.cfm?abstract_id=4077554.

¹⁶ J.D. Power. 2022. "Growing Electric Vehicle Market Threatens to Short-Circuit Public Charging Experience, J.D. Power Finds." Aug. 17, 2022. www.jdpower.com/business/press-releases/2022-us-electric-vehicle-experience-evx-public-charging-study.

¹⁷ A. Bassett. 2022. "Electric vehicles have a charging access problem. These companies are working to solve it." *Fortune*, Oct. 17, 2022. fortune.com/2022/10/17/electric-vehicles-have-a-charging-access-problem-these-companies-are-working-to-solve-it/.

¹⁸ Federal Highway Administration. 2023. "National Electric Vehicle Infrastructure Standards and Requirements." 23 CFR 680. www.federalregister.gov/documents/2023/02/28/2023-03500/national-electric-vehicle-infrastructure-standards-and-requirements.

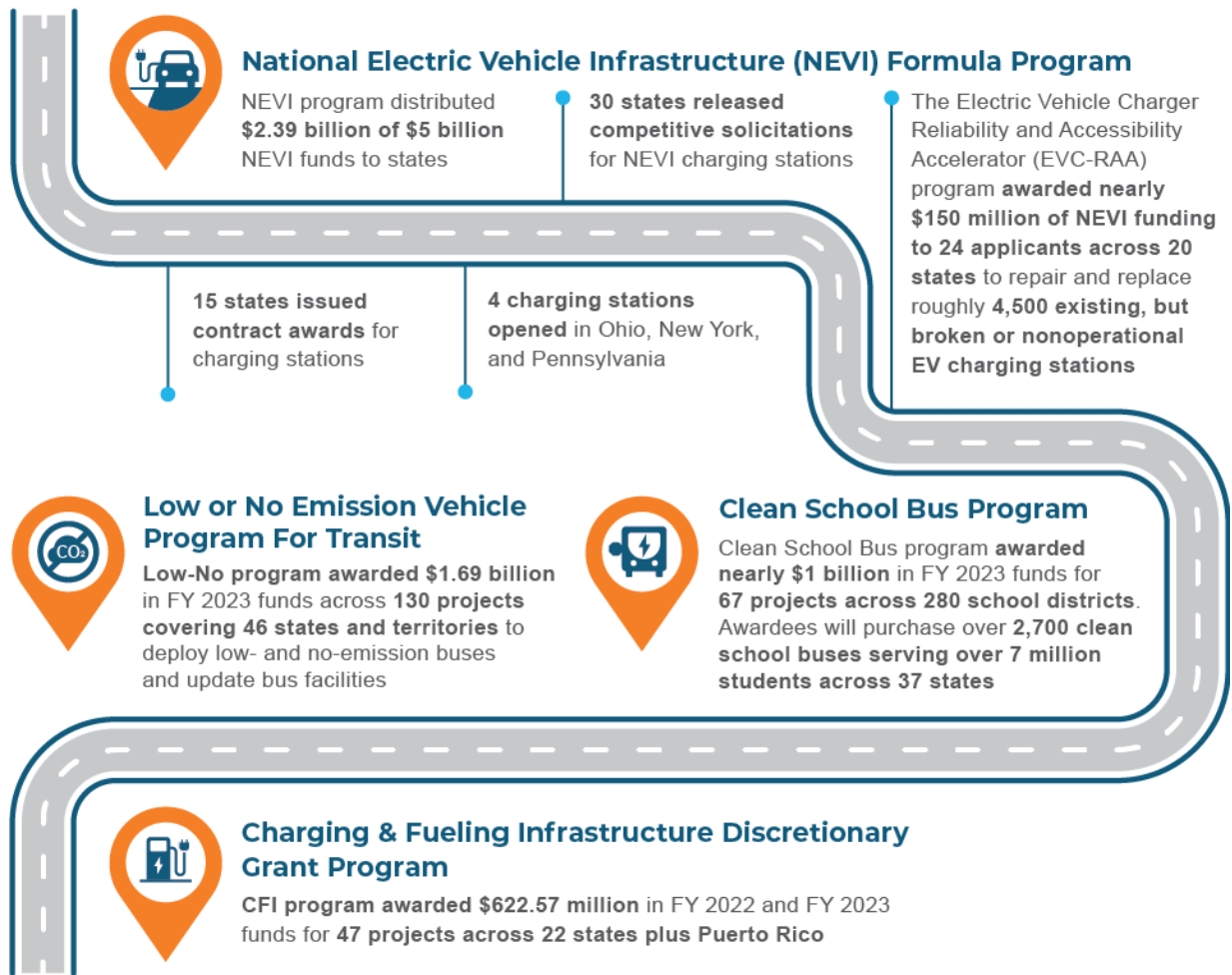


Figure 3. Major milestones for EV charging infrastructure by Bipartisan Infrastructure Law programs as of December 31, 2023^{19,20}

In addition to the NEVI and [CFI programs](#),²¹ the Joint Office released its first funding opportunity announcement (FOA) in 2023 and made awards for 30 projects across 16 states and the District of Columbia on Jan. 19, 2024.²² The \$46.5-million “Ride and Drive Electric FOA” will support the rapid transition to electrified transportation and catalyze private sector investments in clean transportation.²³ Award recipients include academic and nonprofit organizations, large and small businesses, state and local

¹⁹ Joint Office of Energy and Transportation. 2024. “Nearly \$150 Million in Grant Funding Will Bolster Existing U.S. EV Charging Infrastructure.” January 18, 2024. driveelectric.gov/news/reliability-accessibility-accelerator-grants.

²⁰ Federal Highway Administration. 2024. “Charging and Fueling Infrastructure Program Grant Recipients.” Last updated Jan. 11, 2024. www.fhwa.dot.gov/environment/cfi/grant_recipients/.

²¹ https://www.fhwa.dot.gov/environment/cfi/grant_recipients/.

²² Joint Office of Energy and Transportation. 2024. “New Funding Enhances EV Charging Resiliency, Reliability, Equity, and Workforce Development.” Jan. 19, 2024. driveelectric.gov/news/workforce-development-ev-projects.

²³ Office of Energy Efficiency and Renewable Energy. 2023. “DE-FOA-0002881.” [eere-exchange.energy.gov/Default.aspx#Foald0b80a42a-5380-4459-96a9-f333002ea9b0](https://exchange.energy.gov/Default.aspx#Foald0b80a42a-5380-4459-96a9-f333002ea9b0).

governments, and government-owned and government-operated entities from across the United States. Projects selected under this FOA will:

- Help communities identify, develop, and test business models, such as for shared mobility or fleet-based services, that complement or integrate operation of EV charging infrastructure.
- Help develop a high-quality workforce within the electrified transportation industry to support the deployment and maintenance of equipment related to EV charging (i.e., EVSE).
- Increase industrial capacity, competition, and redundancy for validation testing and certification in the United States of DCFC with rated power capacity between 150 kW and 1 MW.
- Assess the performance and reliability of DCFC stations across the United States.
- Create opportunities for underserved communities and groups, measured through metrics such as new jobs and training resources, partnerships with minority-serving institutions and Indian Tribes, engagement with labor organizations, community engagement activities, and other relevant indicators from the Community Benefits Plan.²⁴

Table 2 provides a summary of the types of projects and funding amounts awarded through the Ride and Drive Electric FOA.

Table 2. Distribution of Ride and Drive Electric FOA Projects Across Topic Area

Topic Area	Project Count	Total Federal Funding
Enhancing EV Charging Resiliency	8	\$11,008,479
Community-Driven Models for Electric Vehicle Charging Deployment	10	\$12,286,965
Workforce Development	7	\$9,940,375
Increasing Commercial Capacity for Testing and Certification of High-Power Electric Vehicle Chargers	4	\$9,327,753
Validating Public EV Charging Infrastructure Real-World Performance and Reliability	1	\$3,934,628
Total	30	\$46,498,200

Later in 2024, the Joint Office will announce the recipients of its second FOA, which was issued in April 2024. The Communities Taking Charge accelerator will provide \$54 million in funding for projects that will expand community e-mobility access and provide clean, reliable energy.²⁵

²⁴ See Section IV.D.xvii of the FOA.

²⁵ “Biden-Harris Administration Invests \$54 Million to Expand Clean Transportation Across American Communities.” <https://driveelectric.gov/news/communities-taking-charge-accelerator-funding>.

Stakeholder and Private Sector Role and Engagement

To deliver on promises of the BIL, the Joint Office recognizes the importance of engagement with stakeholders and the private sector to leverage opportunities and expertise and build upon previous experiences. The Joint Office has continued to engage with stakeholders in local, state, and federal government; equity-focused organizations; industry trade associations; nonprofits and nongovernmental organizations; and private industry, including automakers, charging equipment manufacturers and networks, property owners, and utilities. The Joint Office will continue to be responsive, helpful, and open to meet the needs of these stakeholders while also collecting valuable feedback that supports successful and impactful work by the team and colleagues at DOE and USDOT. The Joint Office leverages multiple channels to connect with stakeholders, including:

- **DriveElectric.gov:** This website hosts content about the Joint Office, such as relevant news, upcoming and recorded webinars, technical assistance opportunities, career opportunities, data and tools, email news alert sign-up, and a “contact us” form. DriveElectric.gov had more than 310,000 page views between Jan. 1 and Dec. 31, 2023, and 273,995 through June 30, 2024.
- **Joint Office-hosted webinars:** The Joint Office hosted 21 webinars in 2023 that engaged more than 4,200 total attendees. The webinars will continue in 2024 with 14 webinars through June 2024 on topics regarding the current state of practice for installing, operating, and maintaining EV charging infrastructure with a focus on equitable deployment. The presenters will be a combination of people from across the country with implementation experience and subject matter expertise.
- **Electric Vehicle Working Group:** The Electric Vehicle Working Group was formed by the Joint Office to make recommendations to the secretaries of energy and transportation regarding the development, adoption, and integration of light-, medium-, and heavy-duty EVs into the U.S. transportation and energy systems. It was [established on June 8, 2022](https://www.govinfo.gov/content/pkg/FR-2022-06-14/pdf/2022-12725.pdf),²⁶ pursuant to the BIL, enacted as the Infrastructure Investment and Jobs Act of 2021 (Public Law 117-58). The Electric Vehicle Working Group operates in accordance with the provisions of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), and is critical in ensuring the government and industry are working together on shared goals of transportation electrification. The April 2024 report, [Initial Priorities of the Electric Vehicle Working Group](https://driveelectric.gov/files/evwg-initial-report.pdf),²⁷ summarizes how the working group plans to address the challenges to EV adoption.
- **NEVI technical assistance:** Support for the states to develop and implement their NEVI plans has been ongoing since February 2022. The Joint Office technical assistance team conducted more than 500 one-on-one meetings with state NEVI teams as of July 2024. These meetings have been critical

²⁶ “Electric Vehicle Working Group.” <https://www.govinfo.gov/content/pkg/FR-2022-06-14/pdf/2022-12725.pdf><https://www.govinfo.gov/content/pkg/FR-2022-06-14/pdf/2022-12725.pdf>.

²⁷ Initial Priorities of the Electric Vehicle Working Group. <https://driveelectric.gov/files/evwg-initial-report.pdf>.

opportunities for the Joint Office and FHWA division offices to address unique state challenges. The states are also invited to share preliminary drafts of their plan updates and other implementation documents for Joint Office feedback. The one-on-one meetings will continue at least quarterly through 2024.²⁸ Through July 2024, Joint Office staff also facilitated 88 regional office hour calls in 10 regions to continue state-to-state collaboration and interaction between the state DOTs and FHWA division offices. The collaborative forum of regional office hours offered by the Joint Office provided an opportunity for states to share best practices and resources and plan for multistate charging station network planning.

- **Stakeholder events, meetings, and webinars:** Since early 2022, the Joint Office has participated in more than 430 speaking engagements at in-person and virtual meetings as well as on webinars. In addition to these broad-reaching events, the Joint Office has conducted more than 351 one-on-one meetings with private sector stakeholders interested in learning about Joint Office priorities and sharing insights, products, services, and ideas that may support Joint Office activities.

Through these outreach channels, the Joint Office has fielded nearly 5,670 technical assistance inquiries as of July 2024.

Stakeholder and Private Sector Efforts in 2023 and Early 2024

The private sector and nongovernmental organization involvement in expanding the national EV charger network has grown both directly related to Joint Office and FHWA engagement and independent of government action. Some of the key efforts described below demonstrate the breadth and depth of this public and private sector engagement. Collectively, these efforts are advancing the state of EV charging and contributing to the development of a convenient, affordable, reliable, and equitable national network.

Charging Forward 2023 Symposium

The Joint Office and USDOT hosted the “Charging Forward 2023 EV Charging Symposium” in July 2023. The event brought together nearly 300 stakeholders from across the private, nonprofit, academic, and government sectors in Washington, D.C., to engage in discussion focused on technical assistance and implementation planning for the nationwide expansion of EVs and EV charging infrastructure.²⁹

National Association of State Energy Officials and American Association of State Highway and Transportation Officials Partnership

The Joint Office continued its formal partnership with the National Association of State Energy Officials and the American Association of State Highway and Transportation Officials. In 2023, this partnership hosted seven regional in-person meetings and one national meeting in July, conducted a request for information (RFI) to collect information on the impacts of Tesla opening its North American Charging Standard (NACS) for

²⁸ NEVI leads are able to choose bimonthly or quarterly check-ins with Joint Office technical assistance.

²⁹ U.S. Department of Transportation. 2023. “Charging Forward 2023.” www.transportation.gov/sites/dot.gov/files/2023-09/EV_Symposium_Summary_USDOT_Office_of_Public_Engagement.pdf.

charging connectors, and facilitated peer information exchange through the state EV clearinghouse. The Joint Office is also continuing collaboration with organizations like the American Public Power Association, Edison Electric Institute, National Rural Electric Cooperative Association, and the National Association of Regulatory Utility Commissioners, that provide unique insight into the challenges and opportunities facing utilities.

Charging Connector Standardization

In 2023, as multiple automakers announced their intention to use the NACS connector type,³⁰ it became clear the industry needed an independently administered standard for the connector to enable an interoperable and seamless charging experience. The Joint Office worked with SAE International, the industry leader in automotive standards, to develop a process and timeline for standardization that advanced at unprecedented speed.

SAE's new standard for the NACS connector (Tesla's connector), called J3400,³¹ is expected to be offered by most major automakers on vehicles beginning in 2025 and through adaptors for vehicles with Combined Charging System (CCS) connectors beginning in 2024. The J3400 standard creates design frameworks for the mechanics and electrical signaling for the connector, which are key to a reliable, safe, and consistent EV charging experience. Designed to work with standard communications protocols, the J3400 standard dramatically increases access for all EV drivers to an expanded and interoperable national charging network. The standard leverages existing technology building blocks that will enable a broad foundation of resiliency, security, and equity.³²

Open-Source Reference Implementation

FHWA's minimum standards include requirements for compliance with communications protocols in ISO 15118-2, OCPP 2.0.1, and OCPI 2.2.1, which collectively aim to improve charger reliability and interoperability. In 2023, the Joint Office engaged with Linux Foundation Energy to assist industry in implementing these complex protocols by contributing to the development of Everest—a new software stack (set of software packages). This software can now be used by industry for interoperability testing or incorporated into their charger software to provide interoperability by default, which supports implementation of the standard communication protocols and enables Plug-and-Charge functionality so drivers can simply connect their vehicle to a charger to authenticate, charge, and pay. Consistent with federal policy, the resulting code is open source and free to use under a permissive license so it can be incorporated into proprietary products.

³⁰ SAE International. 2023. "SAE International Announces Standard for NACS Connector, Charging PKI and Infrastructure Reliability." June 27, 2023. www.sae.org/news/press-room/2023/06/sae-international-announces-standard-for-nacs-connector.

³¹ SAE International. 2023. "NACS Electric Vehicle Coupler." J3400_202312. www.sae.org/standards/content/j3400_202312/.

³² To learn more about the standards development process for SAE J3400, visit driveelectric.gov/charging-connector.

ChargeX Consortium

Through Joint Office funding, in 2023 three DOE national laboratories joined efforts to establish the National Charging Experience (ChargeX) Consortium (inl.gov/chargex/).³³ The group of participants from more than 88 EV industry stakeholders, along with consumer advocates, is working toward solutions on the challenges of payment processing and user interface, vehicle-to-charger communication, and diagnostic data sharing. By the end of 2023, ChargeX completed a best practice document for improving payment system reliability, drafted a comprehensive failure mode and effects analysis to ensure safety and reliability of adapters between vehicles and charger connectors, and published a list of minimum error codes to accelerate rapid problem identification and resolution. In June 2024, ChargeX published the report [Customer-Focused Key Performance Indicators for Electric Vehicle Charging](https://inl.gov/content/uploads/2023/07/Customer-Focused-KPIs-for-EV-Charging-6-18-24.pdf)³⁴ to achieve common implementation of key performance indicators to measure and improve customer charging performance across the industry.

Metering Dispensed Energy

The Joint Office has also been actively engaged in the National Institute of Standards and Technology proposed rulemaking (HB44 3.40) to help ensure that metrology requirements for metering energy dispensed at EV charging stations are agreed upon by each state's weights and measures regulators. The interim rulemaking will be discussed during a 2024 conference, and topics will include:

- Simplifying accuracy testing methods for EVSE.
- Identifying tolerances for legacy EVSE and EVSE to be installed after January 2025.
- Outlining identification and marking requirements for EVSE.
- Separating testing standards between bench testing and field testing.
- Providing an allowance to use different testing equipment other than a vehicle as a load.

The Joint Office is engaging stakeholders to establish lab accreditations and field service agent certifications, recommending changes in the regulatory landscape in using electricity as a fuel, and determining how NEVI intersects with each state's weights and measures regulatory rights.

Cybersecurity

In 2023, the Joint Office engaged in several cybersecurity activities to improve the security of federally funded EV charging stations. All of these activities are conducted in tight coordination with DOE's Vehicle Technologies Office and Office of Cybersecurity, Energy Security, and Emergency Response. These activities, which directly support

³³ "ChargeX Consortium." <https://inl.gov/chargex/>.

³⁴ *Customer-Focused Key Performance Indicators for Electric Vehicle Charging*. <https://inl.gov/content/uploads/2023/07/Customer-Focused-KPIs-for-EV-Charging-6-18-24.pdf>.

states in deploying their NEVI funds, also benefit the broader implementation of EV charging infrastructure and are described in the following subsections.

Procurement Considerations

In 2023, the Joint Office published its recommended cybersecurity procurement language clauses for requests for proposals (RFPs) and EV service provider contracts.³⁵ The supplemental resource includes sample language meant to be tailored by the states and can be used to:

- Effectively communicate expectations and requirements for cybersecurity.
- Incorporate cybersecurity into every stage of the EVSE life cycle.
- Inform during the RFP process.
- Serve as a starting point for the acquisition process.
- Help select clauses that align most with established cybersecurity procurements.

Incident Reporting

The Joint Office also has an ongoing project focused on analyzing how cyber event reporting can work for EV charging stakeholders. The goal of this project is to empower EV charging stakeholders to share and interpret information about cyber vulnerabilities, incidents, and mitigations in three ways: (1) preparing them for notifying other EV charging stakeholders regarding potential cyber events, (2) providing guidance to meet state and federal cyber incident reporting requirements, and (3) integrating EV charging stakeholders with established reporting processes. To achieve the goal, the Joint Office is developing and validating an incident reporting approach with stakeholders and incident response agencies and professionals.

Field-Testing-Informed Best Practices

The Joint Office is evaluating the state of practice for existing EV charging infrastructure through a series of hands-on security assessments. The assessments are conducted in partnership with local utility companies and EVSE manufacturers. The security assessments will result in two sets of best practices, one for improving the security of the existing build-out, and another for improving new deployments, such as the NEVI Formula Program.

Plug-and-Charge Public Key Infrastructure

The Joint Office is extending prior federal and industry research regarding plug-and-charge. This includes a bottom-up review of the NEVI standards (ISO 15118, Open Charge Point Protocol, and Open Charge Point Interface) and an adversarial testing event to stress-test industry implementations of public key infrastructure.

³⁵ Joint Office of Energy and Transportation. 2024. "Cybersecurity Procurement Language Clauses for RFPs and EVSP Contracts." Accessed Jan. 30, 2024. driveelectric.gov/cybersecurity-clauses.

Security Working Group

The Joint Office also formed an Electric Vehicles and Charging Infrastructure Security Working Group as an extension of the Executive Forum on Electric Vehicles and Electric Vehicle Charging Infrastructure, hosted by the Office of the National Cyber Director.³⁶ This working group was established under the auspices of the Critical Infrastructure Partnership Advisory Council. The purpose of the working group is to study, plan, coordinate, and implement responses to physical and cybersecurity critical infrastructure matters of joint concern for the Joint Office and other federal stakeholders as related to the design, building, and operation of the EV charging ecosystem. The membership includes representatives from the EV charging industry and government stakeholders who are senior technical staff with a role focused on product cybersecurity or federal project managers with EVs, charging infrastructure, and/or cybersecurity in their portfolio.

The Joint Office convened more than 50 members of the group in person at USDOT headquarters on Oct. 26, 2023. The objective of the meeting was to bring together cyber experts from all parts of the EV charging cyber community to:

- Inform this community about ongoing federal EV charging cybersecurity programs.
- Develop a shared vision of the future state of EV charging cybersecurity.
- Identify cybersecurity attributes needed for the emerging EV and EVSE ecosystem.
- Identify methods to improve public/private coordination on EV charging cybersecurity in 2024.

The Joint Office analyzed the outputs from the event and synthesized a list of activities to conduct in 2024. The group expressed interest in growing its membership and reconvening roughly twice annually to reassess the cybersecurity landscape of EV charging.

Private Sector Announcements

Private companies announced investments in EV infrastructure either independently or through joint ventures, including the following:

- Eight car manufacturers will collaborate in a joint venture to build a public EV charging network that includes 30,000 fast chargers (July 10, 2024).³⁷

³⁶ The White House. 2022. "Readout of Cybersecurity Executive Forum on Electric Vehicles and Electric Vehicle Charging Infrastructure Hosted by the Office of the National Cyber Director." Oct. 25, 2022. www.whitehouse.gov/briefing-room/statements-releases/2022/10/25/readout-of-cybersecurity-executive-forum-on-electric-vehicles-and-electric-vehicle-charging-infrastructure-hosted-by-the-office-of-the-national-cyber-director/.

³⁷ Ionna. 2024. "Toyota Invests in IONNA's EV Charging Network." July 10, 2024. <https://www.ionna.com/news/family-grows>.

- General Motors, EVgo, and Pilot Travel Centers have opened the first 25 of an estimated 200 EV charging stations across the country through a partnership agreement. Each station will be capable of delivering up to 350 kW (Dec. 12, 2023).³⁸
- Volvo, ChargePoint, and Starbucks collaborated to install DCFC at 15 Starbucks locations on a route between Denver, Colorado, and Seattle, Washington.³⁹
- bp has committed to installing 100,000 charging ports worldwide by 2030.⁴⁰

NEVI Formula Program

The NEVI Formula Program is a key component of the BIL, providing nearly \$5 billion over 5 years to help states create a network of EV charging stations along designated AFCs, with an emphasis on the Interstate Highway System.⁴¹ This funding is a catalyst for the deployment of such infrastructure and helps ensure the infrastructure results in a connected network to facilitate data collection, access, and reliability.

The \$5 billion in NEVI Formula Program funds are apportioned to all states by Congress for each fiscal year (FY). The apportionments are determined by an established formula set by Congress. The maximum federal share payable for the cost of a project funded under the NEVI Formula Program is 80%. Each state is required to submit an annual update to its EV infrastructure deployment plan describing how the state intends to use their FY funds.

To support states with their infrastructure deployment plan updates, FHWA developed several guidance documents in coordination and consultation with the Joint Office, including the [NEVI Formula Program guidance](#)⁴², the [State NEVI Infrastructure Deployment Plan Template](#)⁴³, the [Discretionary Exception Template](#)⁴⁴, a [Q&A document](#)⁴⁵, and the [combined DOE-USDOT Justice40 map](#).⁴⁶ These documents, are updated each year as needed to support the development of the upcoming plan update.

³⁸ Stephanie Meyers. 2023. "Pilot Travel Centers LLC, General Motors and EVgo Make Convenient, Accessible Charging a Reality with Opening of First Stations in Coast-to-Coast EV Charging Network." Press release, Dec. 12, 2023. pilotflyingj.com/press-release/28466.

³⁹ Jennifer Sensiba. 2023. "Volvo, ChargePoint, and Starbucks Open Up First Stations In New EV Charging Network." *CleanTechnica*, Dec. 13, 2023. cleantechnica.com/2023/12/13/volvo-chargepoint-and-starbucks-open-up-first-stations-in-new-ev-charging-network/.

⁴⁰ bp. "EV charging: When it comes to EV charging, we're all in." <https://www.bp.com/en/global/corporate/what-we-do/electric-vehicle-charging.html>.

⁴¹ "History of the Interstate Highway System." <https://www.fhwa.dot.gov/interstate/history.cfm>.

⁴² NEVI Formula Program guidance. https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf

⁴³ State NEVI Deployment Plan Template. <https://driveelectric.gov/files/state-plan-template.docx>

⁴⁴ State Discretionary Exception Template. <https://driveelectric.gov/files/exception-request-template.docx>

⁴⁵ NEVI Formular Program Questions and Answers. https://www.fhwa.dot.gov/environment/nevi/resources/nevi_program_faqs.cfm

⁴⁶ Electric Vehicle Charging Justice40 Map. <https://anl.maps.arcgis.com/apps/webappviewer/index.html?id=33f3e1fc30bf476099923224a1c1b3ee>.

In addition to playing a key role in the development of these guidance documents, the Joint Office directly supported states in the development of their EV infrastructure deployment plan updates. Through the opportunities described earlier in the Stakeholder and Private Sector Role and Engagement section, the Joint Office staff engaged with states to help answer questions, discuss challenges, provide technical resources, and encourage collaboration between the states while developing their plans. As the NEVI Formula Program advances, the technical assistance activities will continue to evolve as well, with a transition to a focus on implementation as opposed to plan development.

Minimum Standards

The NEVI Formula Program is primarily guided by a set of minimum standards established in the National Electric Vehicle Infrastructure Standards and Requirements published on Feb. 28, 2023 (Docket No. FHWA-2022-0008), and NEVI Formula Program guidance.^{47,48} The minimum standards set specific requirements that all NEVI EV charging infrastructure is required to meet.⁴⁹

FHWA's minimum standards for federally funded chargers were designed to be flexible, creating space for innovation, including the introduction of additional connector types. Recognizing that the landscape is evolving, in March 2024, FHWA issued a request for information seeking input on connectors.⁵⁰

Build America, Buy America Act

The BIL included the Build America, Buy America Act (2 CFR 184),⁵¹ which covers federal funding investments in infrastructure including EVSE. FHWA published a temporary "Waiver of Buy America Requirements for Electric Vehicle Chargers" (Docket No. FHWA-2022-0023) under its Buy America waiver authorities to modify its existing general applicability waiver for manufactured products related to EV chargers.⁵² The short-term, temporary waiver, effective March 23, 2023, enables EV charger acquisition

⁴⁷ Federal Highway Administration. 2023. "National Electric Vehicle Infrastructure Standards and Requirements." <https://www.federalregister.gov/documents/2023/02/28/2023-03500/national-electric-vehicle-infrastructure-standards-and-requirements>.

⁴⁸ Federal Highway Administration. 2023. "National Electric Vehicle Infrastructure Formula Program guidance (Update)." https://www.fhwa.dot.gov/environment/nevi/formula_prog_guid/90d_nevi_formula_program_guidance.pdf

⁴⁹ For a full description of minimum standards, refer to: Federal Highway Administration. 2023. "National Electric Vehicle Infrastructure Standards and Requirements." <https://www.federalregister.gov/documents/2023/02/28/2023-03500/national-electric-vehicle-infrastructure-standards-and-requirements>.

⁵⁰ Request for Information on the J3400 Connector and Potential Options for Performance-Based Charging Standards. <https://www.transportation.gov/bipartisan-infrastructure-law/regulations/2024-04750>.

⁵¹ Office of Management and Budget. 2023. "Guidance for Grants and Agreements, Part 184—Buy America Preferences for Infrastructure Projects." 2 CFR 184. www.ecfr.gov/current/title-2/subtitle-A/chapter-I/part-184.

⁵² Federal Highway Administration. 2023. "Notice of Proposed Waiver of Buy America Requirements for Electric Vehicle Chargers." *Federal Register* 87 (168): 53539–53547. www.federalregister.gov/documents/2023/02/21/2023-03498/waiver-of-buy-america-requirements-for-electric-vehicle-chargers.

and installation to immediately proceed while also ensuring the application of Buy America to EV chargers by phasing out the waiver over time.

AFC Coverage and NEVI Fully Built-Out Certification

AFCs are a critical element of the NEVI program. AFCs are highways designated by FHWA as corridors that provide charging and fueling for alternative fuel vehicles including electricity, hydrogen, propane, and natural gas. FHWA reviews and designates the AFCs nominated by the states. There have been seven complete rounds of AFC designation since program inception in 2016. The most recent round, Round 7, opened in May 2023, and FHWA designated Round 7 AFCs in October 2023. To date, all states have designated one or more EV AFCs within their borders (Figure 4).⁵³ In June 2024, FHWA opened a Round 8 Request for Nominations. The results of the Round 8 AFC designations will be reflected in FY 2025 Deployment Plan updates.

⁵³ The FY 2024 state deployment plans were submitted prior to FHWA's formal announcement on the Round 7 designations and therefore may not reflect the conclusions of the Round 7 process. For the purposes of this report, state and national mileage of AFCs includes the Round 7 designations.

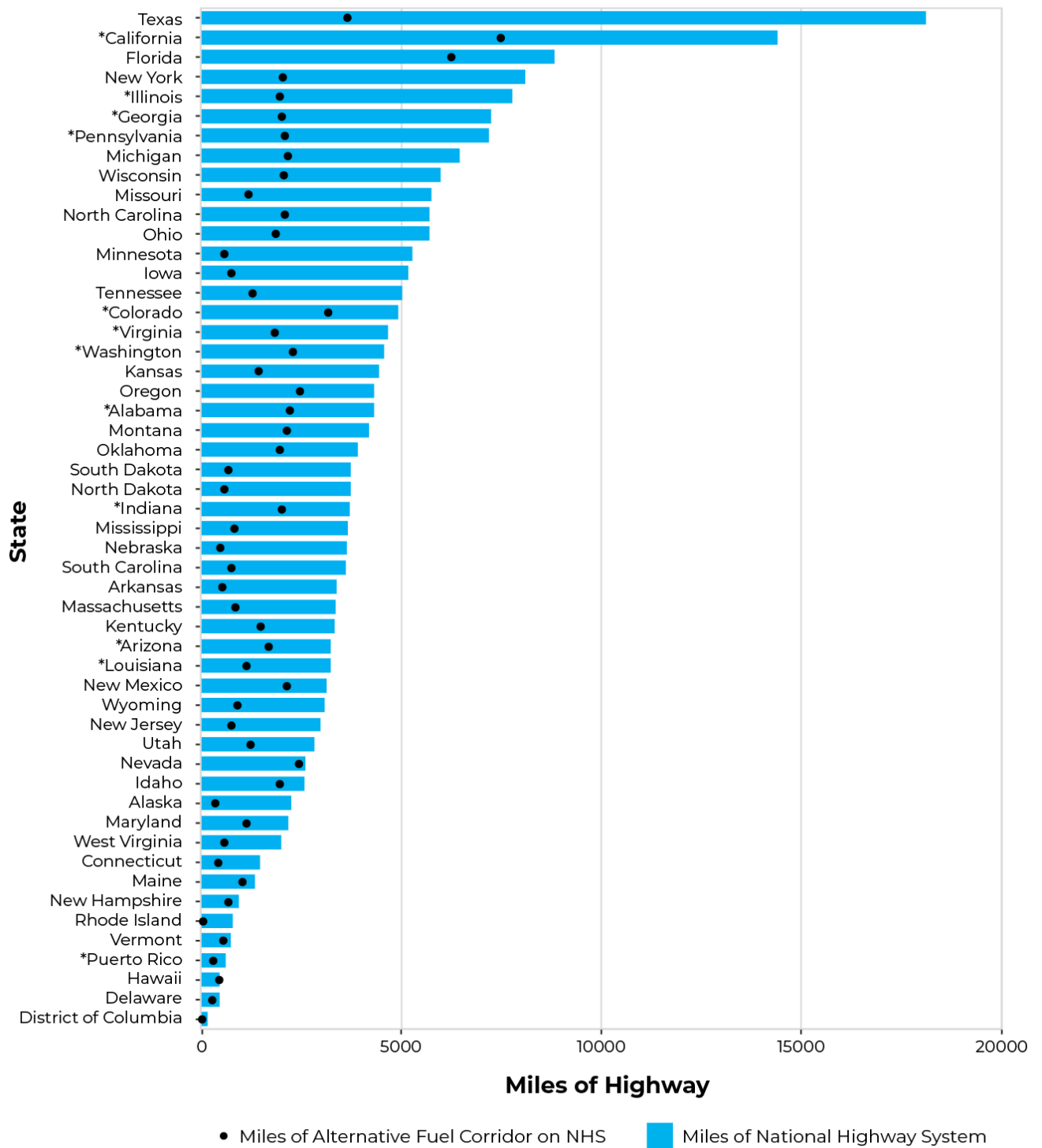


Figure 4. Comparison of total miles of the National Highway System versus total miles designated as AFCs (through Round 7)

* Indicates additional EV corridors designated as AFCs in Round 7



In accordance with the requirements of the BIL, states are required to deploy NEVI Formula Program funds on their designated AFCs until they receive certification from FHWA that they have fully built out their AFCs, at which time they may use remaining NEVI Formula Program funds in other locations. Existing stations along AFCs that meet the specific criteria identified in the NEVI Formula Program guidance may count toward the build-out of an AFC. The criteria include requirements for port and power minimums, maximum station spacing and distance from the corridor as well as additional items as identified in FHWA’s minimum standards. The NEVI Formula Program guidance specifies the fully built-out criteria that all EV stations must meet to be considered “credible” and counted toward the NEVI network.⁵⁴ In July 2024, Rhode Island was the first state to receive full build-out certification.⁵⁵

The Joint Office estimates that the current AFC designations total roughly 81,000 miles of EV corridors across the United States. This is an increase of approximately 6,000 miles, or 8% from Round 6. The AFCs comprise roughly 37% of the National Highway System and 94% of the Interstate Highway System⁵⁶; approximately 27,000 miles designated on the National Highway System are located within DACs.⁵⁷

The primary aim of the NEVI program is to complete a national network of EV charging infrastructure, particularly along the Interstate Highway System, with stations located at least every 50 miles along and within 1 mile of the AFC corridor.

In addition to filling the gaps in the existing AFC network, the NEVI program is intended to support states in nominating and completing build-out of any incomplete AFC segments that cross state borders to establish the backbone of a national network of publicly available fast charging infrastructure.

⁵⁴ Section V-C of the NEVI Formula Program guidance.

⁵⁵ Joint Office of Energy and Transportation. “Rhode Island’s First NEVI-Funded EV Charging Stations Now Open”. July 17, 2024. <https://driveelectric.gov/news/rhode-island-nevi-station-opening>.

⁵⁶ The total AFC mileage is estimated based on Rounds 1–7 of the AFC designation process. This number is a rough estimate by the Joint Office that reflects a snapshot in time and is subject to change.

⁵⁷ The DOT-DOE joint interim definition of DACs for the NEVI Formula Program is used for the purposes of this analysis: Argonne National Laboratory. 2024. “Electric Vehicle Charging Equity Considerations.” Accessed Feb. 2, 2024. www.anl.gov/esia/electric-vehicle-charging-equity-considerations.

Overview of State EV Infrastructure Deployment Plan Updates

All states submitted their FY 2024 EV infrastructure deployment plan updates. Those plans were reviewed and certified by FHWA after evaluation by the Joint Office. The certification of the plan updates unlocked another \$885 million of the NEVI Formula Program funding (in addition to the \$1.5 billion that was distributed for FY 2022 and FY 2023), enabling states to deploy those funds.

Each of the plan updates is publicly available on the state websites. Links to the plans and FHWA certification memos may be found on the [FHWA website](#)⁵⁸ and [Joint Office website](#).⁵⁹ The Joint Office website also provides links to individual state NEVI Formula Program websites, when available.

Funding

The approximately \$5 billion in NEVI Formula Program funds are to be distributed to the states each FY across 5 years, as described in Appendix A.

To date, FY 2022, FY 2023, and FY 2024 funds have been distributed to the states, totaling \$2.385 billion. Apportionment memos detailing the actual funding amounts can be found on the FHWA website:

- [FY 2022 Apportionment](#)⁶⁰
- [FY 2023 Apportionment](#)⁶¹
- [FY 2024 Apportionment](#).⁶²

All funds associated with the NEVI Formula Program are administered by state DOTs as apportioned under U.S. Code Title 23, Chapter 1, which encompasses requirements for states to receive federal transportation funding. All applicable requirements under this code and 2 CFR Part 200 apply to the use of these funds.

Progress Toward a National Network

The state EV infrastructure deployment plans outline each state's strategy for implementing NEVI funds within their state borders. The FY 2024 plan updates summarize new developments since the FY 2022/FY 2023 plans and discuss how the

⁵⁸ "Fiscal Year 2024 EV Infrastructure Deployment Plans."

www.fhwa.dot.gov/environment/nevi/ev_deployment_plans/.

⁵⁹ "State Plans for Electric Vehicle Charging." <https://driveelectric.gov/state-plans/>.

⁶⁰ Apportionment of Fiscal Year (FY) 2022 Highway Infrastructure Program Funds for the National Electric Vehicle Infrastructure Formula Program Pursuant to the Infrastructure Investment and Jobs Act.

www.fhwa.dot.gov/legsregs/directives/notices/n4510863.cfm.

⁶¹ Apportionment of Fiscal Year (FY) 2023 Highway Infrastructure Program Funds for the National Electric Vehicle Infrastructure Formula Program Pursuant to the Infrastructure Investment and Jobs Act.

www.fhwa.dot.gov/legsregs/directives/notices/n4510873.cfm.

⁶² Apportionment of Fiscal Year (FY) 2024 Highway Infrastructure Program Funds for the National Electric Vehicle Infrastructure Formula Program Pursuant to the Infrastructure Investment and Jobs Act.

www.fhwa.dot.gov/legsregs/directives/notices/n4510883.cfm.

states address FHWA’s new minimum standards and updated guidance. Together, those FY 2022/FY 2023 plans and the FY 2024 plan updates illustrate the emerging national network of EV charging infrastructure.

State Plans for Charging Station Deployment

The state plans continue to present a variety of approaches for how they intend to deploy their NEVI-funded EV charging stations. Most state plans indicate a focus on build-out of their respective AFCs within the first few years of the program funds. Some states are prioritizing the upgrade of existing AFC stations to meet the new NEVI requirements. Other states are prioritizing implementation of new NEVI stations along the AFCs before making upgrades to existing stations. Some states are proposing a combined approach, allowing for flexibility.

Although states did generally provide greater detailed information in their plan updates on proposed station locations than in their FY 2022/FY 2023 plans, given the variety of approaches and the flexibility the states are applying—in addition to the uncertainty of which existing stations will ultimately be creditable toward full build-out—the total number of proposed stations and especially the number of ports planned at the national level is still difficult to quantify with any precision. In many cases, the plan updates did estimate a number of stations (but not ports) needed for full build-out, either by showing station locations on a map, providing a table listing proposed locations, or explicitly stating a number of sites. However, states continued to provide few, if any, details for station deployment beyond AFC build-out other than describing their general approach, and no state estimated the total number of stations it intends to build using all their NEVI funding. In addition, several states noted that they may nominate additional AFCs in future years as the program advances but did not indicate which highways they plan to nominate. With all of those caveats, based on information provided in the plan updates combined with analysis of total AFC mileage and existing stations, the Joint Office estimates between 1,000 and 1,500 new and/or upgraded stations are planned by states for implementation to meet the full build-out of the existing AFCs.⁶³ Given that most states did not specify the number of ports they plan to build, it is not possible to estimate the number of ports with any confidence. However, assuming the NEVI minimum of four ports per station, the number of ports expected would be between 4,000 and 6,000, but it could also be much higher if stations include more than the minimum number of ports.

Figure 5 provides a snapshot of proposed station deployments based on information presented in the FY 2024 plan updates and is supplemented with information on awarded and operational stations, where available, after the FY 2024 deployment plan update was approved. Black dots represent existing stations that have four CCS ports capable of providing 150 kW (600 kW total) of simultaneous power and are located within 1 mile of the AFC. Wherever proposed station locations were clearly presented in the plans, they are shown on the figure as orange triangles (proposed new or upgraded

⁶³ The total number of stations required for build-out is likely to change as states determine which existing stations meet all the required criteria to be creditable toward build-out in accordance with the updated program guidance.

stations), blue squares (stations that have been awarded), or red circles (stations that are open). States shown in gray in Figure 5 did not provide enough information to map general locations for proposed stations.

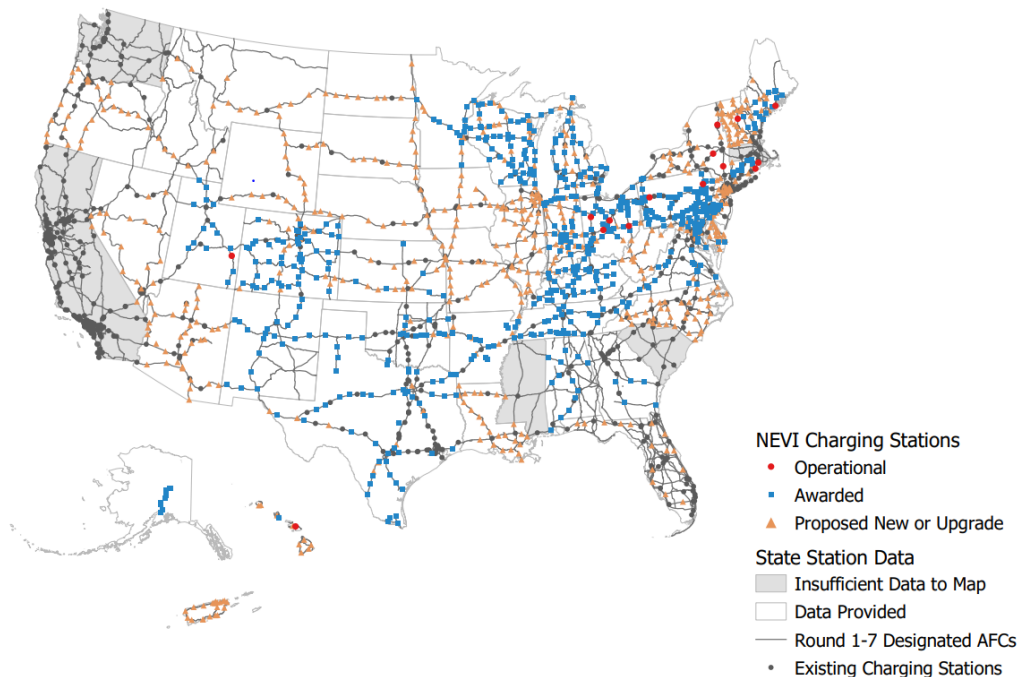


Figure 5. Map of AFCs and existing DCFC stations as of December 31, 2023, that meet NEVI distance, port, and power requirements and Proposed DCFC stations.

Notes: The map also includes proposed stations, which are divided into four categories: existing (black dots), potential new or upgraded (orange triangles), awarded stations (blue squares), and operational stations (red circles). States that did not provide sufficient data for mapping purposes are shaded gray. Station locations are approximate.

Funding Outlook

In the previous year’s report, the Joint Office estimated that many states will complete build-out of their AFCs and have NEVI Formula Program funds remaining to use in off-AFC locations, including other non-designated highway corridors and in communities.⁶⁴ Although the Joint Office maintains this assessment, the exact amount of funding remaining in each state is difficult to predict given the dynamic nature of the deployments, including final federal cost share per station, determination of existing stations creditable toward full build-out, the impact to the total number of new or upgraded stations needed, and new AFCs designated requiring additional stations. As states move closer to full build-out, additional details will surface enabling analysis that will illuminate where and how much funding will extend beyond the implementation of the network on AFCs, or where there may be remaining gaps to fill.

⁶⁴ A full methodology for the Joint Office’s initial cost estimate to achieve full build-out is provided in the FY 2022–FY 2023 NEVI Annual Report: driveelectric.gov/files/nevi-annual-report-2022-2023.pdf.

Discretionary Exceptions

The NEVI Formula Program distance requirements for siting stations along AFCs present substantial challenges in some specific locations. To address those site-specific extraordinary circumstances, FHWA created a discretionary exception process as part of the development and approval of their state plans. The exception process permits states to apply for an exception to the 50-mile (distance) criteria, the 1-mile (proximity) criteria, or both at specific locations where the following extraordinary circumstances exist:

- **Grid capacity:** Delivering sufficient power to the charging site requires major upgrades to existing infrastructure.
- **Geography:** Lack of necessary services or access to the site significantly compromises accessibility and/or functionality (e.g., roadway exits, necessary amenities).
- **Equity:** An alternate location that would still service travelers on the interstate or AFC would better support providing benefits to a DAC.
- **Extraordinary cost:** Costs to locate and operate a station at a given site prevent its economic viability, even with federal funding through NEVI or other sources.

States are required to submit their requests and provide justification to demonstrate the extraordinary circumstances.⁶⁵ Approved exceptions to the 50-mile criteria are valid for the year of the plan being certified; approved exceptions to the 1-mile criteria are permanent upon commissioning of the charging site. The 50-mile exceptions will be revisited annually as conditions change and state plans are updated.

A total of 71 exception requests were submitted from 17 state plans (Table 3). The Joint Office evaluated all the submissions and provided analysis and recommendations to FHWA for consideration and approval. During plan review, the Joint Office and FHWA worked together to engage with states where clarification or additional information was needed, and to reach consensus on each exception approval. Final determination of each discretionary exception was included in the FHWA plan certification memos.

⁶⁵ A template for the discretionary exception requests is available at: driveelectric.gov/files/exception-request-template.docx.

Table 3. Summary of Discretionary Exceptions Requested by State^a

State	Requested	Withdrawn	Approved	Denied
Alaska	3		3	
Arizona	2		2	
California	1		1	
Hawaii	5	3	2	
Idaho	7	7		
Maryland	1	1		
Michigan	3	1	1	1
Nevada	17	10	6	1
New Hampshire	1	1		
New York	9	4 ^b	5	
North Carolina	4		2	2
Ohio	4	2	2	
Oregon	3		3	
Pennsylvania	1		1	
Utah	8		8	
West Virginia	1		1	
Wyoming	1		1	
Total	71	29	38	4

^a Numbers in this table represent the outcome of the discretionary exception process. This may not be consistent with what is shown in the plans, as some states did not resubmit their plans to reflect changes made during the review period.

^b Exceptions identified as unnecessary.

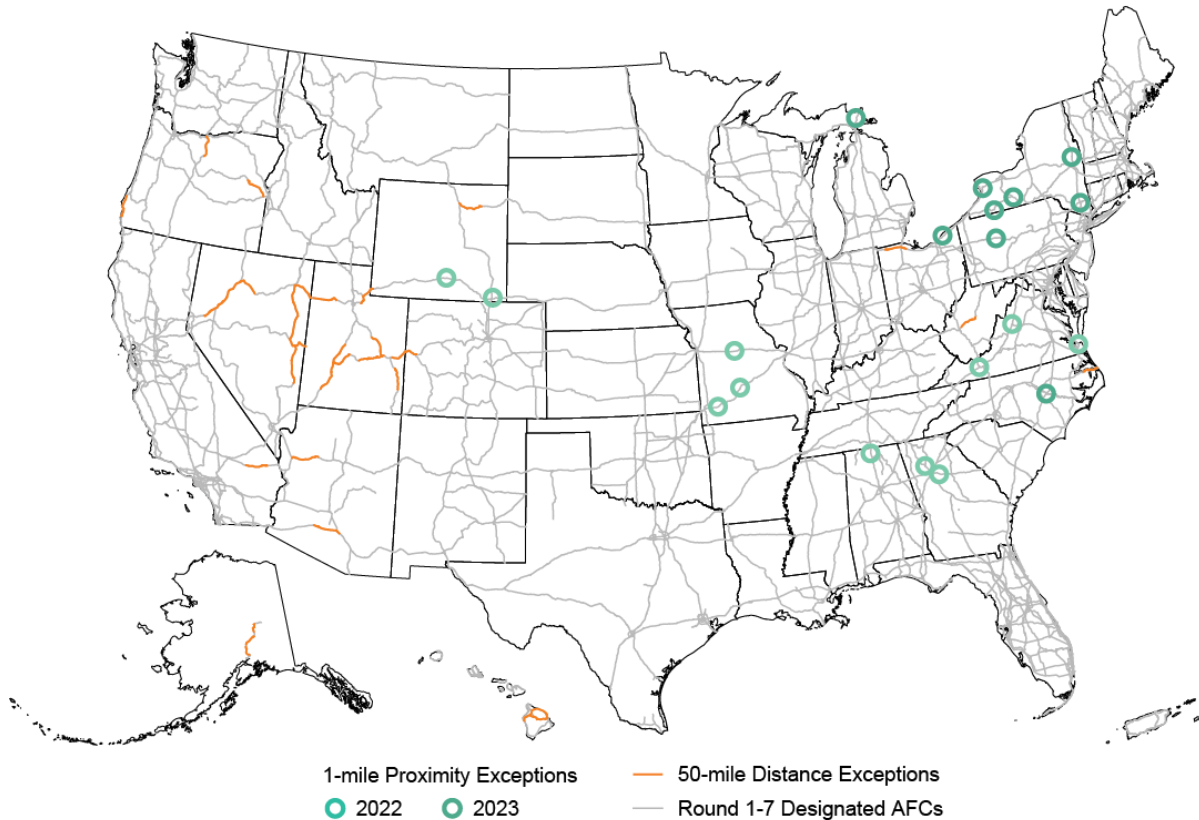


Figure 6. Map depicting the location of approved discretionary exceptions by state

- Among all the exceptions requested from states, 57 requested exceptions to the 50-mile distance criteria and 14 requested exceptions to the 1-mile proximity criteria (Figure 6 above).
- A total of 16 out of the 57 requests for 50-mile distance criteria were approved in the previous year and submitted for reevaluation for the second year.
- A total of 29 exception requests were withdrawn by states after submission or were identified as unnecessary during plan review, including requests where further study and information were needed from the state to evaluate the necessity of a discretionary exception, or the exception requests were found to satisfy the distance and proximity requirements.
- Thirty-eight requests were approved for a discretionary exception (Figure 7 and Appendix B), 29 of which requested an exception for the 50-mile distance criteria, with deviations ranging from 2 to 88 miles more than the guidance. Nine requests were approved for the 1-mile proximity criteria, with 0.2–1.5-mile deviation from the guidance.
- A total of four requests were denied approval due to insufficient evidence to support the necessity of a discretionary exception from the requirements.

State Exception Request by Type

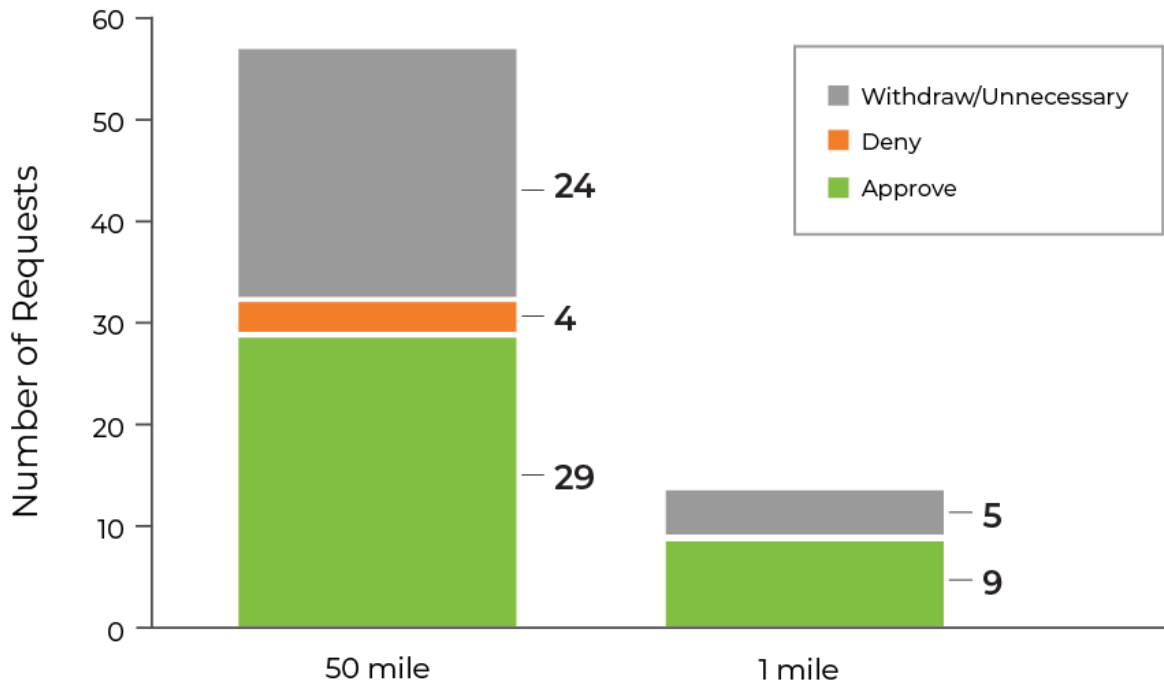


Figure 7. Breakdown of exception requests submitted by type and the resulting approval determination

Most of the exception requests listed multiple reasons to justify the need for a discretionary exception; 89% of exceptions included challenging geography as a reason, 27% cited grid capacity, 24% cited extraordinary cost, and 13% cited equity (Figure 8).

State Exception Request Reasons

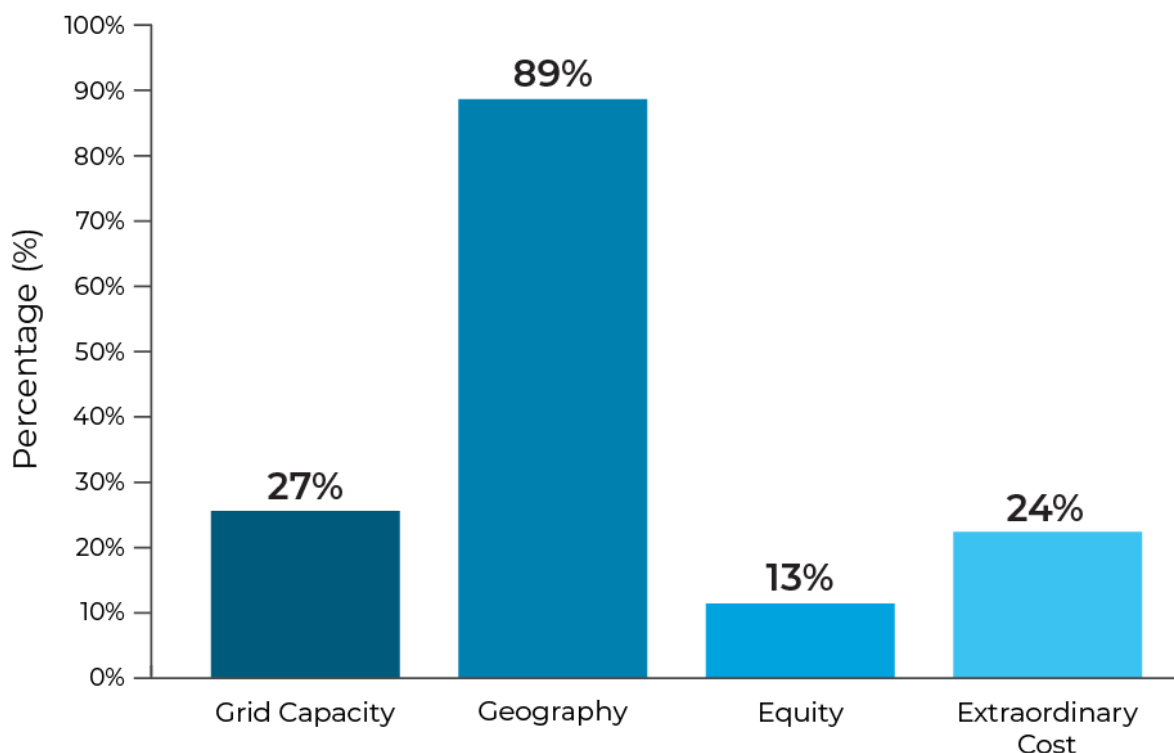


Figure 8. Percentage of exception requests submitted by reason. States were permitted to select more than one reason for the exception when submitting each request.

There was a 19% increase in the total number of new 50-mile distance exception requests over the previous year. Additionally, there was an increase in total distance of the deviations from the 50-mile requirement. There were five initial submissions requesting exceptions that would result in gaps of more than 100 miles between stations. Two of those large gaps were approved due to their extremely rural nature along the designated AFC, with no amenities or grid capacity available to support NEVI stations. The other three requests were withdrawn by the states during plan review for further study. Not surprisingly, many of these requests are for locations in the rural West.

As states progress with their deployment and work toward full build-out, there may be an increase in exception requests for larger deviations from the 50-mile requirement in some of the more geographically challenging regions for EV charging deployment. It is also likely there will be an increase in the exception requests for the 1-mile requirement as specific site locations are selected.

To minimize the number of 50-mile distance discretionary exceptions, the Joint Office will continue to provide technical assistance for the states to support their efforts to build out these challenging regions.

Summary of EV Charging Station Deployments

Since the FY 2022/2023 and 2024 deployment plans were submitted, many states have taken concrete steps to translate their plans into actions. The specific actions in each state look a little different depending on their procurement methods and processes. However, the general pipeline of activities typically includes issuing a solicitation, making awards or entering into agreements, breaking ground for construction, and lastly energizing and opening the station. As of the end of July 2024:

- 39 states have released initial solicitations (11 of which are still open).
- 28 states have announced conditional or final awards for 719 charging stations.
- 61 charging ports across fifteen (15) station locations have been opened in eight states: Utah, Hawaii, Ohio, New York, Maine, Pennsylvania, Rhode Island, and Vermont.

Table 4 lists the states and the current phase of their station deployments.

Table 4. National Electric Vehicle Infrastructure Achievements as of July 31, 2024

NEVI Status Tracking	State(s) Achieved	State Count
Solicitation out	AZ, DE, DC, IL, IA, MA, NJ, NC, ND, OR, PR	11
Awards announced	AL, AK, AR, CA, CO, CT, GA, IN, KS, MD, MN, MI, NH, OK, TN, VA, WI	17
First station in construction	KY, TX, NM	3
Stations operational	ME, NY, OH, PA, HI, RI, UT, VT	8

Topical Summaries from State Plan Updates

FHWA’s NEVI Formula Program guidance provides background, funding eligibility, and program guidance for implementation of the NEVI Formula Program. It also provides an overview of elements states were required to include in the plan update narrative, as well as technical assistance tools relevant for plan development.

The following sections summarize major findings from several of the topical areas that states were required to discuss in the plans in accordance with the guidance. A few specific examples are provided in tables, callout boxes, or figures to illustrate how states approached each of these topical areas. A compendium of these state examples organized by topical area is provided in Appendix C.

Plan Vision and Goals

Each original state plan set forth the state’s vision and goals to create a convenient, affordable, reliable, and equitable statewide and national EV network. The states were not required to update their vision and goals in 2023; however, nearly half elected to share how their strategies changed over the first year of the program. The approach to the planning update varied—some states documented completed goals, upcoming targets, and interim milestones, while others responded to the updated NEVI guidance or changing state policies. The Michigan plan update (Figure 9) included the total number of chargers needed to reach fully built-out status.



Figure 9. Michigan electric vehicle infrastructure deployment 2023 update

Nevada revised its approach based on the June 2023 guidance, shifting “from achieving fully built-out status along the Interstate corridors to expand to address all AFCs across the state where the need is greatest and working with existing charging station owners to address and improve reliability.” Several states explicitly described new engagement and coordination with neighboring states in planning for stations on AFCs at state

borders. As expected, administration changes, an evolving EV market, and changes in state needs and goals led many states to further refine goals with this update.

The NEVI Formula Program, requiring funding to flow through state DOTs, has prompted strong state interagency collaboration. The importance of this collaboration across state agencies continues to be a consistent theme in states' visions and goals. Although updating the state agency coordination section was not required, the vast majority of states provided updates on how their state agencies are collaborating on the NEVI program. Several states have now executed formal agreements between their state DOT and energy office. These agreements help clarify the role each agency plays in deploying NEVI stations in compliance with the minimum standards and following the requirements of U.S. Code Title 23 and 2 CFR Part 200. Some states have created large EV working groups that ensure state-funded EV programs are closely aligned with the NEVI program and other federal programs that support EV adoption.

Plan Vision and Goals Examples

Coordinating Across State Programs

Many states were transitioning to electrification of their transportation systems in advance of the NEVI program. The result is a set of various existing programs, laws, and regulations across which state agencies must coordinate. **New York** provided an overview of their supporting programs, laws, and regulations as an appendix in its plan update, and listed the responsible agencies that are part of the Interagency Zero Emission Vehicle Planning Workgroup. The **Washington** EV Council was directed by the state legislature to develop a statewide transportation electrification strategy and identify and coordinate all EV grant funding.

Regional Coordination

Indiana's plan update discussed regional coordination on utilities, contracting, and the regional EV charging network with Kentucky, Ohio, Michigan, and Illinois. **Oklahoma's** plan outlines engagement actions with Kansas, Missouri, Arkansas, Texas, New Mexico, and Colorado and includes maps of the AFCs that cross state borders with existing stations.

EV Working Groups

Working groups identify goals related to their specific topic and ways to achieve the goals. Several states have excellent examples of EV working groups. **South Carolina's** EV working group of 10 state agencies was established by Executive Order 2022-31 and livestreams all its meetings to ensure transparency. **Oregon's** Zero-Emission Vehicle Interagency Working Group is made up of five core state agencies and others that join the group on specific goals. The working group was formed in 2017 to carry out the state's transportation electrification goals and continues today, incorporating NEVI implementation into its portfolio.

Freight

Many states have begun by deploying charging stations aimed at light-duty vehicle travel along AFCs but are now also considering the electrification of medium- and heavy-duty freight travel and the development of a freight-oriented charging network. More than half of the states included some discussion of freight corridors in their plans. Several states include or encourage specific freight considerations, such as pull-through charging, in their contracting solicitation or scoring methodology. Many states identified the key freight corridors within their borders, highlighting the overlap with current AFCs or nominating them as AFCs in Round 7. Some states referred to a state freight plan in their updates in which medium- and heavy-duty electrification is discussed in more detail.

Public Engagement

State NEVI public engagement will be an anchor for plan updates throughout the program. Outreach and feedback from each state's stakeholders is critical to ensure the plans continue to prioritize an equitable and fair distribution of EV charging stations throughout the states. Each state has a unique mix of stakeholders, but they typically include groups such as the general public; Tribal communities; labor organizations; private sector/industry representatives; the Clean Cities and Communities Coalition Network; representatives of the transportation and freight logistics industries; public transportation agencies; electric utilities; and urban, rural, and underserved communities. The public engagement sections of the plans demonstrated a variety of methods for engaging with the public and soliciting information. Examples included hosting public meetings; using RFIs; and developing online surveys, intake forms, and matchmaking sites.

Engagement Tools

Public

RFIs: In 2023, 18 states issued public RFIs to gather information and perspectives on the NEVI program. RFIs enable the public to comment on the program, giving states valuable insight into stakeholder preferences. (Note, these data are tracked by Atlas Public Policy through their EVHub State Policy Dashboard, which is part of the EV States Clearinghouse, a password-protected website available to state agencies: evstates.org.)

Matchmaker tools: Smaller companies wanting to enter the EV charging infrastructure market may benefit from partnering with a larger company. Several states recognize the importance of such partnerships and have created online tools to help vendors from different aspects of the EV charging infrastructure sector find each other. These include California, Indiana, Iowa, Utah, and Wisconsin.

Community Engagement Outcomes Report

FHWA’s June 2023 guidance update includes a new requirement to include a community engagement outcomes report per 23 CFR 680.112(d). The outcomes report is intended to document the various community engagement activities that the state conducted in the time since the last plan was approved, including engagement with DACs. The section should identify the outcomes from the engagement activities, such as how the community comments were incorporated into the plan update or deployment strategy, as applicable. Engagement methodologies include public and virtual meetings, surveys, focus groups, feedback forms, interviews, and participation in community events. The community engagement outcomes report should also include a forward-looking discussion on public engagement the state is planning over the next 6–12 months.



location of the meeting, some criteria were of higher importance than others (Figure 4). For example, in Boise, 36% of attendees valued sustainability, whereas Eastern Idaho residents valued cost effectiveness and site amenities more. While overall there was a relatively even split, each location’s priorities on selection criteria varied—this usually correlated with the communities’ unique needs or the sentiment of the area around change, green energy, or government spending.

For example, in Twin Falls, where there is a passionate and active group of EV drivers, the chief concern heard is whether stations would provide certain amenities and if those stations could mirror set ups like existing truck stops and/or gas stations. However, in Lewiston, a common refrain among the group was the desire to see a station built in rural areas in Valley County around New Meadows or McCall to better connect them to the southern part of the state. This likely led to participants ranking Equity and Workforce higher to ensure locations in rural areas are given a higher priority than those in metropolitan areas. All locations expressed similar concerns on the ability to future-proof these stations to ensure the longevity of the investment.

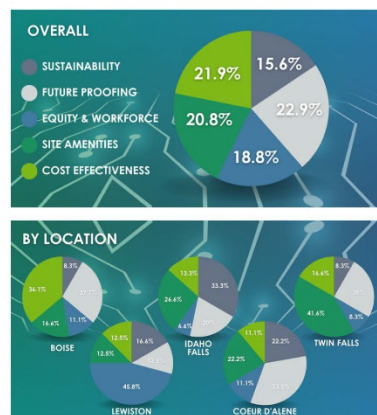


Figure 10. Idaho charts capturing feedback from in-person meetings

Most of the state plan updates specifically included a community engagement outcomes report. Of those, about half offered a robust discussion of how the state engaged with local communities and incorporated feedback into the state’s NEVI program. These plans documented the stakeholder meetings with date and topics discussed and explicitly stated when and how the feedback was incorporated into the state’s NEVI approach. Many also included summaries of media coverage to demonstrate public awareness efforts. The most robust outcomes reports included discussion of specific engagement with DACs, Tribes, and utilities and also provided descriptions for continued engagement in the future. Notably, one plan discussed how the public engagement led to broader conversations about EV planning in underserved communities, and in another it changed how the state was thinking about and

determining boundaries for inclusion along a given AFC. Some of these community engagement outcomes reports were exemplary, but others lacked detail, specifically in describing how the information obtained through the engagement informed the development of the plan or whether future engagement activities were planned.

Tribal Engagement

Engagement with Native American Tribes is also imperative for the equitable and fair distribution of EV charging investment benefits. The plan updates should identify the Tribal entities or types of communities engaged, the number and type of events in which each Tribal entity was engaged, the resources used to engage with Tribes, the feedback received, and a summary of how feedback impacted the development of the plan. In the plan updates, the majority of states included a Tribal engagement section, although some states lacked a dedicated section or made no mention of Tribal engagement at all. Several states included Tribal engagement sections but noted that there are no federally recognized Tribes in the state and thus no engagement has occurred. Fewer than half of the states indicated they have conducted Tribal engagement. Common forms of engagement include webinars, listening sessions, stakeholder meetings, presentations at Tribal conferences, and in-person and virtual meetings with Tribal leaders. Despite the discussion of Tribal engagement efforts, few states discussed the feedback and lessons learned from those efforts. Although not explicitly required in the plan updates, very few states discussed steps taken to continue engagement of Tribes and plans for future engagement.

Several states noted advances in their Tribal engagement activities since their initial NEVI plans. Examples include seeking out publications that Tribal citizens read and trust to announce meetings and events as well as providing translation services in Native languages during public meetings. For example, Arizona provided live translation services in the Navajo language for their virtual statewide meeting. Several states have offered or provided support to Tribes interested in applying for CFI grants. One state, Alaska, noted that the state will work with Tribes to avoid outreach and public participation during the times of year that conflict with subsistence hunting and fishing and will reengage with those communities at a later date.

Utility Engagement

Continued utility engagement and planning are critical to EV charging station deployment success. State plans indicate that they continue to work with utilities to understand grid capacity and necessary upgrades. Many plans note that prospective bidders require utility engagement to ensure bidders have the most current grid capacity information and/or guidance for fitting NEVI projects into existing EV charging make-ready programs to determine if they count toward the 20% nonfederal match. Unique examples of state/utility coordination include:

- A utility information form required to be submitted with the bid response to the solicitation. The form requires data from the utility related to three-phase power availability, 600-kW availability, electrical distribution system capacity in their

service territories (and specifically along current electric AFCs), and interconnection timelines.

- Pre-screened EV charging station sites were provided in several state plans where the state DOT gathered and supplied utility-side details on the availability of three-phase power, electrical capacity in their service territories (and specifically along current or nominated electric AFCs), and interconnection timelines to all bidders.
- Participation by state DOTs in utility commission working groups, where staff were able to engage with various EV stakeholders, including utilities, or provide written comments on EV-related regulatory proceedings/dockets.

Utility Engagement

Through monthly meetings with electric utilities, **Connecticut** is discussing the progress and planning of EV charging station deployments between the NEVI program and each utility's respective make-ready programs. One utility company has a planning team available for capacity analysis to support the NEVI program solicitation. The Connecticut Department of Transportation has participated in the Public Utilities Regulatory Authority's Annual EV Charging Program Review Docket by submitting formal comments and having staff available to speak at hearings related to potential synergies between the utility program and the NEVI program.

Utility engagement forms in RFPs: Several states worked with utilities to develop forms to document outreach and coordination with utilities as part of the NEVI site application packet. The forms verified that the applicant contacted the utility to determine power availability at the proposed location.

Contracting

The contracting sections in the annual plan updates discussed the states' plans for contracting with private entities, as states have largely indicated a disinterest in directly owning and operating infrastructure, instead engaging with third parties to own and operate NEVI-funded infrastructure via public-private partnerships and design-build agreements. The contracting section details how third parties will deliver EV charging infrastructure in a manner that achieves state goals efficiently and effectively, highlighting approaches to both engage small businesses and ensure contracted entities will engage communities where EV charging is installed.

One of the main areas of focus for states in the plan update was the status of their contracting process. Nearly all states discussed their plans for contract solicitation, with many specifying a contracting mechanism. Among those that specified a mechanism, the most common was an RFP. Many states included timelines for their contracting processes as well. As of this writing, more than half of states have released their initial contract solicitation for NEVI funds, with a few states already developing a second

round of solicitation.⁶⁶ The NEVI guidance encourages states to include discussion and details of awarded contracts, but discussion was limited because only a few contracts were issued by the August 1 plan submission date. However, many states included sections dedicated to awarded contracts in their updates, indicating that they will be addressing them as applicable in future plan updates.

Another key area of discussion was scoring methodologies for awarding contracts. Specifically, states were asked to discuss the incorporation of scoring criteria for equity and Justice40 topics. A majority of the plan updates identified scoring methodologies. Of those that did not identify a methodology, the primary reason was because it was still under development or review. A majority of states also incorporated equity considerations into their scoring methodology or noted they will be incorporating considerations into their future methodology. Stronger plans provided detailed descriptions of their criteria and scoring methodologies, including weighting for Justice40/DAC benefits. However, some states did not clearly indicate equity considerations in their scoring methodology discussions or just generally referred to Justice40 goals but did not incorporate specific equity-focused criteria or methodologies.

Part	Title	Contents	Points
A	Administrative	Checklist	Y/N
		Minimum NEVI requirements	Pass/Fail
		Prequalification	Y/N
		Financial Viability	Pass/Fail
	Administrative Subtotal		Pass/Fail
B	Experience	Experience (past EVSE projects)	75
		Qualifications (list firms, role, key staff)	75
		Project Approach	75
		Project Cost Information	25
	Experience Subtotal		250
C	Site Proposal	Site Information	70
		Site Schematic	20
		Site Readiness	60
		Future Proofing	40
		Equity, Workforce and Economic Development	60
	Site Proposal Subtotal		250
TOTAL POINTS POSSIBLE			500

Figure 10. Overview of Indiana's Notice of Funding Opportunity scoring methodology. The full, detailed rubric was included in the appendix of the state's update.

States were also asked to identify how they are ensuring that contractors comply with applicable federal requirements, including U.S. Code Title 23, 23 CFR 680, and all applicable requirements under 2 CFR 200. Methods noted by states to accomplish this include, but are not limited to, using language from these publications in RFPs and

⁶⁶ Since the publication of the NEVI plan updates in August 2023, several states have awarded contracts. Refer to Summary of EV Charging Station Deployments, which describes progress since plan submissions on states' contracting processes, including awarded contracts and operational stations.

contracts; requiring submission of documentation or a plan to ensure compliance; performing compliance reviews throughout the stages of project development; withholding a percentage of funds to ensure requirements are met throughout the 5-year operational period; and levying fees, fines, and/or penalties for noncompliance.

Contracting

Awarded Contracts

Hawaii and **Ohio** were the only states to have awarded contracts by the time of their submittal of the NEVI plan updates. Having completed a round of contracting, Ohio discussed the goals that drove the state's Round 1 procurement and the lessons learned. Among the key lessons learned was to include a draft contract in the solicitation, work more thoroughly with utility companies on process and expectations, clarify eligibility of costs, understand how proposers interpreted the language and provide further explanation of expectations, and be ready for significant interest in the program.

Scoring Methodology

Indiana's plan update includes the state's detailed scoring methodology, which includes sections for qualification and project approach; site proposal; site readiness; future-proofing; and equity, workforce, and economic development. Each of these sections includes expected contents and a detailed points breakdown identifying how to receive the maximum points for each criterion.

Alaska also provided a detailed look at the state's scoring methodology, including four different stages of review for applications. Along with an overview of the points available, Alaska included detailed and extensive lists of questions that applicants would be evaluated against in each stage of review.

Equity Considerations

The equitable deployment of charging infrastructure is a key priority of the NEVI Formula Program to avoid exacerbating existing disparities in the transportation system and to develop a convenient, affordable, reliable, and equitable charging experience for all users. States have taken a variety of approaches to incorporating equity into their NEVI plans, which have been identified throughout this report. A high-quality plan update would:

- Include details about engagement with DACs and how these interactions shaped the plan update in the community engagement outcomes report. The report would account for engagement since the previous plan and look toward public engagement over the next several months.
- Describe in detail how the state engaged with Tribal communities, including information such as how meetings were organized, who participated, and whether translation to Native languages was provided.
- Discuss outcomes from engaging with utilities, especially those that serve DACs.

- Discuss how the communities near the new EV infrastructure will be engaged in advance of the infrastructure being sited, either by the state or the third-party entities with implementation contracts.
- Explain how the state will deliver projects under the NEVI Formula Program that are consistent with Executive Order 14008 and the Interim Justice40 Guidance.⁶⁷

Identifying Disadvantaged Communities

Similar to the community engagement outcomes report, more than two-thirds of the state plan updates documented how they identify DACs. Of those, only about half provided detailed information. Almost all states referenced their continued use of Argonne National Laboratory’s EV Charging Justice40 Map in their plans.⁶⁸ Some states also used the Council on Environmental Quality’s Climate and Economic Justice Screening Tool⁶⁹ or supplemented the map with either definitions of DACs developed for the state or other indicators. The strongest plan updates included maps showing the state’s DACs in relation to the AFCs. Table 5 presents a few examples of how states are identifying DACs as part of their NEVI planning.

Table 5. State Examples of Disadvantaged Community Identification

State	Disadvantaged Community (DAC) Identification Effort
California	Engaged with the state’s DAC Advisory Group Subcommittee on Transportation Electrification and will also work with the newly formed Interagency Transportation Equity Advisory Committee.
Georgia	Engaged with workforce education organizations and equity organizations to identify DACs and understand their concerns and needs around EV charging.
Illinois	Coordinated across state agencies to implement additional state programs aiming to define DACs within the state.
Maryland	Created a specific NEVI EV siting tool for NEVI to screen applicants for both corridor eligibility and equity.
New Hampshire	Used 22 different indicators to identify DACs.
Oregon	The Oregon Department of Transportation’s (DOT’s) Office of Equity and Civil Rights provided a list of community-based organizations that represent DACs.
Pennsylvania	Used both the Climate and Economic Justice Screening Tool and the USDOT Equitable Transportation Community Explorer in identifying DACs (see Figure 12).

⁶⁷ The White House. 2021. “Interim Implementation Guidance for the Justice40 Initiative.” Memorandum, July 20, 2021. www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf.

⁶⁸ Argonne National Laboratory. 2024. “Electric Vehicle Charging Equity Considerations.”

⁶⁹ Council on Environmental Quality. 2024. “Climate and Economic Justice Screening Tool.” Accessed Feb. 2, 2024. screeningtool.geoplatform.gov/en/#3/33.47/-97.5.

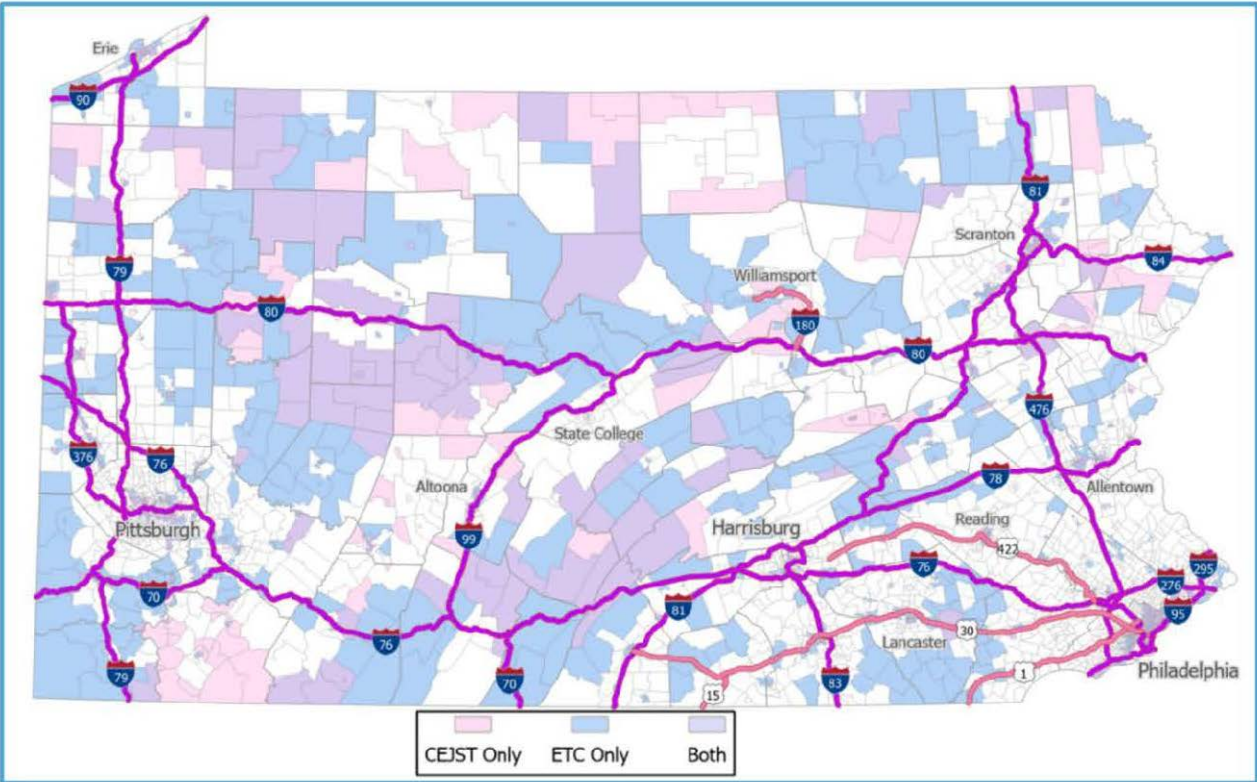


Figure 11. Pennsylvania environmental justice areas and disadvantaged communities (using the Department of Transportation Equitable Transportation Community [ETC] Explorer tool and Climate and Economic Justice Screening Tool [CEJST])⁷⁰

Process to Quantify and Measure Benefits to Disadvantaged Communities

About three-quarters of the state plan updates included some discussion on quantifying and measuring benefits to DACs. Many of those included specific benefits and metrics they have identified. The remaining states mentioned the need for or described a high-level approach to identifying and measuring the benefits and adherence to Justice40; however, the plans lacked specifics and did not include a list of the planned benefits or metrics to be used. The NEVI plan update template included examples of benefit categories for states to consider:

- Improve clean transportation access through the location of chargers.
- Decrease the transportation energy cost burden by enabling reliable access to affordable charging.
- Reduce environmental exposures to transportation emissions.
- Increase parity in clean energy technology access and adoption.

⁷⁰ Pennsylvania Department of Transportation. 2023. *Pennsylvania State Plan for Electric Vehicle Infrastructure Deployment*. Harrisburg, PA: Pennsylvania Department of Transportation. www.penndot.pa.gov/ProjectAndPrograms/Planning/EVs/Documents/PA%20NEVI%202023%20State%20Plan%20Update%20FINAL.pdf.

- Increase access to low-cost capital to increase equitable adoption of more costly clean energy technologies like EVs and EV chargers.
- Increase the clean energy job pipeline, job training, and enterprise creation in DACs.
- Increase energy resilience.
- Provide charging infrastructure for transit and shared-ride vehicles.
- Increase equitable access to the electric grid.
- Minimize gentrification-induced displacement resulting from new EV charging infrastructure.

The states were asked to discuss which benefits they will measure, what metrics will be used to measure those benefits, the data sources and analysis methods used to track metrics, where the baseline will be set, and how the communities will validate the results. Many states indicated in this section of the report that they plan to continue to develop metrics on how the NEVI investments benefit DACs.

Measuring Benefits for Disadvantaged Communities

Detailed Tables

Illinois provided a table documenting all the requested information for each of the DAC benefits suggested in the plan update template.

Connection to Workforce Development

Washington state connected benefits to DACs with workforce development by proposing metrics of dollars spent on participants from DACs for job training, apprenticeships, and educational programs as well as the number of jobs created in DACs.

Alaska, under their clean energy pipeline benefit, documented coordination with several labor-related organizations to encourage women and minority participation in apprenticeship programs, including the Alaska Works Partnership, Alaska Apprenticeship Training Coordinators Association, Alaska General Contractors, and Associated Builders and Contractors.

Labor and Workforce Development

The deployment of NEVI charging infrastructure will create new workforce opportunities, and states are proactively seeking opportunities to grow and diversify their local workforce. Many plans discuss conducting workforce capacity assessments to better understand local workforce development needs. Some plans specifically highlight the addition of the [Electric Vehicle Infrastructure Training Program \(EVITP\)](#),⁷¹ which provides training and certification for electricians installing and maintaining EV charging infrastructure, into existing workforce development training programs. In addition to this

⁷¹ The Electric Vehicle Infrastructure Training Program. <https://evitp.org>.

training program, states discuss leveraging existing apprenticeship programs, community college programs, public-private partnerships, and state initiatives to provide new workforce development options. Numerous plans also identify local labor unions as key stakeholders with whom states have engaged or would engage. A wide range of workforce training and development approaches are described in the state plans. Some states took additional steps to encourage contractors to work with small and disadvantaged businesses on NEVI-funded work. Several states made general commitments to diversify the workforce, and others provided detailed workforce development plans. Unique state labor and workforce development efforts include:

- Comprehensive approach to workforce development that helps workers at all stages of the career path, from micro-credentials for those that have interest but limited time, to scholarships for those that have interest and time, and connecting employers with job seekers for those ready to start the next phase of their career.
- Identifying not only the need for workforce development, but also other sources of funding to support EV/EVSE-specific trainings.
- Identifying the need for training for those who are changing careers and offering upskilling/reskilling opportunities to the existing workforce.

Labor and Workforce Development

New York will engage with DAC liaisons to identify opportunities to provide benefits from NEVI funds, including opportunities for workforce training and education to support a clean energy job pipeline and job training. The New York Office of Just Energy Transition will connect workers to opportunities for quality jobs, upskilling, and training with a focus on serving those who are traditionally underrepresented, especially within DACs.

The **Ohio** Department of Transportation is leveraging existing training programs for NEVI projects, including multiple state agency staff coordinating to provide additional financial reimbursement support for the EVITP through the state's existing TechCred program.

Program Evaluation

The NEVI Formula Program requires each state to develop and implement a robust, data-driven program evaluation plan to ensure accountability and program success. The evaluation should, at a minimum, assess performance in achieving the state's interim and 5-year goals.

Evaluation of each plan's effectiveness includes monitoring performance metrics such as EV charging infrastructure usage, EV charging infrastructure reliability, customer satisfaction, equitable distribution and access to EV charging infrastructure within the state, greenhouse gas emissions, or other metrics that support creating a national network. An efficiency assessment of a state's use of federal funding, measured by the amount of charging developed per funding amount, was also to be included.

States are at different stages in their program evaluation planning. Some have already identified performance indicators and developed detailed metrics, while others have not yet started formal program evaluation work and have indicated a need to hire independent program evaluation consultants. Performance metrics that states have identified to date include, but are not limited to:

- Number of NEVI charging stations installed.
- Completion percentages against state goals.
- Performance, improving transportation equity.
- Population demographics within 50 miles of a station.
- Average consumer charging cost per kilowatt-hour.

Number of stations serving underserved communities. In the annual updates, states were asked to provide a summary and assessment of the performance of EV chargers based on data submitted to the Joint Office in compliance with 23 CFR 680.112. As NEVI chargers were not yet installed in any state when the plans were submitted, charger performance could not yet be directly addressed. Some states indicated they will build upon existing performance monitoring programs and tools to evaluate NEVI Formula Program outcomes. Several states discussed their intention to use the Electric Vehicle Charging Analytics and Reporting Tool (EV-ChART),⁷² the web-based data portal and analytics database being developed by the Joint Office to meet data collection and sharing requirements in 23 CFR 680. A few states plan to develop public-facing dashboards to share ongoing progress, information, and data. Several states discussed or referenced data collection and sharing in accordance with 23 CFR 680 without specifying a mechanism for reporting, while others discussed data collection and sharing without referencing 23 CFR 680.

⁷² Additional information is at driveelectric.gov/evchart.

Program Evaluation

Kentucky, Maine, and Vermont are a few of the states that explicitly indicated they are planning to use EV-ChART to meet the data submittal requirements in 23 CFR 680.112, with each state participating in the Joint Office's State Agency Pilot Group, a voluntary group that meets monthly to clarify open questions around the data submission process, assess usability of the EV-ChART web app features as they are being designed, share state goals and needs as they relate to EV-ChART, and guide and inform future feature development.

In addition to serving as an EV-ChART State Agency Pilot Group member, **Kentucky** discussed the state's proposed preliminary approach to program evaluation in detail, laying out five goals for the state's charging system. Each goal is tied to one or more performance indicators, such as network coverage, equity, and reliability, and each indicator includes metrics that measure progress. Kentucky also identifies the source for each metric's data and, during the program implementation process, will set baseline values and 5-year aspirational targets for each metric.

Known Risks and Challenges

States were encouraged to update their known risks and challenges in implementing the NEVI Formula Program funds. In the plan updates, states maintained many of the risks and challenges from the FY 2022/FY 2023 plans. Several states provided minor updates to their respective sections, including state-specific risks and challenges. The most common new risk was related to the NACS/J3400 connector and its steady increase in popularity among auto and EVSE manufacturers. States expressed concern that the first NEVI charging stations installed will be depreciated before the end of their usable life span if the landscape of charging standards shifts to prefer NACS/J3400 over other connectors, including the required CCS connector. Other new risks and challenges presented in the plan updates include:

- Lack of weather protection overhangs.
- Lack of reliable lighting, preventing the charging experience from mirroring the fueling experience.
- Need for upfront capital due to the NEVI reimbursement model.
- Difficulty navigating state-specific procurement processes and approvals and associated legal issues.
- Difficulty verifying the 23 CFR 680.106(m) requirement limiting the use of income or revenue earned from stations.

The Joint Office will consider this updated information to help prioritize where states may need additional support and to guide future technical assistance efforts. In addition, the Joint Office regularly meets with FHWA staff to share common concerns and areas for clarification identified through its engagement with the states.

Areas of Additional Technical Assistance

The Joint Office technical assistance staff spends time meeting with each state in October and November after plan updates are reviewed to discuss Joint Office plan feedback and identify immediate next steps and areas for additional assistance. This information helps the Joint Office identify shared technical needs across states and strategically deploy resources to fill those needs with technical assistance, information resources, and access to peer exchange through office hours and webinars.

As the NEVI program transitions from initial planning to station implementation, the type of assistance is also evolving. Through early and mid-2023, the Joint Office technical assistance team and FHWA division office staff provided feedback on draft RFP documents and coordination with other states in the same phase of development. Now that the RFPs have been awarded, states are requesting help on how to confirm the proposed station components will meet the NEVI minimum standards. Battery storage system sizing is one area of interest for focused technical support. Several states inquired about specialized review of proposed battery storage systems in more remote areas to estimate whether the power available would meet the requirements. In response, the Joint Office engaged with staff at the National Renewable Energy Laboratory to discuss necessary analysis with appropriate state staff. It is anticipated that the effort will eventually lead to a case study and help sheet that could be shared with the states in a topical webinar.

The Joint Office continues to provide regular one-on-one calls with each of the states to coordinate direct technical assistance based on their certified EV infrastructure deployment plan. These calls range from monthly to quarterly, depending on state preference, during the implementation phase to support progress, share best practices, and address challenges. Additional support is also provided during bimonthly regional office hours and topical webinars, as needed.

As the NEVI program continues, the Joint Office gathers data points indicating which topics are most asked about in one-to-one meetings, through the DriveElectric.gov contact form, and within regional office hours. The updated list of topics for increased technical assistance includes cybersecurity; contracting; incorporating existing stations for full build-out determination; determining “reasonable rate of return”; identifying, implementing, and tracking Justice40 benefits; providing ongoing and meaningful community engagement; required data submission logistics, utility engagement, and coordination; and labor and workforce development.

Through the Joint Office’s partnership with the National Association of State Energy Officials and the American Association of State Highway and Transportation Officials, additional technical assistance will also be provided through quarterly regional calls with state DOTs and energy offices to discuss multistate collaboration activities regarding EV infrastructure planning and deployment; activities to enhance coordination and collaboration between states, the federal government, and the private sector on EV infrastructure build-out; and state topics of interest such as utility coordination.

Conclusion

This report provides an overview of common themes, strategies, and actions in the NEVI Formula Program as presented in the state deployment plan updates and through actions taken by the states since the last report. It also summarizes major activities of the Joint Office to support the implementation of NEVI program funds (and other BIL-funded transportation electrification efforts) over the past year. Although this is the second year states were required to submit NEVI deployment plans, physical implementation of stations is just beginning. Most of the content in the state plan updates focused on incorporating the new minimum standards and resolving details with selected contracting methods. Collectively, the deployment plan updates and activities illustrate state progress. Each plan update continues to demonstrate varied perspectives, approaches, and levels of capacity and experience in administering EV charging programs. These different deployment strategies represent the unique needs and considerations of each state while also incorporating the vision and requirements outlined in the NEVI Formula Program guidance and the minimum standards needed to create the national network.

From Joint Office analysis and information provided in the state deployment plans, it is estimated that between 1,000 and 1,500 new or upgraded NEVI stations (or between 4,000 and 6,000 ports) are needed for build-out of the AFCs. The 61 ports that are operational, and the additional 2,500 that are underway as of July 2024 are just the beginning. As states continue to make progress with implementation and provide additional details in their plan updates, those estimates will improve, and as reporting tools such as EV-ChART are released, information about the use and reliability of these stations will become available as well. In most states, it is anticipated that there will be NEVI funding remaining (and in some cases substantial funding) after they complete build-out of their AFCs, providing opportunities to deploy additional EV charging stations off AFC corridors and in communities with the remaining NEVI funds. Details on the number, type, and location for those additional stations are forthcoming in future plan updates.

The Joint Office has also made progress this year continuing its support of the NEVI program, while also supporting the launch of the CFI and Electric Vehicle Charger Reliability and Accessibility Accelerator programs; supporting the Low or No Emission Vehicle Program for Transit and Clean School Bus programs; issuing the first Joint Office FOA; expanding technical assistance activities and resources and participating in numerous efforts to improve the state of public EV charging, including strengthening cybersecurity; and supporting standardization and improved reliability with efforts such as the ChargeX Consortium, EVERest, and the new SAE J3400 standard, among others. All of these activities directly or indirectly support the success of NEVI and bolster the broader EV charging ecosystem.

Although progress has been made, there will continue to be challenges and learning ahead. The Joint Office remains committed to fostering a strong sense of community and supporting the continuous improvement that is so critical to our collective success in decarbonizing transportation by making it easy for anyone to ride and drive electric.

That network is beginning to unfold, and the work that has been done lays the foundation for accelerated build-out toward the goal of having a convenient, reliable, American-made EV charging network. As NEVI stations continue to open, the Joint Office will keep supporting this network with new technical assistance and resources, stakeholder engagement, and related funding opportunities that make sure every community can access reliable EV options.

Key Findings from the Fiscal Year 2024 State Plan Updates

- All 52 plan updates were submitted and approved by FHWA, releasing another \$885 million of FY 2024 funds to support implementation of those plans. This is in addition to the \$1.5 billion released with approval of FY 2022/FY 2023 deployment plans.
- States continue to designate new AFCs. Approximately 6,000 miles of new AFCs were designated in 2023, increasing coverage of the Interstate Highway System to 94%. All states include designated portions of the National Highway System as AFCs, with roughly 81,000 miles in total, and prioritize build-out along the Interstate Highway System.
- Plan updates provided additional details in key areas such as contracting, planning, and station deployment descriptions, yet there is still room for improvement. General areas of plans that could be enhanced next year include cybersecurity, program evaluation, community engagement outcomes, and measuring and tracking Justice40 implementation. These topics will be emphasized in technical assistance provided by the Joint Office.
- Discretionary exceptions continue to be a tool that states are using to provide flexibility in their deployment to meet unique challenges, especially in areas of the rural West. A total of 71 exception requests (requirements for station spacing along highways or station locations from highways) were submitted; 29 were withdrawn after additional discussion with the requestor determined that they were not needed, 38 were approved, and 4 were denied.

Appendix A. Annual NEVI Formula Program Apportionment Schedule by State

	Actual FY 2022 Funding	Actual FY 2023 Funding	Actual FY 2024 Funding	Estimated FY 2025 Funding	Estimated FY 2026 Funding	Estimated Total Funding
National	\$615,000,000	\$885,000,000	\$885,000,000	\$885,000,000	\$885,000,000	\$4,155,000,000
Alabama	\$11,738,801	\$16,892,267	\$16,892,384	\$16,892,399	\$16,892,434	\$79,308,285
Alaska	\$7,758,240	\$11,164,195	\$11,164,272	\$11,164,282	\$11,164,305	\$52,415,294
Arizona	\$11,320,762	\$16,290,704	\$16,290,816	\$16,290,830	\$16,290,864	\$76,483,976
Arkansas	\$8,010,850	\$11,527,704	\$11,527,783	\$11,527,793	\$11,527,817	\$54,121,947
California	\$56,789,406	\$81,720,595	\$81,721,161	\$81,721,230	\$81,721,400	\$383,673,792
Colorado	\$8,368,277	\$12,042,045	\$12,042,129	\$12,042,139	\$12,042,164	\$56,536,754
Connecticut	\$7,771,342	\$11,183,049	\$11,183,127	\$11,183,136	\$11,183,159	\$52,503,813
Delaware	\$2,617,339	\$3,766,380	\$3,766,406	\$3,766,409	\$3,766,417	\$17,682,951
D.C.	\$2,468,807	\$3,552,641	\$3,552,666	\$3,552,669	\$3,552,676	\$16,679,459
Florida	\$29,315,442	\$42,185,251	\$42,185,543	\$42,185,579	\$42,185,666	\$198,057,481
Georgia	\$19,978,342	\$28,749,059	\$28,749,258	\$28,749,282	\$28,749,342	\$134,975,283
Hawaii	\$2,616,956	\$3,765,829	\$3,765,855	\$3,765,858	\$3,765,866	\$17,680,364
Idaho	\$4,425,511	\$6,368,360	\$6,368,404	\$6,368,409	\$6,368,422	\$29,899,106
Illinois	\$21,998,178	\$31,655,626	\$31,655,845	\$31,655,872	\$31,655,938	\$148,621,459
Indiana	\$14,743,125	\$21,215,523	\$21,215,670	\$21,215,688	\$21,215,732	\$99,605,738
Iowa	\$7,604,168	\$10,942,483	\$10,942,559	\$10,942,568	\$10,942,591	\$51,374,369
Kansas	\$5,847,059	\$8,413,984	\$8,414,042	\$8,414,049	\$8,414,067	\$39,503,201
Kentucky	\$10,280,470	\$14,793,712	\$14,793,815	\$14,793,827	\$14,793,858	\$69,455,682
Louisiana	\$10,859,512	\$15,626,960	\$15,627,068	\$15,627,081	\$15,627,114	\$73,367,735
Maine	\$2,856,158	\$4,110,043	\$4,110,072	\$4,110,075	\$4,110,084	\$19,296,432
Maryland	\$9,298,080	\$13,380,042	\$13,380,134	\$13,380,146	\$13,380,174	\$62,818,576
Massachusetts	\$9,397,238	\$13,522,732	\$13,522,825	\$13,522,837	\$13,522,865	\$63,488,497
Michigan	\$16,290,764	\$23,442,593	\$23,442,756	\$23,442,775	\$23,442,824	\$110,061,712
Minnesota	\$10,089,418	\$14,518,786	\$14,518,886	\$14,518,899	\$14,518,929	\$68,164,918
Mississippi	\$7,483,268	\$10,768,508	\$10,768,582	\$10,768,591	\$10,768,614	\$50,557,563
Missouri	\$14,647,722	\$21,078,237	\$21,078,383	\$21,078,400	\$21,078,444	\$98,961,186
Montana	\$6,348,350	\$9,135,347	\$9,135,410	\$9,135,418	\$9,135,437	\$42,889,962
Nebraska	\$4,472,243	\$6,435,608	\$6,435,652	\$6,435,658	\$6,435,671	\$30,214,832
Nevada	\$5,618,414	\$8,084,961	\$8,085,017	\$8,085,024	\$8,085,041	\$37,958,457
New Hampshire	\$2,556,450	\$3,678,760	\$3,678,786	\$3,678,789	\$3,678,796	\$17,271,581

	Actual FY 2022 Funding	Actual FY 2023 Funding	Actual FY 2024 Funding	Estimated FY 2025 Funding	Estimated FY 2026 Funding	Estimated Total Funding
New Jersey	\$15,448,790	\$22,230,983	\$22,231,137	\$22,231,156	\$22,231,202	\$104,373,268
New Mexico	\$5,681,977	\$8,176,429	\$8,176,486	\$8,176,493	\$8,176,510	\$38,387,895
New York	\$25,971,644	\$37,373,488	\$37,373,747	\$37,373,779	\$37,373,856	\$175,466,514
North Carolina	\$16,137,196	\$23,221,608	\$23,221,768	\$23,221,788	\$23,221,836	\$109,024,196
North Dakota	\$3,841,352	\$5,527,749	\$5,527,787	\$5,527,792	\$5,527,804	\$25,952,484
Ohio	\$20,739,853	\$29,844,883	\$29,845,089	\$29,845,114	\$29,845,177	\$140,120,116
Oklahoma	\$9,812,934	\$14,120,923	\$14,121,021	\$14,121,032	\$14,121,062	\$66,296,972
Oregon	\$7,733,679	\$11,128,851	\$11,128,928	\$11,128,937	\$11,128,961	\$52,249,356
Pennsylvania	\$25,386,631	\$36,531,648	\$36,531,901	\$36,531,932	\$36,532,008	\$171,514,120
Puerto Rico	\$2,020,490	\$2,915,577	\$2,909,472	\$2,908,724	\$2,906,890	\$13,661,153
Rhode Island	\$3,383,835	\$4,869,376	\$4,869,410	\$4,869,414	\$4,869,424	\$22,861,459
South Carolina	\$10,360,855	\$14,909,387	\$14,909,490	\$14,909,503	\$14,909,534	\$69,998,769
South Dakota	\$4,363,463	\$6,279,072	\$6,279,116	\$6,279,121	\$6,279,134	\$29,479,906
Tennessee	\$13,074,884	\$18,814,906	\$18,815,036	\$18,815,052	\$18,815,091	\$88,334,969
Texas	\$60,356,706	\$86,853,980	\$86,854,582	\$86,854,655	\$86,854,836	\$407,774,759
Utah	\$5,372,731	\$7,731,421	\$7,731,474	\$7,731,481	\$7,731,497	\$36,298,604
Vermont	\$3,140,247	\$4,518,851	\$4,518,882	\$4,518,886	\$4,518,895	\$21,215,761
Virginia	\$15,745,244	\$22,657,583	\$22,657,740	\$22,657,759	\$22,657,806	\$106,376,132
Washington	\$10,489,110	\$15,093,948	\$15,094,052	\$15,094,065	\$15,094,096	\$70,865,271
West Virginia	\$6,761,785	\$9,730,285	\$9,730,352	\$9,730,361	\$9,730,381	\$45,683,164
Wisconsin	\$11,642,061	\$16,753,057	\$16,753,173	\$16,753,188	\$16,753,222	\$78,654,701
Wyoming	\$3,963,841	\$5,704,011	\$5,704,051	\$5,704,056	\$5,704,067	\$26,780,026

Appendix B. Approved Discretionary Exceptions by State

State	Location	Type	Deviation (miles)
Alaska	Parks Highway mile 135 (north of Trapper Creek) to mile 210 (Cantwell)	50 mile	27
Alaska	Wasilla to Trapper Creek	50 mile	27
Alaska	Healy to Nenana	50 mile	16
Arizona	Kingman to Seligman (I-40)	50 mile	7
Arizona	Gila Bend to Casa Grande/Eloy (I-8)	50 mile	17
California	Ludlow to Fenner	50 mile	9
Hawaii	Hawai'i Island Waimea to Hilo	50 mile	5
Hawaii	Hawai'i Island Saddle Road	50 mile	27
Michigan	Rudyard	1 mile	1.5
Nevada	Fernley to Lovelock	50 mile	5
Nevada	Lovelock to Winnemucca	50 mile	21
Nevada	Winnemucca to Battle Mountain	50 mile	5
Nevada	Wells to West Wendover	50 mile	7
Nevada	Ely to Wells	50 mile	88
Nevada	Ely to Panaca	50 mile	68
New York	AFDC# 168489 in Newburgh	1 mile	0.2
New York	AFDC# 200684 in Saratoga Springs	1 mile	1
New York	Olean	1 mile	0.7
New York	AFDC# 205276 in Bath	1 mile	0.4
New York	AFDC# 166207 in Cheektowaga	1 mile	0.4
North Carolina	Smithfield	1 mile	0.7
North Carolina	Outer Banks	50 mile	2
Ohio	Mentor	1 mile	0.4
Ohio	Indian Meadow/Tiffin River Service Plazas to Wyandot/Blue Heron Service Plazas	50 mile	6.2
Oregon	Biggs Junction to Shaniko	50 mile	6
Oregon	Bandon and Gold Beach	50 mile	5
Oregon	Unity to Vale	50 mile	15
Pennsylvania	DuBois	1 mile	0.8
Utah	Cedar City to Beaver	50 mile	5
Utah	Ivie Creek to Green River	50 mile	36
Utah	Thompson Springs to Grand Junction, CO	50 mile	10
Utah	Delle to Wendover	50 mile	21

State	Location	Type	Deviation (miles)
Utah	Price to Green River	50 mile	14
Utah	Fillmore to Beaver	50 mile	9
Utah	Richfield to Beaver	50 mile	12
Utah	Moab to Monticello	50 mile	4
West Virginia	Elkview to Sutton	50 mile	6
Wyoming	Gillette to Buffalo	50 mile	26



Appendix C. Compendium of Examples from State NEVI Deployment Plans

Purpose

The purpose of this compendium is to group together examples of how states address some of the key topical areas in their plan updates. This appendix is a resource to guide states looking to their peers for how they approached a specific subject. The Joint Office has heard throughout the NEVI program that such state-to-state peer learning and communication is invaluable to both parties and results in improved processes and advancing their efforts. The plans noted below are a combination of the plans already highlighted in this report and additional examples provided here. This appendix is not intended to be an exhaustive list of the best examples from the state deployment plans, but rather offer a sample of how key NEVI topic areas are being addressed and provide links to the plans for more information.

Plan Vision and Goals

Each original state plan set forth the state's vision and goals to create a convenient, affordable, reliable, and equitable statewide and national EV network. The states were not required to update their vision and goals in 2023, but this section provided an opportunity to share how their strategies changed over the first year of the program. This included documenting completed goals, upcoming targets, and interim milestones as well responding to the updated NEVI guidance or changing state policies. This section also incorporated discussion on freight corridors and electrification.

- [Michigan](#) and [Nevada](#) both provided updates that reflected how their strategies have shifted since the original plans.
- [New York](#) and [Washington](#) provided overviews on how they are coordinating efforts across state programs.
- [Indiana](#) and [Oklahoma](#) discussed coordination across state borders.
- [South Carolina](#) and [Oregon](#) provided strong examples of EV working groups.
- [Georgia](#), [Indiana](#), [North Dakota](#), and [Wisconsin](#) all discussed freight corridors and electrification.

Public Engagement

States were encouraged to provide an update on their public involvement activities in the plan's development that reached all stakeholders, including but not limited to federally recognized Tribes, state public transportation agencies, and urban, rural, and underserved or disadvantaged communities. The states listed below provided detailed information on how they engaged their stakeholders and what resulted from those conversations:

- [Montana](#) will require vendors to create a community engagement strategy that will be implemented in each community and the surrounding area. They also

provided a comprehensive table of who was engaged, the topics that were discussed, and outcomes from the meeting.

- [New York's](#) plan update includes how the state approached engagement with a variety of groups, such as DACs, planning organizations, Tribes, utilities, and the EV industry.
- [Oklahoma](#) DOT stated the importance of clear and effective process as key to developing its NEVI plan and successfully created a flow chart to show their annual public engagement process.
- [California](#), [Indiana](#), [Iowa](#), [Utah](#), and [Wisconsin](#) were all also highlighted in this report for their public engagement.

Contracting

States were asked to provide any updates to their methods for contracting with third-party entities, including how they will ensure that those entities deliver, install, operate, and/or maintain EV charging infrastructure in a manner that leads to efficient and effective deployment against plan goals. States were asked to include the number, status, and timelines for existing and upcoming contracting mechanisms (e.g., RFPs, requests for quotes) and identify awarded contracts. States were also asked to identify and discuss scoring methods, including equity provisions. The following states provided strong contracting sections addressing the above topics and other areas of interest as noted:

- [California](#) provided a detailed description of the methods used to rank corridor groups for their first solicitation and a section on contractor engagement with local communities.
- [Oklahoma](#) provided a detailed discussion on their procurement process, including the documents a proposer must prepare and submit, a detailed timeline, and major next steps in the process.
- [Pennsylvania](#) described detailed steps in their contracting process, a contracting strategy for delivery of ongoing operations and maintenance, and strategies and contract provisions to promote competitive bids and cost containment.
- [Utah](#) and [Washington](#) also provided good examples of contracting sections.
- [Alaska](#), [Indiana](#), and [Ohio](#) were all highlighted in this report for having strong contracting sections.

Equity Considerations

The 2023 plan updates were required to explain how the state identified and reached out to DACs and the process the state will use to identify, quantify, and measure the benefits to those DACs. The plans listed below included clear and substantive descriptions in their equity sections to address these requirements:

- [Alabama's](#) plan update includes six focused maps on the location of EV showcases within Justice40 areas that identify proximity to multiple DACs and a state map overlaying existing and proposed AFCs on the state's Justice40 tracts.

- [Colorado](#) completed an EV equity study in 2022, which included developing an EV Equity Dashboard that helps the state identify priority areas for EV charging and related transportation goals, as well as an eight-step process toolkit that can be used to help support equitable outcomes in transportation electrification projects.
- [Rhode Island](#) has hired a dedicated environmental justice program manager responsible for meeting with community-based organizations and assisting with public outreach. Table 5 of Rhode Island’s plan update details all of the Justice40 considerations across multiple federal programs and agencies, including relevant stakeholder groups within the state and how they are being engaged.
- [Iowa's](#) plan update (Table 9.2) documents metrics for benefits to DACs. The table includes baseline values related to the number of electrician apprenticeships and enrolled electrical apprentices.
- [Utah](#) has developed the Utah Compact on Racial Equity, Diversity, and Inclusion as part of a toolkit that outlines a path for greater engagement with DACs. The state’s NEVI team is committed to developing additional measures through direct engagement with DACs, following the sentiment of the adage “nothing about us without us.”
- [California](#), [Georgia](#), [Illinois](#), [Maryland](#), [New Hampshire](#), [Oregon](#), [Pennsylvania](#), and [Washington](#) were all acknowledged in this report for their equity considerations.

Labor and Workforce Development

This section of the plan updates should include discussion of how the state will approach training, experience level, and diversity of the workforce installing and maintaining EV charging infrastructure. At a minimum, this should include a discussion of how the state will ensure that the workforce installing, maintaining, and operating chargers has appropriate licenses, certifications, and trainings (such as the EVITP) in compliance with 23 CFR 680.106(j). Plans should also discuss how these qualified workforce requirements are enforced through the state’s NEVI contracting and procurement strategies. The following states provide good examples of labor and workforce development discussions:

- [Alaska's](#) plan makes it clear that they are working to expand the number of contractors who use EVITP and specifically references using NEVI funds for workforce development.
- [Arkansas'](#) plan clearly identifies they are working to expand EVITP-certified workers.
- [California's](#) plan discusses engagement efforts and partnerships to ensure current trainings comply with 23 CFR 680.106(j) but also discusses plans to grow the workforce over time to meet NEVI and other EV charger deployment goals in the state.

- [New York](#) and [Ohio](#) are also highlighted in this report as good examples of labor and workforce development.

Program Evaluation

This section of the plan should describe the state's schedule and plan for evaluating performance in achieving its 5-year goals and vision. Evaluation of the effectiveness of this plan should include monitoring performance metrics, such as EV charging infrastructure usage, EV charging infrastructure reliability, customer satisfaction, equitable distribution and access to EV charging infrastructure within the state, greenhouse gas emissions, or other metrics that support creating a national network. This should include an assessment of a state's efficient use of federal funding, measured by the amount of charging leveraged per federal dollar. As applicable, states should provide a summary and assessment of the performance of EV chargers based on data submitted to the Joint Office in compliance with 23 CFR 680.112.

- [Arizona's](#) plan includes a table of metrics mapped to specific performance goals and notes the anticipated frequencies of measurement and the data sources. It also includes a discussion of the data reporting requirements from 23 CFR 680.
- [Ohio's](#) plan includes a general discussion of methodologies and provides a list of metrics and potential data sources in its program evaluation section.
- [Kentucky](#) and [North Dakota](#) were also identified in this report for their program evaluation sections.



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