Memorandum



Subject: INFORMATION: The National Electric Vehicle Infrastructure (NEVI) Formula Program Guidance Date: February 10, 2022

From: Andrew C. Rogers Chief Counsel

Anci

Gloria M. Shepherd Associate Administrator for Planning, Environment, and Realty

lora TT. Shedend

To: Division Administrators

In Reply Refer To: HCC and HEP

On November 15, 2021, the President signed into law the Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act (IIJA), (Pub. L. 117-58). The purpose of this memorandum is to highlight the new National Electric Vehicle Infrastructure (NEVI) Formula Program authorized under Paragraph (2) under the Highway Infrastructure Program heading in title VIII of division J of the BIL.

This memorandum provides background, funding eligibilities, and program guidance for implementation of these historic investments in electric vehicle (EV) charging infrastructure that will put the United States on a path to a nationwide network of 500,000 EV chargers by 2030 and ensure a convenient, reliable, affordable, and equitable charging experience for all users.

Under this program, each State is required to submit an EV Infrastructure Deployment Plan (Plan) that describes how the State intends to use its apportioned <u>NEVI Formula Program</u> funds in accordance with this guidance. No NEVI Formula Program funds shall be obligated by a State until FHWA approves that State's Plan, although staffing and other activities related to the development of a Plan will be eligible for reimbursement (in accordance with 2 CFR Part 200).

Plans must be submitted to the Joint Office of Energy and Transportation (Joint Office) not later than August 1, 2022 and the Federal Highway Administration (FHWA) will approve eligible Plans by September 30, 2022. States that submit plans before August 1, 2022 will be approved by FHWA on a rolling basis.

The Joint Office will play a key role in the implementation of the NEVI Formula Program. Much like the formalized partnership between the U.S. Departments of Transportation and Energy, FHWA Division

Offices should encourage State departments of transportation to coordinate directly with their State energy agencies in the development of Plans and in implementation of the NEVI Formula Program.

The Joint Office will provide direct technical assistance to States and FHWA Division offices to develop their Plans. Such requests for technical assistance should be directed to the Joint Office at https://www.DriveElectric.gov. The Joint Office is planning a series of outreach activities to support States in the development of their Plans. In addition, FHWA will host internal webinars to help Division Offices understand their roles and responsibilities under the NEVI Formula Program.

Unless noted in this guidance, the NEVI Formula Program shall be administered as if apportioned under chapter 1 of title 23, United States Code. As such, non-technical questions regarding the implementation of the NEVI Formula Program, such as those regarding financial management, non-Federal share, or other title 23 requirements, can be directed to FHWA.

General Guidance on use of Federal-Aid Highway Formula Funding

On December 16, 2021, FHWA issued guidance, "Policy on Using Bipartisan Infrastructure Law Resources to Build a Better America", hereafter "Policy", that serves as an overarching framework to prioritize the use of BIL resources on projects that will Build a Better America. That Policy is available on FHWA's BIL implementation website at the following URL:

https://www.fhwa.dot.gov/bipartisan-infrastructure-law/building_a_better_america-policy_framework.cfm

National Electric Vehicle Infrastructure Formula Program Bipartisan Infrastructure Law



Federal Highway Administration February 10, 2022

CONTENTS

OVEF	RVIEW	5
I.	NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) FORMULA PROGRAM	8
II.	FUNDING FEATURES	8
Α.	Authorization Levels	8
В.	NEVI Formula Program	9
C.	Federal Share and State/Local Match Requirements	10
D.	Specific Funding Requirements	11
III.	STATE EV INFRASTRUCTURE DEPLOYMENT PLANS	13
Α.	Plan Requirements and Deadlines	13
В.	Plan Format	14
C.	Equity Considerations	17
D.	Labor and Equitable Workforce Considerations	18
IV.	PROJECT ELIGIBILITY PROVISIONS	19
Α.	Project Eligibility	19
В.	Considerations for the Strategic Deployment of EV Charging Infrastructure by States	21
C.	Minimum Standards and Requirements for Projects Implemented under the	
	NEVI Formula Program	27
V.	PROGRAM ADMINISTRATION	28
Α.	Tracking NEVI Formula Program Funds	28
В.	Data Sharing	29
C.	Program Evaluation	29
VI.	TECHNICAL ASSISTANCE/TOOLS	29
Α.	Existing Station Location Data	30
В.	Relevant Network and Environmental Data	30
C.	Relevant Modeling Tools	30
D.	Relevant Equity and Climate Impact Tools	31

OVERVIEW

This memorandum provides background, funding eligibilities, and program guidance for the historic investments in Electric Vehicle¹ (EV) charging infrastructure made in the Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act (IIJA), Public Law 117-58 (Nov. 15, 2021).

The BIL makes the most transformative investment in EV charging in United States (U.S.) history that will put us on a path to a nationwide network of 500,000 EV chargers² by 2030 that ensures a convenient, reliable, affordable, and equitable charging experience for all users. This national network will:

- Accelerate equitable adoption of EVs, including for those who cannot reliably charge at home.
- Reduce transportation-related greenhouse gas emissions and help put the U.S. on a path to net-zero emissions by no later than 2050.
- Position U.S. industries to lead global transportation electrification efforts and help create family-sustaining union jobs that cannot be outsourced.

The BIL includes a total of up to \$7.5 billion in dedicated funding to help make EV chargers accessible to all Americans for local to long-distance trips. That \$7.5 billion is comprised of a \$5 billion formula program and a \$2.5 billion discretionary grant program:

- 1. National Electric Vehicle Infrastructure (NEVI) Formula Program. The \$5 billion NEVI Formula Program will provide dedicated funding to States to strategically deploy EV charging infrastructure and establish an interconnected network to facilitate data collection, access, and reliability. Initially, funding under this program is directed to designated Alternative Fuel Corridors³ for electric vehicles to build out this national network, particularly along the Interstate Highway System. When the national network is fully built out, funding may be used on any public road or in other publicly accessible locations. Ten percent of the NEVI Formula Program will be set-aside each fiscal year for the Secretary of Transportation to provide discretionary grants to help fill gaps in the national network. A separate process for these "gap-filling" grants will be established in future guidance.
- 2. Discretionary Grant Program for Charging and Fueling Infrastructure.⁴ The \$2.5 billion discretionary grant program is further divided into two distinct \$1.25 billion grant programs to support EV charger deployment. These discretionary grant programs will ensure charger deployment meets the Biden-Harris Administration priorities such as supporting rural charging, building resilient infrastructure, climate change, and increasing EV charging access in underserved and overburdened communities ("disadvantaged communities"):

¹All-electric vehicles (EVs), also referred to as battery electric vehicles, use a battery pack to store the electrical energy that powers the motor. EV batteries are charged by plugging the vehicle in to an electric power source. For the purposes of this guidance, EVs include passenger cars and light trucks, unless otherwise noted. ²More information describing electric vehicle infrastructure can be found at: <u>https://afdc.energy.gov/fuels/electricity_infrastructure.html</u> ³National Electric Vehicle Charging and Hydrogen, Propane, and Natural Gas Fueling Corridors (23 U.S.C. § 151(a)-(e)).

⁴National Electric Vehicle Charging and Hydrogen, Propane, and Natural Gas Fueling Corridors (23 U.S.C. § 151(f)).

- **Corridor Charging Grant Program.** This program will strategically deploy publicly accessible EV charging infrastructure and hydrogen, propane, and natural gas fueling infrastructure along designated Alternative Fuel Corridors.
- **Community Charging Grant Program.** This program will strategically deploy publicly accessible EV charging infrastructure and hydrogen, propane, and natural gas fueling infrastructure in communities.

This program guidance is focused specifically on the NEVI Formula Program, but additional guidance and information on the Corridor and Community Charging Grant Programs will be forthcoming in a future notice(s) of funding opportunity.

The BIL requires the Secretary of Transportation to establish a deadline by which States shall develop and submit a State EV Infrastructure Deployment Plan (Plan) that describes how the State intends to use its apportioned NEVI Formula Program funds in accordance with this guidance. Plans must be submitted to the Joint Office of Energy and Transportation (Joint Office) not later than **August 1**, **2022**. The Federal Highway Administration (FHWA) will review Plans and determine whether they are approved⁵ by **September 30**, **2022**. States that submit Plans before August 1, 2022 will be approved by FHWA on a rolling basis. No State may obligate its apportioned NEVI Formula Funds for EV charging infrastructure projects until that State's Plan has been submitted⁶ to the Joint Office and approved by FHWA, but staffing and development of the Plan will be eligible for reimbursement (in accordance with 2 CFR Part 200). See Section III for additional information about the State EV Infrastructure Deployment Plans.

Because NEVI Formula Program funds are directed to designated Alternative Fuel Corridors to build out a convenient, reliable, affordable, and equitable public charging network, States should first prioritize investments along the Interstate Highway System. States should review their designated Alternative Fuel Corridors and consider designating additional corridors as part of the sixth round of Request for Nominations.⁷

The BIL also requires the Secretary of Transportation, in coordination with the Secretary of Energy and in consultation with relevant stakeholders, to develop minimum standards and requirements applicable to EV chargers under these programs within 180 days of enactment. See Section IV-C for additional information about forthcoming minimum standards and requirements.

These programs will support the Justice40 Initiative⁸ which establishes a goal that at least 40% of the benefits of federal investments in climate and clean energy infrastructure are distributed to disadvantaged communities. This does not mean, however, that 40% of all charging infrastructure funded under this program must be located in disadvantaged communities. See Section VI-D for additional information.

https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/

⁵ Paragraph (2) under the Highway Infrastructure Program heading in title VIII of division J of BIL, states that "a State shall provide a plan to the Secretary, in such form and such manner that the Secretary requires".

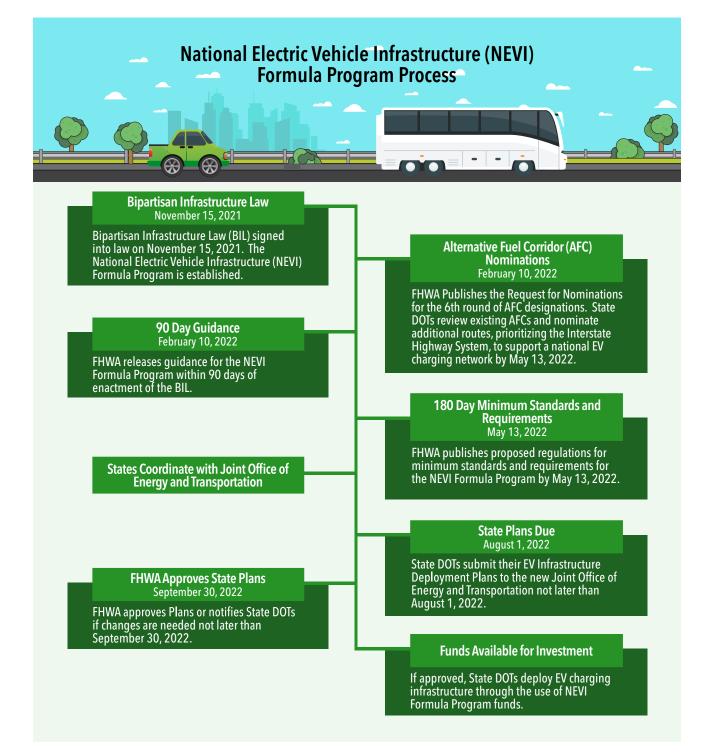
⁶ The development of the Plans is an eligible expense as a direct cost for use of the NEVI Formula Program funds.

⁷ For additional information about the sixth round of Request for Nominations for Alternative Fuel Corridors, please see:

⁸OMB, "Interim Implementation Guidance for the Justice40 Initiative," M-21-28 (July 20, 2021) available at https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf

This guidance has been developed by FHWA in coordination with the Department of Energy (USDOE) and is intended to provide general guidance to FHWA Division Administrators and State departments of transportation (DOTs) related to implementation of the NEVI Formula Program. State DOTs should coordinate closely with their State energy and environmental departments, among others, on the implementation of the NEVI Formula Program and to develop their State EV Infrastructure Deployment Plans. See Section IV-B(6) for additional information about this consultation.

This guidance will be supplemented with additional guidance, as necessary.



I. NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) FORMULA PROGRAM

The NEVI Formula Program is authorized under Paragraph (2) under the Highway Infrastructure Program heading in title VIII of division J of the BIL, which was signed into law on November 15, 2021.

The purpose of the NEVI Formula Program is to "provide funding to States to strategically deploy electric vehicle charging infrastructure and to establish an interconnected network to facilitate data collection, access, and reliability."⁹ To be effective, the EV charging infrastructure deployed under this program must provide a seamless customer experience for all users through a convenient, reliable, affordable, and equitable national EV charging network.

The State EV Infrastructure Deployment Plans created and updated under the NEVI Formula Program are the building blocks that will facilitate this national EV charging network. This national EV charging network will provide EV users with the confidence that they can travel long distances and expect reliable access to EV charging stations when needed, while also recognizing the unique needs of different regions and communities.

All funds associated with the NEVI Formula Program shall be administered as if apportioned under chapter 1 of title 23, United States Code, which encompasses requirements for States to receive Federal-aid funding.

The BIL also amends 23 U.S.C. 151 to establish two new discretionary grant programs to strategically deploy publicly accessible electric vehicle charging infrastructure, hydrogen fueling infrastructure, propane fueling infrastructure, and natural gas fueling infrastructure: the Discretionary Grant Program for Charging and Fueling Infrastructure (Corridor Charging Grants) and the Discretionary Grant Program for Charging and Fueling Infrastructure (Community Charging Grants). Additional guidance and information on the Corridor and Community Charging Programs will be forthcoming in future guidance and notice(s) of funding opportunity.

This guidance reflects public input received in response to a request for information that was published in the Federal Register on November 29, 2021.¹⁰ Future guidance will reflect additional input, as necessary.

II. FUNDING FEATURES

A. Authorization Levels

The BIL appropriates a total of \$5.0 billion for the NEVI Formula Program over the period of fiscal years 2022 through 2026. Table 1 shows the NEVI Formula Program levels by fiscal year.

¹⁰ 86 FR 67782

⁹ Under the NEVI Formula Program, the term "State" is given the same meaning as in section 101 of title 23, United States Code. Under 23 U.S.C. 101(a)(27), State means any of the 50 States, the District of Columbia, or Puerto Rico.

TABLE 1

	BIPARTISAN INFRASTRUCTURE LAW (BIL)					
Fiscal Year	2022	2023	2024	2025	2026	
Avance Appropriation (General Fund)	\$1.000 B	\$1.000 B	\$1.000 B	\$1.000 B	\$1.000 B	

B. NEVI Formula Program¹¹

Type of Budget Authority

• Current and advance appropriations from the General Fund.

Period of Availability

• Available until expended.

Pre-Apportionment Set-Asides

- For FY22 only, the BIL sets aside up to \$300 million for the Departments of Transportation and Energy to establish a Joint Office, which among other activities, is tasked with helping to formulate NEVI Formula Program guidance, best practices, and to provide vision, technical, and other assistance to States and localities in the planning and implementation of a national EV charging network, while also supporting additional transportation electrification efforts in the Federal government.
- For each year of FY22-26, after the set-aside listed above, the BIL sets aside 10 percent of EV Formula funding for grants to States and local governments that require additional assistance to strategically deploy EV charging infrastructure, as determined by the Secretary of Transportation.
- The BIL allows FHWA to use up to 1.5 percent of annual NEVI Formula Program funds for FHWA's operations and administration.

Distribution of Funds

- FHWA will distribute NEVI Formula Program funding (net of the pre-apportionment set-asides described above) among States including the District of Columbia and Puerto Rico on a formula basis. Under the formula, each State receives a share of program funding equal to the State's share of the combined amount that FHWA distributes in
 - o Federal-aid highway apportionments; and
 - o Puerto Rico Highway Program funding.
- This funding is not subject to any limitation on obligation.

¹¹ See FHWA NEVI Formula Program distribution table at: <u>https://www.fhwa.dot.gov/legsregs/directives/notices/n4510863.cfm</u>

C. Federal Share and State/Local Match Requirements

The Federal cost-share for NEVI Formula Program projects is 80 percent. Private and State funds can be used to provide the remaining cost-share. NEVI Formula Program funds can be spread further by combining them with other eligible USDOT funding for EV charging infrastructure projects if the eligibility requirements are met for both programs and the total Federal cost-share does not exceed 80 percent. See DOT Funding and Financing Programs with EV eligibilities below.

		-	-	-	
	FY 2022 ¹ AMOUNT			E	
FORMULA PROGRAMS	i i				
National Highway Performance Program (NHPP)	\$28.4 B ²	<u>Ľ</u> –			
Surface Transportation Block Grant Program (STBG)	\$12.5 B ^{2,3}	<u> </u>		E	
Congestion Mitigation & Air Quality Improvement Program (CMAQ)	\$2.5 B ²	<u> </u>			
National Highway Freight Program (NHFP)	\$1.4 B ²			E	
State Planning and Research (SPR)	\$983.3 M ⁴			E	
Metropolitan Planning (PL)	\$438.1 M ²			E	
Carbon Reduction Program	\$1.2 B ^{2,5}	<u>Ľ</u>		E	
National Electric Vehicle (NEVI) Formula Program	\$685 M ^{2,5,6}	<u>Ľ</u>		E	
DISCRETIONARY PROGRAMS					
Rebuilding American Infrastructure with Sustainability and Equity (RAISE) (formerly known as BUILD)	\$1.5 B	¥ ====		E	
Infrastructure for Rebuilding America (INFRA) Grant Program	\$1.64 B ^{2,7}	<u> </u>		E S	
Advanced Transportation and Technologies and Innovative Mobility Deployment	\$60 M ²				
Discretionary Grant Program for Charging and Fueling Infrastructure	\$300 M ^{2,5}	<u>Ľ</u> +		E	
Rural Surface Transportation Grant Program	\$300 M ^{2,5}	<u>Ľ</u>		E	
Reduction of Truck Emissions at Port Facilities Program	\$80 M ^{2,5,7}	<u>Ľ</u>			
OTHER ALLOCATED PROGRAMS					
Federal Lands and Tribal Transportation Program (FLTTP)	\$1.3 B ^{2,8}	<u> </u>		E	
Puerto Rico Highway Program (PRHP)	\$173 M ²	<u> </u>		E	
Territorial Highway Program (THP)	\$46 M ²	<u> </u>		E	
INNOVATIVE FINANCE PROGRAMS					
State Infrastructure Banks (SIBs)	Varies	<u> </u>		E	
Transportation Infrastructure Financing and Innovation Act (TIFIA)	\$250 M ²	<u>Ľ</u> +		E	

DOT Funding and Financing Programs with EV Eligibilities*

* All eligibility determinations are fact specific. Limitations may apply. Additional low and zero-emission fuel types also may be eligible under these programs.

Note: Total (in millions and billions, rounded to one decimal place)

¹ This table is limited to amounts made available for FY 2022. Unobligated balances of funds made available in prior fiscal years may also remain available for EV eligibilities. For FY 2021 amounts made available for EV eligibilities, see Federal Funding is Available For Electric Vehicle Charging Infrastructure On the National Highway System, April 2021, page 3.

² Highway authorizations under the Bipartisan Infrastructure Law. Set-asides have not been excluded except where specifically noted. https://www.fhwa.dot.gov/bipartisan-infrastructure-law/docs/highway_authorizations_nov302021.pdf

³ Amount does not include the Transportation Alternatives set-aside.

⁴ Amount includes set asides.

⁵ New funding program under Bipartisan Infrastructure Law. Pending program establishment. Please refer to program specific guidance.

⁶ Reflects the net amount after set-asides for FHWA operations and administration and for the Joint Office of Energy and Transportation.

⁷ Amount includes contract authority from the Highway Trust Fund and amounts appropriated in the Bipartisan Infrastructure Law.

⁸ Includes EV funding eligibilities under one or more FLTTP programs.

LEGEND

<u> </u>			ESS		
Construction and installation of EV charging infrastructure including parking facilities and utilities.	Workforce development and training related to EV infrastructure.	EV acquisitions and engine conversions – cars or trucks.	Planning for EV charging infrastructure and related projects.	Construction and installation of EV charging infrastructure to support operational, resiliency, national energy security, environmental, and community goals for freight transportation.	Installation of EV charging infrastructure as part of transit capital projects eligible under chapter 53 of title 49, United States Code.

D. Specific Funding Requirements

Statutory Requirements Associated with Alternative Fuel Corridors

- "Any EV charging infrastructure acquired or installed with NEVI Formula Program funds shall be located along a designated Alternative Fuel Corridor."
 - o States should prioritize the use of NEVI Formula Program funding for EV charging infrastructure along the Interstate Highway System.
 - o As infrastructure must be located along designated corridors, States should review designated Alternative Fuel Corridors and consider nominating additional corridors, prioritizing the Interstate Highway System first, in the current round of Request for Nominations.
 - o States may also use NEVI Formula Program funding elsewhere on designated corridors along the National Highway System, as necessary, to ensure a convenient, affordable, reliable, and equitable national network.
- "If a State determines, and FHWA certifies¹², that the designated Alternative Fuel Corridors for electric vehicles in the States are fully built out, then the State may use funds provided under the NEVI Formula Program for EV charging infrastructure on any public road or in other publicly accessible locations that are open to the general public or to authorized commercial motor vehicle operators from more than one company."
 - Publicly accessible locations may include public parking facilities, parking at public buildings, public transportation stations, Park-and-Rides, public schools, public parks, private parking facilities available for public use, and visitor centers and other public locations on Federal Lands.

¹² As delegated by the Secretary of Transportation.

- o Until FHWA certifies that a State's corridor is fully built out, NEVI Formula Program funding shall only be used along designated corridors to construct new EV charging infrastructure and upgrade existing EV charging infrastructure, and in both cases shall reflect the considerations in this guidance.
- o The Secretary will not consider the certification of a State's determination that the designated Alternative Fuel Corridors for electric vehicles within that State are fully built out during the first year of the NEVI Formula Program.
- If the Secretary certifies a State's determination that its Alternative Fuel Corridors for electric vehicles are fully built out, that certification will extend through FY 26 and will apply to all NEVI Formula Program funding. This certification should not be construed as implying that additional State, local, or private sector investment is not necessary or encouraged.
- A State's determination that the designated Alternative Fuel Corridors in that State are fully built out will be certified by the Secretary only when all designated corridors within that State (with prioritization given to Interstate Highway System corridors) meet the considerations outlined in this guidance.
- o The Secretary will not certify a State's designated Alternative Fuel Corridors for electric vehicles as being "fully built out" until the Secretary finds that the State's corridors meet the following criteria:
 - EV charging infrastructure is installed every 50 miles along the State's portions of the Interstate Highway System within 1 travel mile of the Interstate, unless a discretionary exception has been granted;
 - EV charging infrastructure includes at least four 150kW Direct Current (DC) Fast Chargers with Combined Charging System (CCS) ports capable of simultaneously DC charging four EVs;
 - EV charging infrastructure has minimum station power capability at or above 600kW and supports at least 150kW per port simultaneously across four ports for charging; and
 - Such additional considerations deemed necessary and appropriate by the Secretary of Transportation.

"All funding distributed under the NEVI Formula Program shall be for projects directly related to the charging of a vehicle¹³ and only to support EV charging infrastructure that is open to the general public or to authorized commercial motor vehicle operators from more than one company."

- o Renewable energy generation and storage, such as on-site solar panels, would be considered directly related if it leads to lower overall construction and operating costs, and therefore would be eligible.
- o The development of a State Plan is an eligible expense as a direct cost for use of the NEVI Formula Program funds.

Use of Contracts

 Funds made available under the NEVI Formula Program may be used to contract with a private entity for acquisition, installation, and operation and maintenance of publicly accessible EV charging infrastructure and the private entity may pay the non-Federal share of the cost of a project funded. States can own or lease EV charging infrastructure in accordance with 2 CFR part

¹³ See Section IV for more information.

200. States should demonstrate a contracting strategy that makes maximal efficient use of Federal funding.

- o FHWA anticipates that in most instances States will elect to contract with private entities for the installation, operation, and maintenance of EV charging infrastructure.
- Subject to contract terms, ownership of EV charging infrastructure does not need to revert to 0 the State when a State elects to contract with a private entity to install, operate, or maintain EV charging infrastructure.
- o Additional information regarding minimum standards and requirements associated with the installation, operation, and maintenance of EV charging infrastructure will be provided.

Transferability to Other Highway Formula Programs

States are prohibited from transferring NEVI Formula Program funding to other highway formula programs.¹⁴

III. STATE EV INFRASTRUCTURE DEPLOYMENT PLANS

A. Plan Requirements and Deadlines

Plan Process

- Each State is required¹⁵ to develop a Plan in accordance with this guidance and submit their final Plan not later than August 1, 2022 to the Joint Office.¹⁶
- States should work directly with the Joint Office during Plan development and to remedy any issues with their Plans before submitting final Plans not later than August 1, 2022. Technical assistance provided by the Joint Office is intended to help ensure State Plans will comply with all program guidance and requirements.
- FHWA will work with the Joint Office to review Plans and FHWA will notify each State if their Plan is approved for implementation and obligation not later than September 30, 2022.
- No NEVI Formula Program funds shall be obligated by a State until FHWA has approved¹⁷ that State's Plan; however, the development of the Plan, including reasonable and necessary staffing, is an eligible¹⁸ reimbursable expense as a direct cost for use of the NEVI Formula Program funds. See Section VI for further guidance on technical assistance offered to assist States in Plan preparation.
- All approved Plans will be publicly accessible via USDOT's website.
- If a State fails to submit a Plan consistent with this guidance¹⁹ by August 1, 2022, or if FHWA determines that a State has failed to take action to carry out its Plan, FHWA may withhold or withdraw, as applicable, funds made available under the Program for the fiscal year from the State

¹⁴ Paragraph (2) under the "Highway Infrastructure Program" heading in title VIII of division J of BIL.

¹⁵ Paragraph (2) under the "Highway Infrastructure Program" heading in title VIII of division J of BIL states that "a State shall provide a plan to the Secretary, in such form and such manner that the Secretary requires". ¹⁶ Plan should be submitted in both Word and pdf formats and should be compliant with Section 508 of the Rehabilitation Act.

¹⁷ Paragraph (2) under the Highway Infrastructure Program heading in title VIII of division J of BIL states that "a State shall provide a plan to the Secretary, in such form and such manner that the Secretary requires".

Under the cost principles at 2 CFR part 200.

¹⁹ Paragraph (2) under the Highway Infrastructure Program heading in title VIII of division J of BIL states that "a State shall provide a plan to the Secretary, in such form and such manner that the Secretary requires".

and award such funds on a competitive basis²⁰ to local jurisdictions within the State for use on projects that meet the eligibility requirements outlined in this guidance. FHWA will notify and consult with a State at least 90 days before making such a determination and identify actions the State can take to remedy deficiencies.

- FHWA will provide notice to a State on the intent to withhold or withdraw funds not less than 60 days before withholding or withdrawing any funds, during which time the States shall have an opportunity to appeal directly to the Secretary. If funds cannot be fully awarded to local jurisdictions within the State, the funds will be distributed among other States (except States for which funds for the FY have been withheld or withdrawn) in the same manner as funds distributed for that FY except that the ratio shall be adjusted to exclude States for which funds for that FY have been withheld or withdrawn.
- This guidance will govern at least the first round of Plans. Supplemental guidance may be issued in the future.

B. Plan Format

A recommended template for the Plans can be found at <u>https://www.DriveElectric.gov</u>.

Plans shall²¹ include all the necessary information required for FHWA to determine that the Plan satisfies the NEVI Formula Program requirements found in Paragraph (2) under the "Highway Infrastructure Program" heading in title VIII of division J of the BIL. At a minimum, the Plan narrative shall provide the content described below. Plans should be developed through consideration of this guidance and specifically Section IV. All Plan exhibits and attachments should clearly identify what area of the Plan the document supports.

FHWA will make all FHWA-approved Plans publicly available.

Introduction

This section of the Plan should introduce the Plan and the Plan development process to include a discussion of topics such as the Plan's study area, the dates of the analysis and adoption.

State Agency Coordination

The Plan should describe how the State DOT has coordinated with the State's energy and/or environment department in the development and approval of the Plan. The Plan should address any steps the State's DOT has taken or plans to take to maximize opportunities to utilize U.S.-made EV supply equipment.

Public Engagement

This section should discuss the involvement of particular stakeholder groups in the Plan's development to include the general public, governmental entities, federally recognized Tribes, labor organizations, private sector/industry representatives, representatives of the transportation and freight logistics industries, state public transportation agencies, and urban, rural, and underserved or disadvantaged communities. States should engage stakeholders and communities to ensure the

²⁰ Further information regarding a competitive process would be provided in a Notice of Funding Opportunity.

²¹ Paragraph (2) under the Highway Infrastructure Program heading in title VIII of division J of BIL states "a State shall provide a plan to the Secretary, in such form and such manner that the Secretary requires".

deployment, installation, operation, and use of EV charging infrastructure achieves equitable and fair distribution.

Plan Vision and Goals

The Plan should describe how it supports a convenient, affordable, reliable, and equitable statewide and national EV network. The Plan should describe how the State intends to use the funds distributed under the NEVI Formula Program to carry out the Program in each fiscal year in which funds are made available. The Plans should be updated on an annual basis to reflect the State funding Plans for that fiscal year. Each State should provide 5-year goals for the duration of the program that include at least one outcome-oriented goal with a quantitative target. This section of the Plan should also identify the overall vision and goals specific to the geography, demographics, and network of the State as consistent with the NEVI Formula Program.

Contracting

FHWA anticipates that in most instances States will contract with private entities for the installation, operation, and/or maintenance of EV charging infrastructure funded in whole or in part through the NEVI Formula Program. The Plan should detail whether the State intends to contract with third-party entities, and if so, how the State will ensure that those entities deliver EV charging infrastructure in a manner that leads to efficient and effective deployment against Plan goals. This section should also include a strategy for achieving efficient delivery and deployment and ongoing operation and maintenance. A contracting strategy that makes maximal efficient use of Federal funding will be an important consideration for approval of State plans. This section should also discuss how States will ensure that third-party entities contracted to install, operate, or maintain EV charging infrastructure will engage communities where EV charging infrastructure will be installed. Plans should also include a discussion of how the State will include opportunities for small businesses as provided at 23 U.S.C. 304. Additional information will be provided in support of this effort.

Existing and Future Conditions Analysis

This section should identify the existing conditions within the study area at the time of the Plan creation. It should include the best available information regarding the State's geography and terrain as it pertains to its EV charger deployment vision and challenges, current and future temperature and precipitation patterns, industry/market conditions (to include an overview of the existing state of EV charging, current and projected EV ownership, the location of existing EV charging, and a discussion of the roles of DC Fast Charging stations), public transportation needs, freight and other supply chain needs, grid capacity necessary to support additional EV charging infrastructure, electric utilities that service the study area, land use patterns, travel patterns, EV charging infrastructure, information dissemination about the EV charging station availability. This section should also include a discussion on known risks and challenges for EV deployment. For further guidance on the technical assistance offered for analysis, see Section VI in this document.

EV Charging Infrastructure Deployment

This section should discuss EV charging infrastructure installations and associated policies to meet the vision and goals of the Plan. The Plan does not need to include a list of exact EV charging infrastructure locations, but rather should include an overall strategy for installations along designated corridors that prioritizes build-out along the Interstate Highway System. Components of this section should include information about planned new EV charging infrastructure deployment location types, as well as existing

EV charging infrastructure locations planned for upgrade or expansion. Plans should also identify which utility's territory the planned installations or upgrades are located in.

The section should also include a map of the corridors that are planned for EV charging infrastructure installation or upgrade. The Joint Office can provide assistance to States to help develop these maps. Specifically, maps should include:

- 1. Approximate locations of planned EV charging infrastructure;
- 2. Approximate locations of existing EV charging infrastructure along those corridors, specifically noting existing EV charging infrastructure targeted for upgrade or improvement to meet the requirements of the NEVI programs;
- 3. EV charging infrastructure density along Alternative Fuel Corridors and the Interstate Highway System; and
- 4. Analysis on anticipated usage rates and peak demand, if available.

This section should also identify the source of non-federal funding for EV charging infrastructure deployments. It can include both immediate and longer-term actions but should identify actions to build-out Alternative Fuel Corridors, particularly those along the Interstate Highway System. It should also include actions that will be taken after the build-out of the State's Alternative Fuel Corridors has been accomplished, including ensuring that any portions of the Interstate Highway System not part of the designated Alternative Fuel Corridors for electric vehicles will be fully built-out. Funding topics covered should include funding amounts and sources (including the NEVI Formula Program at a minimum), use of public-private partnerships, and information about EV charging infrastructure ownership.

The overarching goal of the NEVI Formula Program is a seamless national EV charging network, so the Plan should also address how a State will coordinate and connect regionally with other States and adjoining networks.

Implementation

Implementation considerations should include EV charging operations and maintenance programs, and EV charging infrastructure data collection and sharing. The Plan should identify installation, maintenance, and ownership responsibilities for the charging infrastructure and take into account how those roles will ensure the long-term sustainability of the station. Critical to this will be the State's strategy to contract with private entities in a way that makes efficient use of Federal funds to ensure maximal deployment at efficient unit cost. The Plan should also demonstrate how the implementation will promote strong labor, safety, training, and installation standards as well as opportunities for the participation of small businesses. The Plan should also address emergency and evacuation needs, snow removal and seasonal needs, and ways for EV charging to support those needs. The Plan should also describe strategies for resilience for operation during emergencies and extreme weather.

<u>Civil Rights</u>

This section of the Plan should discuss how the State planning and implementation will ensure compliance with State and Federal civil rights laws, including Title VI of the Civil Rights Act and accompanying USDOT regulations, the American with Disabilities Act, and Section 504 of the Rehabilitation Act.

Equity Considerations

The Plan should be developed through engagement with rural, underserved, and disadvantaged communities and stakeholders, including relevant suppliers and contractors, and describe how the Plan reflects that engagement (defined further in Section III-C).

Labor and Workforce Considerations

This section of the Plan should consider the training, experience level, and diversity of the workforce that is installing and maintaining EV charging infrastructure. See Section III-D for additional information.

Cybersecurity

This section of the Plan should discuss how the State will address cybersecurity. The Plan should identify considerations when software updates are made to ensure the station or vehicle is not compromised by malicious code, or that a vehicle infects other stations during future charges.

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.

Discretionary Exceptions

As part of the development and approval of State Plans, and in very limited circumstances, a State may submit a request for discretionary exceptions from the requirement that charging infrastructure is installed every 50 miles along that State's portion of the Interstate Highway System within 1 travel mile of the Interstate, as provided in the Alternative Fuel Corridors request for nominations criteria. All approved exceptions will be supported by a reasoned justification from the State that demonstrates the exception will help support a convenient, affordable, reliable, and equitable national EV charging network. Exceptions must be clearly identified and justified in State plans. Additional coordination with FHWA and the Joint Office may be necessary before any exception is approved. Exceptions will be approved on a case-by-case basis and will be adjudicated prior to approval of a Plan.

Discretionary exceptions should only be requested to ensure consistency across the national network and will be granted sparingly. Examples that may support an exception include charging in disadvantaged communities, rural areas, or where grid capabilities are limited.

C. Equity Considerations

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 equitable benefits from these systems, while other historic barriers to transportation have made facilities inaccessible to individuals with disabilities. For

these reasons, the NEVI Formula Program will emphasize equity considerations at its inception to avoid exacerbating existing disparities in the transportation system and to develop a convenient, reliable, affordable, and equitable charging experience for all users.

NEVI Formula Program investments in EV charging infrastructure have the potential to:

- 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;
- 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 disadvantaged communities;
- Increase energy resilience;
- Provide charging infrastructure for transit and shared-ride vehicles;
- Increase equitable access to the electric grid; and
- Minimize gentrification-induced displacement result from new EV charging infrastructure.

Plans should be developed through engagement with rural, underserved, and disadvantaged communities to ensure that diverse views are heard and considered throughout the planning process, and to ensure that the deployment, installation, operation, and use of EV charging infrastructure achieves equitable and fair distribution of benefits and services. State Plans should reflect this engagement.

State Plans should explain how the State will deliver projects under the NEVI Formula Program that, consistent with E.O. 14008 and the Interim Justice40 Guidance²² issued by the White House and USDOT, target at least 40 percent of the benefits towards disadvantaged communities. Consistent with the Justice40 Interim Guidance, USDOT and USDOE have developed an EV Charging Justice40 Mapping Tool²³ that States are encouraged to utilize during the development of their Plans.

Labor and Equitable Workforce Considerations D.

Installing, operating, and maintaining the NEVI Formula Program's EV charging infrastructure will create new opportunities for workers in the electrical and other construction trades, while also creating work for the skilled incumbent workforce around the country. To ensure safety and highguality delivery, each State Plan should consider the training and experience level of the workforce that is installing and maintaining EV charging infrastructure. This includes ensuring the workforce is trained in high quality training programs like the Electric Vehicle Infrastructure Training Program (EVITP).

To help meet the workforce needs of the NEVI Formula Program, each State Plan should also consider steps that will grow and diversify their local workforce. This includes utilizing geographic, economic,

 ²² Section 219 of Executive Order 14008, Tackling the Climate Crisis at Home and Abroad and OMB, "Interim Implementation Guidance for the Justice40 Initiative," M-21-28 (July 20, 2021) available at https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf
 ²³ https://anl.maps.arcgis.com/apps/webappviewer/index.html?id=33f3e1fc30bf476099923224a1c1b3ee

or other hiring preferences or innovative contracting approaches authorized by law to maximize job creation and economic benefits for local communities. This also includes taking proactive steps to encourage broader participation among women, Black, Latino, Asian American Pacific, Indigenous, and other underrepresented groups in the development of those workforces. States should also consider how they can expand registered apprenticeship, including through the use of apprentices on installation projects, and invest in entry-level training programs, like quality pre-apprenticeship programs. Consistent with Justice40²⁴, States should also consider how disadvantaged communities will benefit from this added job growth.

Strong labor, training, and installation standards will help produce a nationwide network of 500,000 EV chargers by 2030 that provides a convenient, reliable, affordable, and equitable charging experience for all users. See section VI-C for additional information on labor and workforce requirements that may be included in the minimum standards and requirements to be established by the Secretary of Transportation, in coordination with the Secretary of Energy and in consultation with relevant stakeholders.²⁵

IV. PROJECT ELIGIBILITY PROVISIONS

A. Project Eligibility

NEVI Formula Program funds are restricted to projects that are directly related to EV charging infrastructure that is open to the public ²⁶ or to authorized commercial motor vehicle operators from more than one company. ²⁷

In general, NEVI Formula Program funds may be used for:

"(1) The acquisition and installation of EV charging infrastructure to serve as a catalyst for the deployment of such infrastructure and to connect it to a network to facilitate data collection, access, and reliability"

- This includes upgrades to existing public charging stations to meet NEVI Formula Program considerations and requirements or resulting expansions to station charging capacity needed to meet overall network demand.
- This also includes on-site distributed energy resources (e.g. solar arrays, energy storage). See additional considerations in Section IV-B.

"(2) Operating assistance for costs allocable to operating and maintaining EV charging infrastructure acquired or installed under this program, for a period not to exceed five years"

• It is anticipated that such operating assistance may be needed at some locations with lower utilization but that are key to having a contiguous, national network and to address equity

²⁴ <u>https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf</u>

²⁵ Paragraph (2) under the Highway Infrastructure Program heading in title VIII of division J of BIL.

²⁶ Publicly accessible means the equipment is available to the public without restriction. A station that is not maintained or restricts access only to customers, tenants, employees, or other consumers is not publicly accessible. Please note that while hydrogen, propane, and natural gas fueling infrastructure are not eligible under the NEVI Formula Program, these additional fuels are eligible under the Corridor Charging Grants and the Community Charging Grants (23 U.S.C. § 151).

²⁷ Paragraph (2) under the Highway Infrastructure Program heading in title VIII of division J of BIL.

issues in both rural and urban areas where current levels of EV ownership make such lower utilization more likely. Other locations will not need this assistance for a commercial entity to run and operate. States should focus NEVI Formula Program funding for operating assistance to only those locations that most require operating assistance that will ensure a contiguous, national network or to address equity issues in rural and urban areas where current levels of EV ownership make lower utilization more likely. Funding decisions should be reviewed as the network matures.

"(3) Development phase activities relating to the acquisition of stations and equipment as well as installation of EV charging infrastructure"

- Development phase activities include planning (including the development of the Plan), feasibility analysis, revenue forecasting, environmental review, preliminary engineering and design work, and other preconstruction activities.
- This includes community outreach and participation, including with rural, Tribal, and disadvantaged communities, to facilitate equitable and accessible deployment of EV charging infrastructure.

"(4) Traffic control devices and on-premise signs to provide information about EV charging infrastructure acquired, installed, or operated"

• This includes accessible signage that directs drivers to an EV charging station location and signage that provides information at the EV charging station location.

"(5) Data sharing about EV charging infrastructure to ensure the long-term success of investments"

• This includes, to the extent practicable, costs related to the specific data sharing requirements of this program as well as costs of data sharing on all chargers and charging activities on the EV network.

"(6) The acquisition or installation of traffic control devices located in the right-of-way to provide directional information to EV charging infrastructure acquired, installed, or operated under the NEVI Formula Program."

 Traffic control devices, consistent with the Manual on Uniform Traffic Control Devices (MUTCD), include signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, bikeway, or private road open to public travel.²⁸

"(7) Mapping and analysis activities to evaluate in an area in the United States designated by the eligible entity:"

- "The locations of current and future EV owners."
 - o This includes identifying disadvantaged communities with the greatest disparity of EV investments and estimating the benefits to disadvantaged communities in alignment with Justice40.
- To forecast commuting and travel patterns of EVs and the quantity of electricity required to serve EV charging stations."

²⁸ For traffic control device, standards, guidance and supporting information, please see the Manual on Uniform Traffic Control Devices for Streets and Highways.

- o This includes electric service readiness and future public transportation electrification needs.
- "To estimate the concentrations of EV charging sites and stations to meet the needs of current and future EV drivers."
 - o This includes the appropriate power level and quantity of charging stations.
- "To estimate future needs for EV charging stations to support the adoption and use of EVs in shared mobility solutions, such as micro-transit, transportation network companies, and medium- and heavy-duty EVs."
- "To develop an analytical model to allow a city, county, or other political subdivision of a State or a local agency to compare and evaluate different adoption and use scenarios for EVs and EV charging stations."
 - o This includes Federal land management agencies, public transportation agencies, and economic development authorities.
 - o State DOTs may wish to review Section VI on Technical Assistance in this document to better understand whether they should undertake these mapping and analysis functions themselves or obtain assistance from the Joint Office.

B. Considerations for the Strategic Deployment of EV Charging Infrastructure by States

This program guidance is specifically intended to assist States in developing their Plans for the strategic deployment of EV charging infrastructure with consideration given to nine specific areas as required by the BIL. Guidance for each of these specific considerations is provided below and organized under each applicable excerpt from the BIL bolded for reference.

States should develop their Plans under the NEVI Formula Program consistent with these considerations and with the overarching goal for construction, installation, or upgrade of EV charging infrastructure to be completed not later than six months from procurement. Any State seeking a discretionary exception should document those exceptions in the Plan (see Section III-B and "discretionary exception" section of the State Plan template).

"(1) the distance between publicly available EV charging infrastructure"

- EV charging infrastructure should be conveniently and safely located as close to Interstate Highway System and highway corridors as possible and in general no greater than 1 mile from Interstate exits or highway intersections along designated corridors.
 - o The 1 mile should be measured as the shortest driving distance from the Interstate Highway System exit or highway intersection to the proposed station at the time of the proposal.
 - o Stations on public lands in close proximity to the corridor (including Federal lands) may be prime siting locations and should be considered in a Plan.
 - o Exceptions from the no greater than 1 mile from the Interstate Highway System or highway requirement may be made where there is no electrical service or business activity within 1 mile of the Interstate exit or highway. States should work with the Joint Office during the

development of their Plan to identify and attempt to resolve any exception requests. That exception process is explained below in Section III-B.

- NOTE: The 1-mile distance in this guidance diverges from past designations of Alternative Fuel Corridors, and such corridors may need additional stations or upgrades to meet this consideration. Currently designated Alternative Fuel Corridors for electric vehicles will not need to be redesignated if they do not comply with this provision but will not be certified as "fully built out" if they do not meet the criteria established above in Section II.
- New EV charging infrastructure locations should be spaced a maximum distance of 50 miles apart along designated corridors (including planned stations and existing stations, with both conforming to NEVI Formula Program minimum standards and requirements), unless a discretionary exception has been granted.
 - o In initial planning and during the development of their Plans, States should also consider existing stations that substantially meet the minimum standards and requirements to be published in their spacing plans and work to upgrade and expand the capacity of these stations.

"(2) connections to the electric grid, including electric distribution upgrades; vehicle-to-grid integration, including smart charge management or other protocols that can minimize impacts to the grid; alignment with electric distribution interconnection processes, and plans for the use of renewable energy sources to power charging and energy storage"

- EV charging infrastructure should provide power for EV charging regardless of time of day or time of year in a manner that supports a robust and reliable network. Specifically, stations should be designed to:
 - o Achieve a high-level of reliability (>97 percent at the individual station level);
 - o Mitigate adverse impacts to the electric grid;
 - o Maintain cost of charging at a price that is reasonable (for example, comparable to competitive market);
 - o Minimize demand charges or other fixed utility fees; and
 - o Provide high speed charging for travelers on the Interstate Highway System and Alternative Fuel Corridors.
- EV charging infrastructure design should include consideration of the following:
 - o Equipment that connects EV charging stations to the electric grid must be directly related to the charging of a vehicle.
 - o Accessibility.
 - o Fire protection and other traffic safety features.
 - o The inclusion of distributed renewable energy resources (e.g. solar arrays, energy storage) and electric distribution and switching equipment where practicable.
 - o The use of station-level load management or smart charge management in a transparent manner that can encourage grid stability and reduce costs to EV charging station users.
 - o Plan for future proofing that allows expansion for growing demand and higher power levels.
 - o The Joint Office will work with States to identify best practices on EV charging infrastructure design.
- States should work with applicable federal, State and local permitting agencies to identify and streamline permitting processes for EV charging infrastructure installation, including

energy storage and renewable energy generation, to support operations within six months of procurement.

- o The Joint Office will work with States to identify best practices to expedite this process.
- States should also work with local utilities, transmission and distribution operators, and public utility commissions to identify and streamline the planning and approval of grid connections for EV charging infrastructure, including energy storage and renewable energy generation, to support operations within six months of procurement.
 - o The Joint Office will work with States to identify best practices to expedite this process.

"(3) the proximity of existing off-highway travel centers, fuel retailers, and small businesses to EV charging infrastructure acquired or funded under this paragraph in this Act"

• States should consider locations at or immediately adjacent to land uses with publicly accessible restrooms, appropriate lighting, and sheltered seating areas such as travel centers, food retailers, convenience stores, visitor centers on Federal lands, small businesses with an Americans with Disabilities Act (ADA) accessible pathway between the EV charging infrastructure and the front door of the identified establishment, and other comparable facilities.

"(4) the need for publicly available EV charging infrastructure in rural corridors and underserved or disadvantaged communities"

- The distribution of EV charging infrastructure across a State should specifically target locations and benefits to rural areas, underserved and overburdened communities, and disadvantaged communities, including Tribal lands, through analysis of existing service to these areas in a State.
 - o This includes:
 - Prioritizing access of EV charging infrastructure to serve rural, underserved and disadvantaged communities.
 - Identifying gaps in existing service and charging station availability to rural, underserved, and disadvantaged communities in the State.
 - Planning to distribute NEVI Formula Program funds to benefit rural, underserved, and disadvantaged communities in the State.
 - Targeting at least 40 percent of the benefits towards disadvantaged communities in accordance with Justice40.
 - Engaging stakeholders from rural, tribal, underserved, and disadvantaged communities.
- For further guidance, see Section III-C in this document for a discussion of Equity considerations.

"(5) the long-term operation and maintenance of publicly available EV charging infrastructure to avoid stranded assets and protect the investment of public funds in that infrastructure"

- EV charging infrastructure should be maintained in good working order and:
 - o In compliance with all EV charging infrastructure manufacturer requirements;
 - o In compliance with all requirements in the forthcoming minimum standards issued by FHWA; and

- o At the same location for a period of no less than 5 years from the installation date with the consideration of service beyond the NEVI Formula Program funds.
- EV charging infrastructure should be operated and maintained with a focus on public road safety, including, the provision of adequate lighting, fire protection, and other traffic safety features. Potential conflicts with non-motorized and public transportation travel in multi-modal corridors should be addressed through safe design and countermeasures.
- EV charging infrastructure should use charging network providers with demonstrated experience or capability for at least the entire 5-year in-service requirement with plans to keep the stations in service beyond the availability of NEVI Formula Program funds.
- Owners of NEVI Formula Program funded EV charging infrastructure should provide reasonable plans and guarantees for maintaining the chargers, related equipment, and overall charging locations in good working order.
- To avoid stranded assets, EV charging infrastructure should be capable of using open protocols and standards for network connectivity to meet interoperability requirements to allow for easier transfer of operations to a new network provider if needed in the future.

"(6) existing private, national, State, local, Tribal, and territorial government EV infrastructure programs and incentives"

- Decisions about siting, construction, installation, operation, and maintenance should involve consultation with relevant stakeholders to coordinate existing EV charging infrastructure programs and incentives. The involvement of relevant private entities, Federal, State, local, Tribal and territorial governments should allow for the identification of opportunities for States to leverage the NEVI Formula Program funds in concert with other funding/deployment programs including those managed by other agencies.
 - o EV charging programs and grid management is often addressed by both State departments of transportation and/or State energy offices, so Plans under this program should be carefully coordinated across both groups.
- States should consult with entities including:
 - o Metropolitan Planning Organizations and Regional Transportation Planning Organizations;
 - o Counties and cities, including coordination with existing EV charging programs;
 - o State departments of energy, including Clean Cities Coalitions²⁹, as applicable;
 - o State environmental protection agencies;
 - o State economic development agencies;
 - o State public utility commissions;
 - o State weights and measurement agencies;
 - o State and Federal land management agencies;
 - o State manufacturing extension partnerships;
 - o State department of motor vehicles;
 - o State department of commercial motor vehicles;
 - o Responsible emergency/disaster preparedness functions in the State;
 - o Tribal governments;

²⁹ <u>https://cleancities.energy.gov/coalitions/locations</u>

- o Electric utilities and transmission and distribution owners and regulators;
- o Electric vehicle service providers;
- o Public transportation agencies;
- o Port and freight authorities;
- o Community-based organizations, environmental justice and environmental protection organizations, small business associations, Chambers of Commerce; labor organizations, and private entities; and
- o Other appropriate parties.
- For further guidance, see Section III in this document for a discussion of Plans.

"(7) fostering enhanced, coordinated, public-private or private investment in EV charging infrastructure"

- The purpose of public funding is not to discourage private investment, but instead to catalyze additional private investment and supplement and fill gaps to provide a convenient, reliable, affordable, and equitable national EV charging network.
- States are encouraged to develop programs with cost-share requirements or rebates to leverage private investment in EV charging and maximize the impact of NEVI Formula Program funding. Cost-share and rebate programs can be powerful tools for optimizing infrastructure deployment by providing States the opportunity to partner with existing EV infrastructure providers without bearing additional risk of upfront funding prior to deployment and diminishing the risk of half-built or stranded assets.
- The involvement of relevant private sector and industry representatives throughout the development and deployment of the Plan should allow for the identification of EV charging market opportunities and challenges, along with potential solutions to address them.
 Coordinated planning across private and public investments is necessary to provide a seamless and convenient national network.
- States should consult with entities including:
 - o Private sector EV charging infrastructure owners and network operators;
 - o Vehicle manufacturers;
 - o Unions and other labor organizations;
 - o Utilities;
 - o Real estate industry groups;
 - o Minority- and women-based organizations;
 - o Freight industry groups;
 - o Relevant environmental justice, equity, environmental protection, and other community advocacy organizations;
 - o EV industry organizations and EV advocacy groups, as applicable;
 - o Gas station owners and operators;
 - o Taxicab commissions and ridesharing companies;
 - o Emergency management and public safety agencies; and
 - o Other appropriate parties.
 - For further guidance, see Section III in this document for a discussion of Plans.

"(8) meeting current and anticipated market demands for EV charging infrastructure, including with regard to power levels and charging speed, and minimizing the time to charge current and anticipated vehicles"

- All EV charger infrastructure installed as part of the NEVI Formula Program along the designated corridors should be Direct-Current (DC) Fast Chargers. Stations should be designed to provide at least four Combined Charging System (CCS) ports capable of simultaneously charging four EVs. Station power capability should be no less than 600 kW (supporting at least 150 kW per port simultaneously across four ports) for charging.
- Maximum charge power per DC port should not be below 150 kW and should consider design and construction practices that allow for 350kW or greater charging rates through future upgrades.
- Power sharing across ports should be permitted so long as it does not reduce the maximum output per port below 150 kW. For stations with ports above 150kW, States should support station design that facilitate power sharing across ports. For more information on forthcoming minimum standards and requirements, see Section C below.
- Station designs should also consider the potential for future expansions needed to support the electrification and charging demands of medium- and heavy-duty trucks, including station size and power levels.
- Stations should be designed to allow for future upgrades and updates to power levels and number of chargers, to the extent possible and within reason. The Joint Office will publish best practices for EV charging infrastructure construction that will seek to allow flexibility in future upgrades.
- After a State has determined, and the Secretary of Transportation has certified, that the State's designated Alternative Fuel Corridors for electric vehicles are fully built out, that State will have additional flexibility to determine the type and location of any additional EV charging infrastructure installed, operated, and maintained under NEVI Formula Program.

"(9) any other factors, as determined by the Secretary"

- Consumer Protection: States should consider how they will safeguard purchasers of goods and services against defective products, excessive costs, and deceptive or fraudulent business practices.
- Cybersecurity: States should consider cybersecurity needs of the electrical grid, station, vehicles, and customers using EV charging infrastructure.
- Domestic Manufacturing: States should consider how to incorporate and utilize domestically manufactured EV charging infrastructure consistent with Buy America requirements.
- Emergency Evacuation Plans: States should consider emergency and evacuation needs, including how they will support overall emergency evacuation plans along roadways. Plans should also account for growing number of EVs using designated evacuation routes.
- Environmental siting/permitting considerations: States should consider the appropriate level

of review under the National Environmental Policy Act (NEPA) and other environmental laws, regulations, and Executive Orders including, but not limited to, the Clean Water Act, National Historic Preservation Act, Section 4(f), and Executive Orders 12898, 11988, and 13690.

- Developing the Plan will qualify for an environmental categorical exclusion (CE) under 23 CFR 771.117(c)(1) as an activity that does not lead directly to construction. The installation of EV charging infrastructure is a separate activity(s) that will require its own environmental approval.
- o As installation of EV charging infrastructure is generally the type of action that would not be expected to result in significant environmental impacts, several CEs may be applicable including those found at 23 CFR 771.117(c)(2, 19, 22, and 23) and (d), depending on the scope of the action and the CE's conditions.
- o Before a CE determination can be applied to an action, the action must be analyzed to determine whether there are unusual circumstances present that would require further analysis to determine whether the CE classification is appropriate (see 23 CFR 771.117(a-b)).
- States should also consider how they will complete permitting and environmental review processes to support operations within six months of obligating funds. For example, additional efficiencies can be achieved when multiple EV charging infrastructure projects are planned within a particular geographic area or under similar circumstance. In such cases, programmatic analyses can be used to analyze the common effects associated with a suite of projects in order to avoid having to perform analysis of those effects in each unique case and to streamline documentation.
- Resilience: States should consider the potential impacts of climate change and extreme weather events, including through the use of currently available USDOT tools and resources to assess the vulnerability and risk of planned and existing EV charging stations and the development, deployment, and monitoring of resilience solutions. States should also consider the location of existing and proposed EV charging infrastructure with respect to the Federal Flood Risk Management Standard, as well as how climate change may affect the floodplain, and construct EV charging infrastructure consistent with the Federal Flood Risk Management Standard, to the extent consistent with law. States should consider opportunities to add redundancy and improve the overall resilience of the national network of EV charging stations.
- Terrain: States should consider geographic terrain and snow removal and other seasonal needs.
- Other factors may be addressed in future guidance.

C. Minimum Standards and Requirements for Projects Implemented under the NEVI Formula Program

All applicable requirements under chapter 1 of title 23, United States Code, and 2 CFR part 200 apply to the administration of these funds. Also, before funds are obligated, projects must be included on the relevant Statewide Transportation Improvement Program/Transportation Improvement Program and long-range plans, and all State and Federal environmental requirements, such as compliance with the National Environmental Policy Act, must be complete. Additionally, minimum standards and requirements will be provided for the implementation of projects under the NEVI Formula Program as required by the BIL. Topics of these minimum standards and requirements could include:

- Installation, operation, or maintenance of EV Charging Infrastructure
 - o EnergyStar
 - o Americans with Disabilities Act
 - o EV Infrastructure workforce training and requirements
 - o Eligible expenses and direct costs
 - o Connector types, including eligibility of adapters
 - o Interoperability between EVs, EV Supply Equipment, EV Service Providers and the grid
 - o Minimum reliability and time-of-day accessibility requirements
 - o Station design
- Traffic Control & Signage
 - o Manual on Uniform Traffic Control Devices for Streets and Highways
 - o Accessibility
- Data Collection & Sharing
 - o Real-time data sharing protocols
 - o Publicly available location and station information sharing protocols
 - o Data to support reliability and usage analysis
- Network Connectivity and Payment
 - o Payment facilitation, display, source, and pricing information
 - o Session starting standardization
 - o Efficient EVSE management
 - o Use and reliability monitoring
 - o Remote diagnosis and problem resolution
 - o Smart charge management
 - o Open-source network connectivity
 - o Cybersecurity
- Accessibility of Information on Station Availability, Pricing, and Locations
 - o Requirements for making station locations visible through industry leading mapping services
 - o Real-time status (usage, offline, or needs service) broadcasting
 - o Stranded asset mitigation
 - o Detailed pricing transparency and display requirements

V. PROGRAM ADMINISTRATION

A. Tracking NEVI Formula Program Funds

The FHWA's Chief Financial Officer has established program codes in the Fiscal Management Information System (FMIS) to track State investments of NEVI Formula Program funds. States shall accurately reflect these NEVI Formula Program obligations as they record project data in the FMIS. In addition, projects funded under the NEVI Formula Program should utilize FMIS improvement type 63.

B. Data Sharing

FHWA will be providing minimum standards and requirements for data collection and sharing as required by the BIL.

Data sharing about EV charging infrastructure will be necessary to ensure the long-term success of the national EV charging network. States should consider requiring data describing charging usage, cost, and reliability to be shared with USDOT and USDOE to provide the feedback needed to adapt and improve the program.

To increase awareness of charging infrastructure and improve customer and station host satisfaction, States should consider requiring charging network providers to share data describing charging station location, type of equipment available, price, status, and other information via Application Programming Interface with public-facing directories, including the Alternative Fuel Data Center's Station Locator.

C. Program Evaluation

States should 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 5-year goals, including interim goals. States should collect data regarding location of EV charging infrastructure and the utilization rates for charging infrastructure funded under this Program and provide such data to the Joint Office.

Other evaluation indicators a State might consider:

- Program benefits, such as job creation, EV adoption, improved access to EV charging infrastructure, and benefits to underserved communities.
- Program success in creating charging infrastructure that is convenient, affordable, reliable, and equitable.
- Program progress, in terms of the quantity of funds distributed, number of funding recipients, the time required to construct new charging stations, and the number of charging stations constructed.

VI. TECHNICAL ASSISTANCE/TOOLS

The Joint Office will play an important role in the deployment of EV charging infrastructure. The Joint Office will work in concert with FHWA Division Offices to support the State plan development and implementation of the NEVI Formula Program. States should identify a NEVI Formula Program point of contact within their department of transportation as soon as possible, and once identified that individual should contact the Joint Office at https://www.DriveElectric.gov.

Recognizing that States and local governments may be at different stages in their EV charging infrastructure development, the Joint Office will provide technical assistance to States as they achieve a convenient, reliable, and equitable national network of EV chargers, regardless of where they are in the electric charging deployment process. This assistance will include:

- Development of State EV Infrastructure Deployment Plans;
- National interconnectivity;
- Hardware and network procurement;
- Deployment in rural corridors and underserved or disadvantaged communities; and
- Data collection and program evaluation.

Technical assistance will first leverage existing tools, datasets, best practices, and programs built by partners, USDOE, USDOT, and national laboratories. Examples include:

A. Station Location Data

Resources to help States understand where EV charging infrastructure is currently installed and where existing corridors are designated include:

- Alternative Fuel Data Center Station Locations: <u>https://afdc.energy.gov/stations/</u>
- Alternative Fuel Corridor Eligible Station Data: <u>https://afdc.energy.gov/corridors</u>
- FHWA Alternative Fuel Corridor Locations: <u>https://hepgis.fhwa.dot.gov/fhwagis/ViewMap.aspx?map=Highway+Information%7CElectric+V</u> <u>ehicle+(EV-Round+1,2,3,4+and+5)</u>

B. Network and Environmental Data

Resources to aid States in understanding external factors that will support their electric charging infrastructure deployment include:

- Alternative Fuel Corridors Program Best Practices and Information: <u>http://altfueltoolkit.org/</u>
- Alternative Fuels Data Center, State and Federal Laws and Incentives: <u>https://afdc.energy.gov/laws</u>
- Clean Cities Coalition Network: <u>https://cleancities.energy.gov/</u>
- National Highway Traffic Safety Administration (NHTSA) Fatality Analysis Reporting System (FARS):

https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars

- National Institute of Standards and Technology (NIST) Cybersecurity Framework: <u>https://www.nist.gov/cyberframework</u>
- Public Road Inventory Information, Highway Performance Monitoring System (HPMS) data: <u>https://www.fhwa.dot.gov/policyinformation/hpms/nahpms.cfm</u>

C. Modeling Tools

Resources to provide States modeling expertise and tools to plan charging locations, design charging stations, and perform financial analysis include:

- Idaho National Laboratory's Caldera Simulation Platform: <u>https://cet.inl.gov/caldera</u>
- National Renewable Energy Laboratory Electric Vehicle Infrastructure Modeling Suite: <u>https://www.nrel.gov/transportation/evi-x.html</u>

D. Equity and Climate Impact Tools

Resources to help States understand equity and climate considerations. Examples include:

- EV Charging Justice40 Mapping Tool: <u>https://www.anl.gov/es/electric-vehicle-charging-equity-considerations</u>
- FHWA Equity Analysis Screening Tool: <u>https://hepgis.fhwa.dot.gov/fhwagis/buffertool/</u>
- USDOT Rural EV Toolkit: <u>https://www.transportation.gov/rural/ev/toolkit</u>
- USDOE Low-Income Energy Affordability Data Tool: <u>https://www.energy.gov/eere/slsc/maps/lead-tool</u>
- USDOT Limited English Proficiency Guidance: <u>https://www.transportation.gov/civil-rights/civil-rights-awareness-enforcement/dots-lep-guidance</u>
- Argonne National Laboratory Energy Zones Mapping Tool: <u>https://ezmt.anl.gov/</u>
- Argonne National Laboratory Transportation Equity Analysis: <u>https://www.anl.gov/es/transportation-energy-equity-analysis-and-resources</u>

Additional Information

If you have questions about this program guidance, please contact Dawn Horan (<u>Dawn.M.Horan@dot.gov</u>) or Gary Jensen (<u>Gary.Jensen@dot.gov</u>).

For additional guidance on other Bipartisan Infrastructure Law and Federal-aid Highway Programs, please see FHWA's Bipartisan Infrastructure Law website at: <u>https://www.fhwa.dot.gov/bipartisan-infrastructure-law/</u>