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."

$175 million anticipated over the period of the Infrastructure Investment and Jobs Act (through September 30, 2026).
No change in existing law. FHWA (Title 23) rules apply to program deployment, including:

- Commercial service prohibition on interstates built after 1960
- Americans with Disabilities Act (ADA) requirements
- Buy America
- Uniform Relocation Assistance and Real Property Acquisition Policy Act
- National Environmental Policy Act (NEPA)

Funding restricted to the FHWA designated EV Alternative Fuel corridors (EV Corridors) with preference to interstate corridors.

Funding may be used "off" designated EV Corridors only after the FHWA determines that all these corridors are “fully built out.”
What does "built out" mean?

1. Charging station opportunities at least every 50 miles along designated EV Alternate Fuel corridors and no more than one travel mile off the designated EV corridor

2. Charging station infrastructure must have at least four 150 kW direct current (DC) fast chargers with combined charging system (CCS) ports capable of simultaneously charging four EVs

3. Charging infrastructure must have a minimum station power capability at or above 600kW
Considerations for EV Alternative Fuel Corridor Build Out and Use of NEVI Funds

Building out the Corridors

- Providing services along designated EV Corridors in rural areas.

  Issues to consider:

  - Lower usage; adequate power/cellular service; suitable site hosts

- Growing demand for DCFC along designated EV corridors in urban areas.

  Issues to consider:

  - Ensuring grid capacity; real estate/site hosts availability; higher demands; more DCFC currently available

- Future Needs:

  - Medium-Heavy Duty Vehicles

  - Needs beyond the designated EV corridors: e.g. Tourist locations beyond the corridors; Community Needs
Other Considerations

- NEVI Technical standards and requirements released in February 2023 by FHWA
- NYS PSC Proceeding to Establish Alternatives to Traditional Demand-Based Rate Structures for Commercial Electric Vehicle Charging that will impact the economics of DCFC site locations.
- Supply chain for necessary equipment to build out DCFC sites
- Availability of a trained workforce
Designated EV Alternative Fuel Corridors in New York State

- Trucking moves 84% of all freight tonnage in New York State
- New York State’s designated EV corridors have 11 border crossings at the end of its designated corridors.
  - Three of these are international border crossings with Canada, with the provinces of Quebec and Ontario.
Note: NEVI Compliant DCFC as of June 2022
Status of EV Alternative Fuel Corridor Build Out

EV Alternative Fuel Corridors and NEVI Compliant Sites - 2022

Note: NEVI Compliant DCFC as of July 2022
Assumes all anticipated NEVI compliant DCFC chargers are publicly available by third quarter 2023 from:

- EVolve NY
- New York State Thruway Authority Service Plaza Reconstruction
~ 2/3 of freight is through traffic

>80% of this US-Canada trade crossed NYS land borders by truck

>$120B in freight moved between NYS and Canada in 2021

Buffalo-Niagara crossing 3rd in the Nation – value of trade

Champlain Lacolle (Rouses Point) 8th in the Nation – value of trade
MHD EV Charging Considerations

- Grid upgrades are essential for enabling DCFC and MHD charging investments due to their high site-specific power needs.
- DCFC economics challenging given currently low EV deployments.
- While electric LDVs will drive load increases in the near term, MHDV electrification will magnify charging needs over the mid to long term.
- Anticipated levels of demand will require transmission interconnection at many highway fast-charging sites.
- Proximity to transmission lines should be considered in tandem with expected charger utilization during site selection.
**EV Charging Station Project Components**

**Construction**

*Who is involved: Utility, EVSE Developer, Contractor, Site Owner*

- Customers may be required to pay for grid upgrades in excess of utility’s design requirements

**Utility Constructs**

- Panel
- Conduit
- Trenching
- Design
- Permitting

**Site Owner/Charging Station Owner* Constructs**

- Step Up Transformers
- Wiring
- Customer Switchgear

- Signs
- Bollard
- Network
- Maintenance

- Charging Station
- Network Equipment
- Station Installation

**Operation & Maintenance**

*Who is involved: EV Charger Owner*

*Charging Station owner could be the EVSE Developer, Site Owner or Tenant of the Site Owner*
Federal-Aid Project Process Considerations

STEP 1: Plan and Identify Project

STEP 2: Obtain Project Funding

STEP 3: Execute a Project Agreement

STEP 4: Select and Hire Consultant

STEP 5: Authorization to Proceed with Preliminary Design

STEP 6: Prepare Design Approval Document

STEP 7: Authorization to Proceed with Detailed

STEP 8: Acquire Property

STEP 9: Prepare Contract Documents

STEP 10: Authorization to Proceed With Construction

STEP 11: Bid & Award Project

STEP 12: Construct & Inspect Project

STEP 13: Close Project Agreement

STEP 14: Operate & Maintain Facility

Federal-Aid Highway "Reimbursement" Process
Thank you!

Carolyn.Ryan@dot.ny.gov