



Drive Electric PA Coalition Meeting

Thursday, July 21st
via Webex



WEBEX TIPS

- Basics on Audio and Visual
 - Click “Chat” near bottom-right of screen to open chat
 - Set your chat to “All Panelists”
 - Please type questions and comments anytime
 - Let us know if you want to speak during member updates
- Meeting is being recorded
 - The recording is not posted online or shared
 - All presentation slides will be posted online within a couple weeks

BY THE NUMBERS

	March 2019	March 2020	March 2021*	March 2022*	July 2022*
Electric	9,784	11,343	16,924	23,689	31,022
Hybrid	29,680	36,252	46,401	56,334	71,992
Other	5,432	6,510	4,159	2,573	5,549
Total	44,896	54,105	67,484	82,596	108,563

Source: PennDOT registration database

*Reporting class 1 vehicles numbers only

ELECTRIC VEHICLE BATTERY RECYCLING

JEFF SPANGENBERGER - ARGONNE NATIONAL LAB



PENNDOT NEVI STATE PLAN UPDATE

NATASHA FACKLER - PENNDOT



WHAT IS THE PLAN?



 **pennsylvania**
DEPARTMENT OF TRANSPORTATION

PENNSYLVANIA STATE PLAN FOR ELECTRIC VEHICLE INFRASTRUCTURE DEPLOYMENT

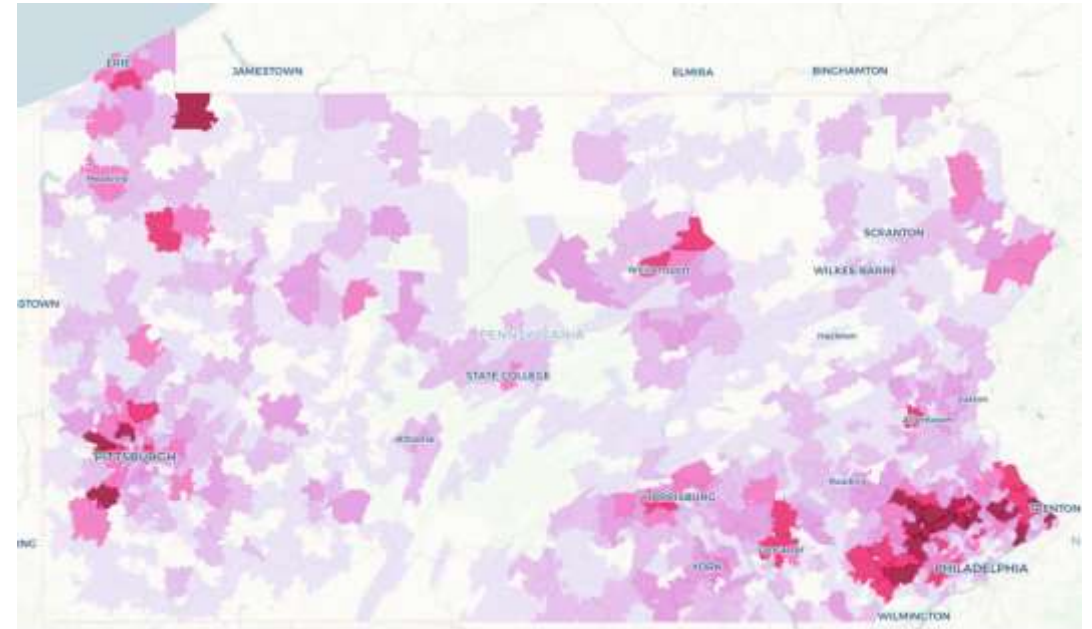
National Electric Vehicle Infrastructure (NEVI)
Formula Program

VERSION FOR FFY 2022-2023

- Engagement completed to date for plan development + Initiatives for future engagement including equity considerations
- Vision and goals for the NEVI program
- Existing EV charging infrastructure
- Anticipated focus areas for yearly NEVI program spending
- EV infrastructure needs (gaps) and opportunities
- Key challenges and risks
- Implementation and contracting steps to be undertaken
- Labor and workforce needs and actions

NEVI PLAN SURVEY RESULTS & IMPACTS

- Received more than 4,400 responses
- Prioritized Goals & Objectives
- Key Insights to Amenities/Services
- New Goal to address environmental benefits and consider multiple modes of transportation for electrification
- First responder training, signage/location identification, SBE/DBE inclusion, and early utility coordination



Response Rate by Zip Code Heat Map

PRIORITIES FOR NEVI FORMULA FUNDS

Build out of the current and future AFC network (DCFC)

01

02

Ensure charging capacity and redundancy on the AFC network (DCFC)

- Focus for initial years of NEVI Formula Program
- Focus on fast-chargers (DCFC) that meet program requirements
- Goal is to meet federal “build-out” criteria for Alternative Fuel Corridors (AFC)

CURRENT AFC NETWORK & EV INFRASTRUCTURE



- AFCs can be added annually based on stakeholder and other state DOT input
- PennDOT tracking EV charging infrastructure along AFCs to inform analysis of gaps and needs

CONTINUE TO EVALUATE NEW AFCS

Potential New AFC Corridors



Route Corridor	From	To	Mileage	Population Centers Included	Existing Public DCFC or Tesla Station Near Corridor	Reason
US 222	MD Border (Lancaster County)	I-78 (Lehigh County)	88	Lancaster, Reading, Allentown	No Stations	Links key cities that do not have direct interstate connection
US 22 / US 322	I-81 (Dauphin County)	I-99 (Centre County)	84	Harrisburg, Lewistown, State College	No Stations	Provides connection between Harrisburg and State College (supports events at Penn State)
PA 6	US 11 (Lackawanna County)	US 19 (Erie County)	270	Towanda, Mansfield, Wellsboro, Warren	1 Tesla	PA Scenic Route supporting long distance travel
US 15	MD Border (Adams County)	I-76 (Cumberland County)	43	Gettysburg, Mechanicsburg	2 Public DCFC 1 Tesla	Key north-south corridor serving longer distance travel including freight movement. US 15 through Harrisburg is not included since serves more local travel.
	US 22/322 (Dauphin County)	CSVT (Snyder County)	32	Harrisburg, Selinsgrove	No Stations	
	I-180 (Lycoming County)	NY Border (Tioga County)	62	Williamsport, Mansfield	1 Tesla	
I-180	CSVT (Northumberland County)	US 15 (Lycoming County)	47	Shamokin Dam, Milton, Williamsport	1 Tesla	When combined with CSVT completion will complement the US 15 corridor for regional travel.
US 219	MD Border (Somerset County)	NY Border (McKean County)	197	Somerset, Johnstown, Dubois	1 Tesla	Key north-south rural corridor serving longer distance travel.
US 22	I-99 (Blair County)	I-76 (Allegheny County)	76	Altoona, Blairsville, Monroeville	No Stations	Provides longer distance connection from Altoona to Pittsburgh and serves rural areas.

- The NEVI State Plan includes additional corridors under consideration
- More evaluation and stakeholder input is recommended to identify other potential corridors
- Focus should be on supporting fast-charging (DCFC) infrastructure
- Corridors will most likely have higher numbers of long-distance travel
- Opportunities to further address rural and other disadvantaged communities

OTHER PRIORITIES FOR NEVI FORMULA FUNDS

Expand charging to other non-interstate routes that may or may not be designated as AFCs and that may serve disadvantaged communities or as emergency routes (DCFC)

03

04

Provide mobile charging or towing services to support emergency response to motorists (DCFC, Level 2 or other power source options)

Provide charging at key public destinations including those that can be accessed by underserved or disadvantaged population (DCFC or Level 2 charging)

05

06

Provide charging at mobility hubs, which are typically located around transit stations and key neighborhood locations. Mobility hubs offer a density of travel options combined with public, commercial, or residential amenities. (DCFC or Level 2 charging)

Provide charging infrastructure to support heavy and medium-duty freight movement including regional travel, rural deliveries or emergency travel (DCFC)

07

- Most will require formal federal designation of AFC “build-out” before funds can be applied
- More flexibility for application to Level 2 charging
- Final federal guidance needed to determine minimum standards for projects
- Will provide more opportunities to address equity needs

NEVI – ENGAGEMENT & EQUITY

- Engagement Strategy - multiple phases throughout 5-year NEVI Program:
 - AFC Build-out Focus on Neighboring Communities
 - Community-based Project Outreach
 - General Education & Outreach – Ongoing
- Equity Considerations
 - EV Equity Principles
 - Justice40 Initiative
 - PA DACs information integrated into program processes
 - Target corridors/destinations that serve DACs
 - Provide opportunities to small/disadvantaged businesses
 - Equity criteria integrated into project prioritization
 - Expand engagement to equity groups
 - Monitoring dashboard
 - Workforce Development for low-income & minority workers
 - Title VI, ADA, and Section 504 considerations

NEVI PROGRAM IMPLEMENTATION STEPS

- Program Management and Procurement



- Application and Testing of Planning Assessment Tools
- Targeted Outreach to Businesses on NEVI Funding Opportunities
- Use NEVI Funds to Support Local Planning Studies to Identify Needs and Opportunities
- Data Collection and Sharing
- Labor, Training and Installation Standards



ELECTRIC VEHICLE FAST-CHARGING
FAQS & FUNDING OPPORTUNITIES

What Businesses Need to Know

What Is DC Fast Charging?
Direct current (DC) fast chargers are game-changers for electric vehicles (EVs). While many EV owners rely on home-charging overnight, **DC fast chargers can charge an EV in only 20 to 30 minutes.** In PA, over 100 locations – most of them businesses – currently have at least one DC fast charger installed in their parking lots.

Why Is Pennsylvania Investing?
One challenge to more rapid adoption of EVs is the lack of public DC fast chargers. By providing funding for fast charge projects in strategic locations – such as along highways and in underserved metro areas – Pennsylvania aims to **increase drivers' confidence in the availability of public EV chargers,** slow down climate change, and improve public health.

Which Businesses are the Best Locations?
The best **types of businesses** for hosting DC fast chargers are restaurants, gas/convenience stores, truck stops, grocery stores, shopping centers, or any interested business with available parking spaces where an EV driver could shop and use amenities during the 20-30 min of charging time. Businesses that are 24/7 and offer food and restrooms are ideal. The best **locations for businesses** interested in hosting fast chargers are near interstate exits along major travel corridors for commuter and recreational travel needs.

What Are the Benefits to Businesses?

- Attract customers looking to stop at a location that offers fast charging
- Increase customer spending at site amenities
- Minimize costs by choosing from a range of business models offered by EV charging hardware & network companies
- Gain customer recognition as a leader in reducing carbon emissions

Is Your Business Located Near an Alternative Fuel Corridor?
The Pennsylvania Department of Transportation (PennDOT) is looking to facilitate the build-out of EV DC fast charging infrastructure across the Commonwealth, including on our designated **Alternative Fuel Corridors (AFCs)**, which include Pennsylvania's interstates and other select highways. If you are interested in a project consultation on fast-charging options and applying for competitive grant funding for a property located within 1-mile of any AFC corridor, please contact:
RA-PDEVCorridors@pa.gov

YOUR BUSINESS MAY BE ELIGIBLE FOR GRANTS

National Electric Vehicle Infrastructure (NEVI) Formula Program

The NEVI Formula Program provides dedicated funding to Pennsylvania and other states to strategically deploy EV charging infrastructure and establish an interconnected network to facilitate data collection, access, and reliability. Program funding and eligibility details include:

- EV charging infrastructure is installed **within 1 travel mile** of the AFC
- EV charging infrastructure includes at least **four 150kW Direct Current Fast Chargers (DCFCs)** 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

Application Request Open:
Late 2022 – Early 2023

Web Link:
[PennDOT NEVI Program](#)

Pennsylvania is Committed to Supporting Growth in EV Vehicles. See the Pennsylvania NEVI State Plan: **Forthcoming**

DRIVE ELECTRIC PA

EV NEWS & MEMBER UPDATES



DEP UPDATES

- [EV Roadmap 2021 Update Booklet](#) is available!
 - Access via Drive Electric PA Coalition webpage or the link above
- DEP's Level 2 Charging Equipment Rebate program has funded over 1,500 level 2 charging plugs
 - Follow this link for [DEP's 1,000 plug press release](#)
- The level 2 rebate program is briefly closed for program updates and should re-open by the end of July
 - The program is anticipated to run out of funds sometime in calendar year 2023

DEP UPDATES

- The Alternative Fuel Incentive Grant (AFIG) is open for applications!
 - \$3 million is available for:
 - Alternative fuel fleet vehicle purchases
 - Fueling infrastructure for alternative fuel fleet vehicles
 - Alternative fuel innovative technology projects
 - Application due dates are August 26th and December 16th, 2022
 - There will be a webinar in early August
 - Register from the [AFIG webpage](#)

DEP UPDATES

- DEP hopes to announce the final round of DC fast charging awards in the next couple months
- The Alternative Fuel Rebate for Consumers program will be modified on September 1st
 - Vehicles purchased before July 1st should submit their rebate application by August 30th
 - The program update will include an income cap

PENNDOT UPDATES

- PennDOT's EV Mobility Plan to be placed on PennDOT's website
- PennDOT's NEVI State Plan to be submitted this week to FHWA-HQ's
- Developing an EV Engagement Strategy for Communities and Stakeholders
- AFC Round 6
 - Route 1 and 422
- EV Notice of Proposed Rule Making

UPDATES

- Member Updates
- PA Legislative Updates
 - HB 948 – Annual fee for electric vehicles
 - HB 1907 – Would enable EV direct sales
 - SB 435 – Would allow electric utilities to install charging equipment infrastructure
 - SB 153, HB 722 – Increases the maximum allowable weight of class 8 electric trucks by 2,000 pounds
 - Other

VOLVO LIGHTS PROJECT LESSON LEARNED GUIDEBOOK

ARAVIND KAILAS, VOLVO



NEXT MEETING

- October 20th, 2022
- Meetings continue to be virtual from 10am – noon
- We will explore having one meeting per year in Harrisburg with a virtual attendance option
- Feel free to share content/speaker ideas

THANK YOU!

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