



Drive Electric PA Coalition Meeting

April 26th, 2023

via Teams



pennsylvania

DEPARTMENT OF ENVIRONMENTAL
PROTECTION



pennsylvania

DEPARTMENT OF TRANSPORTATION

TEAMS TIPS

- Basics on Audio and Visual
 - Use the “Chat” to share questions and comments anytime
 - Attendee mics and cameras are disabled
 - Request mic access during member updates if desired
 - “Reactions” are encouraged
- The meeting will not be recorded
 - All presentation slides will be posted online within a couple weeks

BY THE NUMBERS

	March 2019	March 2020	March 2021*	March 2022*	March 2023^
BEV	9,784	11,343	16,924	23,689	43,725
PHEV					23,839
Hybrid	29,680	36,252	46,401	56,334	221,661
Other	5,432	6,510	4,159	2,573	
Total	44,896	54,105	67,484	82,596	

- BEV – Battery Electric Vehicle
- PHEV – Plug-in Hybrid
- PennDOT historical data did not differentiate plug-in hybrids and hybrids

Source: PennDOT registration database
 *Reporting class 1 vehicles numbers only
 ^VIN de-coding completed

EV RATE DESIGN STUDY AND PUC WORKING GROUP

MELISSA WHITED – SYNAPSE ENERGY ECONOMICS

JOE SHERRICK – PENNSYLVANIA PUBLIC UTILITY COMMISSION



FEDERAL CHARGING AND FUELING INFRASTRUCTURE GRANT PROGRAM

NICK MILLER – ELECTRIFICATION COALITION

TONY BANDIERO – E-PACT



EV NEWS & MEMBER UPDATES



DEP UPDATES

- Level 2 Charging Equipment Rebate (Driving PA Forward)
 - Approx. 1860 plugs installed at over 500 locations since program start in 2018
 - Public spaces: 52%
 - Workplaces: 32%
 - Multi-unit Res.: 16%
 - Approx. \$8.8M spent
 - Approx. \$900k remaining
 - Projected to last thru Summer 2023

DEP UPDATES

- DC Fast Charging Projects (Driving PA Forward)
 - 32 DC fast charging projects awarded since 2019
 - ~\$7.2M committed, \$0 remaining
 - 11 Projects are completed and operational
- The Alternative Fuel Vehicle Rebate
 - Electric vehicle purchase rebates are now larger (up to \$2k) and income cap applies
 - Low-income \$1k bonus (total maximum rebate \$3k)
 - Since reopening 9/1/22
 - 241 Rebates awarded (\$516k)
 - Low-income bonus added to 58 rebates
 - Bolt, Model 3, Leaf, Prius Prime, ID4

DEP UPDATES

- Alternative Fuel Incentive Grant (AFIG)
- 2022 AFIG closed in Dec.
- 13 projects selected at \$1.5M from 1st application window
- 45 applications received in 2nd application window
 - 5.7M request (~\$1.5M available)
 - Awards to be announced shortly
- Targeting Spring 2023 reopening (~\$3M available)
 - 1st Application window: late July 2023
 - 2nd Application window: late Dec. 2023

DEP UPDATES

- Medium and Heavy-Duty Zero Emission Vehicle Pilot Grant program (Driving PA Forward)
 - Goal to develop fleet case studies
 - Min. 3 local freight trucks per fleet
 - Targeting trucks operating in EJ communities
 - Funding up to 75-100% of ZEV trucks + infrastructure
 - Successful applicants commit to 2 years of data reporting
 - DEP contractor will develop & publish case studies
 - 18 applications received & under review

DEP: REVISING THE EV ROADMAP

- Original EV Roadmap developed in 2017/18
- Limited in scope to light-duty plug-in vehicles
- Updated in 2021 with current data, continued strategy
- Planning for development of a new *ZEV Roadmap* in 2023
 - Make use of better, current data for new modeling
 - Re-evaluate and present new recommendations for PA
 - Expand scope to include medium- and heavy-duty trucks
 - Expand scope to include analysis and preliminary strategy for hydrogen fuel cell vehicles and infrastructure
 - Contractor selection June 2023
 - Contractor will engage DEPA Coalition members

PENNSYLVANIA ELECTRIC VEHICLE ROADMAP

Prepared for the Pennsylvania Department of
Environmental Protection
February 2019



MEISTER
CONSULTANTS GROUP | A CADMUS COMPANY



OVERVIEW OF PA'S NEVI FORMULA PROGRAM



- Provides PA \$171.5 million over next 5 years for electric vehicle (EV) infrastructure
 - Federal Fiscal Year 2022 - \$25.4 million
 - Federal Fiscal Years 2023-2026 - \$36.5 million annually
- PennDOT submitted state plan on July 21, 2022.
- PennDOT NEVI plan approved on Sept 14, 2022.
- Pre-announcement of Pennsylvania Program – Oct. 12, 2022
 - Informational Webinar for interested proposers – Nov. 1, 2022
- Pennsylvania Program Document Released – January 6, 2023
 - Updated – March 13, 2023



YEARS 1-2 CHARGING FOCUS

DC Fast Charging

Public

4 ports

CCS Connectors

At least 150kw power per port (600kw total)

Within 1-mile of highway, 50 miles of the next station

How to Charge Your EV



Charge Time



Charging Locations

Level 1

3.5 - 6.5 miles
Per Hour

Residential,
Workplace

Level 2

14 - 35 Miles
Per Hour

Residential,
Workplace,
Destinations

DC Fast Charge

200+ miles
Per Hour

Highways,
Communities,
Destinations



ALTERNATIVE FUEL CORRIDORS



- PennDOT has nominated corridors over 6 rounds - includes interstates and portions of US 30, US 15, Route 1, and Route 422 - over 1,800 miles of roadway
- NEVI funding must be applied to AFCs until a “**Build-Out**” certification by FHWA



PRIORITY LOCATIONS

PRIORITY I:

Selected via gap analysis to most likely meet AFC build-out

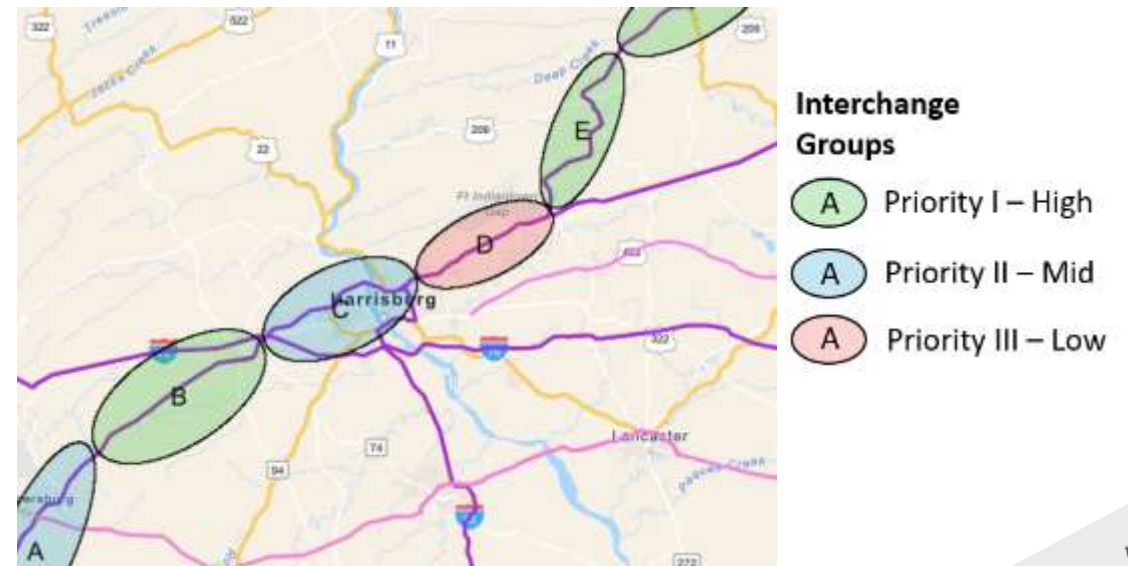
PRIORITY II:

Interchanges in locations closer to existing sites/or likely to be redundant.

PRIORITY III:

Interchanges that already has NEVI-qualifying EV charging site.

- Round 1 will focus on Pennsylvania's primary and auxiliary interstate AFC network and includes 11 primary interstates and four (4) auxiliary interstates
- [PennDOT's interchange group map](#) shows the ~80 gaps labeled as Priority I, II, or III
- At least one site at an interchange within each Priority I group will be selected first, followed by one site within each of the Priority II groups of interchanges.



PROJECT SELECTION PROCESS

Date	Item
January 6, 2023	Program Document released
March 13, 2023	Revised Program Document released
January-Mid March 2023	Submit utility form to utility provider so the utility can complete and return the form to the interested organization in time for the submission due date
March 24, 2023	Any technical questions regarding the program document must be submitted to RA-PDEVCorridors@pa.gov. Frequently asked questions and answers will be posted publicly online to the PennDOT NEVI site.
March 27, 2023	Online submission period begins
May 5, 2023	PA NEVI program submission period ends at 5 PM EDT
May – June 2023	PennDOT proposed projects review
July 2023	Preliminary award approval and denial notifications
July – September 2023	PennDOT NEPA Process
September 2023	Final award approval and denial notifications
October – November 2023	Agreement execution; Notice to Proceed



SCORING RUBRIC TRANSPARENCY

5. Sustainability, Equity, Resilience, and Economic Development [12pts]

ID	Element	Description	Score Breakdown Points	Max Points
5.1	Renewable Energy Usage	Renewable energy sources used for charging energy	0pts: No renewable energy used 0.5pts: 50% renewable energy used 1pts: 100% renewable energy used	1
5.2	Innovative Technologies and Battery Storage	Innovative technologies and/or approaches to site design, charging, and power storage	0pts: No / minimal innovation used in project 0.5-2pts: Based on amount and level of innovations used across project areas	2
5.3	Use of Diverse Businesses	Involvement of small, women-owned, minority-owned, veteran-owned, and/or other diverse businesses and/or workforce	0pts: No or minimal diverse businesses involved in project delivery 1pt: Moderate number of diverse businesses / equivalent workforce used in project delivery 2pts: Substantial number of diverse businesses / equivalent workforce involved in project delivery	2

5.4	Use of Local Businesses	Involvement of local businesses and/or workforce in project	0pts: No or minimal involvement of local businesses / equivalent workforce in project 1pt: Moderate involvement of local businesses / equivalent workforce in project 2pts: Substantial involvement of local businesses / equivalent workforce in project	2
5.5	Charging Accessibility, Equity Principles, and Justice40 Initiatives	<ul style="list-style-type: none"> • Users with Disabilities • Payment Options • Multilingual Access • Additional Equity Principles 	0pts: No / minimal accessible design for charging and/or no equity principles followed 1-5pts: Based on ability to provide for accessible charging and follow PennDOT's EV equity principles and the Justice40 Initiative	5



UPDATES

- IRS FAQ for EV purchase tax credits:
 - [Frequently asked questions related to new, previously-owned and qualified commercial clean vehicle credits \(irs.gov\)](https://www.irs.gov/efile/faq-ev-credits)
- PA House public hearing on EV fees is scheduled for 5/1/23 at 9am in Room 140 Main Capitol Building
 - Any written testimony is due by 4/29/23 to KWagonse@pahouse.net
- EPA 2023 Clean School Bus program is now open!
 - [Clean School Bus Program Grants | US EPA](https://www.epa.gov/clean-school-bus-program)
- Member Updates
- PA Legislative Updates from Attendees

EV BATTERY FIRE RESPONSE

TONY CORREIA – NJ FIRE CHIEFS ASSOCIATION



NEXT MEETING

- July 20th, 2023 – virtual only
- Planning to have an in-person option in Harrisburg, PA for the October 19th, 2023 meeting
- Feel free to share content/speaker ideas

THANK YOU!

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