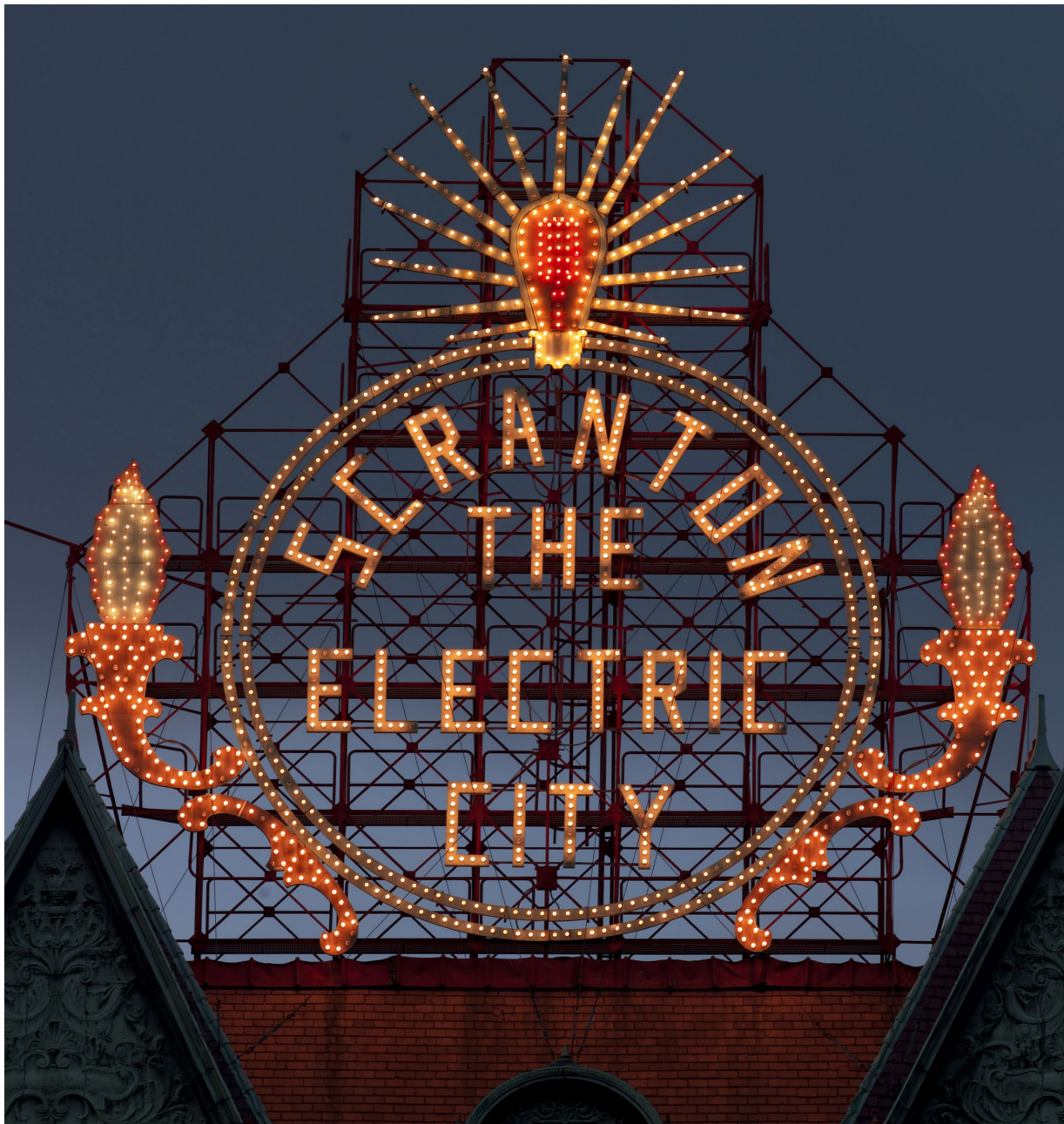




pennsylvania
DEPARTMENT OF TRANSPORTATION

PENNSYLVANIA NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) PROGRAM

**SUPPORTING AGENCIES FOR STAKEHOLDER SESSION:
FIRSTENERGY, DEP & CLEAN CITIES**



WHY TALK ELECTRIC VEHICLES NOW?

EVs More
Affordable & More
People Buying

New **Funding** for
Public Charging

Need for More
Community
Planning &
Education

Identify Key
Opportunities &
Challenges

Ensure EVs &
Funding Benefit
All Populations
(**Equity**)



NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI)

Dan Szekeres

RANGE OF GRANTS & INCENTIVES AVAILABLE























































Federal Tax Grants

DEP Grants

DOT Grants

Utility Programs

DOT Funding and Financing Programs with EV Eligibilities*

	FY 2022 ¹ AMOUNT						
FORMULA PROGRAMS							
National Highway Performance Program (NHPP)	\$28.4 B ²						
Surface Transportation Block Grant Program (STBG)	\$12.5 B ^{2,3}						
Congestion Mitigation & Air Quality Improvement Program (CMAQ)	\$2.5 B ²						
National Highway Freight Program (NHFP)	\$1.4 B ²						
State Planning and Research (SPR)	\$983.3 M ⁴						
Metropolitan Planning (PL)	\$438.1 M ²						
Carbon Reduction Program	\$1.2 B ^{2,5}						
National Electric Vehicle (NEVI) Formula Program	\$685 M ^{2,5,6}						
DISCRETIONARY PROGRAMS							
Rebuilding American Infrastructure with Sustainability and Equity (RAISE) (formerly known as BUILD)	\$1.5 B						
Infrastructure for Rebuilding America (INFRA) Grant Program	\$1.64 B ^{2,7}						
Advanced Transportation and Technologies and Innovative Mobility Deployment	\$60 M ²						
Discretionary Grant Program for Charging and Fueling Infrastructure	\$300 M ^{2,5}						
Rural Surface Transportation Grant	\$300 M ^{2,5}						



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.



OVERVIEW OF NEVI FORMULA PROGRAM



- Funded through the 2021 Bipartisan Infrastructure Law (BIL)
- 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
- All states must submit a NEVI State Plan before funds can be used. Must be updated annually.
 - PennDOT submitted state plan on July 21, 2022.
 - PennDOT NEVI plan approved on Sept 14, 2022.
- Pre-announcement of Funding Opportunity – Oct. 12, 2022
 - Informational Webinar for interested proposers – Nov. 1, 2022
- Proposal Announcement late December/early January



PENNDOT NEVI STATE PLAN



PENNSYLVANIA STATE PLAN FOR ELECTRIC VEHICLE INFRASTRUCTURE DEPLOYMENT

National Electric Vehicle Infrastructure (NEVI)
Formula Program

VERSION FOR FFY 2022-2023

Approved by USDOT / On PennDOT's Website
Search for "*PennDOT NEVI State Plan*"

What's in the Plan?

- Vision and goals for the NEVI program
- Focus areas for NEVI program spending
- Needs, gaps and opportunities
- Key challenges and risks
- Contracting framework (more to come)
- Labor and workforce needs and actions
- Engagement and equity priorities



YEARS 1-2 CHARGING FOCUS

DC Fast Charging

Public (Tesla doesn't count now)

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 (AFC)



- 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



CHALLENGE OF ADDRESSING EQUITY

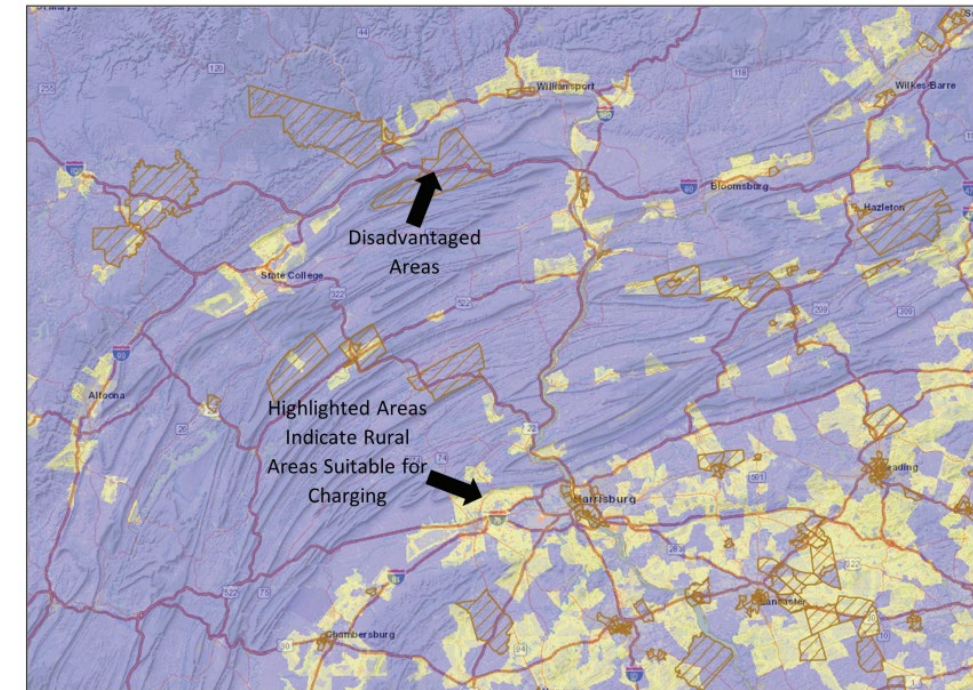
NEVI ACTION STEPS

- 1 DEVELOP AND MAINTAIN EV EQUITY PRINCIPLES TO INFORM AND GUIDE NEVI PROGRAM DECISIONS**
- 2 COORDINATE WITH EQUITY AND ADVOCACY GROUPS FOR DEVELOPMENT OF THE NEVI STATE PLAN**
- 3 IDENTIFY LOCAL DACS WITHIN PENNSYLVANIA AND INTEGRATE INFORMATION INTO PROGRAM PROCESSES**
- 4 IDENTIFY AND TARGET INTERSTATE AND NON-INTERSTATE CORRIDORS OR DESTINATIONS THAT SERVE DACS**
- 5 PROVIDE OPPORTUNITIES FOR FUNDING TO SMALL OR DISADVANTAGED BUSINESSES**

DAC = Disadvantaged Communities



Figure 10: Example Application of EZMT Tool in Pennsylvania (Rural Suitability for Charging)



CHALLENGE OF ADDRESSING EQUITY

- 6** INTEGRATE EQUITY CRITERIA INTO THE PROJECT PRIORITIZATION AND SELECTION PROCESS
- 7** EXPAND ENGAGEMENT TO EQUITY GROUPS TO BETTER UNDERSTAND NEEDS AND OPPORTUNITIES AND BENEFITS RECEIVED FROM THE NEVI PROGRAM
- 8** DEVELOP A MONITORING DASHBOARD TO TRACK AND REPORT HOW NEVI INVESTMENTS ADDRESS DACS
- 9** SUPPORT WORKFORCE DEVELOPMENT FOR LOW-INCOME AND MINORITY WORKERS
- 10** ADDRESS TITLE VI, ADA AND SECTION 504 CONSIDERATIONS

Targeted Outreach to DACs to Evaluate Needs and Benefits of NEVI Program To Those Communities



FUTURE NEVI DISCRETIONARY PROGRAM



Discretionary Grant Program - \$2.5 billion for all alternative fuels (EV, compressed natural gas, hydrogen, etc.).

These funds **focus on AFC development and community alternative fueling projects.**

- **\$1.25 billion** is for designated AFCs while the other half is for community funding. Eligible entities include States, Local governments, Planning Agencies (MPOs/RPOs), Transit and Port Authorities, and Tribal governments.
- **\$1.25 billion** is designated for **Community fueling projects** must be on any public road or in other publicly accessible locations.

Priority will be given to projects in rural areas, low-to-moderate income neighborhoods, and communities with a low ratio of private parking spaces to households or a high ratio of multiunit dwellings to single family homes.



NEVI GRANT PROGRAM

Colton Brown

PENNDOT FUNDING ROUNDS

Round 1

Primary/Auxiliary AFC Interstates

Dec 2022

(Anticipated)

Round 2

Round 1 Unfilled Interstates/ Other
AFC Routes

Mid 2023

(Anticipated)

Round 3

2024

(Anticipated)

Future Rounds

TBD

(Anticipated)

FY 22 - \$25.4 million

FY 23 - \$36.5 million

(PennDOT NEVI funding)

FY '22 & '23 - Approx. \$56 million

(Anticipated available amount for applicants)

FY 24 - \$36.5 million

FY 25 - \$36.5 million

FY 26 - \$36.5 million

(PennDOT NEVI funding)

FY '24, '25, '26 - Approx. \$100 million

(Anticipated available amount for applicants)

** Note: This is the total NEVI funding available by federal fiscal year. Some of this amount may be used for labor & workforce training, planning, outreach, and program management as allowed by NEVI guidelines. Remaining amount will be available for applicants.*



ELIGIBLE COSTS

- **Program administration** costs.
- Costs for **pre-construction**
- **Construction** costs (as defined under 23 U.S.C. 101(a)(4)) directly related to EV charging station
- Costs for **planning, permitting, acquisition, and installation of on-site distributed energy resource equipment** (e.g., solar arrays, stationary batteries).
- Costs to **acquire and install on-site electric service equipment** (e.g., power meter, transformer, switch gear)
- Cost of **minor grid updates** (i.e. work necessary to connect a charging station to the electric grid distribution network).
- Costs to **repair, upgrade, and/or replace existing EV charging equipment to meet NEVI** minimum standards/requirements.
- Costs to **upgrade existing EV charging stations to meet ADA requirements.**
- Costs to **purchase proprietary adapters.**
- Cost to **install, operate, and maintain electric vehicle charging infrastructure (up to 5 years after the charging station is commissioned)**
 - Charging equipment lease fees (lease charging equipment rather than purchase).
 - Cellular network fees, internet service fees, or other similar fees.
 - Hardware and software maintenance and repair costs, including service agreements with third-party contractors and charging equipment manufacturers or warrantors.
 - Other operation costs that are necessary and directly related to the charging of vehicles.
- Cost to **install signage at site**
- Costs for **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.



INELIGIBLE COSTS

1. Any costs incurred prior to grant award.
2. Any costs not directly related to an EV Charging Station.
3. Purchase or rental of real estate.
4. Construction or general maintenance of building and parking facilities (if not directly related to EV Charging Station).
5. Cost of major grid upgrades (longer line extension or upgrades, improvements to offsite power generation, bulk power transmission, or substations).

* These are preliminarily identified eligible and ineligible costs. PennDOT is currently working with the Joint Office, FHWA, and its internal agency team to finalize the eligible and ineligible cost details. Final eligible and ineligible costs will be identified in the formal NOFO.



PA ROUND 1 MATCH REQUIREMENTS

Eligible Costs

Planning, Hardware, &
Construction

Fixed O&M Costs

5-year fixed networking and data cost
5-year fixed warranty cost

Ineligible Costs

Variable O&M Costs

Electricity
Insurance
Other recurring business costs, i.e., staffing

PennDOT

Grant award - UP TO 80%
of the eligible project costs.

Applicant

Grantee match - AT LEAST 20%
of the eligible project costs.

**Grant award WILL NOT cover or consider
ineligible costs in grant formula.**

**Amount of match is part of evaluation criteria. Match requirements are subject to change.*



SELECTION CRITERIA

SITE RELATED – Highest Priority

Interchange Score (Location)

Ability to fill gaps	Number & type of nearby facilities	Proximity of facilities at interchanges with 24/7 access	Safe Access of Facilities	Route Significance	Equity: Environmental Justice areas, rural areas, air quality non-attainment areas
----------------------	------------------------------------	--	---------------------------	--------------------	--

Site Readiness

Power availability	Amount of utility coordination completed	Amount of site development needed	Communication availability	Existing or need for site agreement /ownership	Existing or need for partnership agreement in place	Need for environmental clearance
--------------------	--	-----------------------------------	----------------------------	--	---	----------------------------------

Future Proofing

Power per port/site proposed	Number of additional ports/site proposed	Ability to provide more power per port in the future	Ability to add future ports	Availability of pull through sites	Ability to meet medium heavy duty charging requirements	Ability to meet heavy duty vehicle charging requirements
------------------------------	--	--	-----------------------------	------------------------------------	---	--

SELECTION CRITERIA

SUSTAINABILITY; EQUITY; RESILIENCE; ECONOMIC DEVELOPMENT– Second Priority

Criteria

Usage of renewable energy sources and strategies

Generation of clean energy

Renewable energy storage

Plan for involving local and small businesses/workforce

Plan for public/stakeholder engagement

Plan for team training and Safety

COST- Third Priority

Criteria

Amount of funding requested (out of total project cost)

(Please note these selection criteria are subject to change. The final selection criteria will be identified in the NOFO).

PRIORITY LOCATIONS

PRIORITY I:

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

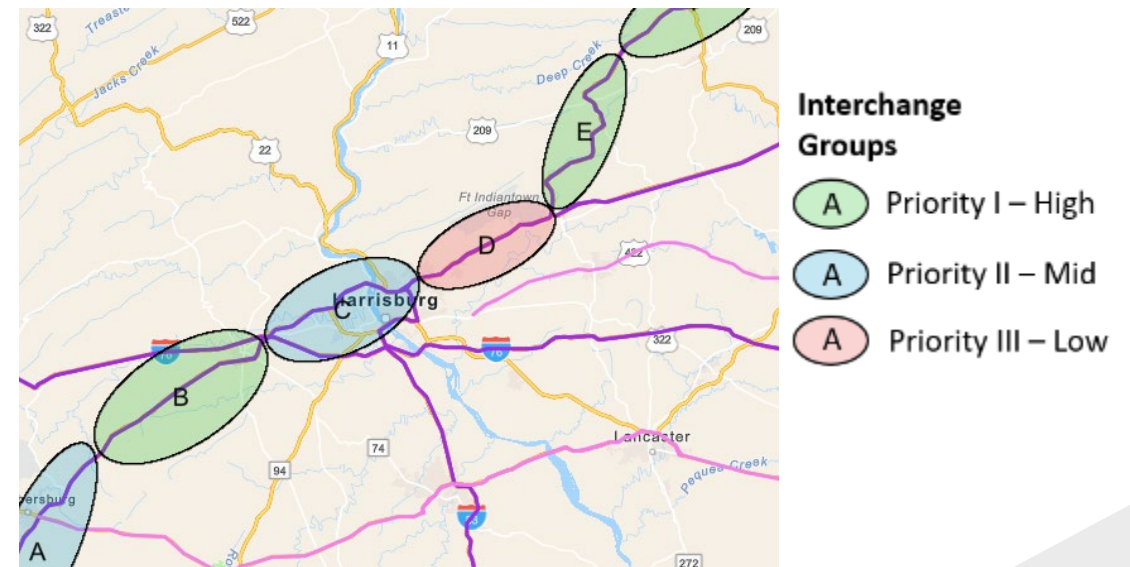
PRIORITY II:

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

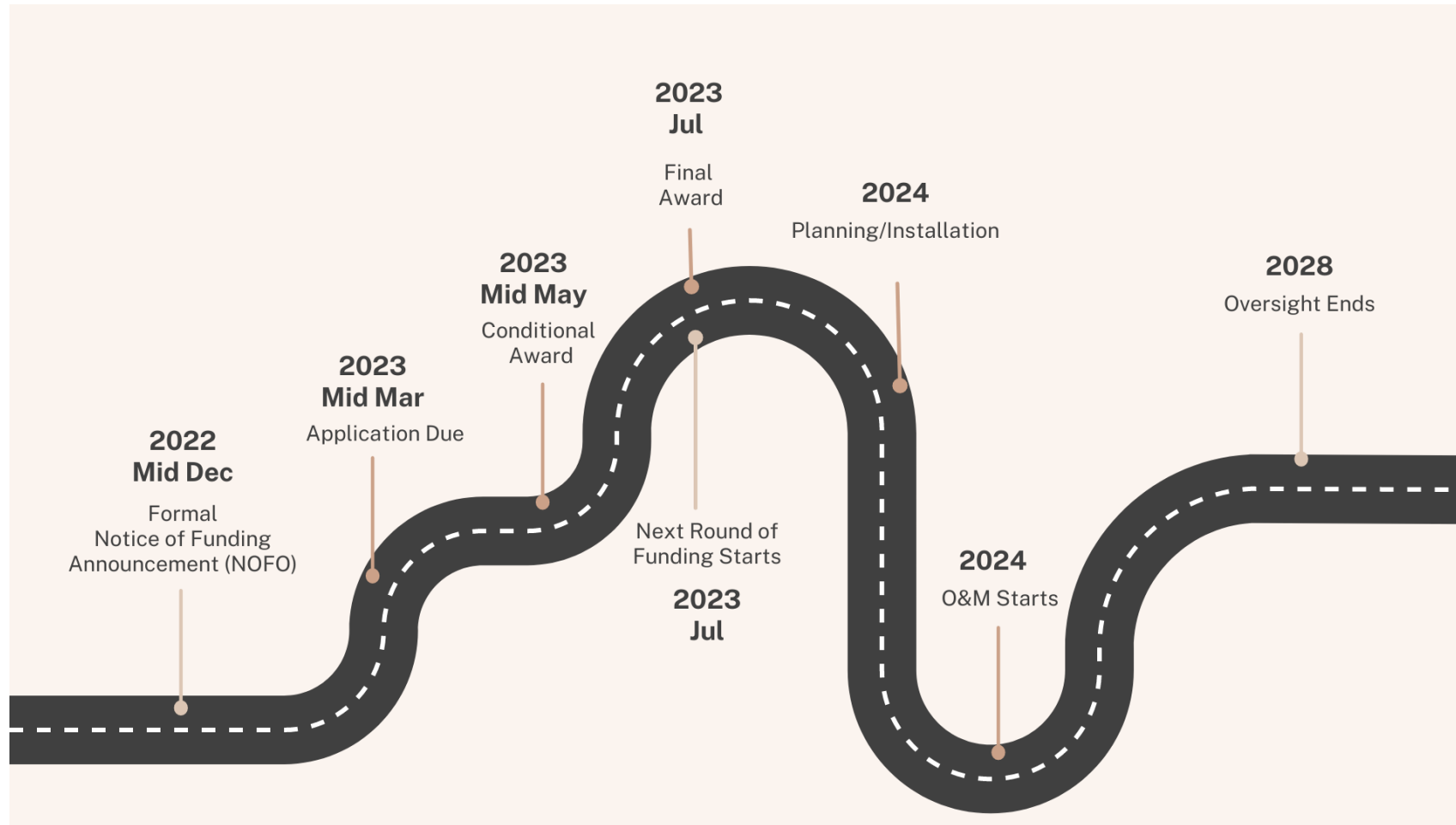
PRIORITY III:

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.



ANTICIPATED TIMELINE



* 5 Year O&M starts once Installation is completed and approved for O&M.

* These dates are representative and are subject to change based on applicants' feedback. NOFO will identify specific dates.



HOW TO GET READY TO APPLY

Colton Brown

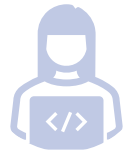
HOW TO GET READY



Register for Keystone Login



Get Familiar with NEVI Program



Attend Informational Webinar



Put a Team Together



Select Site & Assess Readiness



Coordinate with Utilities



REGISTER FOR KEYSTONE LOGIN

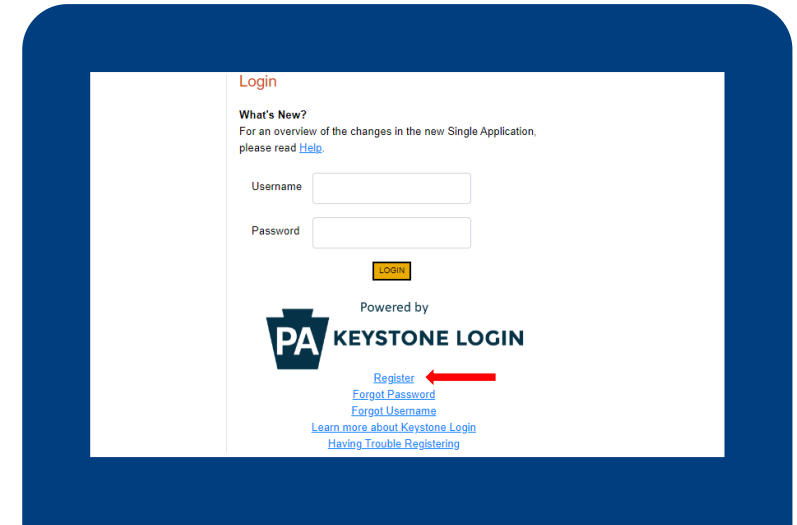
❑ Register for Keystone Login using the link below:

✓ <https://www.esa.dced.state.pa.us/login.aspx>

❑ You will need the following information:

- ✓ Personal information
- ✓ Contact information
- ✓ Login information
- ✓ 3 Security Questions/Answers

* **Note:** You will need the keystone Login to submit grant application



GET FAMILIAR WITH NEVI PROGRAM

- ❑ Learn about the NEVI Program.
 - ✓ Resources for
 - ✓ PA NEVI Plan
 - ✓ Federal NEVI guidance
 - ✓ Federal NEVI FAQ
 - ✓ NEVI proposed rulemaking:

<https://www.penndot.pa.gov/ProjectAndPrograms/Planning/EVs/Pages/Learn-NEVI.aspx>



WATCH THE INFORMATIONAL WEBINAR

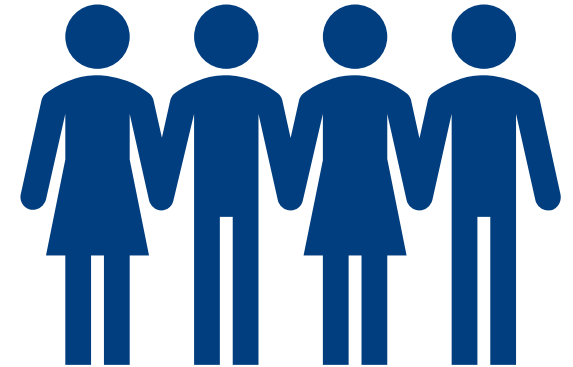
- Watch the recorded Informational Webinar.
 - ✓ Refer to resources
- Refer to the FAQ section for commonly asked questions/responses
- Email the team at (ra-pdevcorridors@pa.gov) if you have any additional questions.



PUT A TEAM TOGETHER

❑ Successful planning, deployment, and O&M of EV site would likely require at least:

- ✓ Site Planner
- ✓ Construction contractor (Civil, Electrical, etc.)
 - ✓ Refer to NEVI guidelines for certification/training requirements
- ✓ Equipment Supplier
- ✓ Operators; Maintainers
- ✓ Others



* **Note:** Some team members may play different roles. Applicant will need to identify the team members as part of the application.



SELECT & ASSESS SITE READINESS

- Select an appropriate site and ensure site meets NEVI requirements (ADA access, safety etc.,)
- Conduct site assessment. Use site/time readiness scoring criteria as a reference.
- Environmental Clearance. Conduct preliminary assessment for environmental clearance needs.

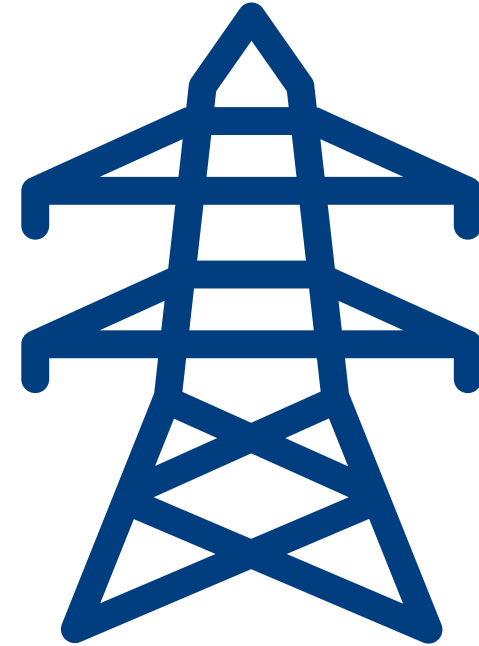
* **Note:** Applicant will need to provide site location information and site readiness information as part of the application

** **Note:** After the final selection process, PennDOT will work with the applicant and appropriate agencies to get environmental clearance.



COORDINATE WITH UTILITIES

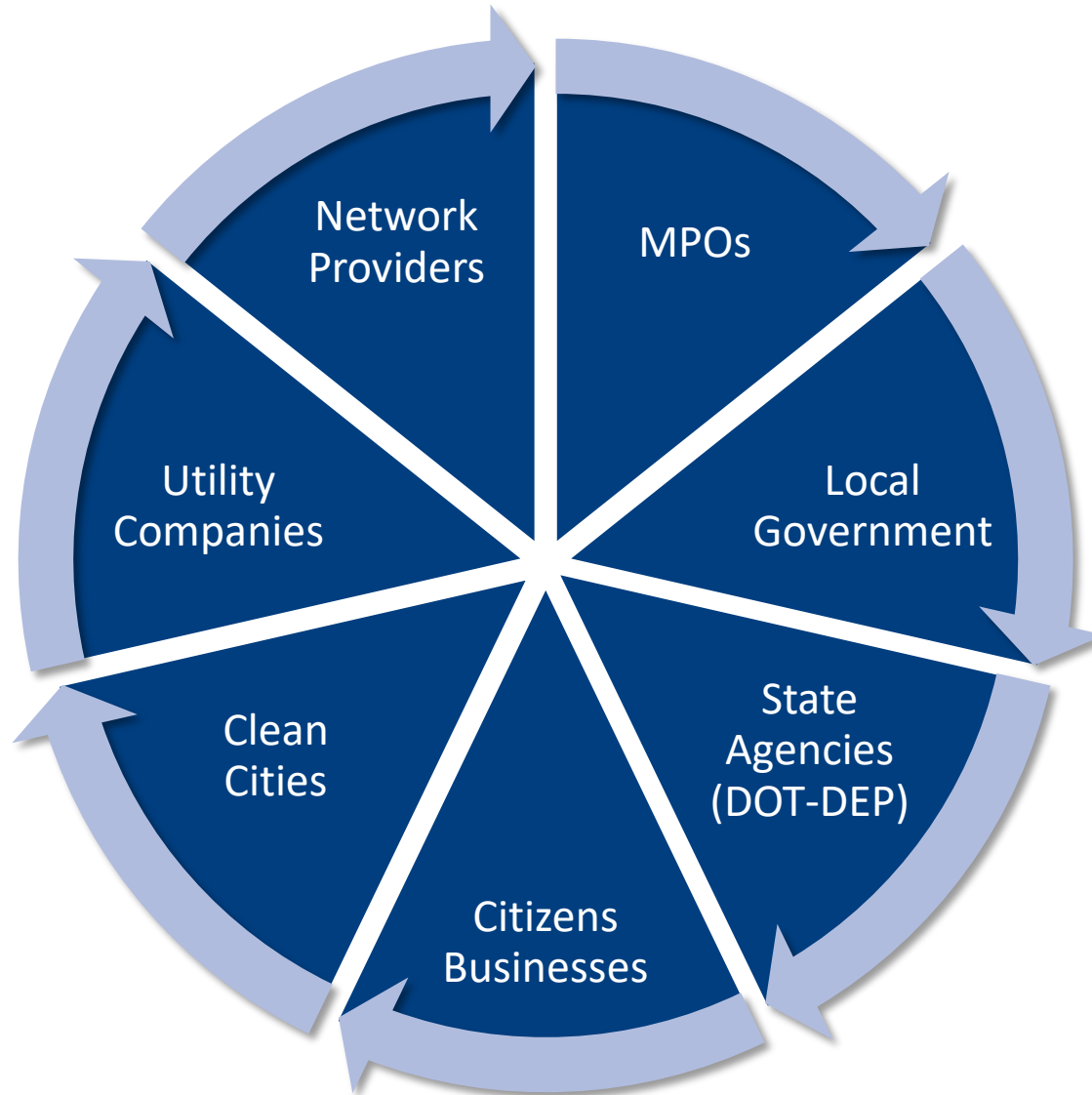
- ❑ Identify the utility servicing the site
 - ✓ Reach out to ra-pdevcorridors@pa.gov if you have questions on the utilities servicing the site.
 - ❑ Coordinate with the utilities
 - ✓ Identify the feasibility of providing (NEVI) required power at the site
 - ✓ Discuss cost and schedule implications
- * **Note:** Applicant will need to provide the utility contact information and cost/timeline for utility related items as part of the application



NEVI PROGRAM COORDINATION

Colton Brown

IMPORTANCE OF COORDINATION

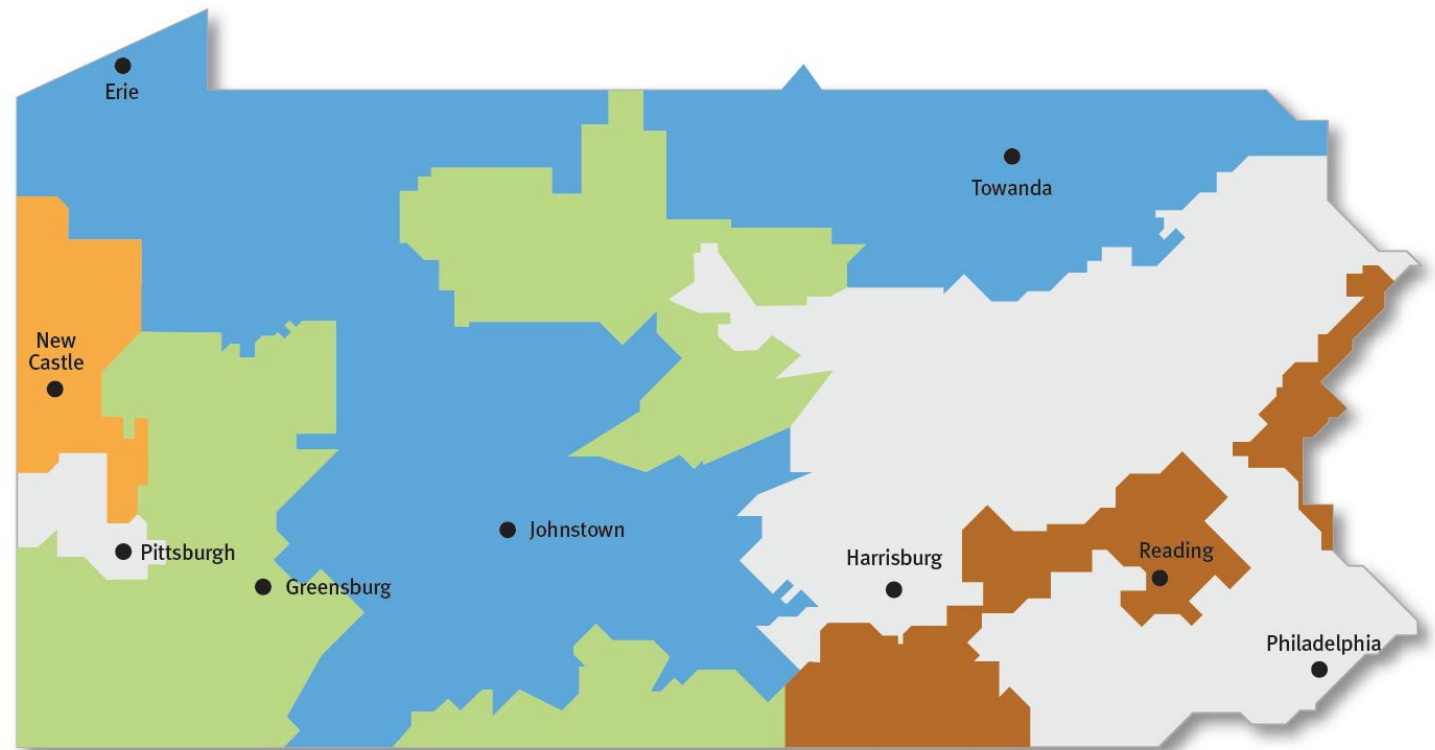


UTILITIES – FIRSTENERGY

Mike Huselton & Tony Leithner

Pennsylvania Highlights

- Our four operating companies serve more than **2.1** million customers within **32,400** square miles of Pennsylvania
- Approximately **3,700** employees in Pennsylvania
- Nearly **95,000** miles of transmission and distribution lines



FirstEnergy Utility Pre-screen Request Process

What the Customer Provides:

- Completed FirstEnergy – PA NEVI Applicant Information form.

What FirstEnergy PA Utilities provide:

- High-level impact study of the Distribution Circuit for the requested Charging Station.
- Estimated cost of the project.
- A direct FE PA NEVI Application email address to communicate between the customers and the utility throughout the process.



FirstEnergy Pennsylvania NEVI – PA.NEVI@firstenergycorp.com

CLEAN CITIES

Tony Bandiero & Rick Price

CLEAN CITIES COALITION NETWORK

- Building partnerships to advance affordable, domestic transportation fuels and technologies

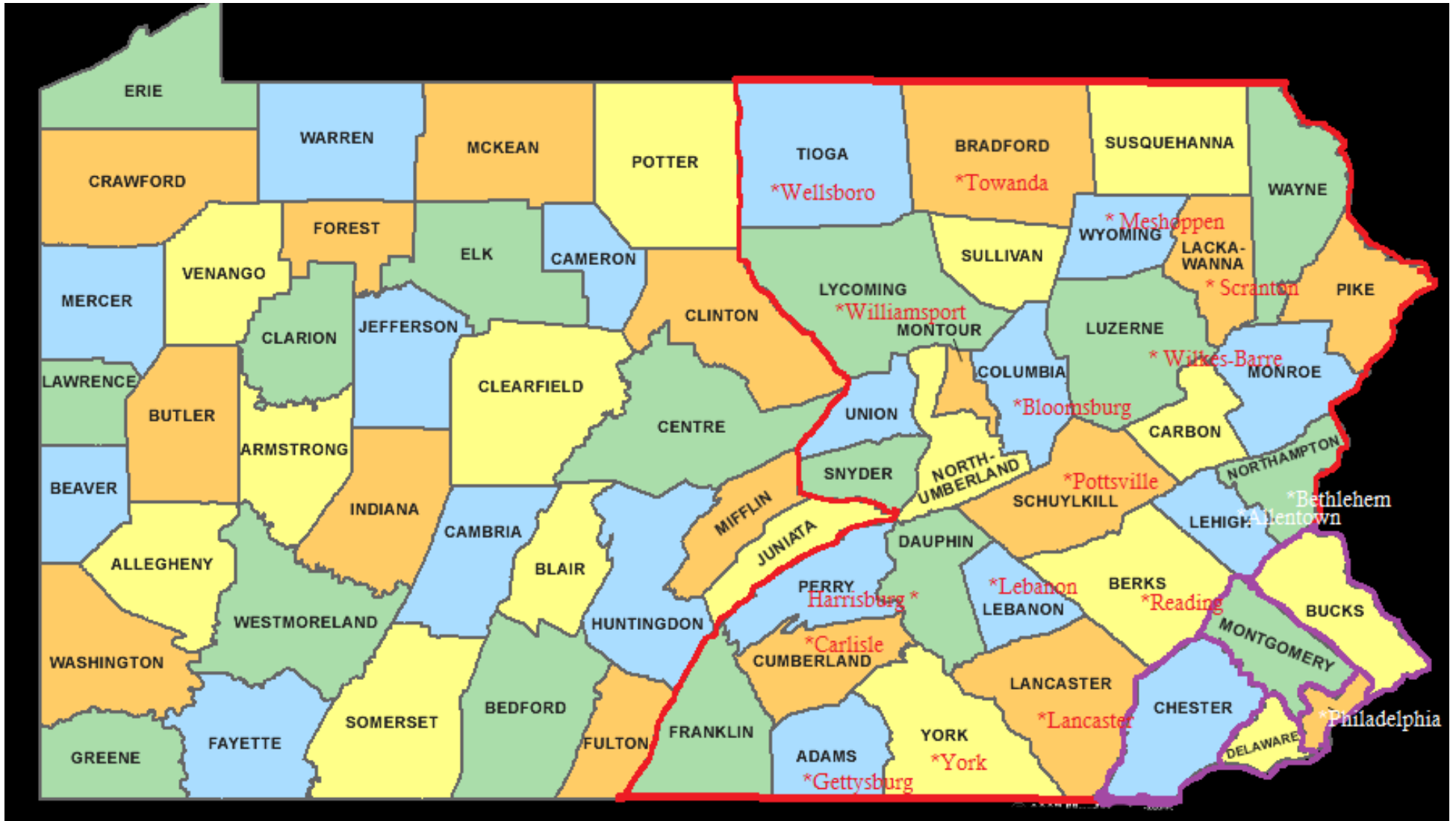


Clean Cities Coalitions:

- Serve as forums for local stakeholders to connect and collaborate on saving energy and using affordable alternative fuels
- Provide grassroots support and resources on new transportation technologies and infrastructure development
- Support networks to help their stakeholders identify cost-effective solutions that work locally



PA CLEAN CITIES COALITIONS



TECHNOLOGY INTEGRATION PROGRAM

- Provides objective/unbiased data and real-world lessons learned that inform future research needs and support local decision-making



CLEAN CITIES – EP-ACT & PRCC

Mission: To reduce petroleum consumption within the transportation sector using alternatives to gasoline and diesel.



Part of the Department of Energy's Clean Cities Program since 1995

501 (c) Non-profit

Comprised of Public and Private companies, State and Local Governments, Municipalities and Utilities

Assist with Grants/incentives/vouchers/rebates

Received over \$10 M for Stakeholders projects valued over \$40 M

Technical Assistance

Project Management

Education and Outreach



ELECTRIC VEHICLE PROJECTS

Priority Areas:

- Statewide Branded
- Consumer Education
- Utility & Regulatory Engagement
- EV Charging Infrastructure Planning
- State & Local Government Planning
- Dealer Engagement
- Fleet Engagement



- The Drive Electric Pennsylvania Coalition was formed in 2016 to help plan and implement strategies for the adoption of electric vehicles throughout Pennsylvania.
- The coalition consists of state and local governments, industry, utility, universities, public and private companies who wish to help spur the adoption of Electric Vehicles (EV's) in The Commonwealth of Pennsylvania.



EP-ACT ELECTRIC VEHICLE PROJECTS

Mid-Atlantic Electric School Bus Experience Project (MEEP)

- Awarded by the U.S. Department of Energy
- Partnership of school bus manufacturers, Clean Cities coalitions and others
- Providing free electric school buses (ESBs) for multi-day vehicle demos in selected school fleets in VA, MD, D.C., PA and NJ through 2023



PRCC ELECTRIC VEHICLE PROJECTS

Charge to Work USA

- Awarded by the U.S. Department of Energy
- Partnership with CALSTART, Clean Cities Coalitions, and others
- Is a nationwide workplace charging acceleration program consisting of education, outreach and technical assistance targeting employers to commit to installing workplace charging.



SUPPORT FROM PLANNING AGENCIES

Dan Szekeres

WAYS THAT PLANNERS CAN HELP



- ❖ Educate the Public and Businesses
- ❖ Identify Needs and Gaps
- ❖ Engage Disadvantaged Communities
- ❖ Share Funding Opportunities
- ❖ Support Grant Applications
- ❖ Coordination (utilities)
- ❖ Address Risks and Challenges

CONDUCTING NEEDS ASSESSMENTS

Prepare for Grant Applications

- Grants are competitive – showing community support and a robust engagement and needs assessment will be valuable in winning grants

Identify Businesses for Hosting Public Charging Infrastructure

- Find business partners to work with and help them obtain grants and coordinate with charging companies
- Private businesses will be needed to accomplish many charging needs and goals

Provide Local Governments Ideas for Projects, Policies and Other Actions

- Evaluate ways to overcome challenges and barriers within the community
- Local governments can work with regional and state partners to get projects funded

ADDITIONAL DEP GRANT PROGRAMS

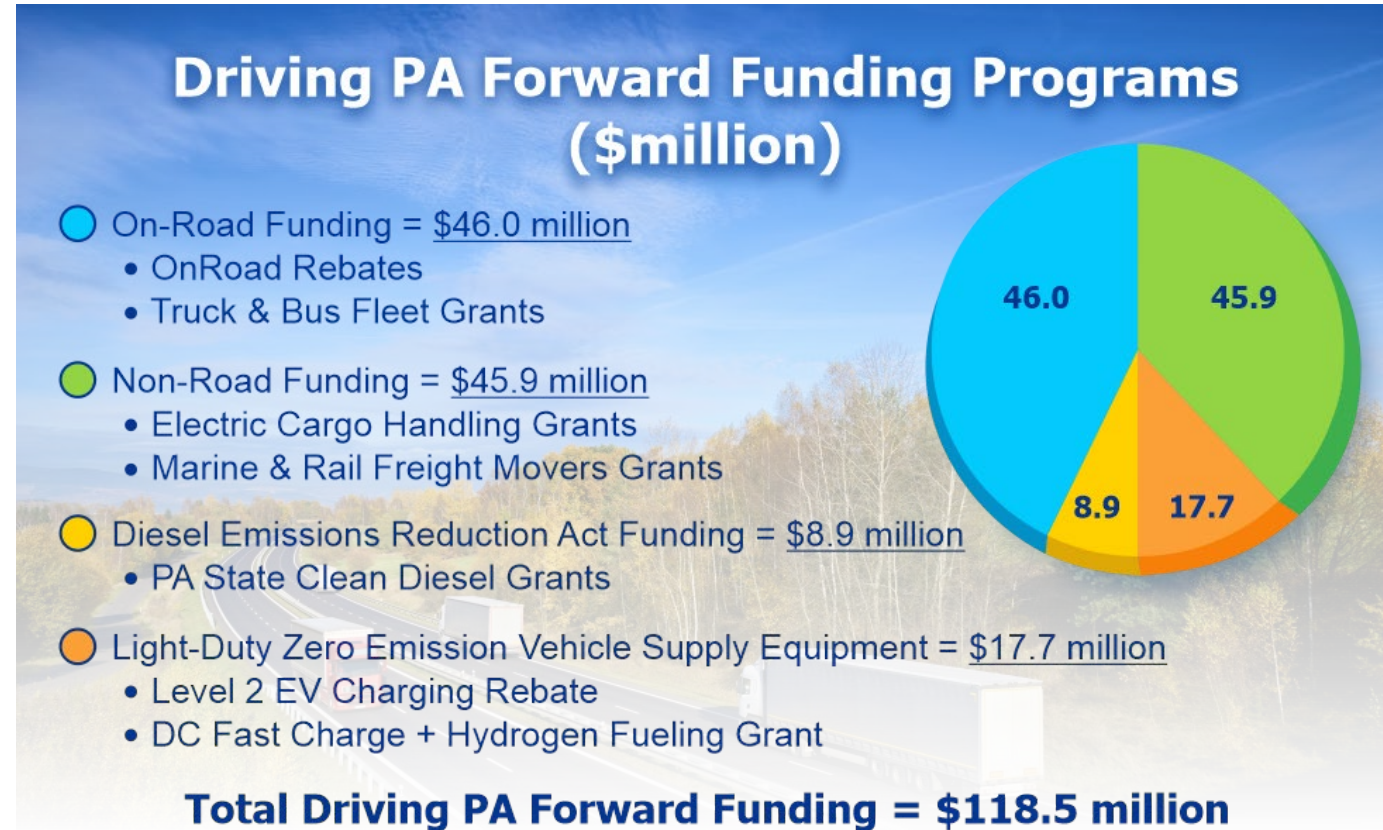
DEP SUPPORT FOR EV

- Level 2 and DC fast charging equipment funding programs for businesses, non-profits, and local governments
- Consumer EV rebate
- Grant program for alternative fuel fleet vehicles
- [Drive Electric PA Coalition](#)
- Medium and Heavy-Duty Zero Emission Vehicle Pilot Grant program
- Electricity rate design study for electric vehicle charging
- Stakeholder and public education



DEP SUPPORT – FUNDING

- Driving PA Forward Funding – Level 2 Rebate:
 - Public spaces
 - Workplaces (employee or fleet)
 - Multi-unit dwellings
- Voucher system
- Over 1,600 plugs installed so far!



www.depgis.state.pa.us/DrivingPAForward/

DEP SUPPORT – REBATE AMOUNTS

Project Type	Maximum Rebate per Plug	OR (whichever is less)	Maximum % of Total Project Cost
Full Public Access, Networked, Priority County	\$4,000	or	70%
Full Public Access, Networked, All Other Counties	\$3,500	or	60%
Multi-Unit Dwelling	\$3,000	or	50%
All Other Eligible Projects	\$2,500	or	40%

www.depgis.state.pa.us/DrivingPAForward/

DEP – ALTERNATIVE FUEL PROGRAMS



Alternative Fuels Incentive Grant Program

2022 Grant Program

- About \$3 million per year to incentivize fleet transitions to alternative fuels
- Eligible project types include incremental cost of fleet vehicle purchase and fleet fueling infrastructure
- Applications are due by December 16th



Alternative Fuels Vehicle Rebate

- Alternative Fuel Vehicle Rebate for low- and middle-income individuals:
 - Household income must be under 400% of federal poverty to qualify
 - \$2,000 for new or used electric vehicle
 - \$1,500 for new or used plug-in hybrid
 - Additional \$1,000 for applicants under 200% of federal poverty

QUESTIONS?

NETWORKING SESSION

STATION 1: LEARNING MORE ABOUT APPLICATION PROCESS

STATION 2: UNDERSTANDING OUR NEEDS, GAPS AND OPPORTUNITIES (INCLUDING EQUITY)

STATION 3: FINDING MATCHES BETWEEN BUSINESSES AND EV NETWORK PROVIDERS

STATION 4: COORDINATING WITH UTILITIES

CONTACT INFORMATION

PENNDOT EV TEAM: RA-PDEVCORRIDORS@PA.GOV

FIRSTENERGY

Email: PA.NEVI@firstenergycorp.com

RICK PRICE, PRCC

Email: rprice5705@aol.com

TONY BANDIERO, EP-ACT

Email: tbandiero@ep-act.org

PA DEP DRIVE PA FORWARD

Email: ra-epvwmitigation@pa.gov

PA DEP AFIG

Email: ra-afig@pa.gov

**Provide your feedback
about this session!**

Scan the QR code here or on the
poster before you go!

Hard copy surveys also available.

