pennsylvania
DEPARTMENT OF TRANSPORTATION

PENNSYLVANIA NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) PROGRAM

SUPPORTING AGENCIES FOR STAKEHOLDER SESSION:

PECO, DEP & CLEAN CITIES


SCRANTON
THE
ELECTRIC
CITY


EAST NORTH
22 322 522
Harrisburg
Selinsgrove
Electric
Avenue
EXIT ONLY

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

pennsylvania
DEPARTMENT OF TRANSPORTATION

RANGE OF GRANTS & INCENTIVES AVAILABLE

- Federal Tax Grants
- DEP Grants
- DOT Grants
- Utility Programs

DOT Funding and Financing Programs with EV Eligibilities*

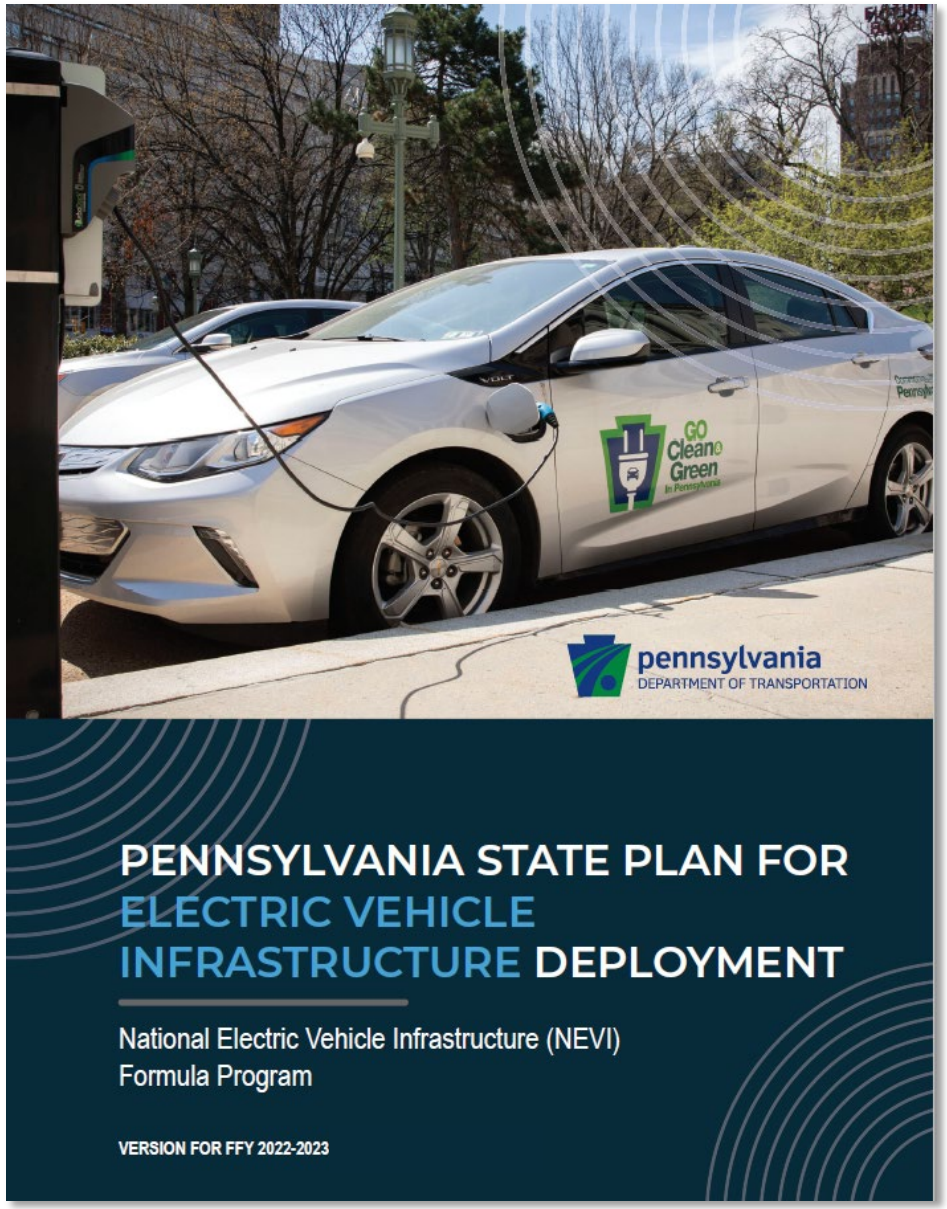
	FY 2022[1] AMOUNT						
FORMULA PROGRAMS							
National Highway Performance Program (NHPP)	$28.4 B[2]	✓	✓				✓
Surface Transportation Block Grant Program (STBG)	$12.5 B[2,3]	✓	✓		✓	✓	✓
Congestion Mitigation & Air Quality Improvement Program (CMAQ)	$2.5 B[2]	✓	✓	✓		✓	✓
National Highway Freight Program (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 though 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



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

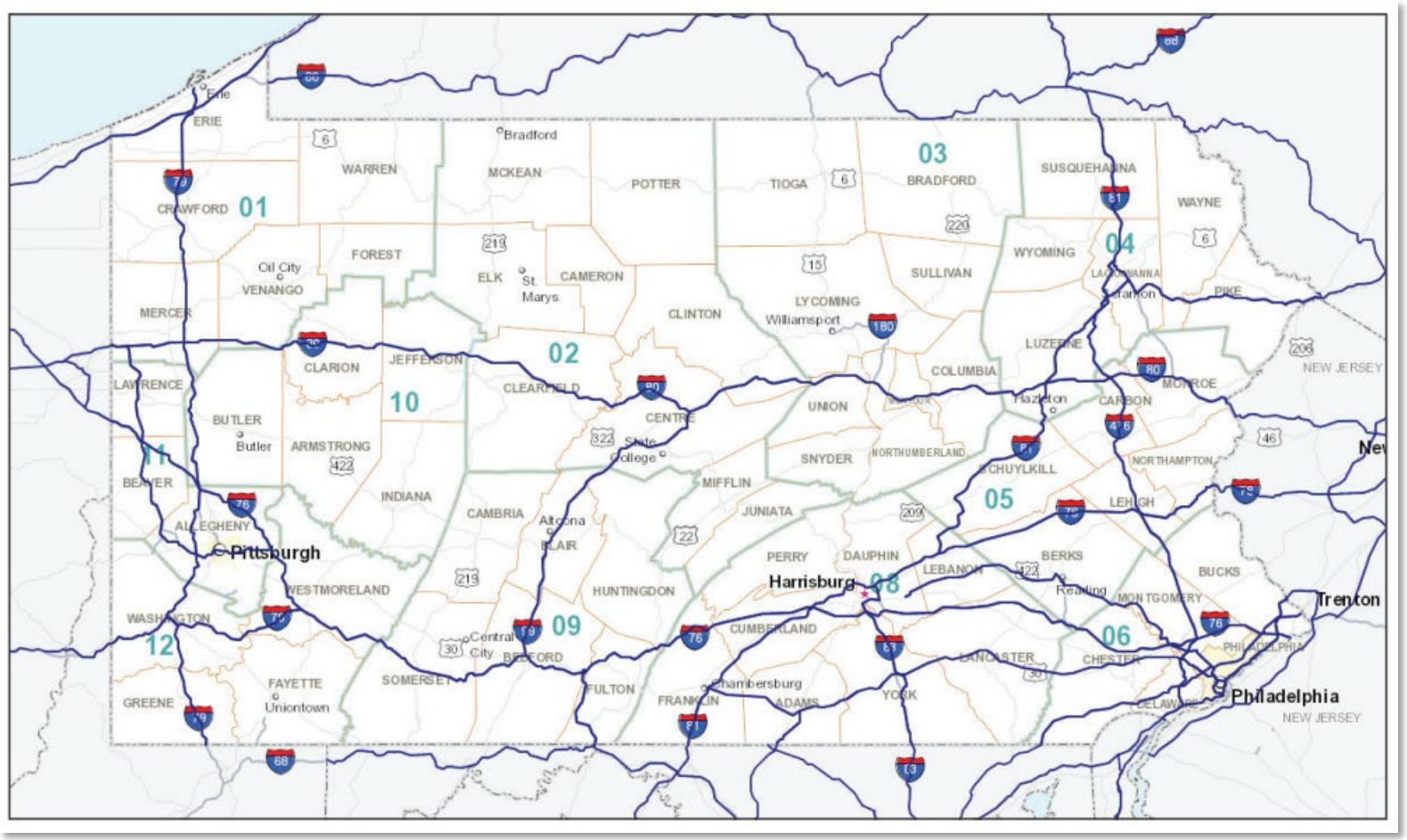
YEARS 1-2 CHARGING FOCUS

- **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

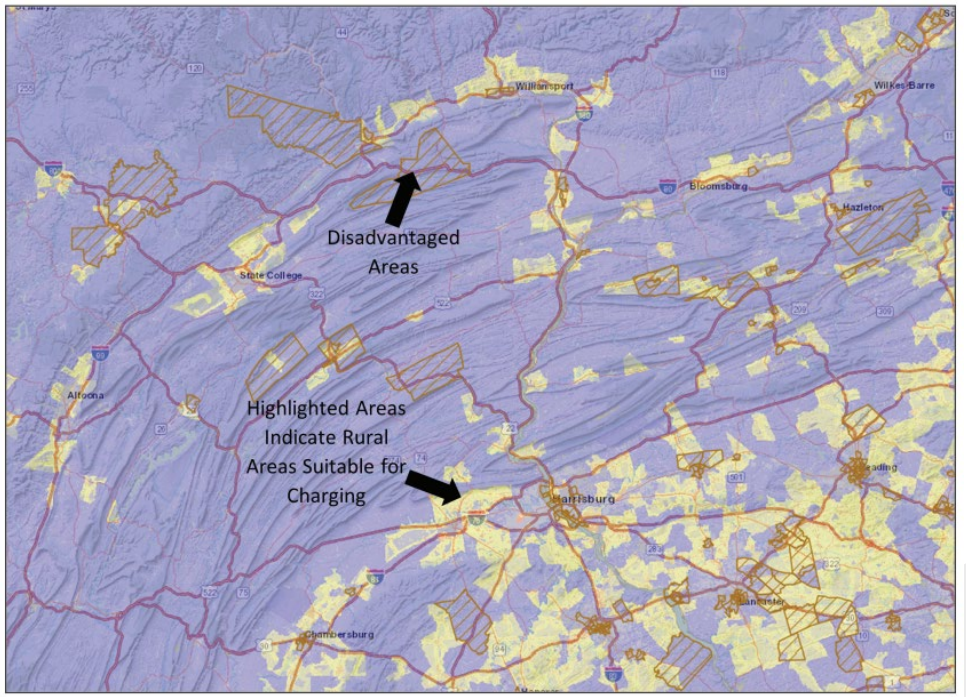
CHALLENGE OF ADDRESSING EQUITY

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

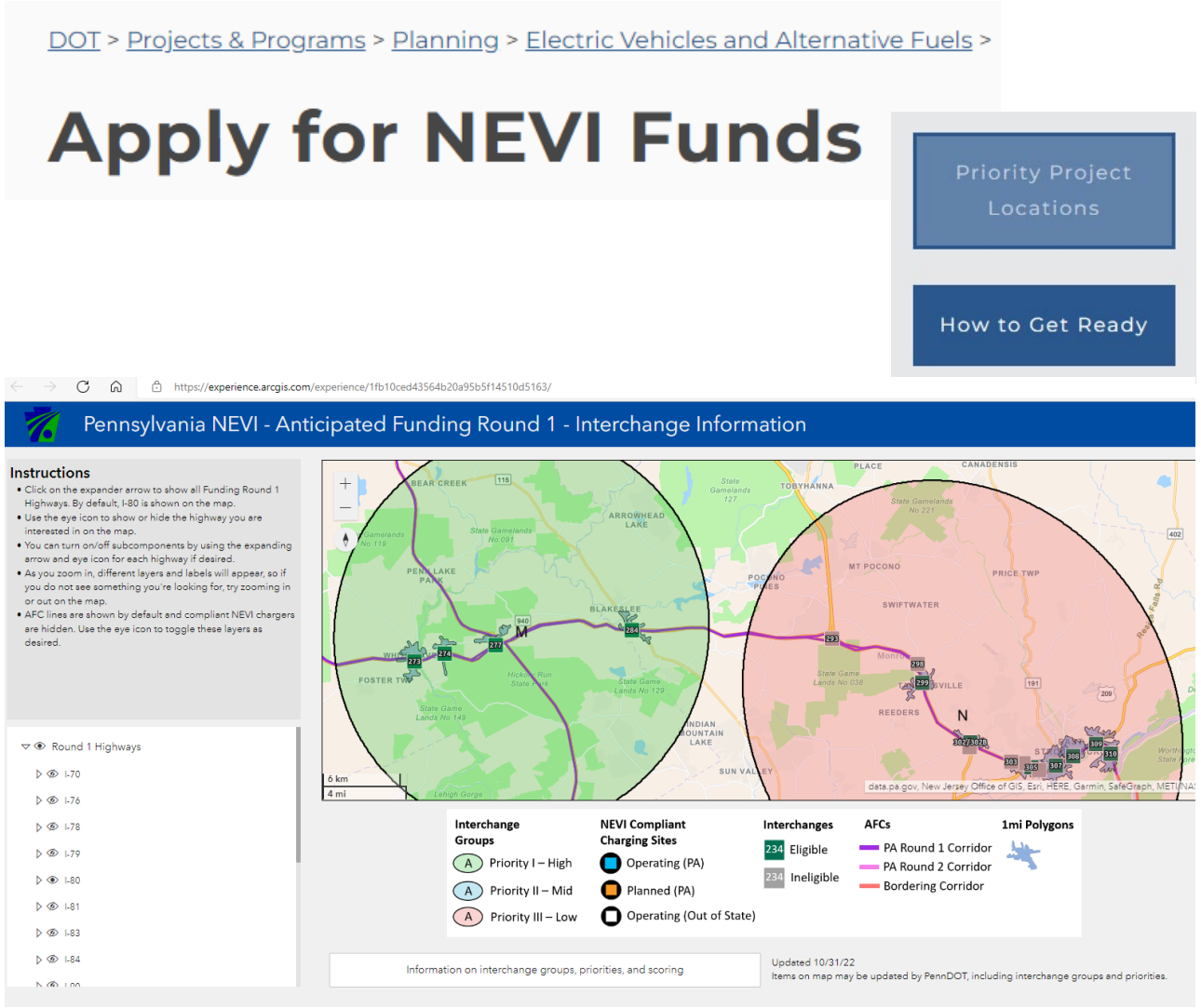
8 DEVELOP A MONITORING DASHBOARD TO TRACK AND REPORT HOW NEVI INVESTMENTS ADDRESS DACS

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

LEARN MORE ABOUT APPLICATION PROCESS



- Application process details provided on PennDOT's EV website:

  www.penndot.gov/ev

- Priority locations for funding highlighted on an interactive map
- Other details on eligibility and application procedures

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

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PENNDOT FUNDING ROUNDS

Round 1	Round 2	Round 3	Future Rounds
Primary/Auxiliary AFC Interstates	Round 1 Unfilled Interstates/ Other AFC Routes		
Dec 2022 *(Anticipated)*	Mid 2023 *(Anticipated)*	2024 *(Anticipated)*	TBD *(Anticipated)*
FY 22 - $25.4 million **FY 23 - $36.5 million** *(PennDOT NEVI funding)*		**FY 24 - $36.5 million** **FY 25 - $36.5 million** **FY 26 - $36.5 million** *(PennDOT NEVI funding)*	
FY '22 & '23 - Approx. $56 million *(Anticipated available amount for applicants)*		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

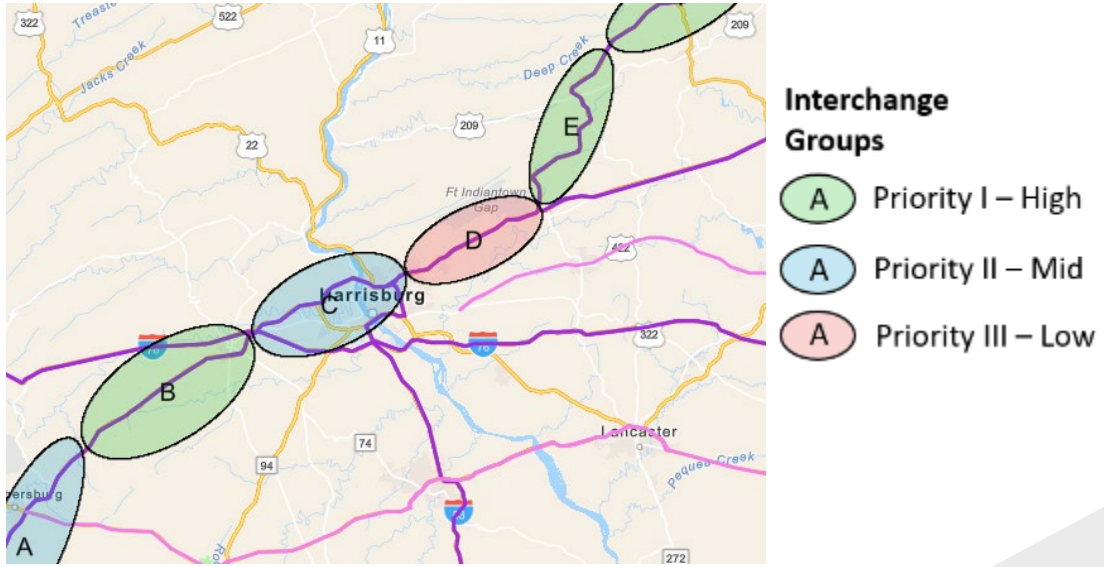
PRIORITY II:

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

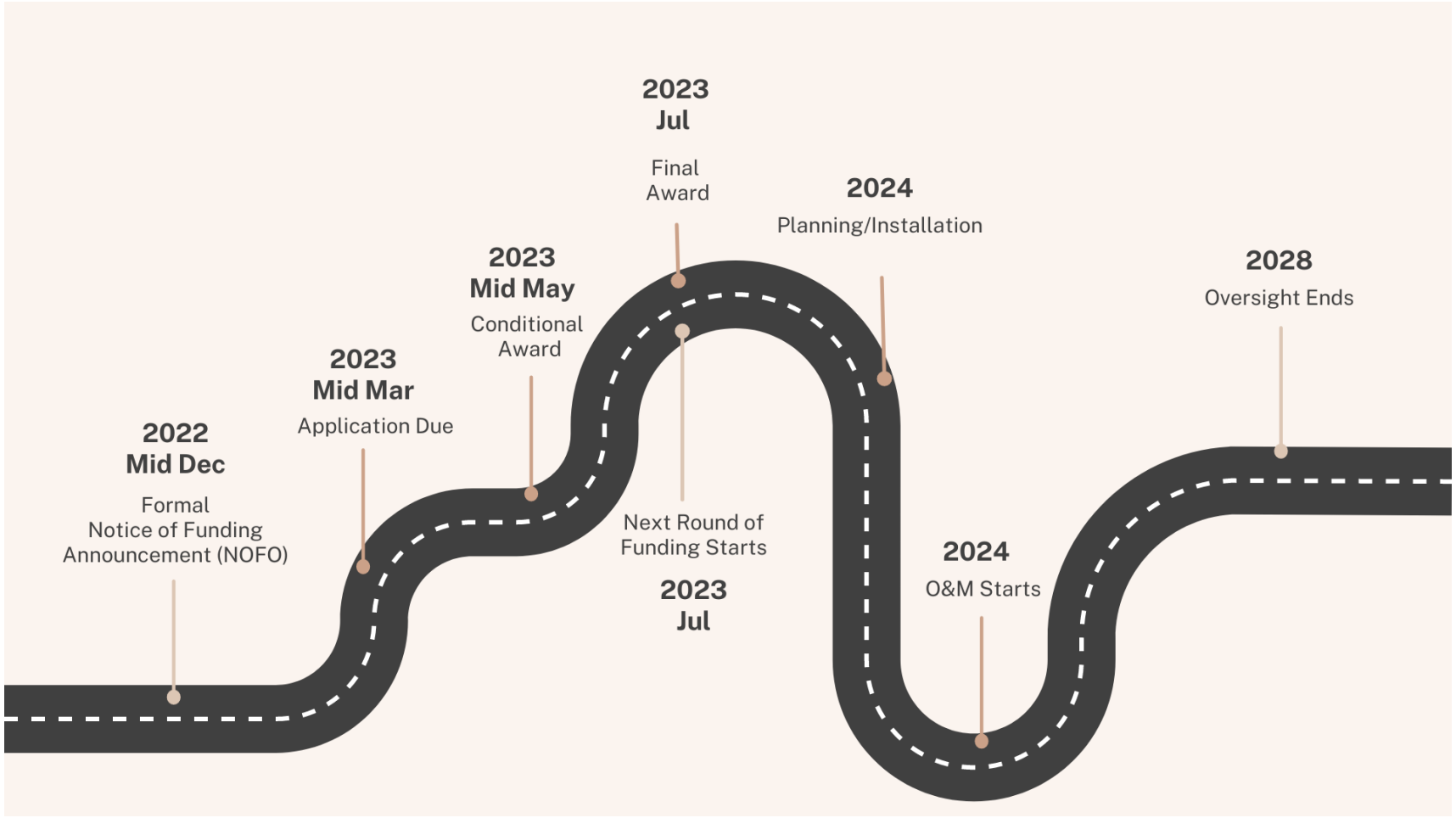
PRIORITY III:

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

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DEPARTMENT OF TRANSPORTATION

HOW TO GET READY

Register for Keystone Login

Get Familiar with NEVI Program

Attend Informational Webinar

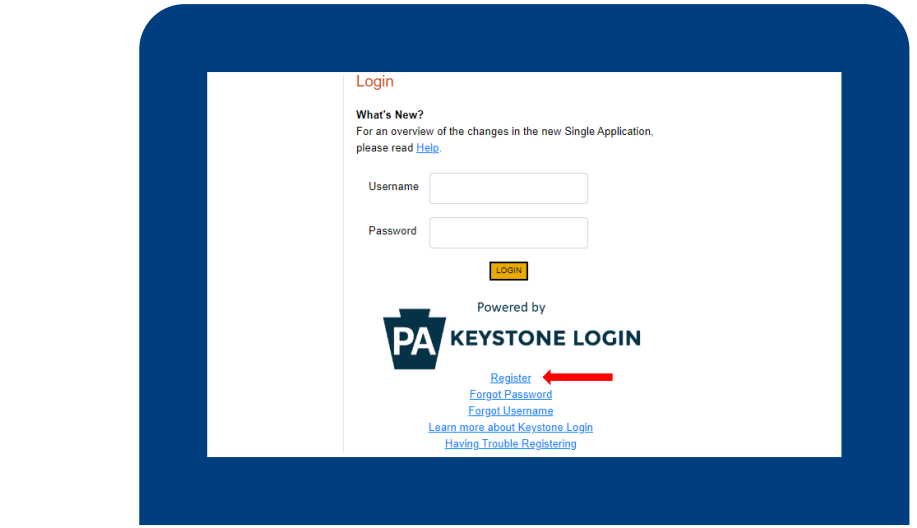
Put a Team Together

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:

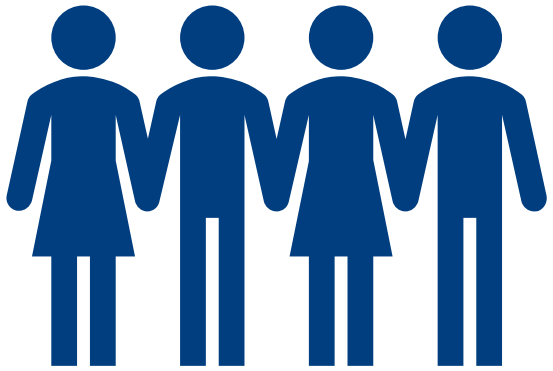
      https://www.penndot.pa.gov/ProjectAndPrograms/Planning/EVs/Pages/Learn-NEVI.aspx

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

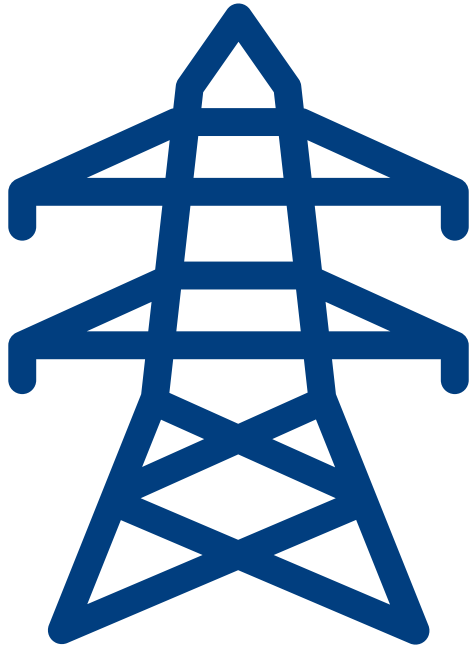
- ❑ Select an appropriate site and ensure site meets NEVI requirements (ADA access, safety etc.,)
- ❑ Conduct site assessment. Use site/time readiness scoring criteria as a reference.
- ❑ Environmental Clearance. Conduct preliminary assessment for environmental clearance needs.

* **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

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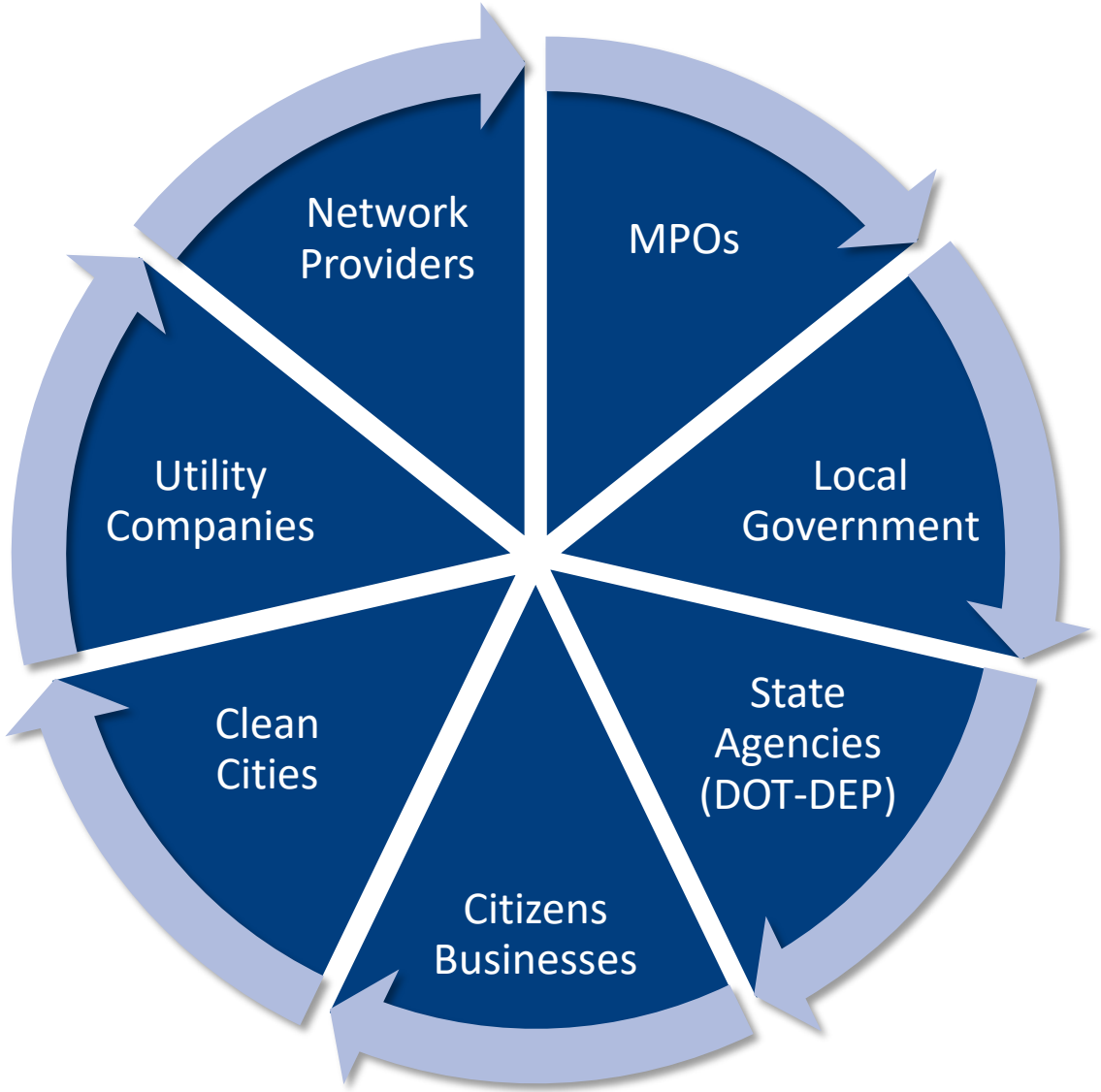
DEPARTMENT OF TRANSPORTATION

IMPORTANCE OF COORDINATION



UTILITIES – PECO - EXELON

Tom Bonner / Monica Vona

peco SM
AN EXELON COMPANY

November 15, 2022

Vehicle Electrification Roadmap

EVsmart®
LIFE, FULLY CHARGED

PECO Fleet Electrification Roadmap

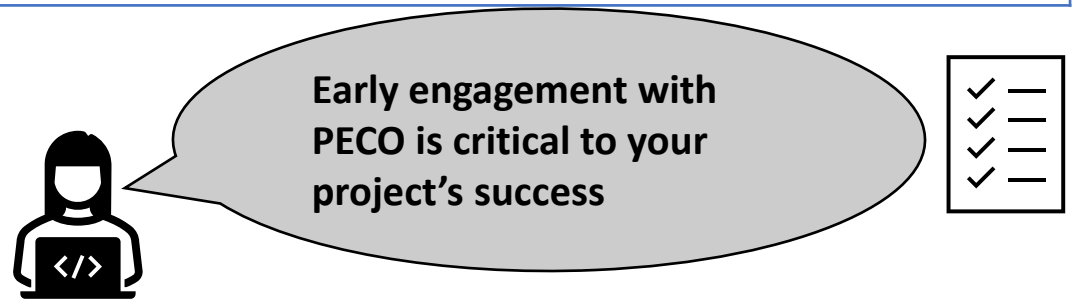
Start Your Electrification Journey at www.peco.com/evroadmap

- **Initiation**
  - Research your charging and electrification needs
  - Verify or establish your PECO account or meter number
  - Work with your manufacturer or electrical contractor to prepare and submit a utility service application, site plan and equipment specifications
- **Planning**
  - PECO reviews service application and advises if utility infrastructure upgrades are needed
  - Design Construction Consultant performs site visit and initial design of the utility equipment or upgrades needed
  - Project timeline developed
- **Design**
  - PECO completes detailed design for electrical installation
  - Simultaneous applications for permit approvals (PECO – utility permits and underground markings; customer contractor works with local municipality)
  - Customer completes installation of charging equipment and “behind the meter” infrastructure
- **Scheduling and Construction for Utility Upgrades**

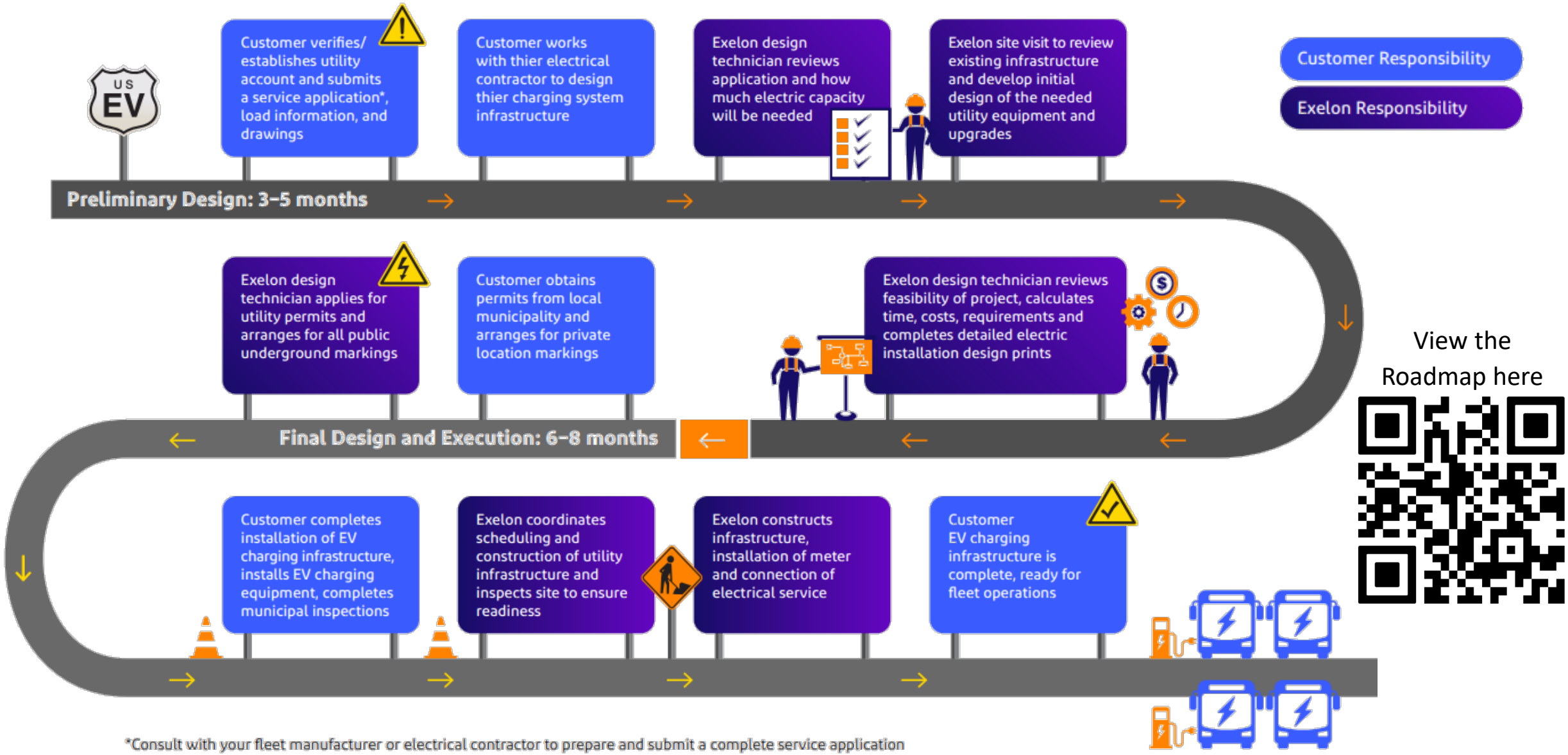
Typical Power Requirement Timelines

Power (MWs)	Equipment	Description	Timeline
125 kW	Switching/cap bank	Minimal on/off property work is needed to accommodate the capacity requirement	2-4 months
500 kW	Install new transformer or extend feeder	Minor on/off property work is needed to accommodate the capacity request	3-6 months
2 MW	New medium voltage feeder	New feeder extension is required to accommodate additional capacity	9-12 months
6 MW	Two new feeders (medium or high voltage)	Construct or extend multiple feeders to customer site	12-15 months
12.5 MW	Multiple new feeders (medium or high voltage)	Depending on load, may build or extend feeders to customer site	12-18 months
25 MW	Multiple new high voltage feeders	Load will likely warrant multiple high voltage feeders and potential substation work	24+ months

Please contact your PECO Large Customer Service representative that is noted on your invoice, or email EVBusiness@peco.com for more information if your organization doesn't have an LCS manager



Navigating the Roadmap



View the Roadmap here

*Consult with your fleet manufacturer or electrical contractor to prepare and submit a complete service application

PECO Service and Meter Application for Electric Vehicles

Electrical Contractor submits a Service and Meter application to PECO. Attach a site plan and Equipment Specification Sheet.

PECO has a dedicated group of Design Construction Consultants that will work with your contractor to complete the service upgrade.

NEVI-eligible projects are assigned an Account Manager who will be your point of contact throughout the process.

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PECO - New Business
Application for Electric Service & Meter (S&M)

M-24175 Rev. 6/2022

INSTRUCTIONS:

Complete this application in its entirety and return **via EMAIL** to the appropriate PECO Office. Incomplete information WILL result in a delay in processing your application.

All work must comply with PECO's Electric Tariff, PECO's Electric Service Requirements manual, PECO's Standards AND be inspected by an approved inspection agency (*City of Philadelphia requests may be shared with Licenses & Inspections*).

Note**: Not all service voltages are available in all areas. **Before purchasing electrical equipment or proceeding with wiring, obtain information regarding service availability and meter location from PECO.

This application may be ***cancelled within 90 days*** of PECO's response date if no further communication is received.

NOTE: For '**make-safe**' requests (de-energize/cover lines) please click here: Make-Safe online request (https://secure.peco.com/SafetyCommunity/Safety/Pages/MakeSafeRequest.aspx)

If demolishing a building and require electric or gas facilities removed: **Call: 8-1-1 (PA One Call) Demolition Requests**

Select the appropriate PECO office from the selection below

BUCKS & MONTGOMERY COUNTIES
400 Park Ave.
Warminster, PA 18974
Fax # (215) 956-3240
Phone 1-800-454-4100 ***opt 1; opt 2***
Email: BucksMont
BucksMontServiceApplications@Exeloncorp.com
NOTE: Lower Merion is served by **DelChester Region

DELAWARE, CHESTER & YORK
1050 W. Swedesford Rd.
Berwyn, PA 19312
Fax # (610) 725-1416
Phone: 1-800-454-4100 ***opt 1; opt 1***
Email: DelChester
DelChesterServiceApplications@Exeloncorp.com
NOTE: Lower Merion is served by **DelChester region

PHILADELPHIA COUNTY
830 S. Schuylkill Ave.
Philadelphia, PA 19146
Fax # (215) 731-2327
Phone 1-800-454-4100 ***opt 1; opt 3***
Email: PHL County
PhilaNewBusiness@Exeloncorp.com

***NEW* RESIDENTIAL CONSTRUCTION**
(**New Foundation Residence Only** - *NOT renovations*)
400 Park Ave.
Warminster, PA 18947
Fax # (215) 956-3386
Phone 1-800-454-4100 ***opt 3***
Email: NRCG
NRCGServiceApplications@Exeloncorp.com

CUSTOMER NAME	Tax ID # or SSN
** ADDRESS TO BE SERVED - use for underwriter	APARTMENT / LOT #
CITY, STATE	ZIP CODE
Customer Email Address	Customer Telephone #
Preferred Method of Communication Email Phone	

** **Use the address noted above when applying for underwriter's inspection**

CUSTOMER BILLING ADDRESS **-OR-** CUSTOMER PECO ACCOUNT #

CITY, STATE	ZIP CODE	TELE. #

SEND REPLY TO:

ELECTRICIAN OR BUILDER NAME	
ADDRESS	Reply Requested by:
CITY, STATE	ZIP CODE
TELE. #	E-mail Address

CURRENT CONSTRUCTION STATUS:
Not Started - Date Customer Will Start Work: _____ In Progress Completed

Is service line required Yes No Is power currently ON at the facility Yes No

PECO cannot commence work until all required information, including approved plans, are confirmed received

CUSTOMER COMMENTS / DESCRIPTION OF WORK:

ENCLOSE THE REQUIRED DOCUMENTS:
- Site Plan
- Elevation Plan
- Single Line Digrams (for 3-Phase Service)
- Substation Arrangement (As Needed)

NOTE: New Residential Construction (new foundation) Customers - Per the Tariff, section *Underground Service*, the builder is required to trench, at their coordination, and expense. All trenching must comply with PECO's standards.

REQUEST TYPE

New Service to **Existing** structure	Solar	Load increase / Decrease
Temporary Service to **Existing** structure	Upgrade / Changes	Reintroduction of Service
New Services to New *Residential* Foundation	Service Relocation	Remove Service
Temporary Service to New *Residential* Foundation	Separation of Wiring	Demo (PA 1 Call Notified)

SERVICE TYPE:

RESIDENTIAL
Single House, Apartment, Duplex/Triplex, Mobile Home, Modular Home, Town House
Other _____
Area of Building _____ Sq. Ft.

☐ COMMERCIAL
Store, Industrial, Restaurant, Office, Warehouse
Other _____
Area of Building _____ Sq. Ft.

SERVICE CHARACTERISTICS:

Underground Aerial

AMPS _____

PHASE	VOLTS	WIRES
1	120/240	3
2	120/240	5

PHASE	VOLTS	WIRES
3	240	3
3	120/240	4
3	120/208	4
3	277/480	4
3	13200	3 or 4
3	33000	3 or 4

METER INFO:
Single Meter Required Multiple Meters Required - Total No._____
Location: Inside Outside

HEATING / AIR CONDITIONING:
Heat Pump ____ Tons Resistance Natural Gas Other_____ Type
Central Air ____ Tons Propane Geo-Thermal Backup_____

CHARACTERISTICS OF *NEW* OR *ADDITIONAL* LOAD:

TYPE OF CONNECTED LOAD (kW) *(Indicate 0 if not applicable)*		LARGE MOTOR SPECIFICATIONS:	
AIR CONDITIONING		FREQ. OF STARTING (per hr.)	
CAR CHARGERS L2		LOCKED ROTOR CURRENT	
CAR CHARGERS L3		MOTOR CODE LETTER	
ELEVATORS		PHASE	
GENERATORS		PURPOSE	
HEATING		QUANTITY	
LIGHTING		SIZE (HP)	
TANKLESS WATER HTR		VOLTAGE	
MISCELLANEOUS			
MISCELLANEOUS			

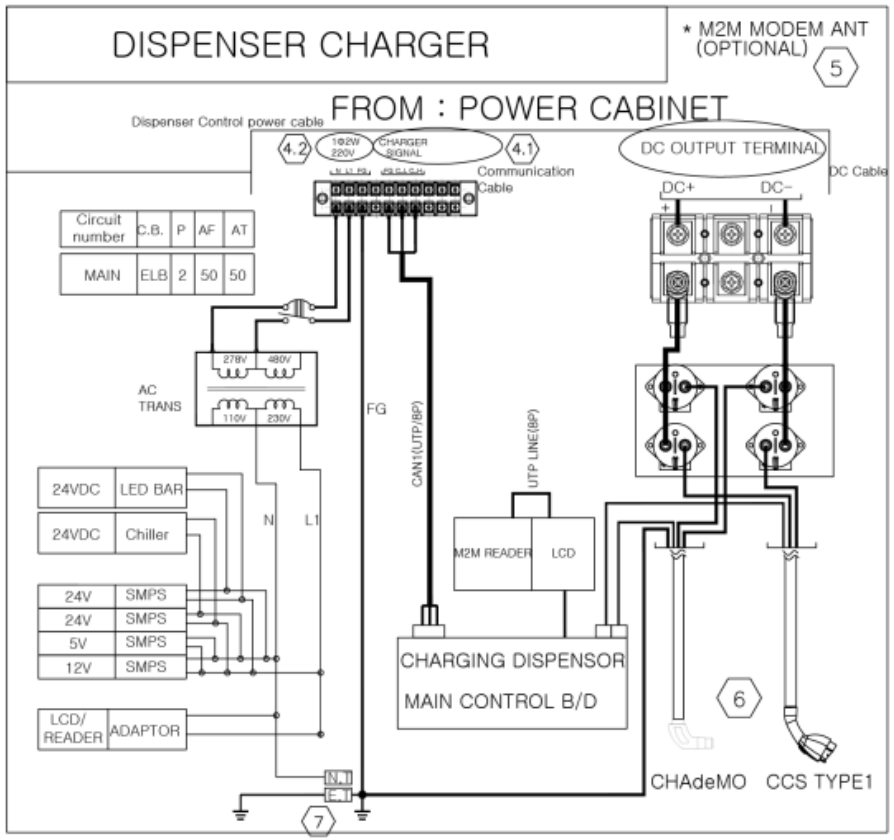
SUBMITTED BY:

_____ **DATE:**_____

Direct Link to S&M PDF Application - https://www.peco.com/SiteCollectionDocuments/PECO%20Electric%20S%20and%20M%20Application%20REV-6-2022.pdf

PECO Service Request Page - https://www.peco.com/MyAccount/MyService/Pages/ServiceRequests.aspx

Dispenser - 2/2



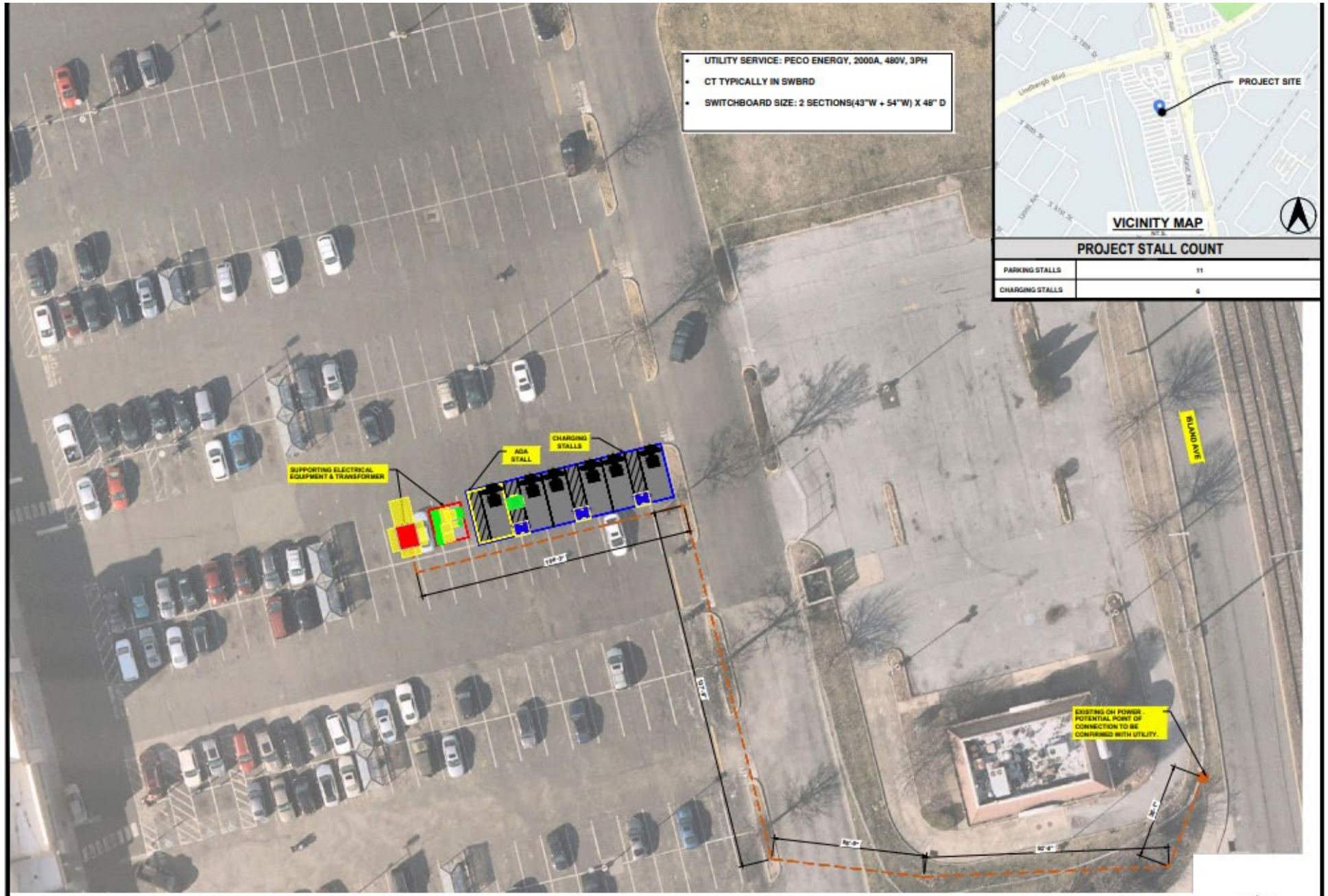
Specifications

Specifications

The following table lists the specifications for the EV Charging Station.

Power Cabinet

Item		HPC 175K (1 set) (150 kW power config)	HPC 175K (2 sets) (350W power config)
AC Input	Voltage	3-phase, 480y/277 (4-wire)	
	Voltage Range	10 %	
	Frequency	50/60 Hz	
	Current (peak)	227 A	
	Power	173 kW	346 kW
DC Output	Max. Voltage	DC 200 – 920 V	
	Max. Power	161 kW	322 kW
Power Factor		More than 0.99	
Efficiency (full load)		94.5 %	
Mfr recommended overcurrent protection		300 A	
Total Harmonic Distortion		3.9	
Operating Temperature		-30 °C – +50 °C (-22 °F – +122 °F)	
Humidity		95 %	
IP Rating		Nema, Type 3R, Rain Proof	
IK Rating		IK08	
Short Circuit Rating		65 kA (part number starting with QB)	
Altitude		3,000 m	
Power Cabinet Weight		882 lb (400kg)	1,764 lb (800kg)
Power Cabinet Dimensions (W x D x H)		41.97 x 29.45 x 83.39 in (1,066 x 748 x 2,118 mm)	83.94 x 22.05 x 83.39 in (2,132x 748 x 2,118 mm)

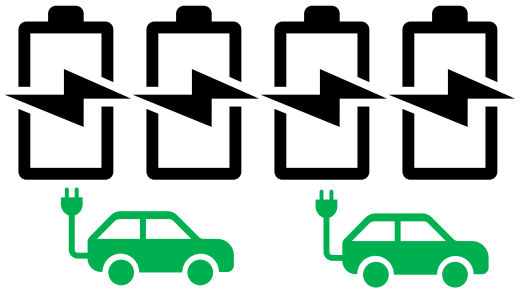


C-1 **PROPOSED EVCS LAYOUT OPTION 1**

Electric Vehicle – Fast Charging (EV-FC) Rider

PECO will continue to offer a pilot discount on distribution charges for commercial customers installing fast charging infrastructure through June 30, 2024.

- Available to customers on PECO rates GS, PD, or HT who install at least one high-powered, publicly available charger (direct current, inductive charging, or equivalent capabilities).
- Includes public charging, fleet applications, and multi-dwelling unit buildings.
- Provides a temporary demand (kW) credit to the customer's billed demand, initially equal to 50% of the combined maximum nameplate capacity for all DCFCs connected to the service.*
- Customers must provide data for each DCFC not separately metered by PECO, including number of charging ports, hourly and monthly usage (kWh), and hourly and monthly demand (kW).
- Customers will receive this credit for 36 months or until the pilot ends, whichever comes first. (The pilot began on July 1, 2019, and is scheduled to end on June 30, 2024.)



* The customer's billing demand cannot be less than the minimum demand applicable under the terms of their PECO base rate.

CLEAN CITIES

Rick Price

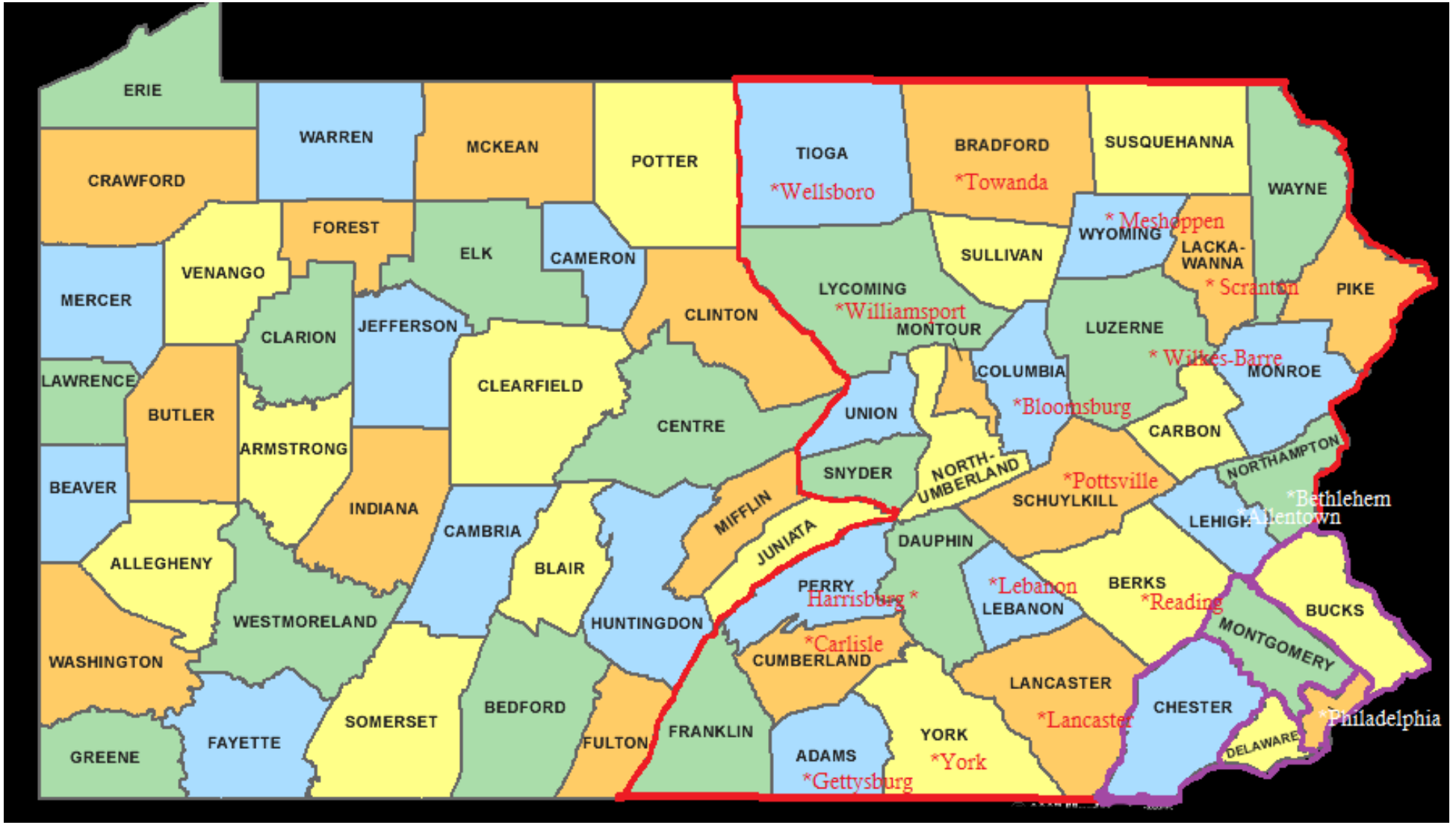
CLEAN CITIES COALITION NETWORK

- 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



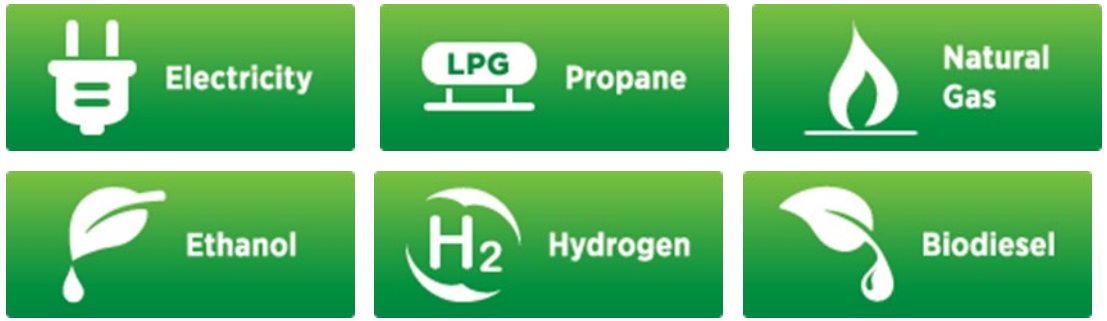
TECHNOLOGY INTEGRATION PROGRAM

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

EP-ACT

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

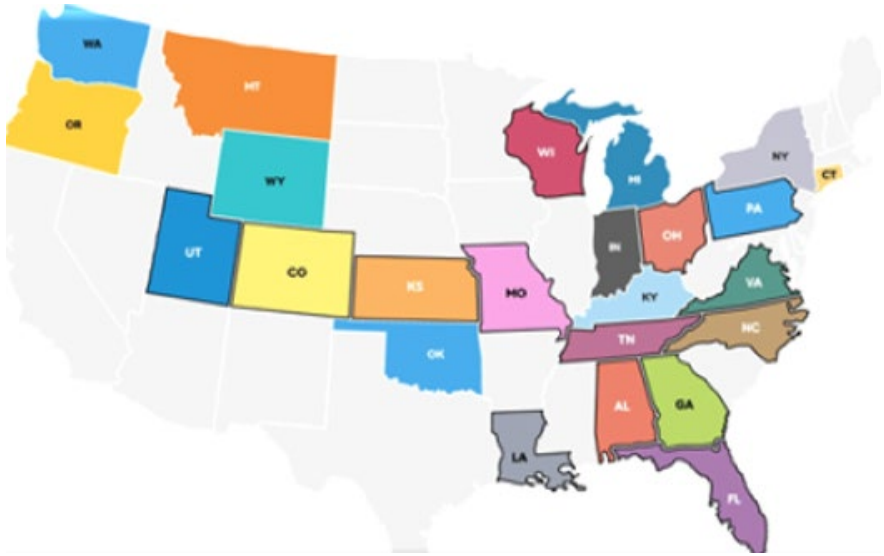
- Part of the Department of Energy's Clean Cities Program since 1993
- 501 (c) Non-profit
- Comprised of Public and Private companies, State and Local Governments, Municipalities and Utilities
- Assist with Grants/incentives/vouchers/rebates
- Received over $30 M for Stakeholders projects valued over $90 M
- Technical Assistance
- Project Management
- Education and Outreach



EP-ACT ELECTRIC VEHICLE PROJECTS

Priority Areas:

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



DRIVE ELECTRIC PA

- 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

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

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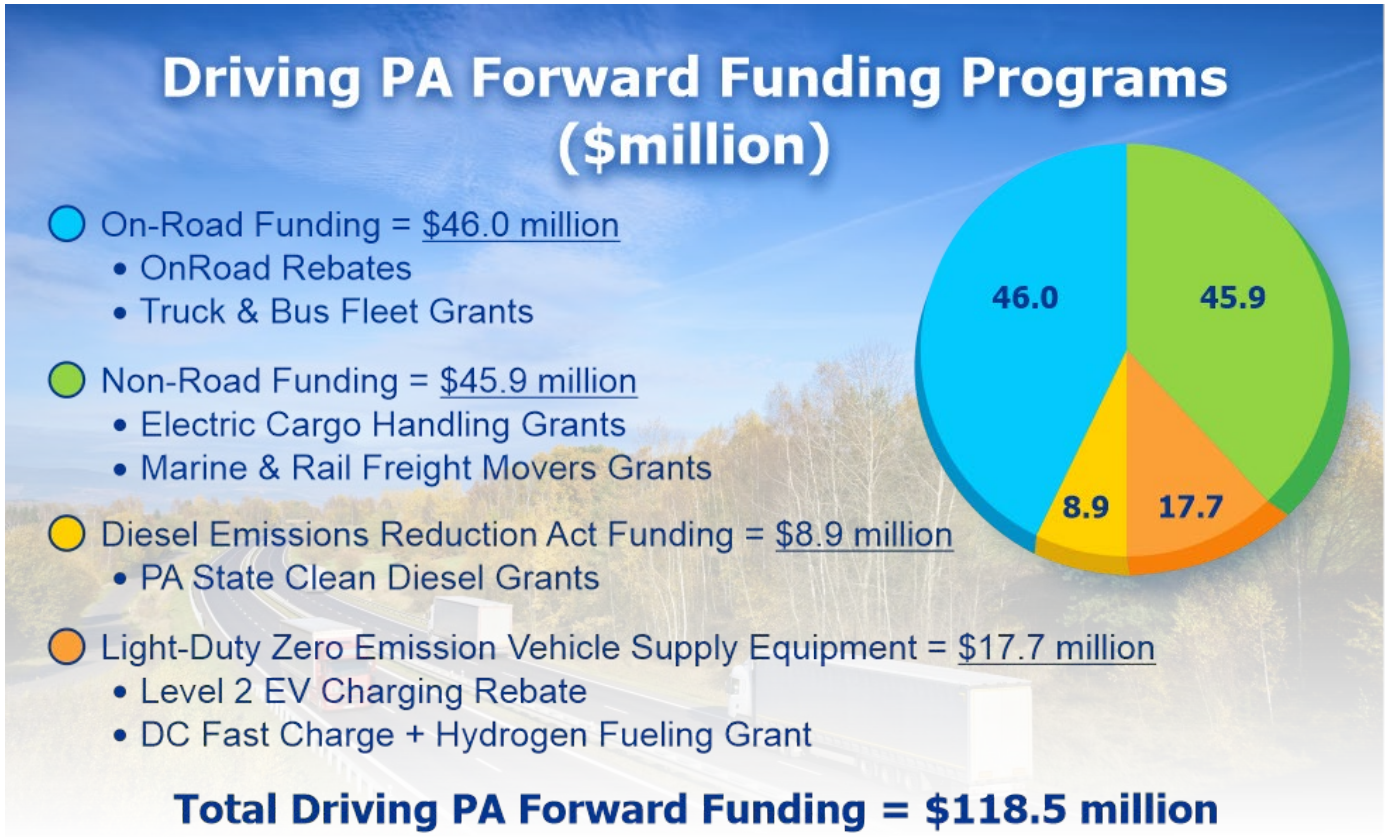
DEP SUPPORT FOR EV

- 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/

pennsylvania DEPARTMENT OF ENVIRONMENTAL PROTECTION

pennsylvania DEPARTMENT OF TRANSPORTATION

DEP – ALTERNATIVE FUEL PROGRAMS

- 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 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?

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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

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Hard copy surveys also available.

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