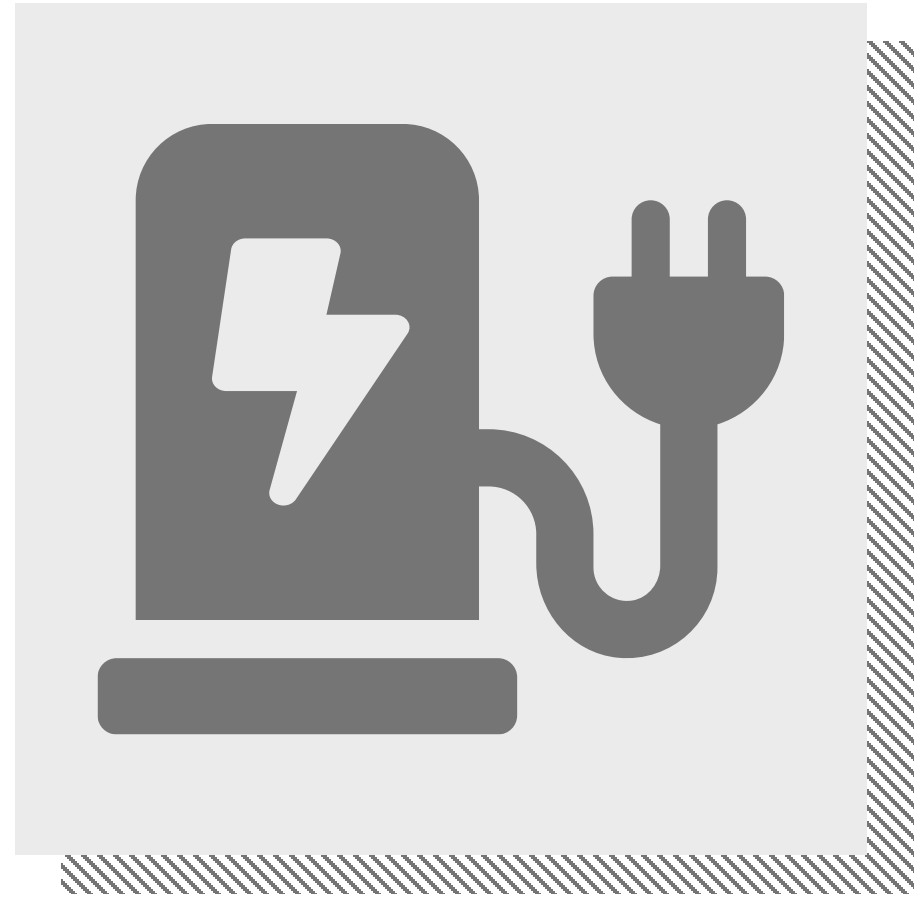


ODYSSEY DAY

CONNECTING THE CORRIDORS

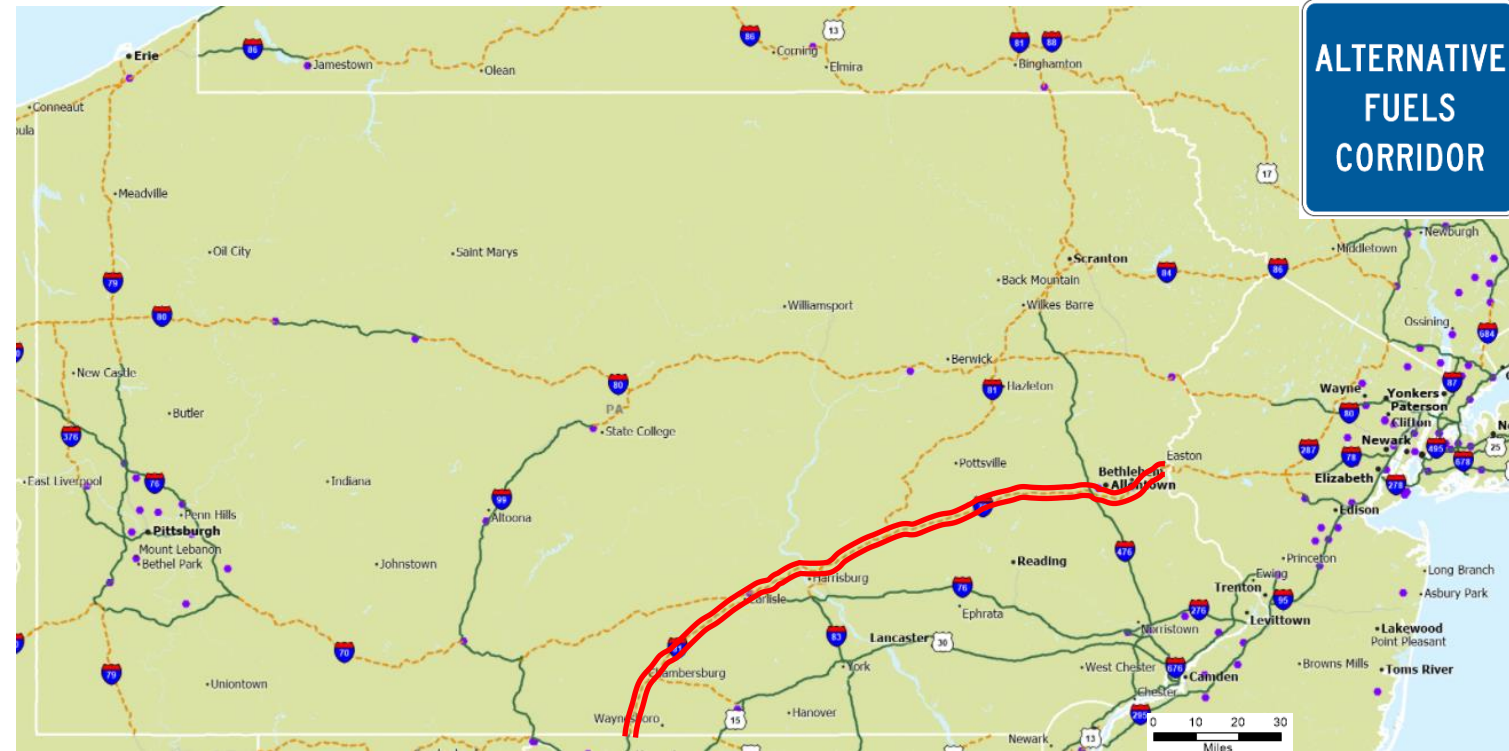
MARK C. KOPKO | OCTOBER 1, 2021

- Alternative Fuels Corridor
- EV Senior Advisory Council
- Current Initiatives
- EV Mobility Plan



ALTERNATIVE FUELS CORRIDORS

- Alternative Fuels Development Plan for I-81 and I-78 in PA completed in July
- Looked into areas to deploy EV chargers and CNG stations to fill in the gaps on I-81/I-78 corridor
- Next steps:
 - Continued outreach
 - Maintain discussions with EV network companies
 - Work with DEP on grant opportunities
 - Share lessons learned with planning partners



ALTERNATIVE
FUELS
CORRIDOR

Legend

- DC Fast Charging Station
- EV – Corridor Ready
- EV – Corridor Pending
- == I-81/I-78 Corridor



ALTERNATIVE FUELS CORRIDORS



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 80 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 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 or in metro areas.

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 On I-81/I-78?
The Pennsylvania Department of Transportation (PennDOT) is developing a Deployment Plan for alternative fuel infrastructure, including DC fast charging, along the I-81/I-78 corridor in PA. (plans for other interstates are anticipated in the future). If you are interested in a project consultation on fast-charging options and possible grant funding for a property located along the I-81/I-78 corridor, please contact:
RA-PDEVCorridors@pa.gov

DRIVING PA FORWARD

YOUR BUSINESS MAY BE ELIGIBLE FOR FUNDING

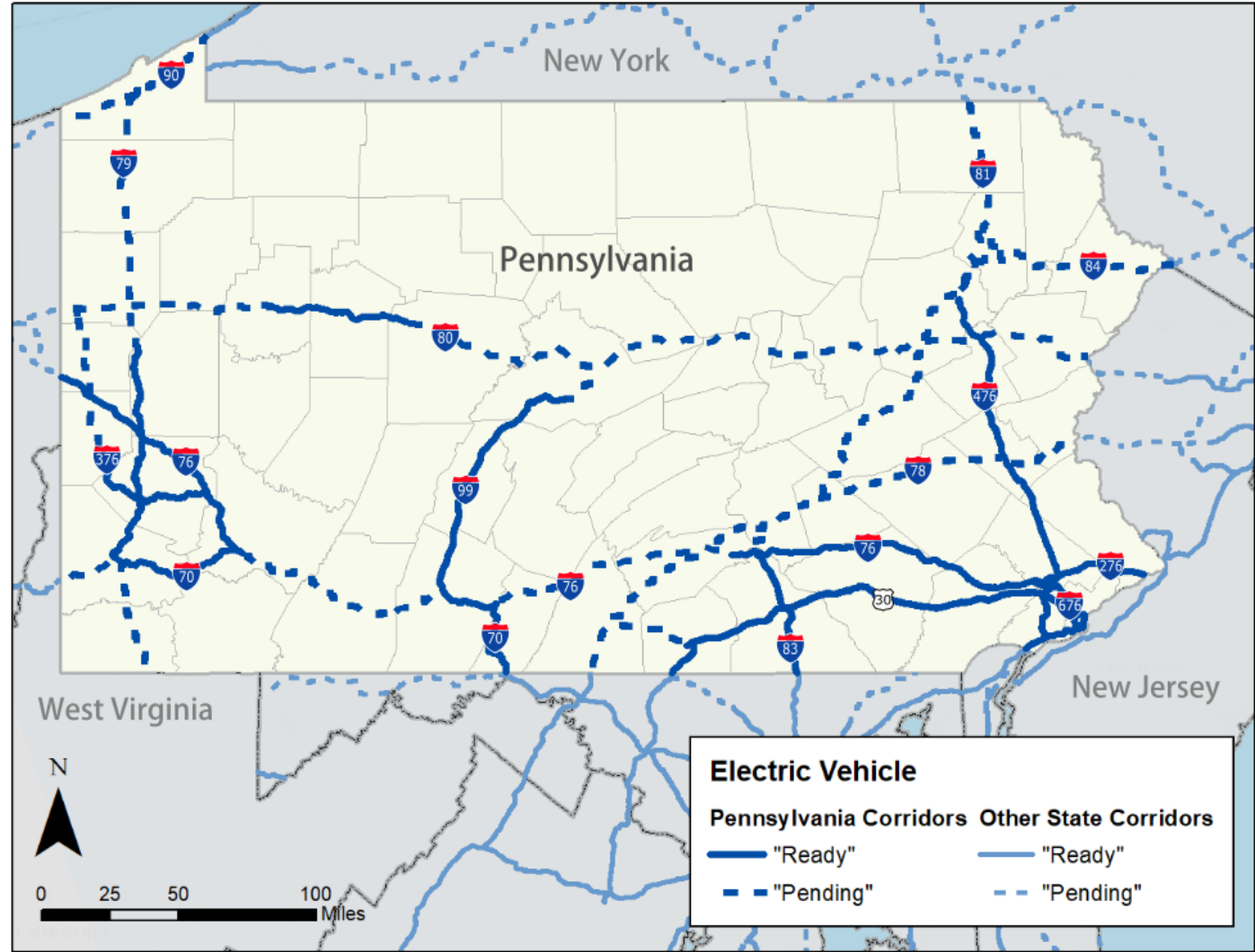
DC Fast Charging Grant Program
The Pennsylvania Department of Environmental Protection *Driving PA Forward* initiative includes reimbursements for the acquisition, installation, operation and maintenance of DC fast charging equipment. Program funding and eligibility details include:

- More than 1/2 of costs reimbursed for DC fast charging projects, or \$250,000 maximum per award
- Projects must be in PA, publicly accessible, 24/7 operational, networked, and include both CCS and CHAdeMO connector types
- Preferred locations include projects off interstate exits (<5 miles) or in metro areas

Application Opens Early Summer 2021

Web Link:
[Driving PA Forward Homepage](#)
Scroll down to DC Fast Charging Grant Program to see Guidelines and Instructions

Pennsylvania is Committed to Supporting Growth in EV Vehicles. See the [Pennsylvania EV Roadmap: Web Link to Road Map](#)



EV SENIOR ADVISORY COUNCIL

- Made up of representatives from various deputates and offices
- Working groups
 - Education and Outreach
 - PennDOT Fleet
 - EV Deployments
- Current/Future Initiatives
 - Internal and External EV Education Programs
 - Solar Charging in ROW Pilot
 - Charging at PennDOT facilities
 - Filling in gaps of the Alternative Fuels Corridors
 - Developing internal policies for the PennDOT EV fleet
 - Identifying electrical grid upgrades required at fleet facilities



PA EV MOBILITY PLAN SCOPE

- Confirm Goals, Objectives and Use Cases
- Identify Best Practices
- Identify Existing Conditions
- Perform Technology Scan
- Evaluate Climate Impact
- Equity Considerations
- Develop EV Mobility Report



GOALS, OBJECTIVES, AND USE CASES

PRIMARY FOCUS FOR PASSENGER VEHICLE CHARGING FOR:

- a. Enable interstate/regional travel on interstate routes/interstate lookalikes with fast charging every 50 miles within 1 mile of interstate and interstate lookalikes
- b. Support destination trips (urban and rural)
- c. Assist with mobility during emergencies (focus on winter weather events and storm evacuation into and within PA)

REVIEW OF BEST PRACTICES AND NEXT STEPS FOR:

- a. Support passenger vehicle commuter travel (i.e., appropriate location for mobility hubs to encourage multimodal travel)
- b. Enable medium/heavy duty freight charging for:
 - i. Interstate/regional travel on interstate routes
 - ii. Rural deliveries
 - iii. Emergency travel (consider MD & NY evacuation to PA)

CONSIDER EQUITY AND EVALUATE CLIMATE IMPACTS

- a. Disabilities, multi-unit dwellings, personal safety needs, getting small businesses involved



BEST PRACTICES AND LESSONS LEARNED

- MDOT, CDOT, VDOT, NREL, USDOE
- EV Senior Advisory Council
- Survey employees to identify facility locations to prioritize
- Map charging stations and EV owners
- Some fleet vehicles can't be changed over to EVs (snowplows, emergency response) due to charging time when they need to be used
- AV companies aren't deploying in rural/low-income areas due to lack of EV charging
- Being able to see availability is beneficial for customers
- Ridesharing/ride-hailing/carsharing are helping improve equity because the user doesn't need to purchase a car
- CA had a pilot where they gave e-bikes to low-income essential workers



EV MOBILITY PLAN NEXT STEPS



Evaluate Climate Impact

Equity Considerations

Engage MPOs and
Continue to Involve Other
Stakeholders

Develop EV Mobility Report



QUESTIONS?



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