



PennDOT EV MOBILITY PLAN

The Future is Bright!

Agenda

- Introductions
- Review Scope
- Goals and Objectives
- Next Steps

PennDOT 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/Priorities & Objectives

SCOPE

PASSENGER VEHICLE CHARGING

- Interstate/Regional Travel on Interstate Routes
- Destination Trips (urban and rural)
- Emergency Travel
- Commuter Travel (including appropriate location for mobility hubs to encourage multimodal travel)

MEDIUM/HEAVY DUTY FREIGHT CHARGING

- Interstate/Regional Travel on interstate routes
- Rural Deliveries (is charging limiting services?)
- Emergency Travel (consider MD & NY evacuation to PA)

Goals/Priorities & Objectives

SCOPE

PASSENGER VEHICLE CHARGING

- Interstate/Regional Travel on Interstate Routes
- Destination Trips (urban and rural)
- Emergency Travel
 - Top 10 possible emergencies according to PEMA:
 1. Floods
 2. Fires
 3. Winter storms
 4. Tropical storms, tornadoes, and thunderstorms
 5. Earthquakes and landslides
 6. Hazardous material incidents
 7. Pandemics
 8. Nuclear threats
 9. Dam and water threats
 10. Mass violence

REFINEMENT

PASSENGER VEHICLE CHARGING

- Equity/mobility in all goals/priorities
 - **Safe/efficient intercity travel:** charging every **50 miles** within **1 mile** of interstate and interstate look-alikes (consider quantity, FHWA alternative fuel corridor is within 5 miles).
 - **Support destination trips** (rural & urban): charging at **key** origins and destinations (multi-modal)
 - Use case: public state facilities, park & rides, entertainment venues, others
 - **Safe evacuation in an emergency:** determine location and number of chargers needed to address evacuation across state boundaries (ability to scale)
 - Use Case: Eastern PA

Goals/Priorities & Objectives

SCOPE

PASSENGER VEHICLE CHARGING

- Commuter Travel (including appropriate location for mobility hubs to encourage multimodal travel)

MEDIUM/HEAVY DUTY FREIGHT CHARGING

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PATH FORWARD

PASSENGER VEHICLE CHARGING

- **Commuter Travel:** Determine framework for addressing commuter travel (mobility hubs, partners for workplace charging, MUD charging, etc., public buildings)

MEDIUM/HEAVY DUTY FREIGHT CHARGING

- **Safe/efficient intercity travel:** identify 100+ mile charging gaps between truck stops
- **Rural Deliveries:** Identify how best to support fleets as they convert to EV (they will likely want their own charging). Permitting.
- **Safe evacuation in an emergency:** Determine framework for identifying chargers needed to evacuate – including across state boundaries.

Goals/Priorities & Objectives

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PATH FORWARD

- Work with PennDOT to identify process for each of these tasks.
- Assemble & provide lessons learned
- Assemble & provide available tools
- Identify action items for PA agencies to take to move these forward

DISCUSSION



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