



PLANNING + PIZZA

Community Electric Vehicle Charging Network Planning

May 22, 2025, 12-1pm

Agenda

- Electric Vehicle Infrastructure Background
- Community Charging Background
- Community Benefits
- Existing Initiatives
- Concerns/Thinking Points
- Interactive Activity
- Next Steps

- **Infrastructure Investment and Jobs Act (IIJA)**
 - **AKA Bipartisan Infrastructure Law (BIL)**
 - **Phase 1 - Establishes Alternative Fuel Corridors (AFCs)**
 - **Federal/State designated route on highways/major roads**
 - **Interstate 476 & Interstate 78**

National Goals under the IIJA

- Enhancing Accessibility
- Supporting the Adoption of Electric Vehicles
- Ensure Equitable Distribution of Charging Infrastructure



Electric Vehicle Infrastructure Program

Phase II	Phase III	Phase IV	Phase V
Corridor Connections	Community Charging	Critical Investments	Electric Vehicle Workforce
PennDOT led additional corridor selection. Fulfilling regional service gaps.	Charging solutions that serve community needs.	Needs identified after corridor connections and community charging. Additional Investments.	Train or upskill workers in methods to support EV charging. EVSE certification programs.



We are here

*** Phase I** – Established Alternative Fuel Corridors

EV Infrastructure Role

- Determine where in the Lehigh Valley infrastructure needs to be expanded
- Plan where infrastructure is most viable
- Support development of an EV network



Community Charging Background

Charging solutions that serve community needs

- Phase 2 Goal to determine largely accessible locations for EV charging infrastructure
 - Mainly in locations accessible to *everyone*
 - It is understood that some people will have at home charging and some locations will be on private property
 - But not everyone will have access. This is where thoughtfulness around more globally accessible locations is important

Planning the Community Charging Program

Charging solutions that serve community needs

- Community Use Cases
 - Examples:
 - On-Street Charging
 - Parking Lots
 - Retail Shopping Locations
- Priority Communities
 - Examples:
 - City Downtowns (i.e. Bethlehem, Easton, Allentown)
 - Borough Centers (i.e. Emmaus, Nazareth, Pen Argyl)



Why the Community Charging Initiative Matters

- Economic Impact
 - Serves everyone, including businesses
 - Connects people with employment centers
 - Creates jobs
- Access
 - Fills infrastructure gaps everywhere
- Scalability
 - Leverages public-private partnerships for cost-effective expansion

Community Benefits

Charging solutions that serve community needs

- Increases Charging Opportunities
- Enhances Convenience, Reduces Costs/Saves Money
- Supports Air Quality and Public Health Improvements
- Increases Economic Activity and Development
- Diversifies Energy Sources and Reduces Reliance on Fossil Fuels



Existing Initiatives



FutureLV: The Regional Plan

Goal 2: Connected Mixed-Transportation Region

Policy 2.5 – Support the expansion of technology, communications and utilities to reduce travel demands, optimize traffic flow and prepare for the next generation of jobs.

- Advance Autonomous, artificial intelligence, and alternative-fueled vehicle technologies.
- Advance deployment of alternative fueling infrastructure.

Priority Climate Action Plan for Transportation Decarbonization

Transition to Clean (Low Carbon) or Zero Emission Fuels

Goal 3: Supporting deployment of alternative fuel vehicles (AFVs) of all types.

Goal 4: Increase alternative fueling infrastructure and stations.

What it is

- Qualitative process for the infrastructure
- Understanding EV community needs
- Developing a list of community charging use-cases
- Determining areas where communities would benefit

What it is not

- Not writing an EV implementation plan
- Not building EV chargers
- Not selecting EV projects
- Not expanding utility infrastructure

Concerns & Thinking Points

- **Cost of Charging**
- **Classes of Chargers**
- **Charging Station vs. Parking**
- **Competing Land Uses**
- **High Energy Consumer Competition**
- **Generation of electricity**
- **Distribution of electricity**
- **Network Reliability**
- **Infrastructure Lag**

Interactive Activity

Part One

1. What is your role in the adoption of EV's in the Valley as a whole, not necessarily tied to this initiative?
2. What is your organization's role in EV adoption?

Interactive Activity

Breakout Table Activity – Part Two

1. Locate and identify Charging Use Cases
 - Kinds of Use Cases & Potential location of Use Cases
2. Rank the kinds of Use Cases
 - Number the Cases 1-15

Next Steps

- Adopted by Lehigh Valley Transportation Study in Summer
- Forward to Pennsylvania Department of Transportation
- Continue to advocate and prepare for EV innovation



Survey Link: www.tinyurl.com/LVEVSurvey



Questions?
Thank you!