



Electric Vehicle Community Charging Hubs for Multi-Unit Dwellings



Anna Marshall (BMC) & Abby Morgan (Kittelson)
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Agenda

- 1 Challenge:** Where can EV drivers charge if they don't have access to home or work charging?
- 2 Opportunities:** Potential strategies & locations for "Community Charging Hubs" in the Baltimore region
- 3 New Resources:** Fact Sheets & Guide

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Project Background

- EV adoption is on the rise in Maryland!
- 100% of new light duty vehicles sold in MD will be zero emission by 2035
(*Advanced Clean Cars II Act*)
- 80% of EV charging takes place at home
- **Challenge: People who cannot charge at home or work need access to public chargers**



Electric vehicle charging [Forbes]

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Project Overview

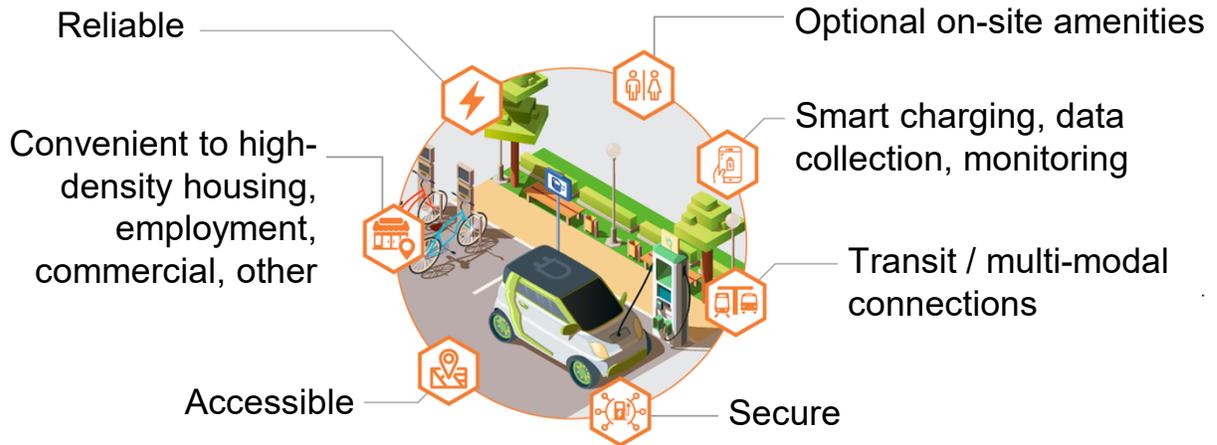
Develop a plan to provide EV charging opportunities for residents in **high-density residential areas** across the Baltimore region

What resources were developed?

- **Implementation recommendations** for EV chargers in high-density residential areas
- **Fact sheets** to share with elected officials, colleagues, and community members about EV charging
- **Potential locations** for community charging hubs

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How can Community Charging Hubs serve public charging needs?



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Examples



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Project Outcomes

- **Fact sheets** to share with elected officials, colleagues, and community members about EV charging
- **Planning Guide** with recommendations on how to implement EV chargers in high-density residential areas
- **Case studies** that highlight potential locations for community charging hubs



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Fact Sheet Topics



Electric Vehicles 101



Community Charging Hubs



Workforce Development Opportunities



Preparing for the Next Grant Cycle



Statewide Incentives

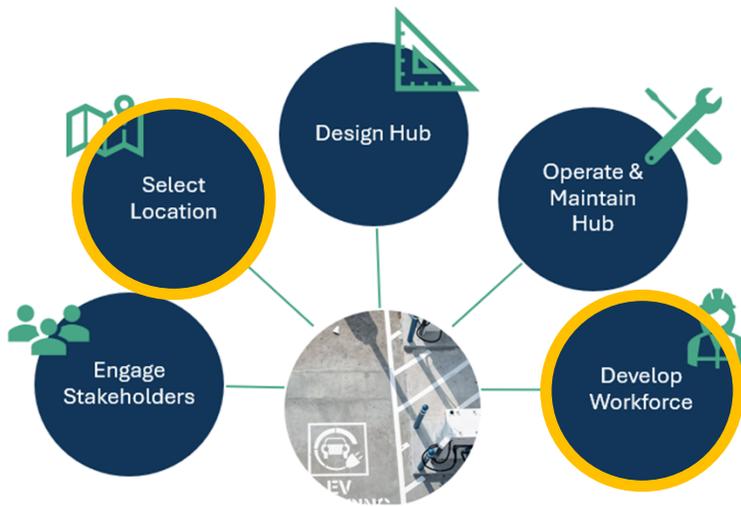
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Use the fact sheets to...

- Engage with community members, colleagues, and elected officials about the **benefits of EVs**
- Discuss the **EV charger types and effective locations**
- Direct colleagues to best practices for **planning, siting, and designing hubs**
- Identify **EV funding opportunities**
- Learn more about **EV-related jobs**
- Share strategies for **equitable workforce development**



Planning Toolbox



A collage of documents related to EV charging infrastructure. The top document is a report from the Baltimore Metropolitan Council titled "Baltimore Regional Transportation Board Electric Vehicle Community Charging Hubs for Multi-Unit Dwellings Planning Guide". Below it is a "Case Study: Matching Land Use and Charger Types" which includes a map of a multi-unit dwelling complex and text discussing potential locations for charging hubs based on land use and charger types.

Site Selection Considerations

- Multi-family housing without dedicated parking spaces
- Mobile home parks
- Neighborhoods of homes built before 1960
- 24/7 community access to parking spaces
- ADA accessible opportunities
- Visibility (for increased use and safety)
- Electrical supply (existing or able to be upgraded)
- Opportunities for shared uses (micromobility, food trucks, bookmobiles, or mobile vet clinics)



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Site Selection Prioritization



Does the location have electricity? Is electrification possible?



Does your jurisdiction own the property? Does the property owner approve of installing EV chargers?



Is this location in a floodplain? If so, consider another location or design for resilience.



Can this site serve populations without existing access to EV chargers?



Is this site convenient to high-density multi-family housing, employment centers, or other destinations?



Does this site serve multimodal connections, such as e-bikes, ride-hailing, car-sharing, or transit charging needs?

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Workforce Development

Public agencies and private companies can promote equitable workforce development

- Procurement Process
- Targeted Outreach
- Training Programs
- Mentorship and Apprenticeship Programs
- Workforce Diversity
- State and Federal Support

- ✓ **VETWorkS** (Baltimore):
Automotive and EV charger training courses and certifications
- ✓ **Baltimore City Public Schools:**
Automotive Technician training in some area high schools.
- ✓ **Montgomery College:**
Automotive Electrical Systems Specialist Certificate
- ✓ **Carroll Community College:**
90-hour Hybrid/EV Technician Program

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Do you want to learn more about Community Charging Hubs?

- Download and share the fact sheets & planning guide
- Contact **Anna Marshall** (amarshall@baltometro.org) or **Abby Morgan** (amorgan@kittelson.com) for more information



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baltometro.org

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