

MARYLAND ZERO EMISSION

Electric Vehicle Infrastructure Council

July 23, 2025

Agenda

- Welcome and Announcements
- Public Comments
- Local Governments' Role in Electrification
 - Georgetown Climate Center
 - Howard County
 - City of Rockville
- ZEEVIC Communications Workgroup
- National Electric Vehicle Infrastructure (NEVI) Program
- State Agency Announcements
- Closing Remarks



Welcome and Announcements

Deron Lovaas, ZEEVIC Chair & MDOT Chief of Environment and Sustainable Transportation

Maryland By the Numbers





Public Comments

Local Governments' Role in Electrification

Local governments' role in vehicle electrification is increasingly important in helping Maryland meet its electrification and greenhouse gas reduction goals.

Local Governments' Role in Electrification

ZEV Freight Truck Charging Facility Zoning and Permitting

Matthew Goetz, Georgetown Climate Center

ZEV Freight Truck Charging Facility Zoning and Permitting

Maryland Zero Emission Electric Vehicle Infrastructure Council July 23, 2025

Matthew Goetz
Georgetown Climate Center

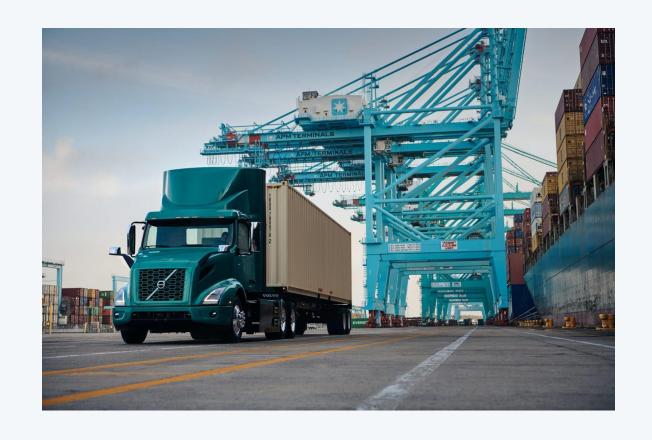
ZEV Freight Truck Charging Facility Zoning and Permitting

- Current context and opportunity
- Why local government action may be needed
- Questions and discussion



Why should local governments be considering this topic now?

- Federal and state policy context
- Actions now can enable ZEV truck deployment moving forward

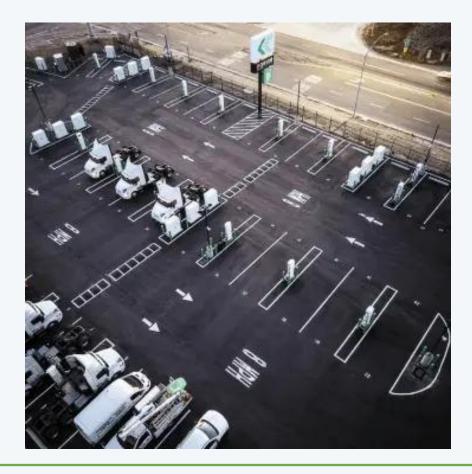


ZEV Freight Truck charging facilities may require updates to zoning and permitting frameworks



GEORGETOWN CLIMATE CENTER

Examples of ZEV freight truck charging facilities





WattEV electric truck charging station depot in Bakersfield, CA

Forum Mobility FM Harbor depot at Port of Long Beach

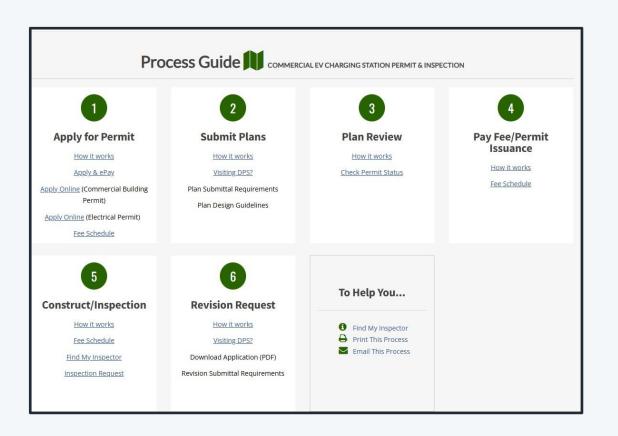
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What updates to zoning or permitting processes may be needed?





How does this relate to actions local governments are taking now?



DEPARTMENT OF PERMITTING, INSPECTIONS AND ENFORCEMENT (DPIE)

REVISED GUIDELINES FOR PERMITTING ELECTRIC VEHICLE CHARGING STATIONS

(November 25, 2024)

General Requirements for Electric Vehicle Charging Stations

- Outdoor and indoor installations of electric vehicle supply equipment (EV charging stations) must be permanently connected and fastened in place with no exposed live parts.
- Charging stations must be listed by an approved product listing agency, rated for outdoor/indoor use, and installed in accordance with the manufacturer's specifications and the County's permit conditions.
- All other utility infrastructure existing and new utilities and laterals must be shown on the site plan for the permit.
- . EV charging station installation shall be at least 6 feet from fire hydrants.
- EV charging station cords must not cross over sidewalks, walkways, or driveways when not in use.
- Each outlet installed for the purpose of charging electric vehicles shall be supplied by an individual branch circuit. Each circuit shall have no other outlets.
- Position the EV charging station such that the stored connector is at a height of not less than 18 inches above the parking surface for indoor locations or not less than 24 inches above the parking surface for outdoor locations (Electrical Code, Article 625.50).
- All EV charging stations shall comply with <u>CB-067-2022</u>, effective date 12-27-2022.

Questions for Discussion

- Is your jurisdiction already addressing or considering this topic?
- What have you heard from trucking / freight companies or charging station developers?



Local Governments' Role in Electrification

Climate Forward:

Accelerating EVs in Howard County

Tim Lattimer, Elissa Reineck, and Abbi Pettinati, Howard County



Howard County Government

Climate Forward: Accelerating EVs in Howard County

Maryland Zero Emission Electric Vehicle Infrastructure Council (ZEEVIC)

July 23, 2025

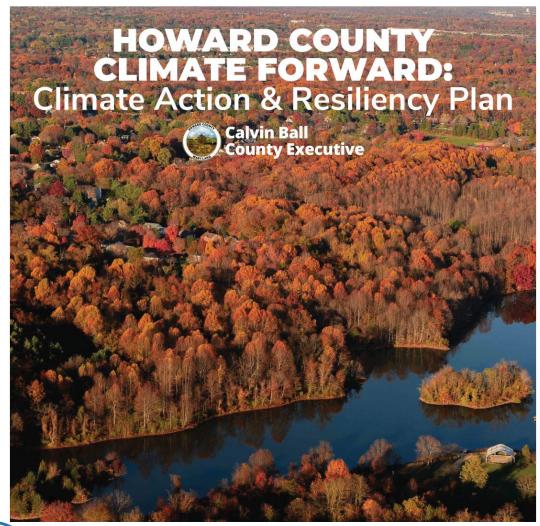












Howard County Climate Forward:

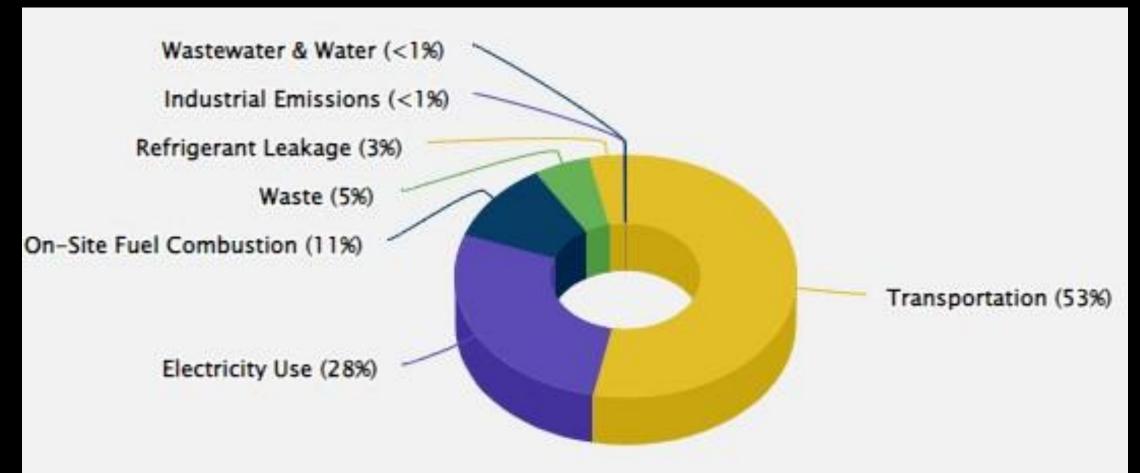
Climate Action and Resiliency Plan

April 2023



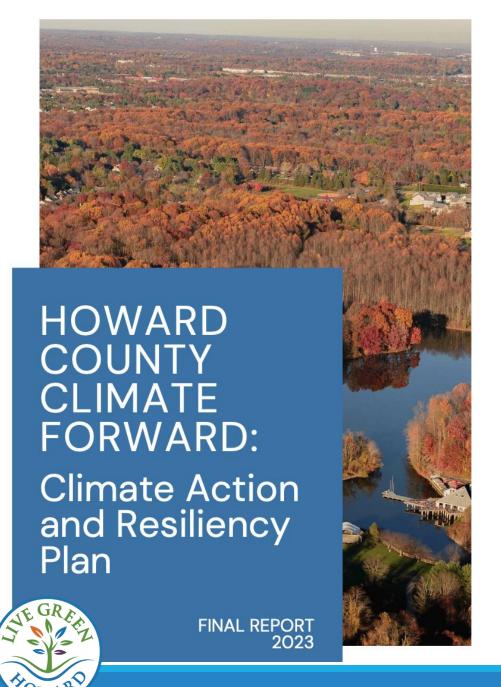


Transport Emits Most HoCo GHGs









- Key Goals:
 - > 60% GHG cuts by 2030 (vs. MD's 60% by 2031)
 - Net Zero by 2045 (same as MD's goal)
- > Whole-of-Government effort
- Implementation strategies, actions, and timelines for lead and cooperating agencies for mitigation, nature-based solutions, and resiliency
- Community-wide scope / focus on equity



Mitigation Strategies: Transportation







Maximize use of electric vehicles

- ➤ Increase EV charging stations
- > Transition to zero emissions fleet
- ➤ Education to increase EV adoption

> Reduce vehicle miles traveled

- ➤ Improve public transit and implement microtransit
- > Improve and expand walking and bike paths
- > Promote telework
- > Promote individual behavior change







Greening Howard County's Fleet



Howard County's
Green Fleet Policy
calls for moving
toward an all-electric
administrative fleet.

Gas vehicles are replaced with electric at end of life.

Currently, there are 58 plug-in vehicles in the County fleet.

Mitigation Strategies: Electric Vehicles

"Maximize use of electric vehicles" is Howard County's **single most impactful action** to curb transportation GHG emissions.

- ➤ Increase EV charging stations
- > Transition to zero emissions fleet
- > Education to increase EV adoption

Metric	Baseline (2019)	June 2025 Status	2030 Goal	2045 Goal
Number of EVs in the government fleet	7	58	578 (42%)	1,336 (100%)
Percentage of EVs owned by people, businesses, and government in the County	1%	5.1%	26% passenger cars, 8% passenger trucks	85.5% passenger cars, 8% passenger trucks
Publicly available EV charging stations in Howard County	117	147	400	2,600



Sources: MDOT Registration Data, AFDC Station Locator

HoCo Government EV Charger Installs

- BGE Chargers (25)
 - •Early adopters of this program
 - Some maintenance issues
- Public/Employee Chargers (72)
 - Mostly Chargepoint
 - Maintain on one dashboard
 - •CE Signed a Charge @ Work pledge



- Started with Chargepoint
- •Migrating to EJ Ward to integrate with fuel management system







Other Initiatives

- IRS Elective Pay Commercial Vehicle Credits
 - Approx. \$290k in rebates we may use to buy more EVs
- Solar-powered EV chargers (pictured)
- EV chargers at solar parking canopies
- Challenges
 - Pole-mounted EV charging stations
 - Residences that lack private garages/driveways





EV-Ready Building Codes

- July 2025 Howard County adopted EV charging-ready requirements for new commercial buildings.
- Since 2019, Howard County has required new home construction to be EV Charging-Ready.
- Our 2019 law also requires new multi-family residential buildings to provide one EV charging station for every twenty-five residential units.



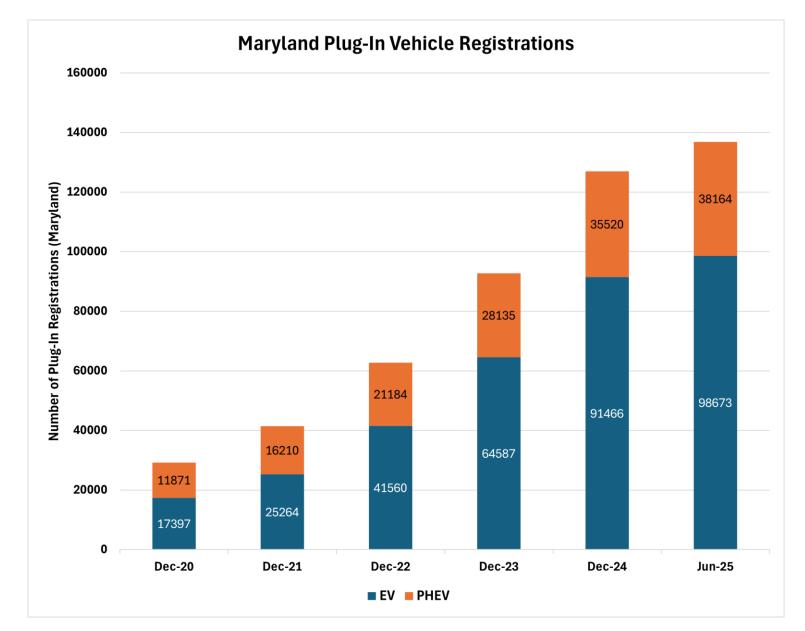
Image: Baltimore Sun

Education to Increase EV Adoption

- > Clean Miles Club
- > "Ask an EV Driver" Webinars
- ➤ Employee Drive Electric event
- ➤ HoCo Electrified Dealerships (pending)
- > Social media and newsletter

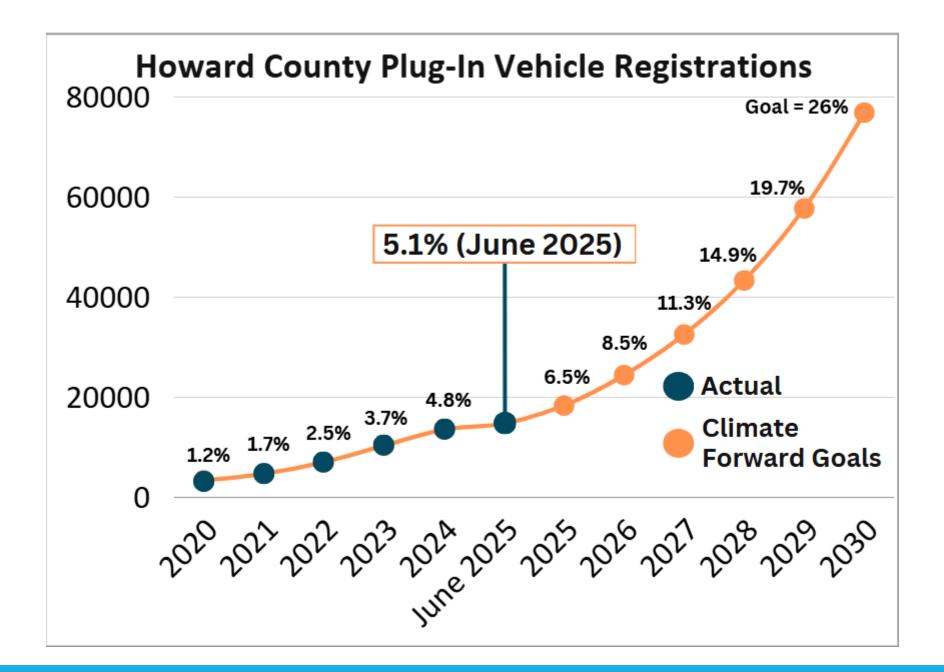










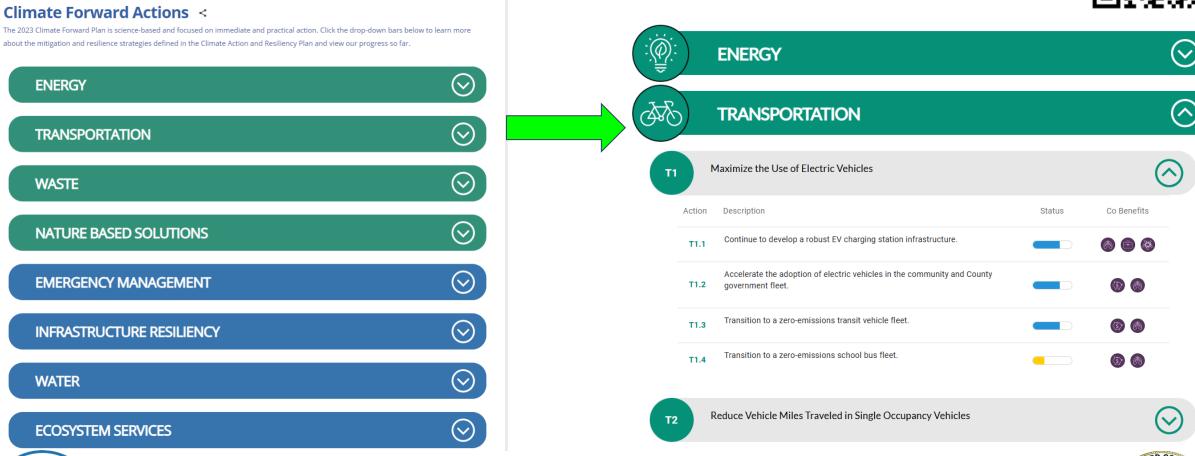






HoCo Climate Forward Dashboard







https://climateforward.howardcountymd.gov/dashboard



BE PART OF THE CLIMATE SOLUTION



 Learn more and sign up for our monthly newsletter at <u>www.livegreenhoward.com</u>

- Join the Howard County Clean Miles
 Club to learn more about EVs
- Follow LiveGreenHoward on Facebook and Instagram

Tim Lattimer
Office of Community Sustainability
410-313-0700
tlattimer@howardcountymd.gov





Local Governments' Role in Electrification

Rockville EV Readiness Plan

Amanda Campbell and Erica Shingara, City of Rockville



Rockville EV Readiness Plan

Maryland Zero Emission Electric Vehicle Infrastructure Council July 23, 2025

Amanda Campbell, Sustainability Coordinator

acampbell@rockvillemd.gov









Outline

- 1. Lessons learned summary
- 2. Plan background
- 3. Community engagement
- 4. EV needs and data







Lessons Learned

- 1. Patience and persistence
- 2. Learning and research follow best practices, data
- 3. Written plans and project pipelines
- 4. Establish resources CIP, staff, consultant, internal and external allies and partnerships: Pepco, MEA, MWCOG, Montgomery County, USDOT, MCEC, MDOT, Electrification Coalition
- 5. Building the EV while you're driving it
- 6. Seek public feedback
- 7. Equity centered approach



Climate Action Plan



Energy Efficiency (9 actions)

Increase energy conservation and efficiency and reduce fossil fuel use in all existing and new buildings and infrastructure.



Renewable Energy (5 actions)

Increase the generation, use and access to affordable, reliable and clean energy systems.



Transportation (9 actions)

Expand safe, efficient, affordable, and equitable multi-model transportation options that utilize clean and efficient energy sources.



Land Management (3 actions)

Maximize the economic and social benefits of land while maintaining or enhancing natural systems and ecological health to ensure resiliency.



Materials and Waste (3 actions)

Manage solid waste by reducing, reusing, recycling, composting, and sustainable purchasing.



Resiliency (9 actions)

Improve the capacity of our community, homes, businesses, and natural environment to prevent, withstand, respond to, and recover from climate change impacts such as rising temperatures, more frequent and intense heat waves, heavy rainfall and severe storms.



Public Education and Oversight (4 actions)

Conduct inclusive and equitable public engagement and involvement and establish systems for monitoring and accountability to encourage participation and support plan success.

Electric Vehicle Readiness Plan Scope





EV Overview and Charging Assessment: Existing and projected EV registrations and charging needs



Community Engagement:
Online Survey, Crowd Source
Mapping and Outreach
Sessions



Equity Assessment: Identify barriers and strategies for equitable EV and charging access



Policy, Code, Permit Review: Zoning, building codes, permitting, EV policies and standards



Costs and Funding Sources: EV charging costs, funding opportunities, business models for public and private charging



Fleet: City fleet electrification and charging plan



Action Plan: 4 EV Readiness Goals with 26 Actions to reduce barriers, expand charging access, and build EV readiness



Community Engagement

Element	Timeline	Details
Boards & Commissions Consultations	12/2022-Ongoing	Recreation & Park Advisory Board plus Commissions: Environment, Transportation & Mobility, Planning, Human Services Advisory, Human Rights
EV Engagement Webpage	12/2022-Ongoing	Plan public engagement platform
Virtual Open House	12/8/2022	22 participants
Online Public Surveys	12/2022-1/2023	255 participants (Residents, Large Property Owners/HOAs, and Employees)
Crowd Sourced Charger Needs Map	12/2022-1/2023	203 suggested charging locations
In-Person Tabling at	12/2022-1/2023	21 at Twinbrook Community Center
Community Centers		34 at Lincoln Park Community Center
Montgomery County Online	2/2023-6/2023	592 online survey participants with 620 suggested charging locations (including 10
Public Survey		Rockville locations)
Regional Coordination	1/2023-Ongoing	Plan and grant coordination (Maryland, Maryland Clean Energy Center,
		Metropolitan Washington Council of Governments, Montgomery County)
Draft Plan Open House	10/10/2024	29 participants reviewed draft results and recommendations
Draft Plan Public Comments	January 2025	15 public comments submitted



Community Feedback Themes

- 1. Costs of vehicles, chargers, installation
- 2. Questions about EV incentives and ownership, charging technology, and the city's role
- 3. Charging for multi-unit and shared residential parking
- 4. Charging for homes lacking garages or driveways
- 5. Accessible charging
- 6. Unclear plan/permitting process to install charging
- 7. Charging gaps



EV Charging Access and Equity

Fewer Chargers

Travel

(DC Fast)

Destination

(Level 2, DC Fast)

Workplace - Fleet

(Level 1-2, DC Fast)

Workplace - Employees

(Level 1-2)

Home - Multi-Unit Dwellings

(Level 1-2)

Home - Single Unit Dwellings

(Level 1-2)

Most Chargers

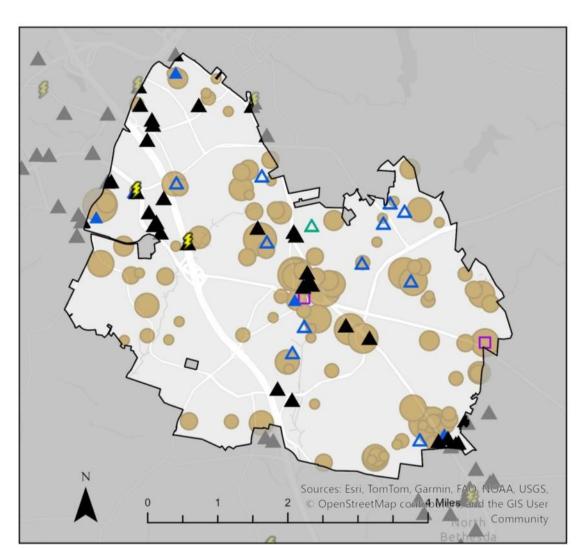




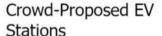
EV Charging Needs

Top Community Requested **EVSE Locations**

- Rockville Town Square
- Swim & Fitness Center
- Civic Center Park
- Richard Montgomery HS
- Twinbrook Library
- Rockville Metro
- Fallsgrove Village Center
- Congressional Plaza/ Congressional South
- Ritchie Center
- Wintergreen Plaza



Legend















City-hosted Public, Available



City-hosted Public, Planned



City-hosted Public, Potential Future Site



County-hosted Public, Planned



Available Public DC Fast



Available Commercial-hosted

EV Readiness Goals





Goal 1: EV Ready Codes, Policies and Procedures

Update and align codes, policies, guidelines, permitting and inspection processes to reduce barriers, streamline and expedite EV charging infrastructure development.



Goal 2: Robust and Equitable Charging Network

Expand access to EV charging to equitably serve residents, workers, visitors, and the municipal fleet.



Goal 3: Clean Municipal Fleet

Implement a multi-year fleet electrification strategy that aligns with fleet vehicle replacement schedules, duty cycles, and EV infrastructure.



Goal 4: Inclusive Public Engagement and Oversight

Conduct inclusive and equitable public engagement to support EV adoption and monitor plan implementation.

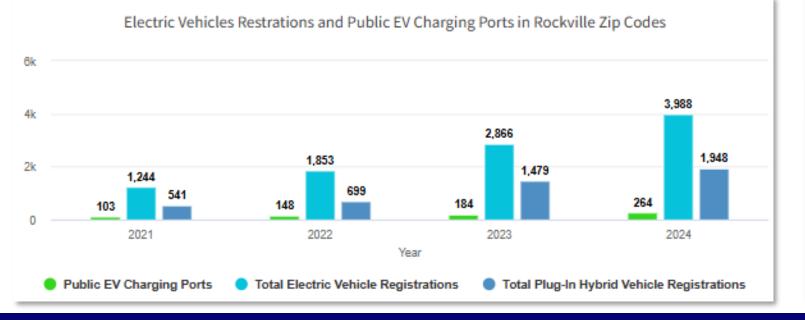


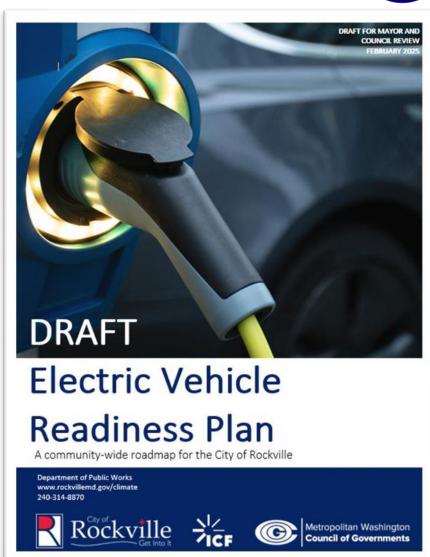
Transportation: Community



Electric Vehicle Readiness Plan (C-11)

- Drafted Rockville's first EV readiness plan with input from 432 individuals (adopted March 2025)
- Electric vehicles and hybrids registered in Rockville zip codes rose to 5,936 (36% increase)
- 264 public EV charging ports







Transportation: Municipal



EV Charging Infrastructure CIP (M-07)

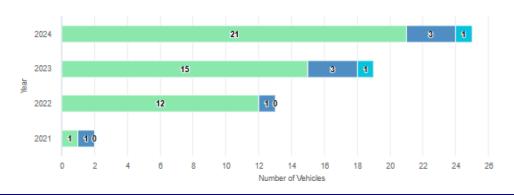
- Fleet Charging: designing stations for City Hall, Police, Recreation Services and 6 Taft Court
- 17 Public Charging Ports: Pepco constructed public charging stations to serve Thomas Farm Community Center, Mattie J.T. Stepanek Park and street parking on Vinson Street, Prettyman Drive and Bouic Avenue

City Fleet (M-06)

 21 battery electric, 1 plug-in hybrid, and 3 hybrid vehicles



Rockville Fleet - Alternative Fueled Vehicles



Outside Funding/Partnerships



Completed in 2024

Pepco

 Public EV Chargers (16 ports at 5 stations)

Maryland Energy

Administration

• EVSE Rebate for City Hall + Fleet (\$5,632)

Ongoing and New FY25/FY26

Maryland Energy Administration

- Solar Canopy Grant Taft Court (\$144,000); Rothgeb Maintenance Facility (\$250,000) which will each include 4 EV charging ports
- EV charging stations for fleet (\$48,000)
- Senior Center Electric Buses Awarded 2 shuttles (\$160,000)
- RHE coordination for LMI EV Chargers with Citizen Energy (applied)

Montgomery County

RHE coordination for Healthy, Efficient, Electrified, Climate-Adapted
 Pilot Homes Grant and federal earmark

Maryland Department of Transportation

- 4 public charging stations (City) and 2 more (County), 4 bikeshare stations
- NEVI potential benefits through the County

Direct Pay (exploring tax credits)



Thank You

- Amanda Campbell <u>acampbell@rockvillemd.gov</u>
- EV Readiness Plan Project page: https://engagerockville.com/evplan
- Thank you to DPW, CPDS, R&P, the Environment Commission, partners, and all who have contributed to EV planning in Rockville.

 Maryland











Energy

Administration



ZEEVIC Communications Workgroup

Ron Kaltenbaugh, Communications Workgroup Chair

ZEEVIC Communications Workgroup

PARTICIPATION



29 Participants

Representing businesses, nonprofits, state and local government, utilities, and business associations.

Next Meeting September 5, 2025 10:00 am- 11:00 am ET (tentative)

MEETING FREQUENCY



Quarterly Meetings
3 Meetings since

launch

Open to ZEEVIC Members and interested stakeholders.

Want to join? Email zeevic@mdot.maryland.gov

KEY TOPICS AND SUCCESSES



Website Updates



Earth Day Planning



Fleet Electrification Co-benefits



Increased
Communication
with partners



National Electric Vehicle Infrastructure (NEVI) Program

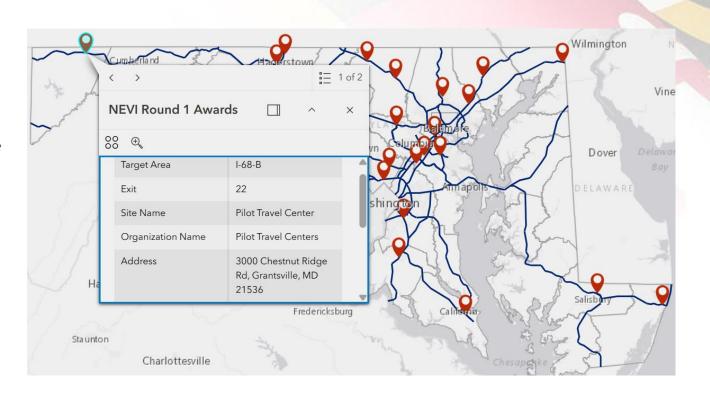
Amanda Hinh, MDOT

National Electric Vehicle Infrastructure (NEVI) Program Update

Round 1 Starts Construction

- First NEVI site in Grantsville (Pilot Travel Center) broke ground in June
- Additional sites expected to begin construction in July
- All Round 1 stations expected to be open to the public in Spring 2026







National Electric Vehicle Infrastructure (NEVI) Program Update

Round 2 Charges Ahead

- Maryland joined 16 other states in <u>State of</u>
 <u>Washington v. U.S. DOT</u> over the pause of NEVI and recission of previously approved NEVI Plans
- Court issued <u>preliminary injunction</u> in favor of Plaintiff states (litigation is continuing)
- Maryland will move forward with Round 2 as planned
 Request for Proposals closes August 27

NEVI Guidance

 Updated draft guidance is under <u>Office of</u> <u>Management and Budget (OMB) review</u>



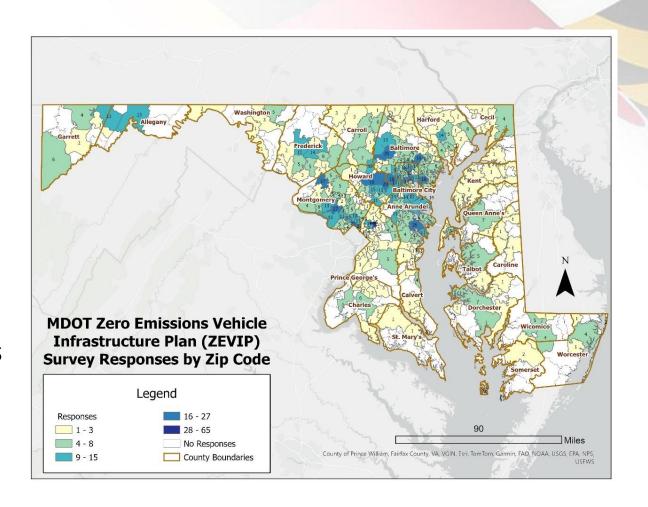


State Agency Announcements and Updates

MDOT- Zero Emission Vehicle Infrastructure Plan (ZEVIP)

ZEVIP Survey

- <u>Purpose</u>: To understand Marylanders' charging preferences and needs and inform the ZEVIP
- Collected 1,487 responses from April-June 2025
- Identified nine hard-to-reach areas for additional outreach
- Over half (53%) of Maryland's zip codes reached





MDOT- Zero Emission Vehicle Infrastructure Plan (ZEVIP)

Next Steps

- Publish full ZEVIP Survey results on the <u>EV</u>
 Plan website
- Refine and publish suitability tools to support strategic siting of Alternative Fuel Corridor (AFC), multi-unit dwelling, and workplace charging
- Continue interagency coordination





Announcement - MDP

- Passage of Maryland's Sustainable Growth Planning Principles Legislation
 - SB 266/HB 286 (2025 Session)-Replacing 12
 Visions with 8 Principles (Land, Transportation, Housing, Economy, Equity, Resilience, Place, and Ecology)
 - Transportation: Prioritize transportation networks that create energy efficient, affordable, and reliable access to jobs, housing, and services.
 - Inform State capital investments and guide local comprehensive plans
 - Implementation Guide for the Principles



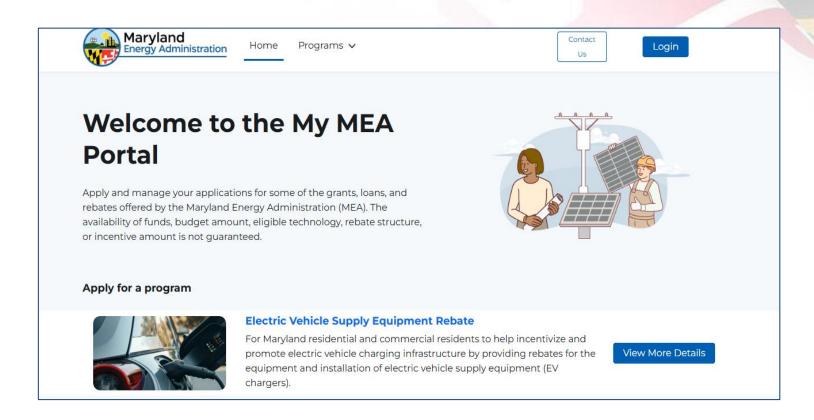


Announcements - MEA

EVSE Rebate Program - Online Application

Incentive Amounts:

- Residential: Up to \$700 per charging station
- Commercial/Government:
 Up to \$5,000 per station





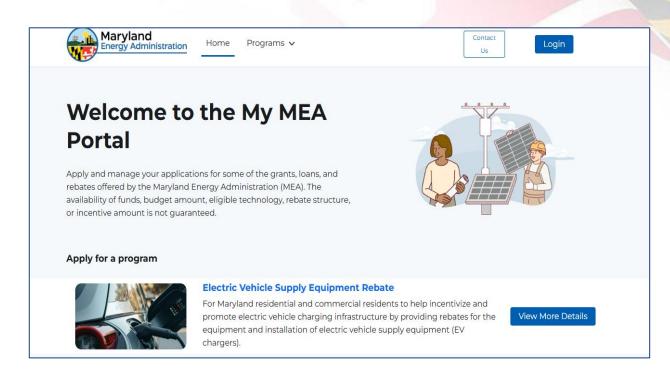
Announcements - MEA

Medium and Heavy Duty Grant Program - Online Application

We need help connecting with private and public fleets!

What We Need from ZEEVIC:

- Share grant deadlines and FAQs
- Recommend potential fleet partners
- Connect with us on Events





MEA- Community EVSE Award List - Available

From Governor Moore's FY25 proposal, a one-time investment was allocated to increase community EVSE charging networks.

- 1. EV Infrastructure Planning (5 projects)
- 2. EV-Capable and EV-Ready Installations (6 projects)
- 3. EVSE Installations —-> **183 ports**

\$1 million distributed through DHCD

Oversubscribed program with a request for \$39 million in projects

FY26 - \$13 million Open in Sep 25



MEA- Award List Electric School Bus Program



- 1. Baltimore County Public Schools
- 2. Chesapeake Charters
- 3. Howard County Public Schools
- 4. Kent County Public Schools
- 5. Board of Education of Frederick County
- 6. Prince George's County Public Schools
- 7. Washington County Board of Education

What We Need from ZEEVIC:

- Amplify the message across your networks
- Share grant new deadlines and FAQs (Sep 2025)



MDE - Program Updates

Volkswagen Settlement Updates

- EVSE Infrastructure Programs
 - Phase III
 - MDE received 131 proposals (107 ECGP, 24 CAGP)
 - Approx. \$35 million in total requested funds
 - Approx. \$4 to 5 million available in funding
 - Under ECGP: Approx. \$34.49 million funds requested
 - Under CAGP: Approx. \$528,288 funds requested
 - MDE has begun review process, goal to complete end of summer
- Electric School Bus
 - Approx. \$4 to 5 million in funding
 - Fund cost of electric school bus and infrastructure
 - Program is due to open Fall of 2025
- Medium and Heavy Duty (MHD) Program
 - Approx. \$4 to 5 million in funding
 - Fund cost of electric MHD vehicle and infrastructure
 - Program is due to open late 2025



MDE - Program Updates (continued)

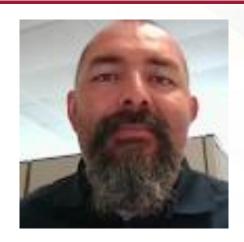
Electric School Bus Program

- Program was open October 2024 to February of 2025
- Approx. \$3 million in legislative funding
- Program provided \$300,000 towards the purchase of an electric school bus
- Awards were made to four school districts for a total of ten buses
- Contracts are being finalized by AG
- Awards will need to go to BPW for final approval



Announcements – DGS

- New staff member
 - Elio Quijada
 - EV Project Manager
 - Started July 9th
- Utility Ports 87
- Non-Utility L2 Ports 245
- Non-Utility DCFC Ports 6
- Starting in FY26, shift towards non-network chargers





Closing Remarks

Next ZEEVIC quarterly meeting: Wednesday, October 22, 2025

To receive ZEEVIC Meeting Notices, email: ZEEVIC@mdot.maryland.gov

ZEEVIC webpage: Mdot.Maryland.gov/ZEEVIC

