



The Zero Emission Vehicle Infrastructure Plan

June 11, 2026





MARYLAND

ZERO EMISSION

Vehicle Infrastructure Plan

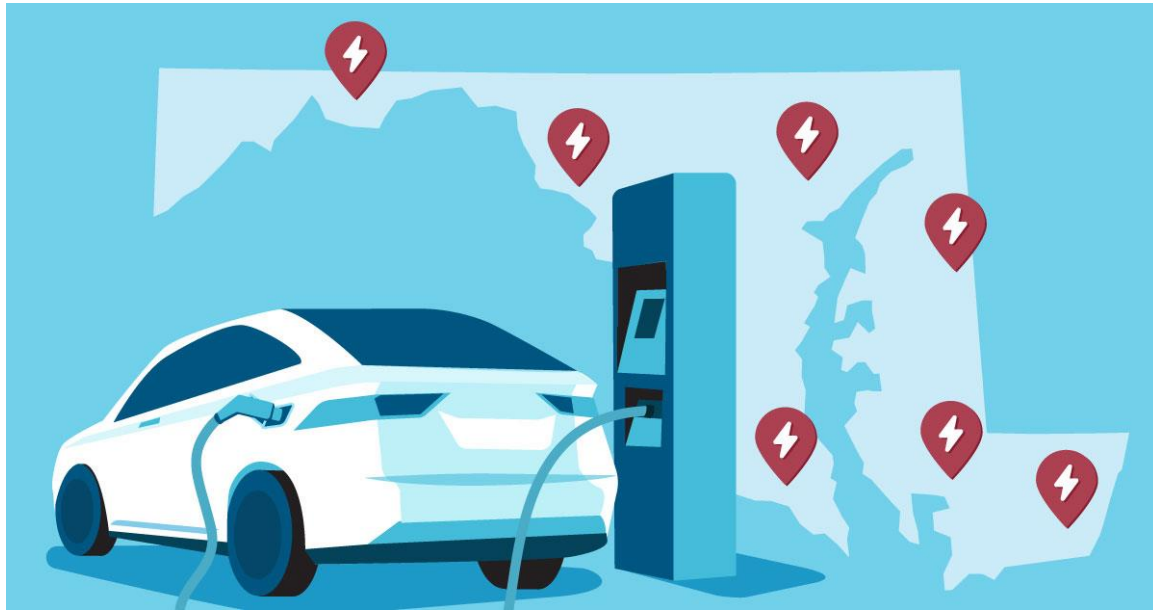
What is the ZEVIP?

Maryland's first statewide, five-year strategy document to build a more connected and convenient public charging infrastructure network.

Developed in response to:

- Executive Order 01.01.2024.19, "Leadership by State Government: Implementing Maryland's Climate Pollution Reduction Plan"
- Inquiries from public and private partners for state guidance on where to site additional public charging for light-duty electric vehicles (EVs)

ZEVIP Overview



What it is:

- State of Maryland “**playbook**” for state agency coordination on EV charger deployment from now through 2031
- **Predictability** in how the state will continue to support EVs and public charging infrastructure
- Reflection of **integrated feedback** from interagency coordination, as well as stakeholder and public engagement
- Low, medium, and high **scenarios assessment** of projected EV growth and charging infrastructure needs
- Evaluation of **current opportunities** for siting additional public charging infrastructure
- **Updated** and amended every three years, as needed

Frameworks for Scenario Development

LDV adoption scenarios developed in coordination and collaboration with the Maryland Department of the Environment to better understand federal and market uncertainties

High

Reflects the retention of federal incentives. Most lenient of the Advanced Clean Cars (ACC) II Program implementation

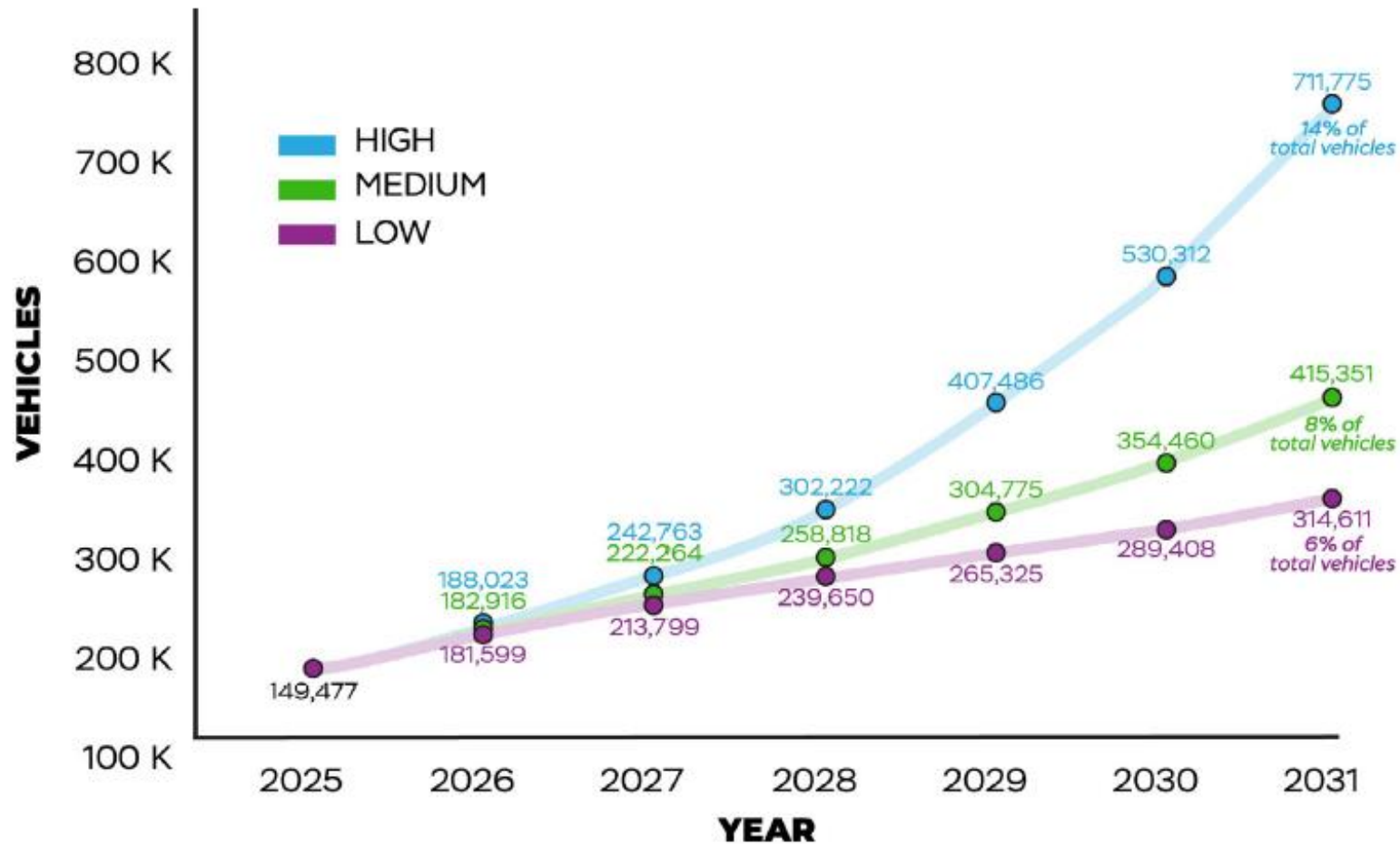
Medium

Reflects a full federal repeal of vehicle tax incentives under the Inflation Reduction Act (IRA). This scenario does not include ACC II implementation.

Low

Assumes EV sales will remain flat at 10%. This scenario does not include federal incentives or the implementation of ACC II.

Projected EV Populations Under Scenarios



Simplified Projected Public Charging Needs

SCENARIO	TOTAL PROJECTED EVs	PUBLIC DCFC CHARGING PORTS NEEDED	PUBLIC LEVEL 2 CHARGING PORTS NEEDED
LOW	314,611	585	10,063
MEDIUM	415,351	585	11,664
HIGH	711,775	1,058	20,467

Balancing modeled outputs from EVI-Pro Lite with stakeholder-reported needs is essential for accurately characterizing the range of Maryland's charging requirements. Both the public ZEVIP Survey and Maryland's NEVI gap analysis identify specific deficiencies not captured by EVI-Pro Lite's statewide capacity totals.



Neighborhood & Amenity EV Charging Suitability

The Maryland Neighborhood and Amenity Electric Vehicle (EV) Charging Suitability Tool was developed by the Maryland Department of Transportation (MDOT) as part of the Zero Emission Vehicle Infrastructure Plan (ZEVIP) to support the deployment of publicly available light-duty EV charging infrastructure throughout the State. The tool is designed to:

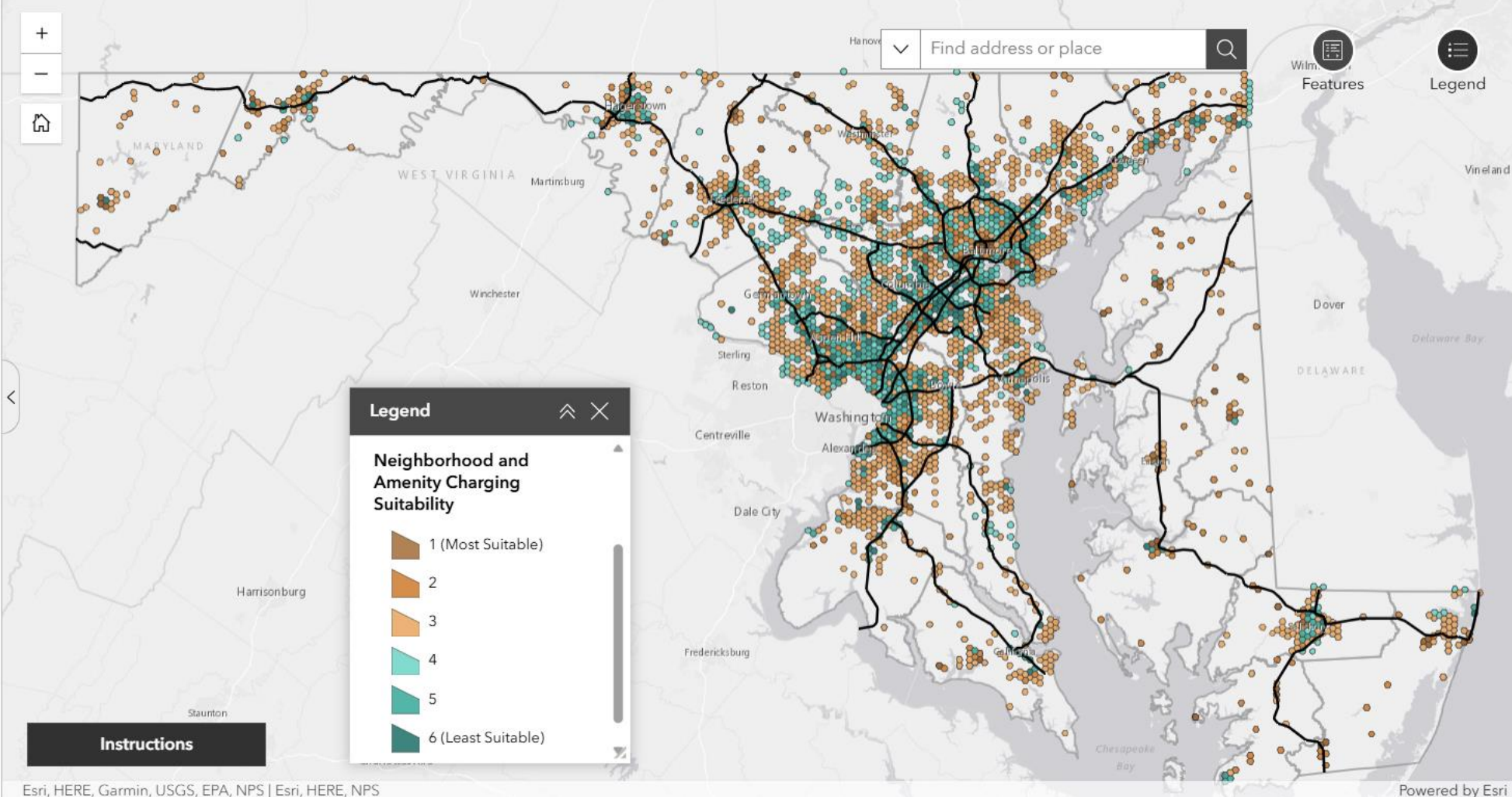
- Establish publicly available EV charging infrastructure within Maryland communities where people gather or currently stop.
- Increase equitable access to publicly available EV charging infrastructure.

More information on the scoring methodology and fields for the Neighborhood & Amenity Charging Suitability Tool, as well as a demonstration video can be found [here](#). Suitability scoring is below:



Data Layers

- > Charging & Fueling Infrastructure
- > MHD Vehicles & Freight
- > Routes/Corridors
- > Vehicle Miles Traveled (VMT)



Instructions

Esri, HERE, Garmin, USGS, EPA, NPS | Esri, HERE, NPS

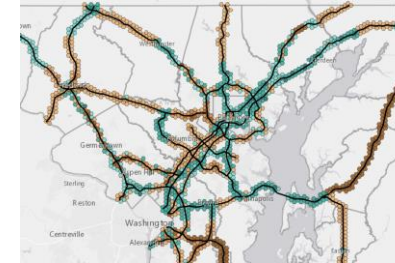
Powered by Esri



Maryland EV Charging Suitability Tool

Now Available Online

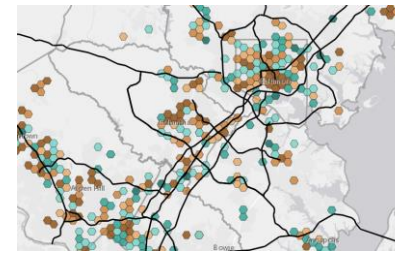
- Maryland is divided into unique, 1-mile hexagonal bins containing normalized and weighted data.
- Color shading indicates suitability for future infrastructure under each charging category
 - **Corridor** – Fast charging along highways
 - **Workplace** – Level 2 (L2) charging at places of employment
 - **High-density residential** – L2 charging for multi-unit residential communities
 - **Neighborhood & amenity** – L2 charging at neighborhood spots where people gather



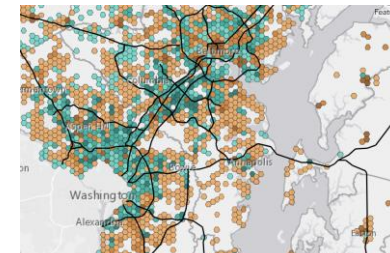
Corridor



Workplace



High-Density Residential



Neighborhood & Amenity



Key Targets and Actions

**State
Interagency
Workgroup**

ZEVIP Survey

- Defined targets
- Supporting recommendations
- Intended outputs
- Responsible state agencies
- Approximate timelines

Target 1: Increased EV Sales

- EV market study for incentives
- Updated MHDV scenarios-based projections
- Fleet transition technical assistance

Target 2. Expanded EV Charger Deployment and Reliability

- Strategically invest NEVI funds to close gaps
- Real-time data sharing
- Best practices for permitting
- Long-term plan for chargers on state property
- Improve workforce training for EV chargers

Target 3: Strategic Utility Grid Integration

- Align utility hosting capacity with infrastructure planning tools
- State incentives for make-ready
- Continue integrating EV planning in electricity system planning
- Evaluate tools/programs for peak demand

Target 4: Tactical Public Engagement and Communications

- Increase partnerships for consumer-focused communications
- Assist high-density residential EV charging
- Increase EV road signage
- Improve engagement from local planning departments
- Engage fleet owners on clean tech transition

Thank you!

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