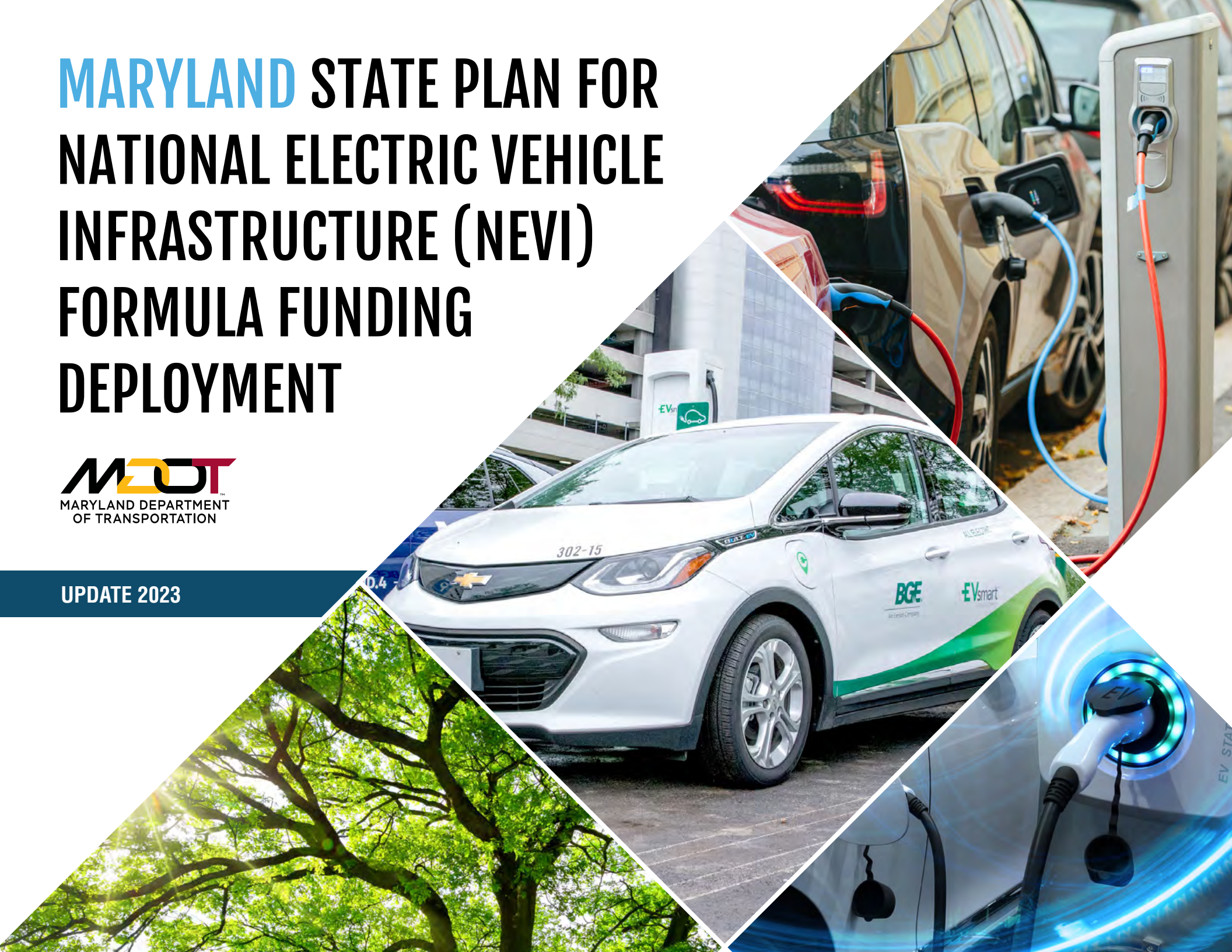


MARYLAND STATE PLAN FOR NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) FORMULA FUNDING DEPLOYMENT



UPDATE 2023



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MESSAGE FROM MARYLAND TRANSPORTATION SECRETARY

On behalf of the Maryland Department of Transportation (MDOT), and in close collaboration with the Maryland Energy Administration (MEA), I am pleased to submit Maryland's 2023 State Electric Vehicle (EV) Infrastructure Deployment Plan Update as required under the National Electric Vehicle Infrastructure (NEVI) Formula Program.

In 2022, under the Climate Solutions Now Act (CSNA), Maryland set the most aggressive greenhouse gas (GHG) emissions reduction goals in the nation. Targets have been established to achieve GHG emissions reductions of 60% below 2006 levels by 2031, and net-zero emissions by 2045. The equitable decarbonization and electrification of the transportation sector remain top priorities in Maryland and are critical to meeting the state's GHG reduction goals.

Maryland has adopted a target of 600,000 EVs registered in the State by 2030 and designated 23 EV alternative fuel corridors (AFCs) in our state for EV infrastructure build out. These corridors provide important connections within our borders and serve as thoroughfares for freight and passenger movement throughout the nation.

I would like to express my sincere gratitude to the Maryland Zero Emission Electric Vehicle Infrastructure Council (ZEEVIC), our partners, stakeholders, and communities that have remained dedicated to accelerating the adoption of EVs, and the installation of corridor and community charging infrastructure. Our collaborative efforts have resulted in Maryland's consistent ranking as a leading EV state by the Electrification Coalition, iSeeCars, the American Council for an Energy-Efficient Economy, and others.

This 2023 NEVI Plan Update represents an important continuation of our work to electrify and decarbonize the transportation sector. I encourage all Maryland residents, stakeholders, private-public partnerships, and the EV industry to use this Plan, and its associated website and tools, as an opportunity to remain engaged and provide feedback.



Maryland Department of Transportation Secretary, Paul J. Wiedefeld



Introduction

Under the National Electric Vehicle Infrastructure (NEVI) Program, states were required to submit an EV Infrastructure Deployment Plan by August 1, 2022. The Plans, which must be updated annually, outline each state's approach for deploying charging infrastructure and achieving the goals of the NEVI Program. The Maryland Department of Transportation (MDOT) submitted the initial Maryland State Plan for NEVI Formula Funding to the Joint Office of Energy and Transportation (Joint Office) on July 15, 2022. The Maryland NEVI Plan was approved by the Joint Office on September 14, 2022, unlocking more than \$20 million in federal funds for federal fiscal years (FFYs) 2022 and 2023.

This document, known as the 2023 NEVI Plan Update, serves as Maryland's 2023 update to the initial NEVI Plan submitted in July 2022 and describes Maryland's activities that support the successful deployment of charging infrastructure since the previous plan submittal. These updated activities can be found in the following plan sections:

1. State Agency Coordination
2. Public Engagement
3. Plan Vision and Goals
4. Contracting
5. Civil Rights
6. Existing and Future Conditions Analysis
7. EV Charging Infrastructure Deployment
8. Implementation
9. Equity Considerations
10. Labor and Workforce Considerations
11. Physical Security & Cybersecurity
12. Program Evaluation
13. Discretionary Exceptions





State Agency Coordination

MDOT continues to coordinate with the State's energy office, the Maryland Energy Administration (MEA), and other key state agencies through the following efforts:

NEVI ADVISORY GROUP (AG) – Comprised of MDOT, MEA, the Maryland Department of the Environment (MDE), and the Maryland Department of Planning (MDP), the NEVI AG met to discuss and provide comments and recommendations on federal NEVI guidance and rulemakings, as well as the proposed Exelon rebate incentive. This proposed incentive would offset NEVI matching requirements by providing a rebate that would be based on total project cost, and whether installation occurs within an equity area. An overview of this proposal was shared with the Maryland Zero Emission Electric Vehicle Infrastructure Council (ZEEVIC) during the November 2022 meeting. Exelon's presentation can be found [here](#).

NEVI PROGRAM GROUP – Consisting of key staff from MDOT's State Highway Administration (SHA), the Secretary's Office (TSO), and MEA, the NEVI Program Group meets bi-weekly to discuss the development of Maryland's Round 1 NEVI Program. This includes key programmatic decisions, such as prioritization of Alternative Fuel Corridors (AFCs) for build out, procurement and contracting mechanisms, as well as updated program guidance issued by the Federal Highway Administration (FHWA), discussions with FHWA district offices, and the inclusion of the federal, NEVI minimum standards, which are regulations that set minimum standards and requirements for projects funded under the NEVI Formula Program. A summary of the NEVI minimum standards can be found in the March 2023 ZEEVIC meeting presentation, [here](#). The full text of the final minimum standards can be found [here](#).

PUBLIC SERVICE COMMISSION EV WORKING GROUP – MDOT continues to participate in the Public Service Commission (PSC) Public Conference (PC) 44 and its electric vehicle (EV) Working Group. The Working Group, consisting of members from the PSC, MDOT, MDE, MEA, Maryland utilities, and the EV industry, developed proposed EV reliability standards for charging stations installed by Maryland utilities that comply with the reliability and reporting standards defined through recent legislation ([Maryland House Bill 0834](#)), while still aligning closely with the NEVI Standards. These proposed EV reliability standards, required under Commission Order No. 90036, were filed with the PSC on July 28, 2023.

ZEEVIC – MDOT continues to share information and updates on NEVI as well as solicit feedback from the ZEEVIC, which includes representatives from state and local government agencies, industry representatives, and public/community representatives.

EV WORKFORCE WORKING GROUP – MDOT continues to coordinate with the Maryland Department of Labor (Labor), MEA, MDE, the Department of General Services (DGS) as well as internally with SHA and Maryland Transit Administration (MTA) to discuss labor and workforce considerations, including existing and future training and apprenticeship programs that will grow and diversify the workforce, while ensuring that technicians are highly trained.



Public Engagement

Public engagement plays a critical role in the development of Maryland's NEVI Plan and Program for the build out of AFCs as well as future investments in communities. MDOT is organizing a proactive stakeholder engagement and public participation process to ensure input and feedback from both the public and stakeholders are incorporated throughout the planning process and will continue to be incorporated in all future NEVI Plan updates submitted to FHWA.

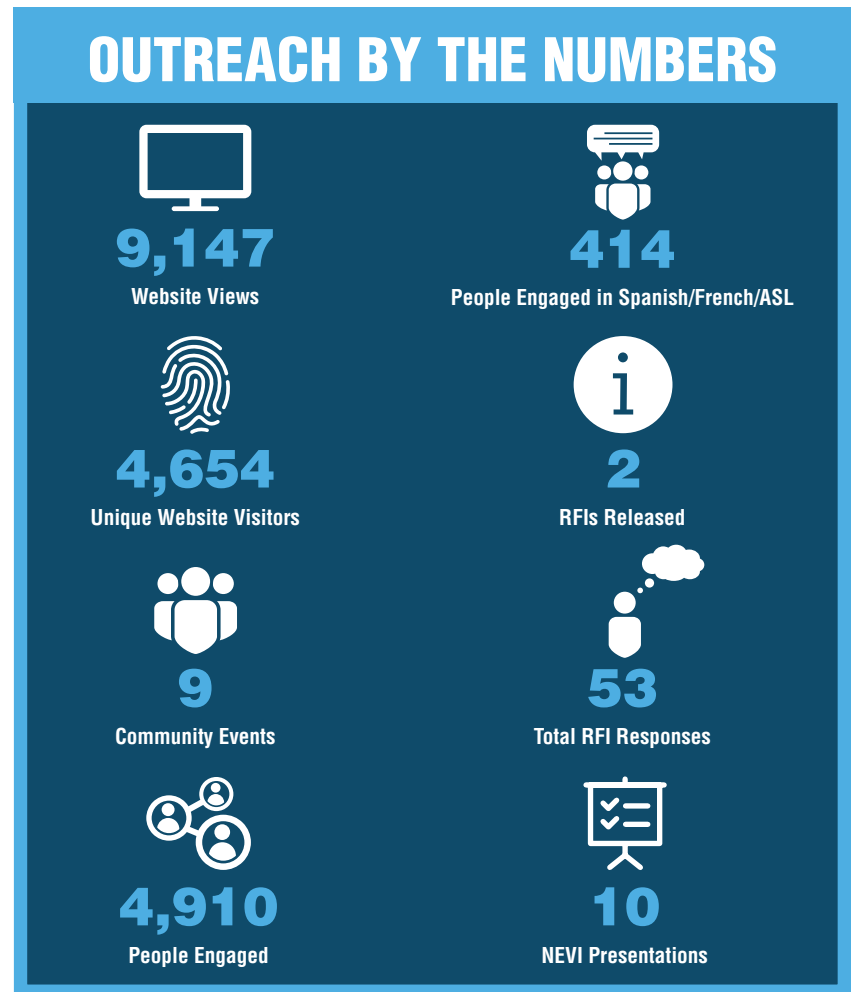
COMMUNITY ENGAGEMENT OUTCOMES REPORT

WEBSITE

The [Maryland Zero Emission Vehicle Infrastructure Plan website](#) continues to serve as the primary resource for both stakeholders and the public. The site provides an overview of NEVI, highlights milestones, news, and updates, and information on completed and upcoming meetings. The public can also provide comments on the deployment of EV infrastructure in Maryland and join the mailing list to receive updates and stay engaged with the planning process.

REQUEST FOR INFORMATION

MDOT released two Requests for Information (RFIs) to assist in developing the Round 1 NEVI Program and received a total of 53 responses. The first RFI on NEVI Formula Funding was released on September 20, 2022, and was open for one month until October 20, 2022. In total, 29 respondents provided information on their organization, funding and costs, and barriers, challenges, and opportunities, which included anticipated costs, 20% matching requirements, as well as experience installing and operating charging stations in Maryland. MDOT released a second RFI on electric vehicle supply equipment (EVSE) End-to-End Data Collection & Data Reporting Solution on January 11, 2023. The RFI was open until February 13, 2023, and received 24 responses providing information on EV infrastructure deployment data, data-reporting, software, network, communication, and cybersecurity needs.



PRESENTATIONS & BRIEFINGS

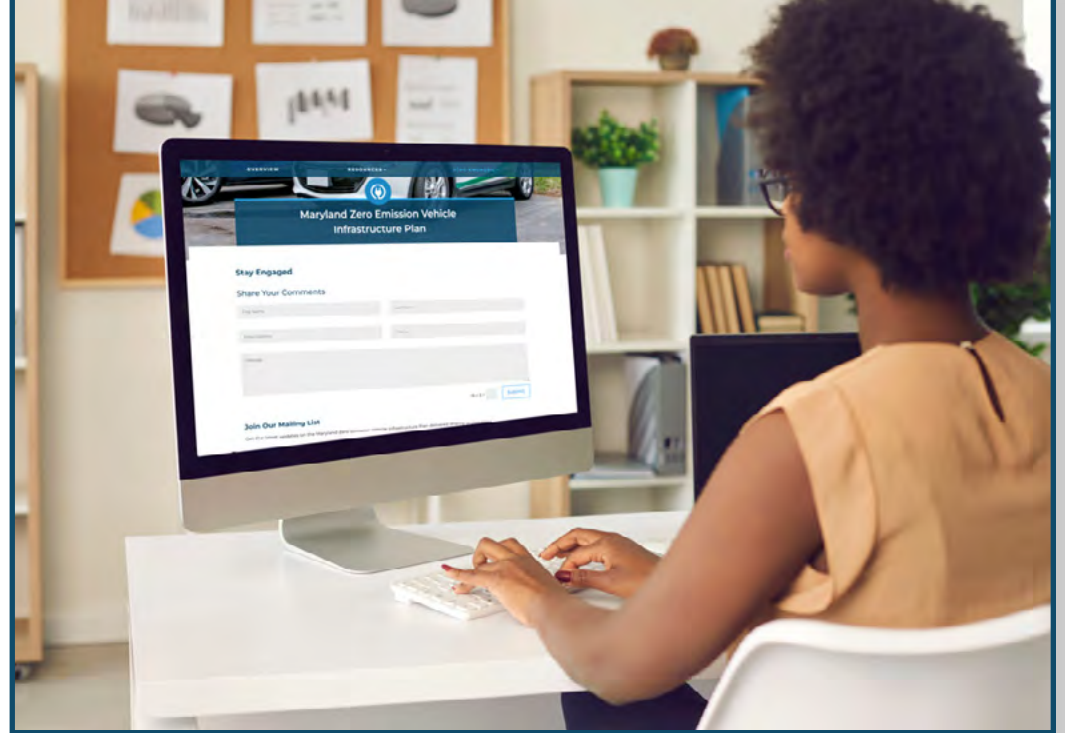
MDOT continues to utilize various meeting forums including ZEEVIC, the Metropolitan Washington Council of Governments (MWCOCG), MDOT's Planning Council, and the Air Quality Control Advisory Committee (AQCAC) to provide updates on the NEVI Planning process. These forums also provided MDOT with the opportunity to engage and solicit feedback from key stakeholders including utilities, state agencies, local governments, original equipment manufacturers (OEMs), EV advocacy and environmental organizations, local planning partners, and EVSE manufacturers. More information on these presentations can be found in **Appendix B: Public Engagement**.

COMMUNITY EVENTS

ZEEVIC has been working to increase EV awareness by meeting Marylanders in their communities through attendance at planned events and festivals across the state. These events provide MDOT with an avenue to directly engage and gather feedback from residents. After a pause in in-person events due to the Pandemic, ZEEVIC resumed in-person outreach beginning in July 2022, with six events in 2022 and three events so far in 2023. Locations were chosen to target key audiences, specifically members of rural, underserved, or disadvantaged communities who have, on average, a lower rate of EV adoption. Over 4,900 people have been engaged through these nine events, including 402 in Spanish, ten in French, and two in American Sign Language. Three additional events are planned for later in 2023 that will specifically reach African American and Native American communities as well as residents within the southern, central, and capital regions of Maryland. More information about these events and locations can be found in **Appendix B: Public Engagement**.

EV CHARGING SITING TOOL

MDOT developed and launched the [Electric Vehicle Charger Siting Tool](#) in June 2023. The interactive tool consolidates data from a variety of state and federal agencies and allows for potential applicants to NEVI Formula Funding Program, Charging and Fueling Infrastructure (CFI) Discretionary Grant Program, or other state/local grant programs to determine whether a site may be a good candidate for the grant program. A video tutorial on how to use the tool can be found [here](#).



CFI GRANT COORDINATION

MDOT coordinated with the Maryland Clean Energy Center (MCEC) on their application to the CFI Corridor Program. Coordination with MCEC began in April with meetings discussing MDOT's plan for building out the AFCs. Later meetings included sharing of the EV Charger Siting Tool to help support their narrative as well as identifying potential sites for the Corridor Program. In total, MCEC proposed 29 sites along AFCs that would support corridor build out. In addition, MDOT also met with MWCOCG, Montgomery County, Howard County, Frederick County, and the City of Salisbury to discuss opportunities and plans to install community charging under the CFI Community Program. In total, over 175 sites were submitted under the CFI Community Program, which will directly support charging within Maryland communities, including those identified as disadvantaged.

UTILITY ENGAGEMENT

MDOT and MEA met with FirstEnergy, BGE, Pepco, and Delmarva to discuss their anticipated role within the NEVI Program application process, the level of detail/effort they can provide for potential sites, and their process for interacting with potential applicants. In addition, MDOT and MEA participated in bi-weekly calls with the Exelon utilities (BGE, Pepco, and Delmarva) to discuss opportunities through the PSC for utilities to offer additional incentives or rebates to applicants of the NEVI Program.

Plan Vision and Goals

VISION STATEMENT

To continue leading the nation and strengthening our communities through the strategic deployment of interconnected, accessible, reliable, equitable, and safe transportation electrification solutions.

GOALS

Per the 2023 federal NEVI program guidance and report template, Maryland's goals have been updated and include objectives to support the establishment of an interconnected network that will facilitate data collection, equitable access, and network reliability.

1. ALTERNATIVE FUEL CORRIDOR BUILD OUT:

- Certify existing (23) corridors as “fully built-out” on or before the end of State Fiscal Year (SFY) 2026 (June 30, 2026).

2. EQUITABLE CHARGING INFRASTRUCTURE:

- Ensure at least one port per station is Americans with Disabilities (ADA) accessible.
- Meet demands in various locations, e.g., urban, suburban, rural, employment centers, multi-unit dwellings, etc.
- Per the Justice40 initiative, ensure 40 percent of the benefits of the NEVI program are realized in disadvantaged and rural communities.

3. WORKFORCE/JOB IMPACTS:

- Provide training and apprenticeships that prioritize diversity and deliver valuable job experience.

4. BUILD & STRENGTHEN PUBLIC-PRIVATE PARTNERSHIPS:

- Facilitate contracting and implementation.

5. COLLABORATION:

- Work with state, local, regional, non-government organizations (NGOs), and private organizations.

6. RESILIENCY AND RELIABILITY:

- Understand and address grid impacts, renewables, emergency preparedness, weather, operations/maintenance.
- Identify and consider vulnerable communities.



Contracting

MDOT expects that the majority of contracts will be established with eligible private entities for the acquisition, installation, and operation and/or maintenance of EV charging infrastructure funded in whole or in part through the NEVI program. MDOT is currently developing and finalizing the contracting process for the initial round of applications and defining general program administration. While the precise terms and conditions of Maryland's NEVI Program are still being developed, the contracting/procurement/agreements will be competitive and ensure that the:

- Initial focus is on designated AFCs.
- Funds and site locations are distributed equitably.
- Community engagement process is effective.
- Applications/installations meet the federal NEVI requirements, including the minimum standards as well as any additional memos, guidance, or templates issued by FHWA or the Joint Office.
- Evaluation criteria are clear and linked to Maryland's NEVI goals and objectives.

STATUS OF CONTRACTING PROJECT

The NEVI Formula Program will be administered through MDOT in partnership with MEA. While MDOT is the agency through which funding will be made available and managed, investment strategies and decisions will involve cooperation and input from MEA, other state agencies, and critical stakeholders. MDOT is currently developing the procurement language and associated program management process. A Notice of Funding Opportunity (NOFO) will be released addressing the final details of the program and application process. Maryland will soon have a timeframe for when it will begin accepting Round 1 applications. After the application period has closed, MDOT will make initial awards.

AWARDED CONTRACTS

No contracts have been awarded at this time. While the exact contract language to promote competitive bids and contain costs is still being developed, MDOT's development of criteria for reviewing and ranking applications, including value and experience, will promote virtuous competition among applicants.



SCORING METHODOLOGY

MDOT is developing a competitive process with transparent criteria for the award of NEVI Formula Funding. MDOT will award each application points based on the following criteria:

Cost & Schedule: Competitive pricing, 20% match consideration, and schedule for installation of charging station.

Project Team Qualifications: Experience of the project teams with civil design, National Environmental Policy Act (NEPA) and other federal requirements, project management, permitting, utility coordination, as well as experience with construction, operations, and maintenance of charging stations.

Location-based Metrics: Located in an identified rural or disadvantaged community (DACs), identified as optimal site in previous surveys, existing EV ownership within census tract, existing land use (commercial, mixed-use, high-density, etc.), within 1-mile of AFC exit or interchange, proximity to transit-oriented development (TOD) site, and within a priority funding area or sustainable community.



To assist in the evaluation, MDOT will release the Maryland Zero Emissions Vehicle Infrastructure Plan (ZEVIP) Planning Toolkit prior to the finalization of the Maryland NEVI Formula Program. The ZEVIP Planning Toolkit will provide each applicant with the location-based score for the proposed site based on the Program requirements. In addition to the above criteria and the location-based scoring, MDOT will also consider the application(s) ability to address:

- Adherence to all federal guidance, including NEPA, Buy America, and the minimum standards.
- Infrastructure gaps and support for overall AFC build out.
- Safety considerations, such as lighting, siting, driver and vehicle safety, fire prevention, tampering, charging locks, surveillance, etc.
- Accommodation for larger EVs or towables, such as pull-through charging spaces.
- Proximity to amenities (dining, retail, restrooms, shelters, etc.).
- Resiliency, reporting requirements, cybersecurity, and data governance.
- Grid connectivity, operations, and maintenance capabilities.
- Innovations such as mobile charging, solar, or battery storage.
- Greater deployment efforts i.e, both corridor and community charging.

PLANS FOR COMPLIANCE WITH FEDERAL REQUIREMENTS

MDOT will ensure that NEVI EV charging projects comply with all applicable federal and state requirements (Chapter 1 of Title 23, U.S.C. and 2 CFR part 200, respectively). Before any funds are obligated, the program funding must be included in the Statewide Transportation Improvement Program

(STIP) in accordance with 23 CFR part 450. All funding administered through this program will meet the minimum federal requirements. MDOT will include in the contract standard language on how any such situation will be approached. Ultimately, MDOT intends that such issues be appropriately addressed on a case-by-case basis through the current contractual resolution processes.



Civil Rights

Maryland will comply with all regulations according to the Title VI of the Civil Rights Act and accompanying US Department of Transportation (USDOT) regulations, the ADA, and Section 504 of the Rehabilitation Act by taking the following actions:

- Engage Maryland Works to be a network provider to promote workforce development among individuals with disabilities.
- Promote job opportunities with Labor, Maryland Department of Education Division of Rehabilitation Services, American Association of People with Disabilities (AAPD) Career Center, and the Employer Assistance & Resource Network on Disability Inclusion (EARN) so that job seekers are aware of vacancies that they can potentially apply for.
- Connect with counties that provide employment resources for the disabled, such as Baltimore and Montgomery Counties.
- Carry out the Department of Justice's strategy regarding education and training on environmental justice to staff and participate in department-wide briefings.
- Ensure that no violations are cited due to race, color, or national origin by conducting frequent progress check-ins.
- Provide technical assistance to aid all users in the deployment plan.

Existing and Future Conditions Analysis

Understanding Maryland's existing and future conditions is important to the successful deployment of EV charging infrastructure. These conditions serve as the basis for identifying opportunities, challenges, and risks.

STATE GEOGRAPHY AND LAND USE PATTERNS

While Maryland is the 9th smallest state by area, Maryland is the 18th most populous state in the US with a 2020 Census population of over 6.1 million people and is expected to grow to over 6.7 million by 2040. It is geographically diverse with forested mountains, marshlands, beaches, and rolling hills and can be divided into five regions – Baltimore Metro Region, Washington Metro Region, Western Maryland Region, Southern Maryland Region, and Eastern Shore Region. Information, including population and land use, for each of these regions, can be found in the [2040 Maryland Transportation Plan](#) (MTP).



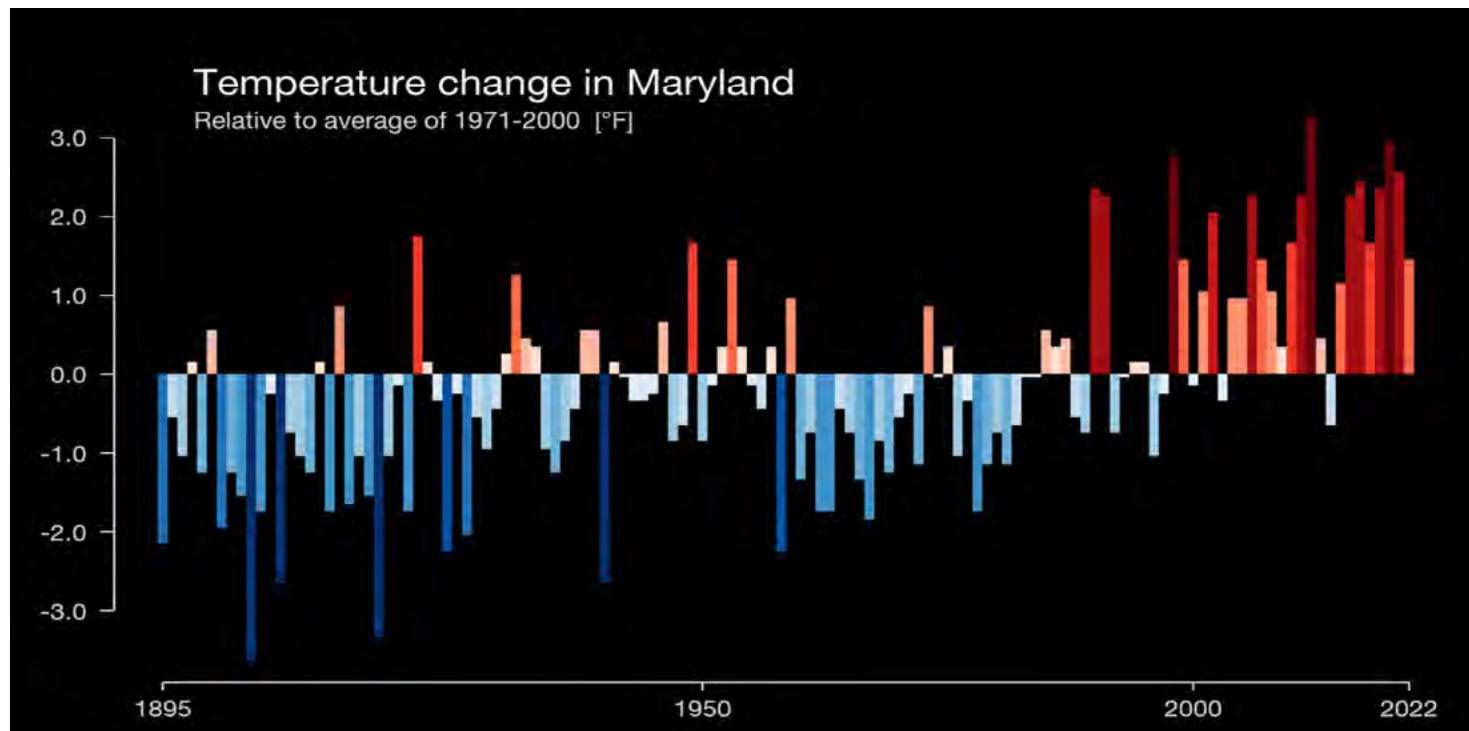
CLIMATE

Maryland's climate is classified as temperate, experiencing four distinct seasons. Maryland has an average annual temperature of 55.1°F, with the highest temperatures occurring in July with average temperatures in the mid to upper 80s and the lowest temperatures occurring in January with average temperatures in the low to mid 20s. However, due to the geography, temperatures can vary from region to region with the western region experiencing colder weather and more snow in the winter while summers in the eastern and southern areas are hot with greater levels of humidity.

Since the beginning of the 20th century, Maryland has experienced an increase of 1.5°F in the annual average temperature and an average of less than one day per year of nights below 0°F in the winter since the mid-1990s. Maryland is expected to have a notable increase in days with extreme heat (over 90°F) by 2050. Heat waves are likely to increase in frequency, intensity, and duration. Maryland receives an average annual precipitation of 59 inches, which typically peaks in July and August. Maryland's annual mean precipitation has been above average for the past two decades. Maryland has an average seasonal snowfall of 20.6 inches with areas in the Eastern Shore receiving approximately 10 inches per year while Garrett County in Western Maryland receives 110 inches of snow.

Rising temperatures along with the increase in extreme weather events are the result of an increase in GHG emissions, particularly from the transportation sector, which accounts for over one-third of GHG emissions in Maryland. This could negatively impact, both directly and indirectly, Maryland's ecosystems, infrastructure, recreational opportunities, and economy. In addition, the effects of climate change could result in adverse health consequences for people throughout the state as well as negative outcomes for those in DACs.

TEMPERATURE CHANGE IN MARYLAND – *Relative to average of 1971-2000 [°F]*

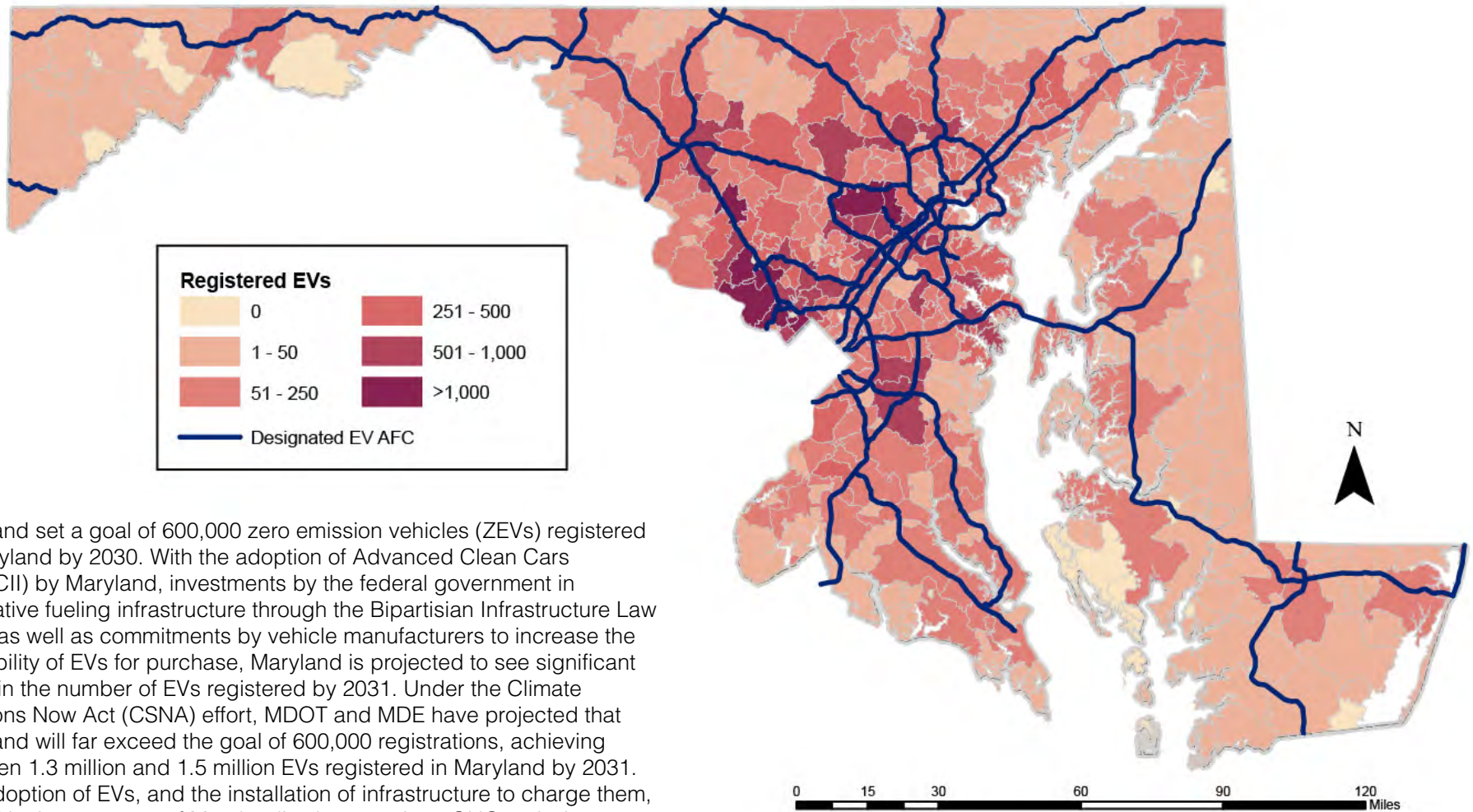


Source: <https://mde.maryland.gov/programs/Air/ClimateChange/Pages/index.aspx>, Courtesy of Professor Ed Hawkins, University of Reading

REGISTERED EVS

Maryland continues to experience significant growth in the number of EVs registered, in part due to lower vehicle costs, incentives, and the increasing availability of models and charging infrastructure. As of June 30, 2023, there were 75,861 EVs registered in the state, an increase of 45% or 23,542 from the previous year. EVs make up over 1% of all vehicles registered and 12 ZIP codes now have more than 1,000 EVs registered.

REGISTERED EVS BY ZIP CODE, JUNE 30, 2023



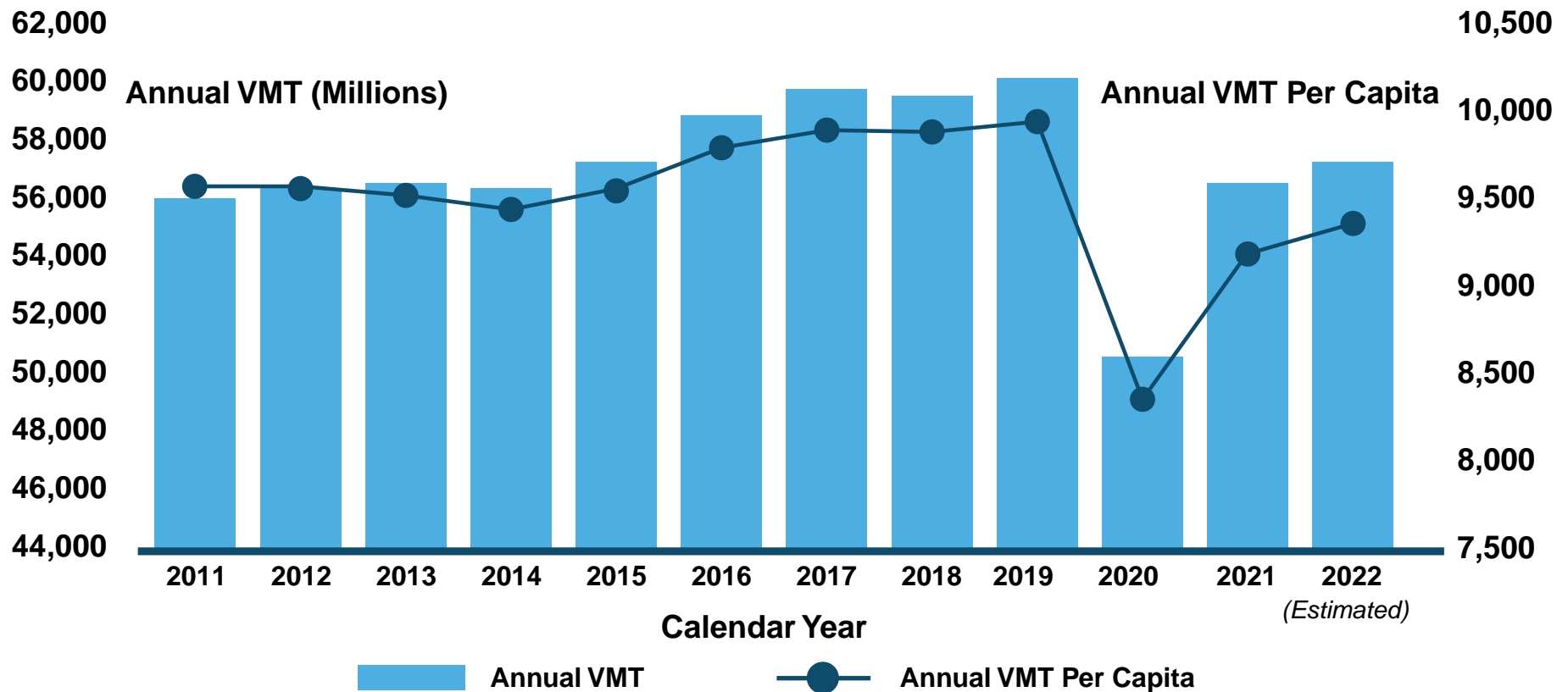
Maryland set a goal of 600,000 zero emission vehicles (ZEVs) registered in Maryland by 2030. With the adoption of Advanced Clean Cars II (ACCII) by Maryland, investments by the federal government in alternative fueling infrastructure through the Bipartisan Infrastructure Law (BIL), as well as commitments by vehicle manufacturers to increase the availability of EVs for purchase, Maryland is projected to see significant gains in the number of EVs registered by 2031. Under the Climate Solutions Now Act (CSNA) effort, MDOT and MDE have projected that Maryland will far exceed the goal of 600,000 registrations, achieving between 1.3 million and 1.5 million EVs registered in Maryland by 2031. The adoption of EVs, and the installation of infrastructure to charge them, is a critical component of Maryland's plan to reduce GHG emissions from the transportation sector and achieve the ambitious GHG emission reduction goals.

TRAVEL PATTERNS IN THE STATE, PUBLIC TRANSPORTATION NEEDS, FREIGHT, AND OTHER SUPPLY CHAIN NEEDS.

MDOT regularly tracks and forecasts vehicle miles traveled (VMT), truck and light-duty vehicle travel, as well as freight activities and transit movements throughout the state. Existing and forecast metrics can be found in the 2040 MTP, the Maryland State Freight Plan, and the Maryland Attainment Report on Transportation System Performance (AR), which is updated annually.

SHA also maintains a comprehensive Traffic Monitoring System (TMS) website, which includes the TMS Dashboard, a web-based portal tool that provides data analyses on traffic patterns, volumes, and classifications.

ANNUAL VMT AND VMT PER CAPITA





KNOWN RISKS AND CHALLENGES FOR EV DEPLOYMENT

MDOT identified the following risks and challenges that could impact the successful implementation and deployment of Maryland's EV charging infrastructure.

Supply Chain – Global supply chains experienced major disruptions resulting in slowed shipment, increased product demand, higher costs, and shortages in materials. As a result, there were shortages in EV charging equipment and additional wait time for the delivery of EV charging infrastructure and other products. This could impact the overall timeline for the deployment of charging infrastructure in Maryland. In addition to delays in the shipment of EV charging equipment, a global chip shortage has resulted in a slowdown in the production of cars and an overall higher vehicle cost, which could impact the consumer's decision and ability to purchase an EV. If the availability and demand for EVs slow, there may be lower demand for EV charging infrastructure, resulting in some stations being underutilized.

Grid Capacity – It is likely that existing grid infrastructure will not be able to support the increased capacity demands of EVs and will require upgrades to ensure the grid can reliably support the load increase. Upgrades needed to meet this increased demand could be extremely costly. This applies especially in areas where transmission and distribution infrastructure may be limited either due to restricted existing capacity, in more urban and suburban areas, or due to a lack of infrastructure altogether, such as in more rural areas.

Reliability – Ensuring the uptime and reliability of the charging equipment is critical to the successful adoption of EVs. Stations that are consistently down and unavailable create a gap in the charging network. This could further fuel range anxiety by creating a negative opinion and experience surrounding charging, which could impact EV sales growth.

Climate Change – As the climate continues to change due to GHG emissions, Maryland will experience more extreme temperatures and severe weather events, including flooding from increased rainfall, which could impact access to charging stations as well as the operations and uptime, resulting in stations being unavailable for an extended period.

Public Education – With the shifting landscape around new charging providers, public education was identified by stakeholders as key to the adoption of EVs and deployment of infrastructure. Education is necessary to build awareness and comfort within the public about EVs, the cost to charge, how to use the charging stations, and access and availability of charging stations. Without this, the public may not be comfortable purchasing an EV or utilizing public charging stations.

Emergency Management – Widespread power outages due to severe weather events could result in charging stations being unavailable for prolonged periods of time, while evacuations may result in increased demand for charging infrastructure. Preparation for emergencies and severe weather through the deployment of mobile charging stations and other technologies is necessary to ensure that charging stations remain available for EVs.

ADA Accessibility – Ensuring that charging stations are accessible to all people is essential to EV adoption. While NEVI Program guidelines recommend that “States should consider locations at or immediately adjacent to land uses with publicly accessible restrooms, appropriate lighting, and sheltered seating areas such as travel centers, food retailers, convenience stores, visitor centers on Federal lands, small businesses with an ADA accessible pathway between the EV charging infrastructure and the front door of the identified establishment,” there are no specific provisions for EV charging stations in the ADA Accessibility Standard including the recommended minimum number of ADA accessible EV charging spots.



Equity Barriers – Members of rural and DACs face barriers that prevent the adoption of EVs within these communities. The greatest of these barriers is affordability. EVs, on average, are more expensive than comparable internal combustion engine (ICE) vehicles. Without incentives or rebates, this cost difference could inhibit members of these communities from purchasing an EV. Members of these communities also tend to live in areas where there is limited or no access to Level 2 charging stations, such as multi-unit dwellings, or older communities with predominantly street parking, leaving members of these communities reliant on DC Fast Charging, which is more expensive than Level 2 charging stations.

Workforce Development – As new job opportunities related to the installation, operations, and maintenance of EV charging stations are created, education and training opportunities must be available to support these jobs. If unavailable, there could be labor shortages if there are not enough qualified people to fill the roles.

Connectors – The federal final rule establishes a requirement that each direct current fast charging (DCFC) port installed under NEVI must have a Combined Charging System (CCS) connector. The final rule also allows, “DCFC charging ports to have other non-proprietary connectors so long as each DCFC charging port is capable of charging a CCS-compliant vehicle.” Going above and beyond the required CCS standard could increase the cost of installation under the NEVI program and is further complicated by the fact that there are competing connector standards outside of the required CCS.

On one hand, several automakers have announced they are abandoning the CCS standard, including Ford, GM, Rivian, Tesla, and Volvo, in favor of the North American Charging Standard (NACS). This means that a larger percentage of new EVs will have to use adapters to take advantage of the CCS stations installed under NEVI. On the other hand, much of the

existing EV fleet, which is more affordable in a used car market, utilizes an older style connector, known as CHAdeMO. States must decide if they will only install CCS or install one or more of the other charging standards along with CCS. The federal CCS requirement is forcing states to balance cost-effectiveness (installing only CCS), equity (including CHAdeMO), and convenience (including NACS).

Coordination – The federal government should ensure that policy and guidance are flexible, timely, and informed by state, stakeholder, and public feedback. The NEVI program is unfolding very quickly. The policy, guidance, and rules are not tailored to the fast-paced environment of innovation and have been slow to respond to state needs and private sector advancements. As a result, states have been forced to operate on short timeframes and to take risks when issuing procurements. In addition, while the deployment of complementary programs like the Maryland PSC pilot program, and the federal CFI grants, offer opportunities to deploy infrastructure along our corridors, and within our communities, these programs also operate independently of the NEVI formula funding program. While MDOT, partner agencies, utilities, and the private sector maintain open lines of communication, it is challenging to keep track of when and where infrastructure will be installed in Maryland. This presents a challenge to MDOT as the state attempts to build out the AFCs as efficiently as possible so that we may shift our focus to community charging needs.

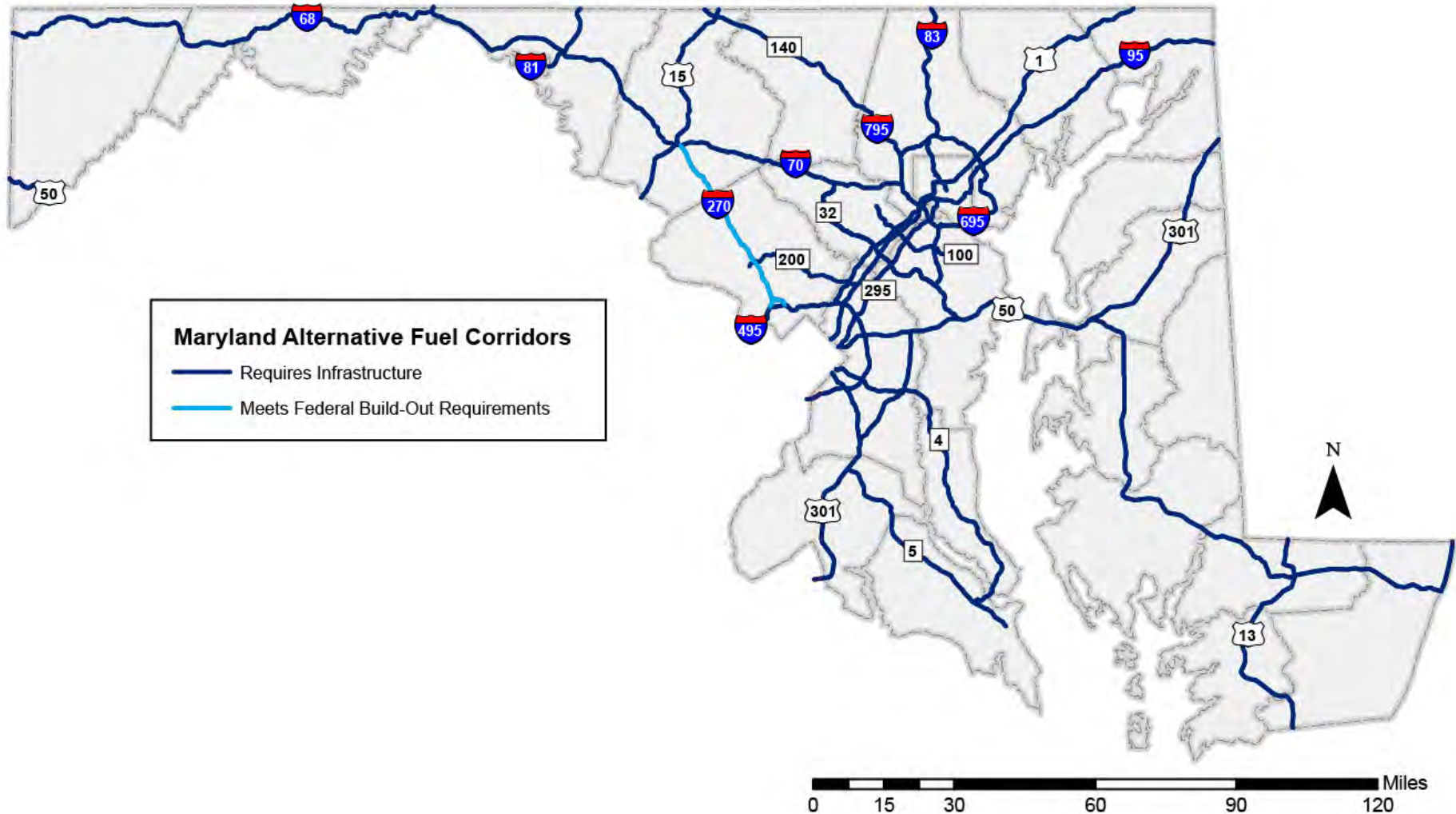


AFC DESIGNATIONS

Maryland has a robust network of AFCs that traverse the entire state. Since the initial AFC Nomination in 2016, MDOT has successfully nominated 23 corridors for designation as EV AFCs in Rounds 1-7. In total, Maryland has designated 10 interstates, 5 US Routes, and 8 Maryland Routes. Prior to the release of the minimum standards, 15 of the 23 corridors were considered Corridor-Ready, meeting the minimum station and mileage requirements.

Four corridors were considered Corridor-Pending, requiring more charging infrastructure. Three corridors had segments that were considered both Corridor-Pending and Corridor-Ready. With the release of the updated standards, only one corridor, I-270, currently meets the federal build out requirements. The remaining 22 corridors require infrastructure. A complete list of Maryland's EV AFC and their designation status can be found in **Appendix A**.

MARYLAND ALTERNATIVE FUEL CORRIDORS



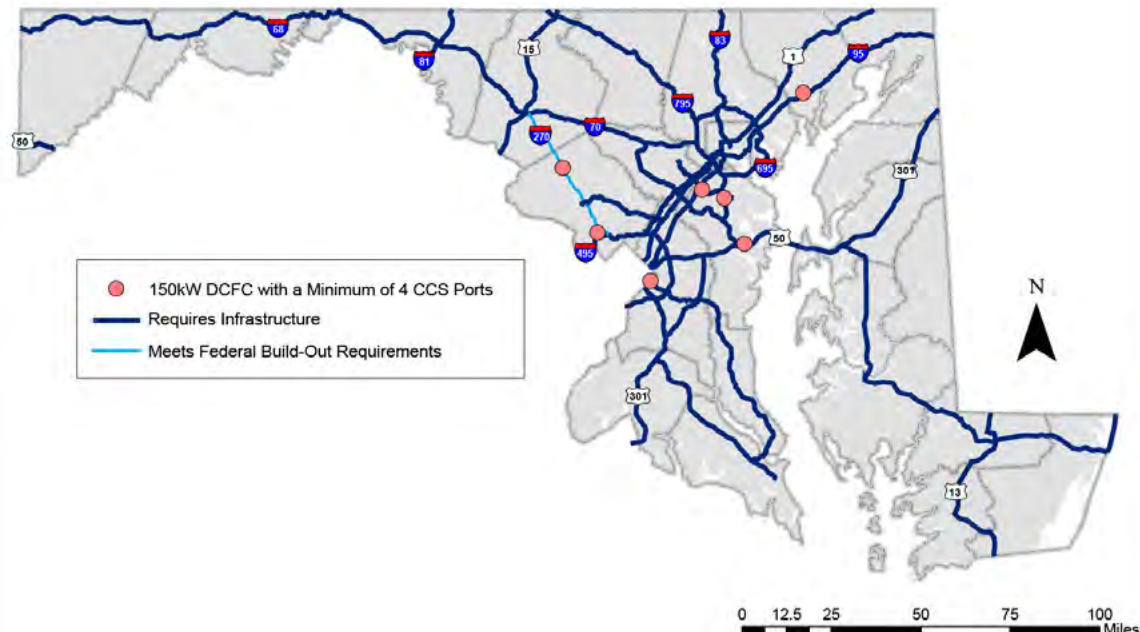
EXISTING CHARGING STATIONS

These 23 corridors support nearly 1,400 charging stations with over 3,800 charging ports located throughout the state with the highest concentration of EV charging stations along the I-95 and I-270 corridors in the Baltimore and Washington Metro regions. As of July 1, 2023, 14 stations currently meet the power requirements of at least four (4) CCS ports with at least 150 kilowatts (kW) of power each. Of these 14 charging stations, the following seven charging stations fall within one mile of an interstate exit or highway intersection along one of Maryland's designated AFCs.

State EV Charging Location Unique ID*	Charger Level	Route	Location	# Charging Ports	EV Network	Meets all relevant requirements in 23 CFR 680?	Intent to count towards Fully Built Out determination?
MD 97-12	DCFC	I-97	7951 Nolpark Ct	4	Electrify America	Yes	Yes
MD 270-18	DCFC	I-270	22705 Clarksburg Rd	4	Electrify America	Yes	Yes
MD 100-10	DCFC	MD-100	7000 Arundel Mills Cir	6	Electrify America	Yes	Yes
MD 95-77	DCFC	I-95	401 Constant Friendship Blvd	8	Electrify America	Yes	Yes
MD 50-23	DCFC	US 50/US 301	2100 Generals Hwy	4	Electrify America	Yes	Yes
MD 270-1	DCFC	I-270	7101 Democracy Blvd	4	Electrify America	Yes	Yes
MD 4-4801	DCFC	MD 4	4801 Marlboro Pike	4	eVgo	Yes	Yes

* The State EV Charging Location Unique ID represents the state (MD), the interstate or route number followed by the exit number, if applicable, or the station address if there are no exits along the route.

EXISTING CHARGING INFRASTRUCTURE THAT MEETS FEDERAL REQUIREMENTS



EV Charging Infrastructure Deployment

The primary objective of the NEVI Formula Funds is to build out and certify all 23 of Maryland's existing AFCs. Once certified, MDOT will utilize the funds to build out the public charging infrastructure within communities, where it will be the most beneficial to adoption of EVs, especially in rural and DACs.

FUNDING SOURCES

Maryland was apportioned approximately \$63 million over 5-years, with approximately \$33 million for FFY 2022-2024. These funds can be used by themselves or combined with other eligible USDOT funding sources to cover up to 80% of eligible project costs for charging infrastructure. The remaining 20% must be matched through private, state, or other local funds.

PLANNED CHARGING STATIONS

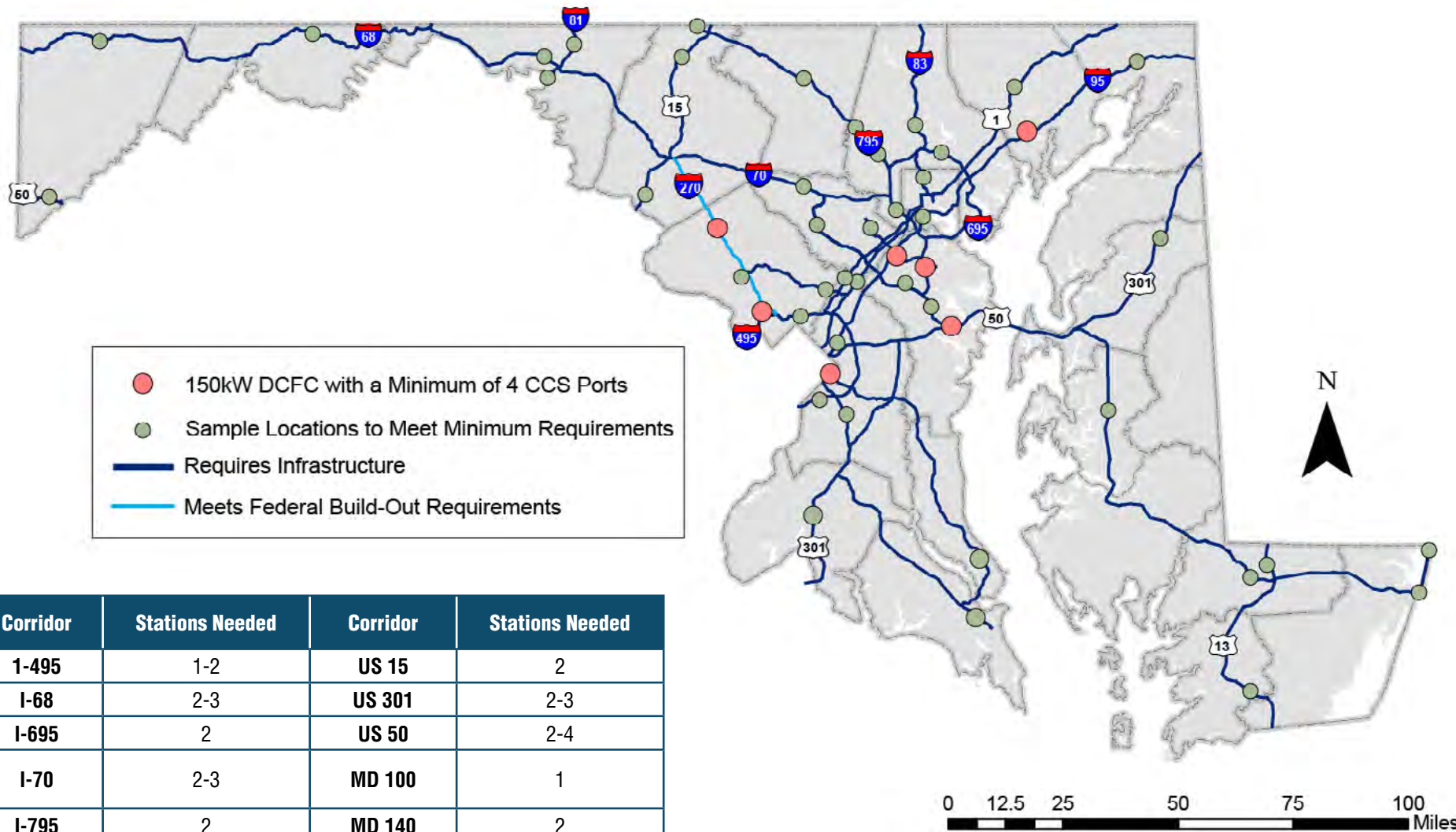
At the time of this Plan's submission, MDOT has not released the Round 1 Program or corresponding Request for Qualifications (RFQ). While there are currently no stations under construction nor stations planned using NEVI Formula Funds, MCEC submitted 29 sites along Maryland's AFCs for consideration under CFI's Corridor Program. If selected, these sites will support MDOT's efforts in building out the AFCs, create redundancy in the charging network, and allow MDOT to move more quickly in the deployment of charging stations within communities.

PLANNING TOWARDS A FULLY BUILT OUT DETERMINATION

Maryland completed a preliminary gap analysis to visualize where charging stations can be located along the corridors to achieve a fully built out determination for all 23 AFCs. The gap analysis examined existing charging stations meeting FHWA requirements in both Maryland and neighboring states, the 50-mile maximum distance between stations, a minimum of two charging stations per corridor, 1-mile from an AFC interchange or intersection, and a station within 25-miles of where the AFC terminates. Based on the analysis, MDOT estimates approximately 40-48 charging stations must be installed. This estimate does not include the 29 sites submitted under the CFI Corridor Program or any private investments, such as installations under the PSC pilot program.



SAMPLE LOCATIONS TO MEET MINIMUM DISTANCE REQUIREMENTS



Corridor	Stations Needed	Corridor	Stations Needed
I-495	1-2	US 15	2
I-68	2-3	US 301	2-3
I-695	2	US 50	2-4
I-70	2-3	MD 100	1
I-795	2	MD 140	2
I-81	1-2	MD 32	2
I-83	2	MD 4	1
I-95	3	MD 5/MD 235	2
I-97	1	MD 528	2
US 1	2-3	MD 295	2
US 13	2	ICC/MD 200	2



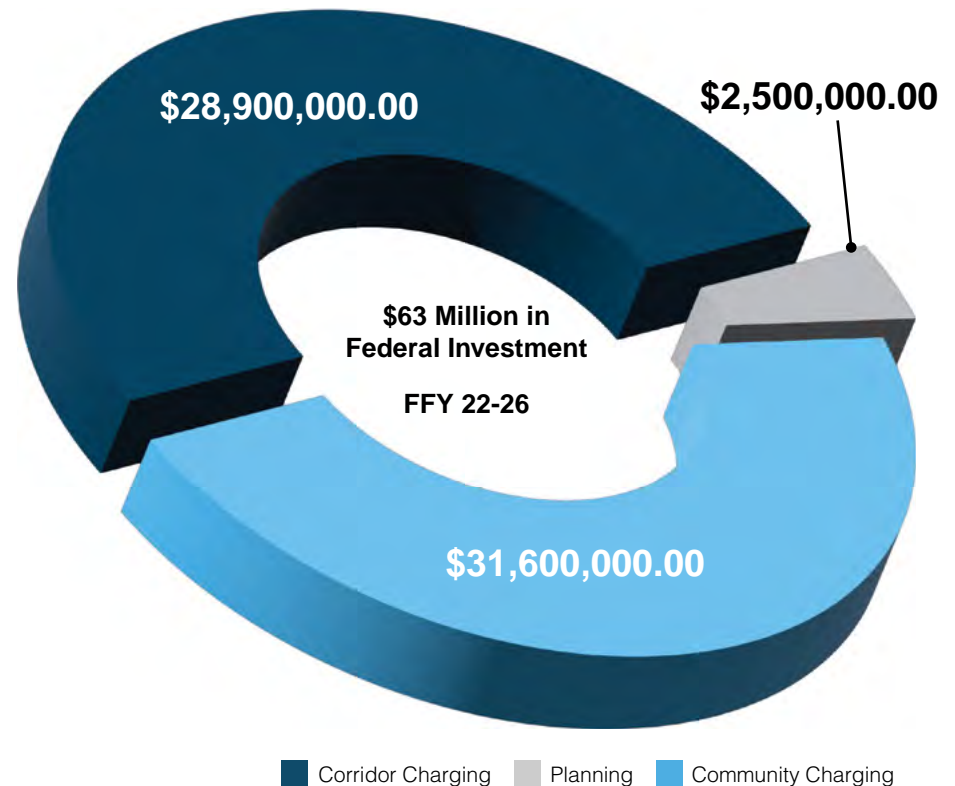
MDOT will allocate FFY 2022, FFY 2023, and some FFY 2024 funds to building out Maryland's AFCs. Maryland's focus will shift to investing in community charging starting with FFY 2024. Investment in community charging will continue with FFY 2025 and FFY 2026 funds. This FFY funding plan should not be confused with a contracting and installation schedule. The initial contracting release will come out by the end of calendar year 2023. Specific funding amounts for the 2023 release, and the funding details and timeframes for subsequent contracting release(s) are still under consideration.

While the existing infrastructure and relatively small geographical nature of Maryland will likely lead to the build-out of AFCs fairly quickly, the speed of build out will be dependent on the deployment of charging stations in neighboring states as well as the deployment of charging stations under the CFI Corridor Program, private investments, and other initiatives. This will require continued coordination with neighboring DOTs as well as regional and local partners.

\$63 Million in federal investment, plus an additional **\$15 Million** in required, matching, non-federal investments
 Total of over **\$75 Million** in EV Infrastructure Investment

INVESTING IN COMMUNITIES

- ✓ Ensuring Equitable Charging Infrastructure
- ✓ Benefiting Marylanders
- ✓ Meeting Geographic Demands in Urban and Rural Communities





Implementation

MDOT, in partnership with MEA and the NEVI Advisory Committee, is developing implementation objectives and strategies to support and maintain the sustainability of the EV charging infrastructure funded through the NEVI program. Part of the overall implementation strategy is ensuring that EV charging infrastructure is operated and maintained according to the program guidelines and that applicable data and information is collected and publicly shared via an online dashboard.

The development of these strategies, activities, and dashboard is still ongoing but will be finalized in concert with the development of Maryland's competitive funding program guidelines and requirements. The competitive grant program to award and disburse NEVI Formula funds will include a request for applications from eligible entities interested in receiving NEVI funding to upgrade, install, own, and operate charging infrastructure in Maryland. Contracts will include both federal and state legal terms and conditions. MDOT's NEVI management program will be ready to work with partners and stakeholders to ensure all federal and state requirements and established program goals are met. Useful information about EVs in Maryland as well as additional programmatic resources can be found on [MDOT's website](#).

MARYLAND ZEVIP PLANNING TOOLKIT

To assist in site identification, evaluation, and tracking, Maryland continues to develop the Maryland ZEVIP Planning Toolkit, which will be released to the public prior to the finalization of the Maryland NEVI Formula Program. The ZEVIP Planning Toolkit will allow potential applicants to determine whether a site may be a good candidate. MDOT will update the ZEVIP Planning Toolkit to reflect each round's Program requirements and scoring criteria. In addition, the toolkit will also be designed to serve as a publicly available tracking dashboard, that will disclose where NEVI funded stations have been installed and track usage of those stations.



STRATEGIES

The following strategies were suggested as implementation considerations by the Joint Office in the State NEVI Plan Template and were affirmed by the NEVI outreach conducted in Maryland. As the Maryland NEVI Program is developed, these strategies will evolve and be included in future NEVI Plan updates.

OPERATIONS & MAINTENANCE

EVSE operations and maintenance guidelines and requirements will be included as part of the competitive funding program. The applicant/site host applying for the funding will be responsible for the operations and maintenance of the EV charging infrastructure for a minimum of five years. Any maintenance needs or challenges experienced during the five-year operating period will be included in the data collection requirements and summarized by MDOT via the dashboard.

EVSE DATA COLLECTION & SHARING

MDOT is developing an online dashboard tool, part of the Maryland ZEVIP Toolkit, that will track EV charging infrastructure locations receiving NEVI funding, the status of stations (design, construction, completion, etc.), costs for acquisition and installation of EVSEs, cost for grid upgrades, the number of charging stations/ports per location, usage, uptime, as well as maintenance needs or challenges. As part of the program requirements, applicants will be required to track and share this data regularly with MDOT for a minimum of five years. The data collected from the EV charging station site will be reflected in the dashboard and updated regularly by MDOT and submitted to the Joint Office quarterly. Annually, Maryland will also submit to the Joint Office identifying information for the organizations that operate, maintain, and install charging infrastructure and indicate whether these organizations participate in state or local business opportunity certification programs annually to the Joint Office.

RESILIENCE, EMERGENCY EVACUATION, SNOW REMOVAL/SEASONAL NEEDS

Resilience, emergency evacuation, and snow removal/seasonal needs guidelines and requirements will be included as part of the competitive funding program. The site host must describe their plan to address these issues and provide assurance that the site will be operational 24/7/365 with minimal downtime or disruptions as part of the application process.

In addition, the Maryland floodplain mapping layer will be incorporated into the Maryland ZEVIP Toolkit as an important resource to identify current and future sites that may be susceptible to flooding.

STRONG LABOR, SAFETY, TRAINING, AND INSTALLATION STANDARDS

MDOT, in collaboration with MEA, will continue ongoing discussions and coordination with Labor and other state agencies to understand safety considerations, trainings, or certifications that may be needed as well as the potential impact on the workforce. This will allow for the identification of existing programs that can be expanded and built upon to meet existing and future needs.

Examples of existing or required future EV training programs include:

- The Maryland Highway or Capital Transit Construction Skills Training Program directs training funds to Maryland's public workforce system partners to connect Marylanders to construction and maintenance careers that support capital transportation projects.
- MDOT MTA safety and workforce development training is required under the Zero Emission Bus Acquisition Requirement (Senate Bill 61, 2022).
- New transportation apprenticeship programs are actively being developed by MDOT, in conjunction with its employee labor unions

and Labor, to address immediate workforce needs related to EV infrastructure.

- Training for school bus drivers under the Maryland PSC's Electric School Bus Pilot Program (SB 528, 2022).
- Local initiatives are undertaken by members of the Climate Mayors EV Purchasing Collaborative, which provides training, best practices, educational resources, and analysis support, creating a one-stop shop to support EV transitions for public fleets. Participating Maryland jurisdictions, include Baltimore, College Park, Greenbelt, Hyattsville, Montgomery County, and Takoma Park.
- The Electric Vehicle Infrastructure Training Program (EVITP), identified in the NEVI Standards and Requirements, would serve to provide training and certification for electricians installing, operating, and maintaining EVSEs.
- The state-funded EARN Maryland program, administered by Labor, is a nationally recognized workforce development program focused on creating industry-led sectoral partnerships that address critical workforce needs.
- SHA's safety and workforce development training is required for both heavy equipment maintenance staff as well as for the Coordinated Highways Action Response Team (CHART) responders to applicable incidents.

In addition, ZEEVIC, chaired by MDOT, will continue to develop policies, recommendations, and incentives to increase ZEV awareness and promote private investment for ZEVs and fueling infrastructure through education and outreach to its members and stakeholders. ZEEVIC is establishing workgroups to specifically address priorities and topics for discussion and implementation, barriers and solutions, legislative communications, and trucking and heavy-duty vehicle infrastructure needs.

IDENTIFYING EV CHARGER SERVICE PROVIDERS & STATION OWNERS

As part of the MetroQuest Survey, MDOT asked stakeholders to drop pins on a map within one mile of an exit or interchange along designated AFCs to identify optimal locations that would support the build out and certification of the AFCs. Stakeholders could also drop pins outside the one-mile buffer to identify locations that would be optimal for community charging once AFCs are built-out. These locations, as well as those identified in a previous Local Government MetroQuest Survey, will be included as a map in the Maryland ZEVIP Planning Toolkit. The map will allow EV network companies to identify and connect with potential optimal site locations. Additionally, site locations will be included in the scoring criteria when reviewing applications.

Equity Considerations

Maryland is committed to deploying an equitable and accessible charging network that ensures that at least 40% of all benefits from the NEVI Formula Program target DACs and rural communities that have been disproportionately burdened by the transportation and energy sectors.

The following principles have been identified through public and stakeholder outreach and discussions with state agencies and will guide the equitable deployment of charging infrastructure:



ACCESSIBILITY

Ensuring all Marylanders and Visitors Have Access to Reliable EV Charging

Geographic Diversity

Rural/Urban

Corridors/Communities

Multi-Lingual Graphic User Interfaces

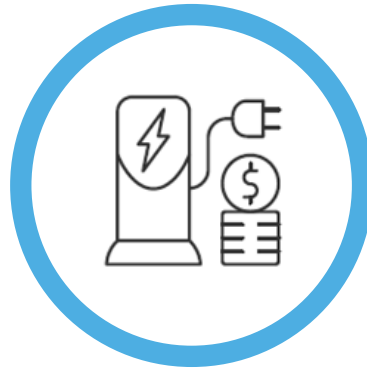
ADA Compliance

Multi-Unit Dwellings

Employment Centers

Safety While Charging

Grid Reliability



AFFORDABILITY

Creating Incentives, Innovations, and Systems that Increase Affordability of EV Ownership and Charging

Leveraging state, local, federal, and private funding

Cost of Vehicles

Cost of Charging

Mobility Hubs

Carshare

Rideshare

ZEV Transit



COMMUNICATION

Meeting People where they are, Listening, and Educating

Multi-Lingual Materials

Events

Webinars

Surveys and Polls

Geofencing

Website

Social Media

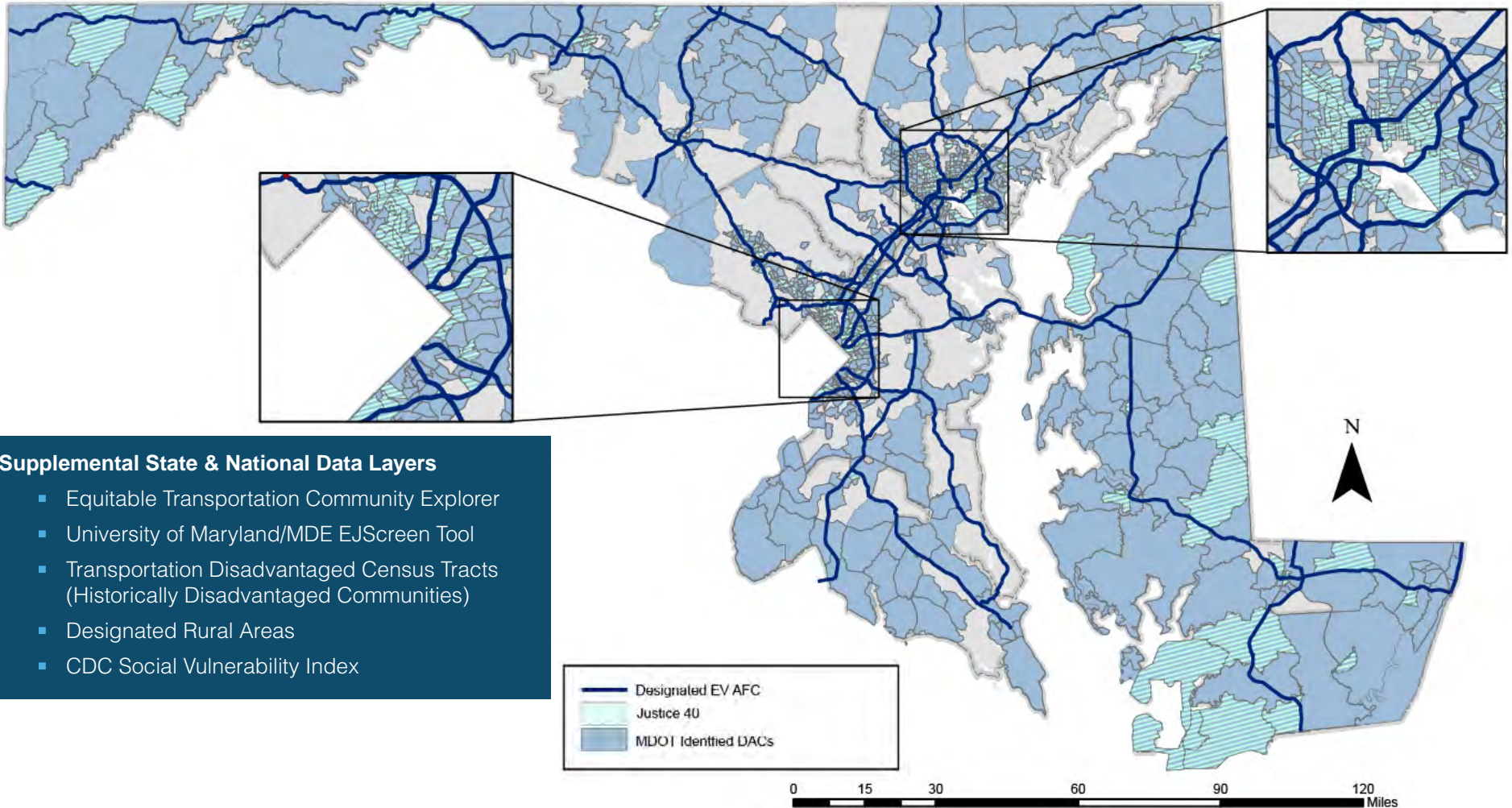
Calculators

IDENTIFICATION AND OUTREACH TO DACS IN THE STATE

MDOT, in coordination with NEVI AG, identified state and national data layers that will be used to supplement the Climate and Economic Justice Screen Tool (CEJST) for the identification of rural and DACs in Maryland. The CEJST, which was developed as part of the Justice40 Initiative to identify census tracts that are overburdened and underserved, only identifies 206 of the 1,406 census tracts in Maryland as disadvantaged. These identified DACs census

tracts are mainly concentrated within the Baltimore Beltway, primarily in Baltimore City, and within the Washington Beltway in Prince George's County. Census tracts with DACs were also identified in Frederick, Hagerstown, Cumberland, Elkton, Oakland, Waldorf, Frostburg, and along the Eastern Shore. These supplemental layers, identified in the blue box, will ensure that all DACs within Maryland are captured and identified. MDOT will continue to work with key partners to identify new or updated data layers that will best capture all rural and DACs within Maryland.

DACS IN MARYLAND BY CENSUS TRACT



PROCESS TO IDENTIFY, QUANTIFY, AND MEASURE BENEFITS TO DACS

MDOT is developing an online dashboard that will track not only the overall benefit to Maryland as a result of investment from the NEVI Formula Funds but the benefits to those communities identified as rural or disadvantaged. The chart below summarizes the benefits of NEVI investment that MDOT will track as well as the strategy for measuring these benefits and process for community validation. These benefits will be reviewed yearly to ensure they are in line with MDOT's other reporting measures, such as those found in MDOT's AR.

Benefits Category	Strategy for Tracking Benefits
Improve clean transportation access through the location of chargers	<p>Baseline:</p> <ul style="list-style-type: none"> ■ Number of existing NEVI compliant Stations in DACs <p>Methodology:</p> <ul style="list-style-type: none"> ■ Track the number of NEVI charging stations installed in DACs census tracts <ul style="list-style-type: none"> ■ Emphasis on DAC census tracts identified in CEJST <p>Community Validation:</p> <ul style="list-style-type: none"> ■ Outreach to identified DACs <ul style="list-style-type: none"> ■ Community Events/Local Government partnership ■ Surveys ■ Meetings/Webinars/Focus Groups
Reduce environmental exposures to transportation emissions	<p>Baseline:</p> <ul style="list-style-type: none"> ■ GHG modeling, completed as part of the CSNA Plan. National Ambient Air Quality Standards (NAAQS) monitoring data, and State Implementation Plan (SIP) inventories for ozone and particulate matter (PM2.5). <p>Methodology:</p> <ul style="list-style-type: none"> ■ Model air quality and GHG emission benefits <ul style="list-style-type: none"> ■ Use station usage data provided by the NEVI applicant <p>Community Validation:</p> <ul style="list-style-type: none"> ■ Outreach to identified DACs <ul style="list-style-type: none"> ■ Community Events/Local Government partnership ■ Surveys ■ Meetings/Webinars/Focus Groups
Diversity of workforce	<p>Baseline:</p> <ul style="list-style-type: none"> ■ Current percentage/number of minorities who are qualified technicians ■ Current percentage/number of minorities who are enrolled in qualified programs/apprenticeships <p>Methodology:</p> <ul style="list-style-type: none"> ■ Track the percentage/number of minorities who are qualified technicians ■ Track the percentage/number of minorities who are enrolled in qualified programs/apprenticeships <p>Community Validation:</p> <ul style="list-style-type: none"> ■ Outreach to school advisors/counselors ■ Outreach to identified DACs <ul style="list-style-type: none"> ■ Surveys ■ Meetings/Webinars/Focus Groups



Labor and Workforce Considerations

Upskilling and training new job seekers to meet the demand for an EV workforce will require a coordinated effort. Labor is currently working in partnership with MDOT and other ZEEVIC members to anticipate and respond to the workforce needs that will accompany Maryland's transition to EVs. In 2023, Labor submitted a competitive application for State Apprenticeship Expansion funds from the US Department of Labor Employment and Training Administration. The proposal would include \$3 million to support new and innovative registered apprenticeship programs for local, county, and state government agencies.

Labor was also invited by the Joint Office to submit a full proposal under the Ride and Drive Electric, FY 2023 Funding Opportunity. In partnership with MDOT, Labor is proposing an EV Workforce Collaborative that will help seed new electrical registered apprenticeship programs and retool existing programs with EV-specific training and certifications. Funding from the Joint Office would support a scalable pilot program focused on job seekers and incumbent workers with persistent barriers to employment. The collaborative will integrate rigorous registered apprenticeship and pre-apprenticeship electrical training with localized supportive services and outreach, establishing Maryland's first-ever workforce partnership specific to EV infrastructure.

These federal grants will build upon the existing efforts that are on-going under Maryland's Public Workforce System, the Apprenticeship Program, the EARN Maryland Program, the Maryland Highway or Capital Transit Construction Skills Training Program, as well as through EV workforce investments funding through the Workforce Innovation and Opportunity Act (WIOA).

In compliance with 23 CFR 680.106(j), to ensure that the installation and maintenance of chargers is performed safely by a qualified and increasingly diverse workforce of licensed technicians and other laborers, all electricians installing, operating, or maintaining Electric Vehicle Supply Equipment must receive certification from the Electric Vehicle Infrastructure Training Program (EVITP) or a registered apprenticeship program for electricians that includes charger-specific training developed as part of a national guideline standard approved by the US Department of Labor in consultation with the US Department of Transportation, if and when such programs are approved.

Physical Security & Cybersecurity

Physical security and the safety of Maryland drivers and citizens is a priority and is specifically referenced in MDOT's mission statement. Safety has also been identified as a key component of the NEVI program, through the Vision statement referenced in this document. To enhance the physical security of the infrastructure deployed under the NEVI program, applicants must consider the following safety measures: lighting, siting, driver and vehicle safety, fire prevention, tampering, charging locks, surveillance, etc. Proximity to amenities, particularly those that have built-in security/surveillance or are open 24-hours will also be evaluated and given more weight.

Maryland is committed to ensuring that critical infrastructure transportation technologies do not pose cybersecurity or personal privacy risk to Maryland or the United States. The increase in connected devices could cause an increase in cyberattacks, exposure of personal information, and payment/financial data risk. Third parties contracted will own, operate, and maintain the EV charging stations as well as the data produced. They will be required to provide MDOT anonymized data on a recurring basis. MDOT will follow its Information Security Plan to handle information received from third-party operators and to transfer data to FHWA and the Joint Office.

Third parties will also be required to publish station location, power ratings, and costs to the various sites tracking EV charging stations, including the US Department of Energy Alternative Fuel Data Center. As part of the contract, prior to issuance of the award or other funding, the third party will be required to demonstrate compliance with applicable Maryland, regulatory, and federal cybersecurity requirements. Third parties will be required to maintain cybersecurity throughout the life of the NEVI program, including upgrades for future cybersecurity requirements, and to alert MDOT and the Cybersecurity and Infrastructure Security Agency (CISA) of any known or suspected network or system compromises.

Contracting documents shall specify cybersecurity reporting and auditing requirements. In the recently released NPRM on minimum technical requirements, FHWA proposes to outline network connectivity requirements for charger-to-charger network, charging network-to-charging network, and charging network-to-grid communications. These requirements should help address cybersecurity concerns.



Program Evaluation

Maryland has made significant progress since the inception of the NEVI program in November 2021, and the initial federal guidance was released in February 2022. As illustrated above, MDOT has:

- Launched an informative and user-friendly website as a clearinghouse for NEVI-related information, which will be used for program evaluation and tracking as well.
- Conducted several public and stakeholder meetings to share progress and gather and incorporate feedback into the program.
- Issued 2 RFIs and communicated with industry representatives to understand the private and utility opportunities and risks associated with NEVI.
- Worked on important related programs, like the PSC pilot program and CFI grant opportunities, which have the potential to bolster the NEVI program.
- Coordinated closely with the Joint Office and the FHWA Division and Headquarters offices to move contracting forward despite slow-moving guidance and other obstacles.

Ensuring continuing transparency and success of the overall NEVI program is important and, as part of its program development, MDOT will implement an evaluation approach based on the Program's goals and objectives. MDOT will track, measure, and identify improvements between application rounds, to ensure lessons learned and best practices are continually incorporated into the process. On a periodic basis, MDOT will use both administrative and operational data to assess outcomes. This transparent approach will both confirm requirements are being met as well as build consumer confidence over the five-year performance period of each EV Charging Site.

MDOT is developing a dashboard that will track NEVI infrastructure investment within Maryland as well as Maryland's statewide infrastructure goals identified in the CSNA Plan or in the AR. The dashboard will report:

- Total number of NEVI charging stations, ports, and locations
- Status of stations (design, construction, completion, etc.)
- NEVI Funds allocated & total match value
- Usage, time to charge, downtime (per port and statewide avg)
- Gaps within charging infrastructure
- Overall maintenance needs or challenges

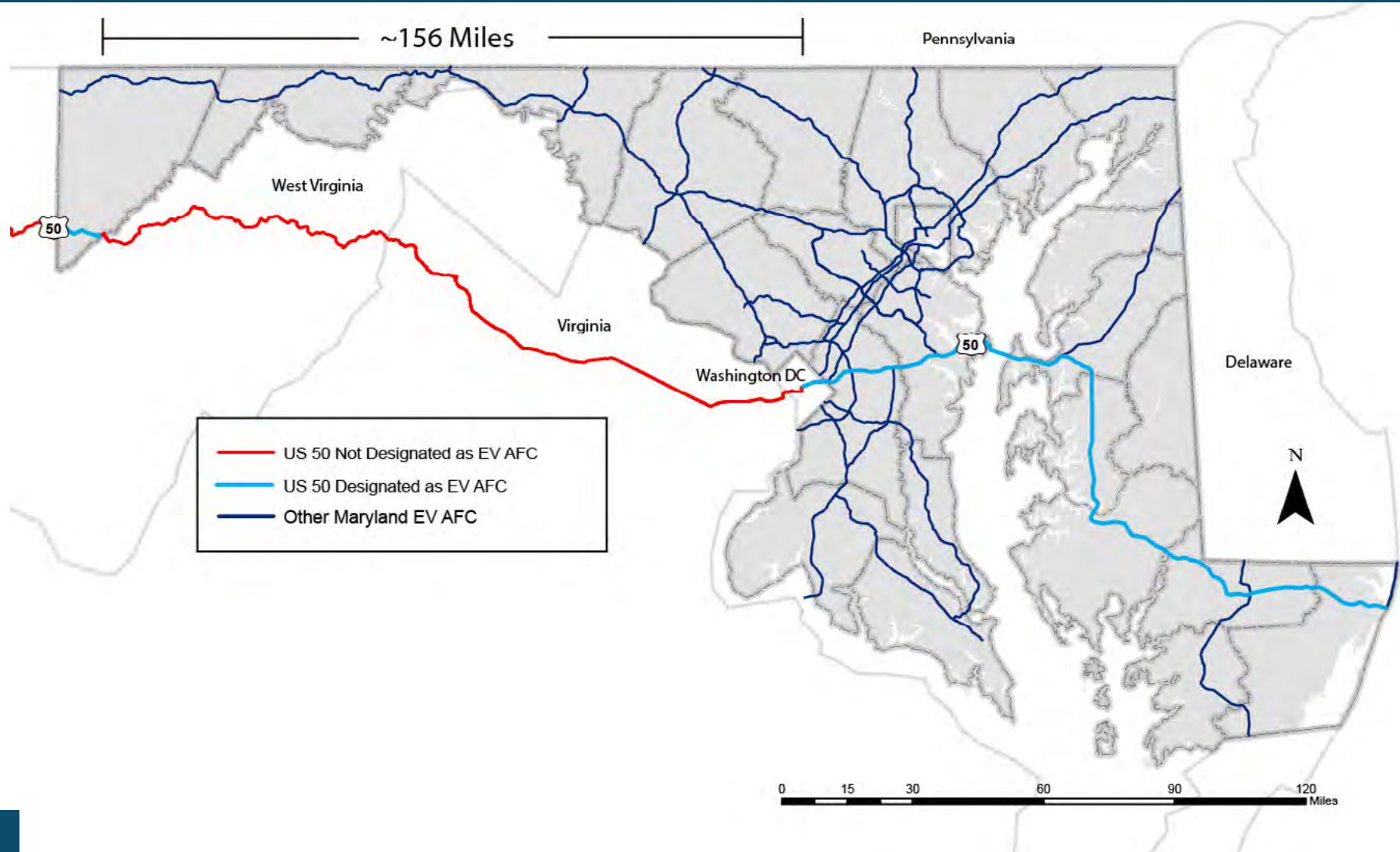


Discretionary Exceptions

MDOT is requesting a 50-mile discretionary exception for the approximately 9-mile portion of US 50 located in Garrett County, Western Maryland, as illustrated in the map below. While US 50 extends from the eastern shore of Maryland through Washington, D.C., Virginia, West Virginia, and beyond, US 50 is only designated as an EV AFC in Maryland and Washington, D.C. This leaves an approximately 156-mile gap through Virginia and West

Virginia where US 50 is not designated as an EV AFC. Because of this, there will be more than 50 miles between a potential station in Washington, DC and a potential station located in Western Maryland. Given the facts that this section of the US 50 corridor is approximately 9 miles long and is uniquely separated by adjacent states that have not designated US 50 as an AFC, Maryland specifically requests a discretionary exception to plan for 1 station on this small corridor segment.

DISCRETIONARY EXCEPTIONS



GLOSSARY OF TERMS

ACCII – Advanced Clean Cars II

AG – NEVI Advisory Group

AQCAC – Air Quality Control Advisory Committee

AR – Maryland Attainment Report on Transportation System Performance

CFI – Charging and Fueling Infrastructure

CCS – Combined Charging System

CSNA – Climate Solutions Now Act

DAC – Disadvantaged Community

DGS – Department of General Services

EARN – Employer Assistance & Resource Network on Disability Inclusion

EVITP – Electric Vehicle Infrastructure Training Program

EVSE – Electric Vehicle Supply Equipment

FFY – Federal Fiscal Year (October 1 – September 30)

FHWA – Federal Highway Administration

GHG – Greenhouse Gas Emissions

ICE – Internal Combustion Engine

Joint Office – Joint Office of Energy and Transportation

Labor – Maryland Department of Labor

MCEC – Maryland Clean Energy Center

MDE – Maryland Department of Environment

MDOT – Maryland Department of Transportation

MDP – Maryland Department of Planning

MEA – Maryland Energy Administration

MTA – Maryland Transit Administration

MTP – Maryland Transportation Plan

MWCOG – Metropolitan Washington Council of Governments

NACS – North American Charging Standard

NEVI – National Electric Vehicle Infrastructure

NOFO – Notice of Funding Opportunity

OEM – Original Equipment Manufacturers

PC44 – Public Conference 44

PSC – Public Service Commission

RFI – Request for Information

RFQ – Request for Qualification

SFY – State Fiscal Year (July 1- June 30)

SHA – State Highway Administration

STIP – Statewide Transportation Improvement Program

TMS – Traffic Monitoring System

TSO – The Secretary's Office

VMT – Vehicle Mile Traveled

ZEEVIC – Zero Emission Electric Vehicle Infrastructure Council

ZEV – Zero Emission Vehicle

ZEVIP – Zero Emission Vehicle Infrastructure Plan



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APPENDIX A: MARYLAND AFCS & DESIGNATION

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Corridor	Length (Miles)	Starting Point	Ending Point	Original Corridor Status	Build Out Status
I-270	34.5	I-70	I-495	Corridor-Ready	Meets Build Out Requirements
I-495	16.1	VA State Line	VA State Line	Corridor-Ready	Requires Infrastructure
I-68	79.9	I-70	WV State Line	Corridor-Pending	Requires Infrastructure
I-695	51.3	-	-	Corridor-Ready	Requires Infrastructure
I-70	90.9	I-695	PA State Line	Corridor-Ready	Requires Infrastructure
I-795	8.9	I-695	MD 140	Corridor-Ready	Requires Infrastructure
I-81	12.0	PA State Line	VA State Line	Corridor-Ready	Requires Infrastructure
I-83	32.9	PA State Line	Fayette Street	Corridor-Ready	Requires Infrastructure
I-95	108.1	DE State Line	VA State Line	Corridor-Ready	Requires Infrastructure
I-97	18.2	I-695	US 50	Corridor Ready	Requires Infrastructure
US 1	24.4	PA State	Joppa	Corridor-Pending	Requires Infrastructure
	60.4	Joppa	DC Line	Corridor Ready	
US 13	42.2	DE State Line	VA State Line	Corridor-Pending	Requires Infrastructure
US 15	37.85	PA State Line	VA State Line	Corridor-Ready	Requires Infrastructure
US 301	67.1	DE State Line	MD 5	Corridor-Ready	Requires Infrastructure
	22.6	MD 5	VA State Line	Corridor-Pending	
US 50	139.7	DC Line	MD 528	Corridor-Ready	Requires Infrastructure
MD 100	16.8	US 29	MD 177	Corridor-Ready	Requires Infrastructure
MD 140	11.5	I-795	Westminster	Corridor-Ready	Requires Infrastructure
	22.41	Westminster	PA State Line	Corridor-Pending	Requires Infrastructure
MD 32	30.3	I-70	I-97	Corridor-Ready	Requires Infrastructure
MD 4	58.8	DC Line	MD 235	Corridor-Pending	Requires Infrastructure
MD5/MD235	52.8	DC Line	MD 712	Corridor-Ready	Requires Infrastructure
MD 528	8.6	DE State Line	US 50	Corridor-Pending	Requires Infrastructure
MD 295	30.5	Russel Street	DC Line	Corridor-Ready	Requires Infrastructure
ICC/MD 200	18.8	US 1	I-270	Corridor-Pending	Requires Infrastructure

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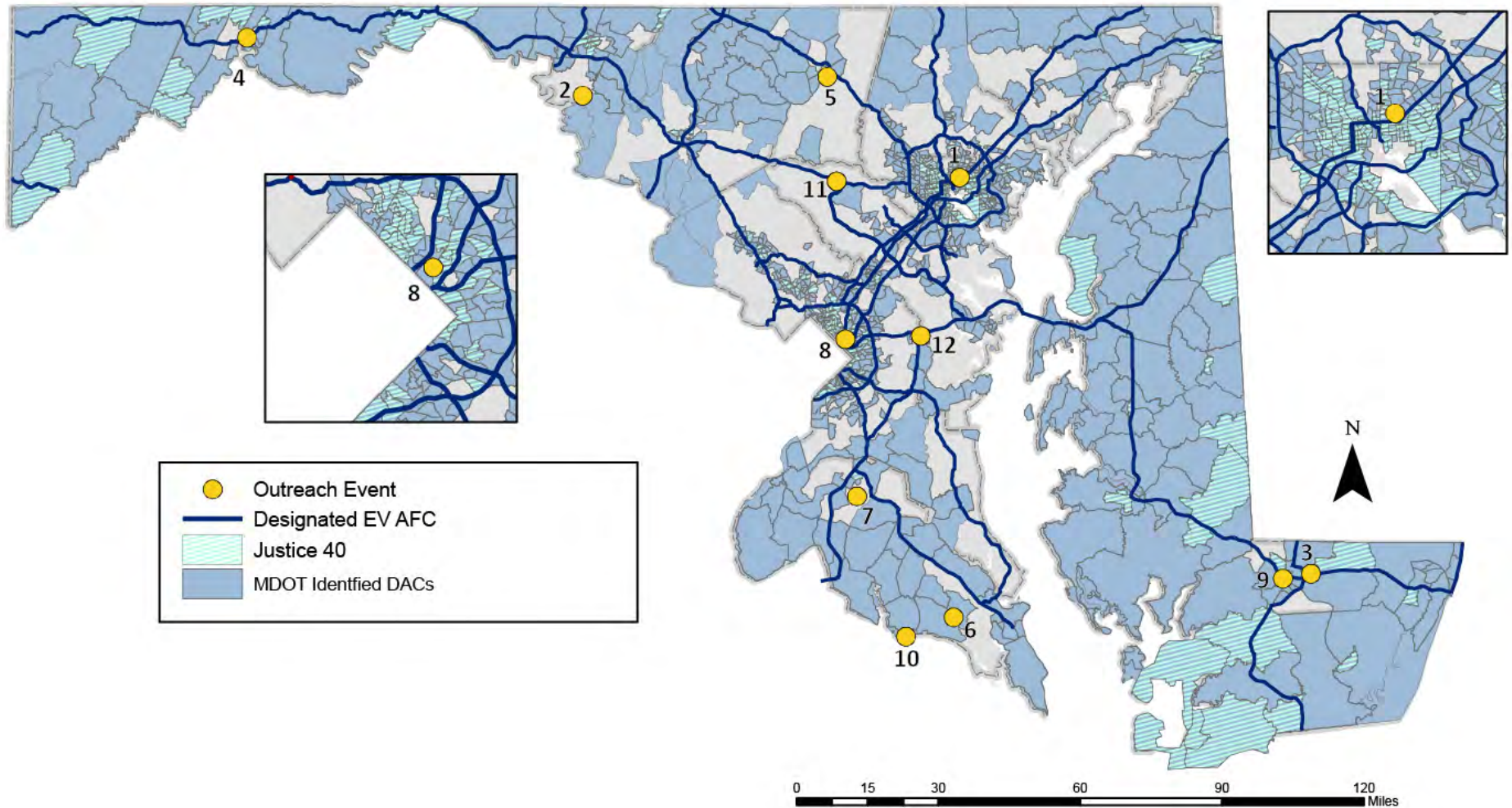
APPENDIX B: PUBLIC ENGAGEMENT

PRESENTATIONS & BRIEFINGS

Meeting	Date	Audience
ZEEVIC	July 19, 2022	State Agencies, Utilities, EV Industry, Members of Public
	September 22, 2022	
	November 17, 2022	
	January 12, 2023	
	March 8, 2023	
	July 12, 2023	
Planning Council	November 2, 2023	MDOT Modals
	April 26, 2023	
Air Quality Control Advisory Council	June 12, 2023	Industry, Labor, Professional Associations, Local & regional Government organizations, Academia, and General Public
MWCOG Regional EV Working Group	March 16, 2023	Local & Regional Government organizations

Event	City	Date	Total Engagements	Interpreter Engagement		
				Spanish	French	ASL
Baltimore Washington One Caribbean Carnival	Baltimore	July 2022	1200	275	10	0
Washington County Ag Expo and Fair	Boonsboro	July 2022	455	0	0	0
Wicomico County Fair	Salisbury	August 2022	905	25	0	0
Cumberland Historic Heritage Days	Cumberland	September 2022	775	50	0	0
Maryland Wine Festival	Westminster	September 2022	520	35	0	1
St. Mary's County Fair	Leonardtown	September 2022	305	0	0	0
Taste of Southern Maryland	Waldorf	April 2023	275	0	0	1
Waterfront Arts Festival	Bladensburg	May 2023	150	12	0	0
Eastern Shore JuneTeenth Parade & Festival	Salisbury	June 2023	325	5	0	0
Potomac Jazz and Seafood Festival	Coltons Point	July 2023	-	-	-	-
Howard County Pow-Wow	West Friendship	July 2023	-	-	-	-
Annual Negro League East/West Vintage and Auto Showcase	Bowie	July 2023	-	-	-	-

MARYLAND COMMUNITY OUTREACH EVENTS





Prepared By



in Collaboration with



With Support From



Maryland State Plan for
NEVI Formula Funding Deployment