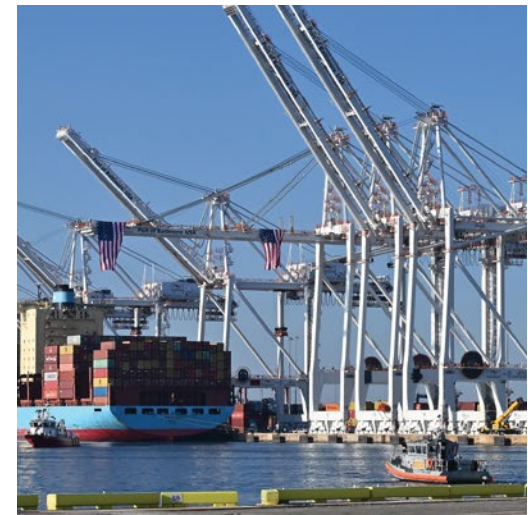
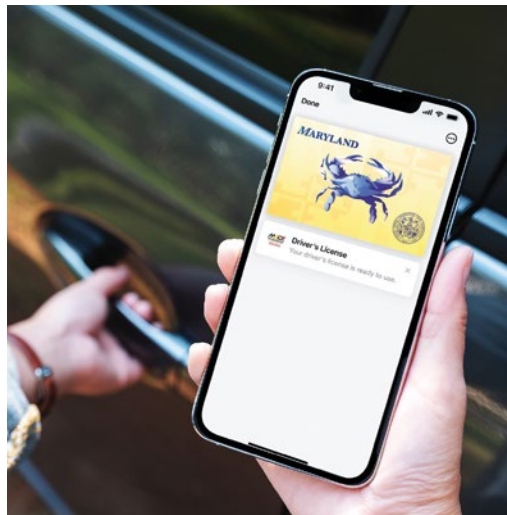


# MARYLAND CONSOLIDATED TRANSPORTATION PROGRAM

## FY2023–FY2028

2023 State Report on Transportation





MARYLAND’S CONSOLIDATED
TRANSPORTATION PROGRAM

The Consolidated Transportation Program (CTP) is Maryland’s six-year capital budget for transportation projects. The Capital Program includes major and minor projects for the Maryland Department of Transportation (MDOT) business units: the Secretary’s Office (MDOT TSO); the Maryland Aviation Administration (MDOT MAA); the Maryland Port Administration (MDOT MPA); the Motor Vehicle Administration (MDOT MVA); the State Highway Administration (MDOT SHA); the Maryland Transit Administration (MDOT MTA) – and authorities related to the MDOT, including the Maryland Transportation Authority (MDTA) and the Washington Metropolitan Area Transit Authority (WMATA).

In this document, you will find for every major project a Project Information Form (PIF) which includes project details, financial information, and construction status; you will also find a list of minor capital projects. The MDOT works together with residents, local jurisdictions, and local and state elected officials to include projects in the CTP that preserve investments and safety, enhance transportation services and connections, and improve accessibility and opportunity throughout the state. To help Maryland’s citizens review this document, the CTP includes a summary of MDOT’s financing and budgeting process and instructions for reading PIFs.

MDOT ensures nondiscrimination and equal employment in all programs and activities in accordance with Title VI and Title VII of the Civil Rights Act of 1964. If you need more information or special assistance for persons with disabilities or limited English proficiency, contact MDOT’s Office of Diversity and Equity at 410-865-1397.

For the hearing impaired, Maryland Relay 711.

For further information about this document or to order a hard copy, please contact Ms. Dawn Thomason at the Maryland Department of Transportation, Office of Planning and Capital Programming toll free at 1-888-713-1414, or locally at 410-865-1288. This document is also available online at: www.ctp.maryland.gov.

For more information on Maryland transportation, please visit us on the web at www.mdot.maryland.gov.

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## MARYLAND'S CONSOLIDATED TRANSPORTATION PROGRAM

The Maryland Department of Transportation (MDOT) is pleased to present the state's six-year capital investment program for transportation, the Final FY 2023 – FY 2028 Consolidated Transportation Program (CTP).

The CTP is the capital budget outlook and a key part of the State Report on Transportation (SRT) which MDOT publishes each year. The SRT contains three important documents: the Maryland Transportation Plan (MTP); the Consolidated Transportation Program (CTP); and the annual Attainment Report (AR) on Transportation System Performance. MDOT last updated the MTP, the 20-year vision for Maryland's transportation system, in January 2019. The MTP is updated every five years following extensive outreach efforts and collaboration with the public, local jurisdictions, and state agencies to ensure they reflect the needs and priorities of Marylanders. MDOT will be updating the MTP in 2023, which will be submitted in January 2024. To learn more about the MTP, visit: [mdot.maryland.gov/MTP](https://mdot.maryland.gov/MTP). The performance measures are updated along with the MTP, with direction from the AR Advisory Committee (please visit [mdot.maryland.gov/ARAC](https://mdot.maryland.gov/ARAC) to learn more).

The 2040 MTP goals are:

- Ensure a Safe, Secure, and Resilient Transportation System
- Facilitate Economic Opportunity and Reduce Congestion in Maryland through Strategic System Expansion
- Maintain a High Standard and Modernize Maryland's Multimodal Transportation System
- Improve the Quality and Efficiency of the Transportation System to Enhance the Customer Experience
- Ensure Environmental Protection and Sensitivity
- Promote Fiscal Responsibility
- Provide Better Transportation Choices and Connections

The CTP contains projects and programs across MDOT. It includes capital projects that are generally new, expanded or significantly improved facilities or services that may involve planning, environmental studies, design, right-of-way acquisitions, construction, or the purchase of essential equipment related to the facility or service.

## MAINTAINING PRIORITIES

This year's CTP reflects MDOT's priorities as delineated in the MTP goals and our mission statement (below). The state's transportation priorities follow federal and state requirements; address local government needs, interests, and concerns; and serve MDOT's customers and the critical supply chain.



### MISSION STATEMENT

The Maryland Department of Transportation is a customer-driven leader that delivers safe, sustainable, intelligent, exceptional, and inclusive transportation solutions in order to connect our customers to life's opportunities.

### Maintaining a Culture of Safety for Employees and Users of the Transportation Network

Safety continues to be the number one priority for MDOT. We will not compromise on our commitment to improve the safety and security of our customers and partners in everything we do. It is critical we commit to safety and security in our designs, in our construction, as well as in our operations and maintenance of the state's transportation system. We promote a culture of safety in our business practices and educate our traveling public on good safety behavior and practices. MDOT works with our federal, state, and local law enforcement partners on a daily basis to constantly evaluate and implement measures to reduce the vulnerability of Maryland citizens and facilities. With federal and state investments, progress is being made on a variety of fronts.

Traffic fatalities in Maryland decreased from 573 in 2020 to 563 in 2021. Speeding accounts for more than 9,100 crashes and 3,900 injuries each year in Maryland. As no life lost is acceptable, MDOT strives to do what it can to eliminate traffic fatalities. On October 1<sup>st</sup> the new law took effect, requiring all travelers in Maryland to move over or slow down for any vehicle stopped with caution signals or warning lights.



### **Strategic Highway Safety Plan (SHSP)**

MDOT promotes traffic safety through the many infrastructure and behavioral programs and projects implemented by MDOT SHA and MDOT MVA Maryland Highway Safety Office. The SHSP is a statewide, comprehensive safety plan that provides a coordinated framework for reducing deaths and severe injuries on all public roads. Through extensive outreach and involvement of federal, state, local, and private sector safety stakeholders, the Plan establishes statewide goals and critical emphasis areas. MDOT continues to urge Marylanders to demonstrate safe behavior when driving by focusing on some simple, common rules of the road.

### **Safeguarding Motorists and Monitoring the Roadways Across the State**

MDOT SHA Coordinated Highways Action Response Team, or "CHART," and the MDTA's Courtesy Patrols and Vehicle Recovery Unit are incredibly vital as they continue to safeguard our highways, respond to crashes, and help stranded motorists. CHART employees also monitor roadways 24/7 at the Statewide Operations Center (SOC), our comprehensive, command and control facility in Hanover. The MDTA has a similar Emergency Operations Center (EOC).





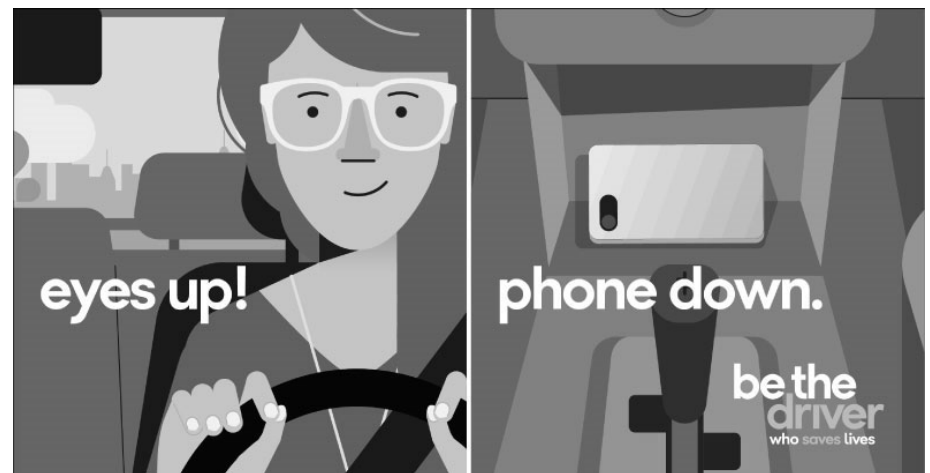
When an incident occurs, our MDOT SHA and MDTA employees are often the first to respond. CHART drivers patrol 2.4 million miles a year. MDOT SHA and MDTA employees are still responding to many incidents each year. In 2021, CHART responded to 65,839 incidents and disabled vehicles events on Maryland's roads. With traffic patrols spread across the state to handle peak-period traffic incidents, CHART has assisted nearly 1.2 million motorists since the program began in the mid-1980s. The CHART incident management program saved motorists \$1.08 billion in user costs due to reduced delay, fuel savings and crash reductions, and helped reduce delays by 23.52 million vehicle hours in CY 2020.

### ***MDOT Leadership in Safety Efforts***

- Since launching the overarching Be the Driver campaign in 2020, the MDOT MVA's Maryland Highway Safety Office has expanded the campaign to include additional topics such as Move Over and What to Do in a Roadside Emergency. These campaigns focus on educating motorists on how to stay safe when they encounter an emergency while driving, in response to the growing number of fatalities in this area, as well as information on the expansion of the move over law. The campaigns were developed in coordination with several state agency partners.
- During the past 10 winter seasons, MDOT SHA and MDTA were able to clear the roads on primary and interstate highways in fewer than four hours, on average.
- In the last year, MDOT MVA's Highway Safety Office launched the redesigned ZeroDeathsMD.gov website with enhancements to include more current and comprehensive crash data. This allows for

greater access to Crash Summary Reports, summaries of major crash causes, and additional data broken down by each jurisdiction in the state. The website is updated each month with the year-to-date number of fatal crashes and fatalities that were a result of a motor vehicle crash on Maryland roads.

- In May, Maryland became the second state to launch Maryland Mobile ID in Apple Wallet, providing Marylanders with an easy, fast, and secure digital version of their MDOT MVA-issued drivers' license or state ID card. Through Maryland Mobile ID, a customer's identity is digitally verified, allowing the customer to control what personal data a requestor can see.
- MDOT MVA continues to focus on REAL ID, assisting 87% of Marylanders become compliant, well above the national average of 49%, in advance of the REAL ID deadline of May 7, 2025.



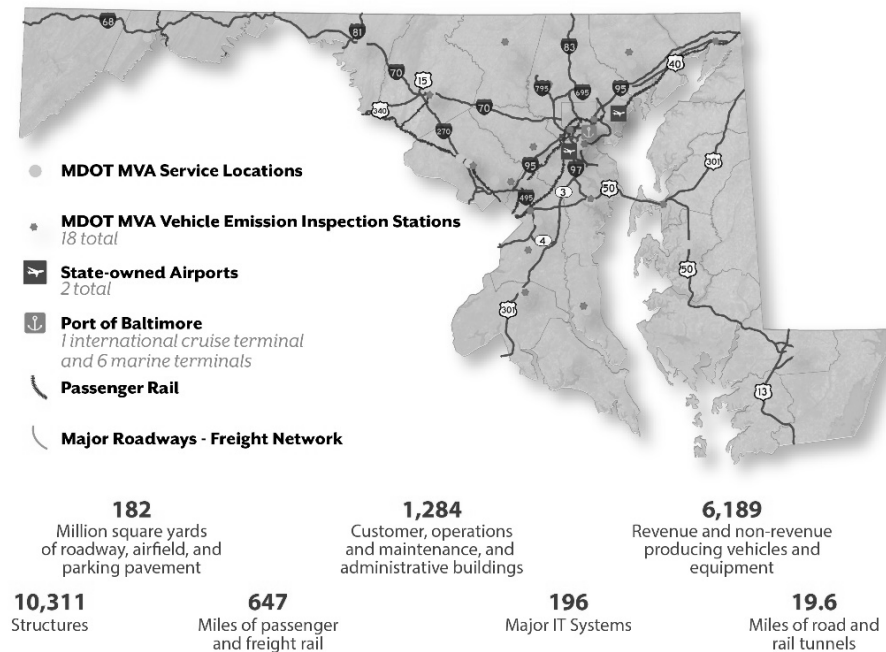
### **Asset Management**

State of Good Repair is the condition in which a transportation asset, such as transportation infrastructure, services, or vehicles are able to operate at a full level of performance. MDOT is committed to ensuring all of its transportation assets remain in a State of Good Repair. To accomplish this, we continuously catalog and evaluate our assets, which helps us maximize our limited resources by directing them to those most in need of improvements. Annually MDOT conducts State of Good Repair (SGR) Analysis to identify SGR funding needs across the Department. In the upcoming ten-year period, MDOT has identified over \$22 billion in State of Good Repair funding needs for the most critical assets. The Department has implemented asset criticality frameworks and scoring processes to ensure a risk-based approach to directing funding to

the most critical needs. Asset management is a holistic approach of balancing costs, opportunities, and risks against the desired performance of assets. MDOT will continue to focus on the transportation infrastructure that is most in need of repair across all modes of transportation.

MDOT strives to maximize the value of every dollar, allocating funds toward system preservation first. The CTP reflects this priority by making continued investments in our: statewide bridge program; road and runway resurfacing; rail car overhauls and replacements; bus replacements; and general facility rehabilitation, replacement, and upkeep.

### MARYLAND DEPARTMENT OF TRANSPORTATION'S SYSTEM



A key focus area is the condition of bridges across Maryland. MDOT SHA continues to prioritize reducing the number of poor rated bridges (the bridges are safe but need repairs/replacement) on the state's highway system to ensure safe travel for our customers. Bridges that are identified as poor rated are evaluated through our asset management plan for inclusion in a rehabilitation or replacement program. MDOT recorded 26 poor rated MDOT SHA bridges in the March FHWA submission - the lowest level since tracking began and one of the lowest percentages of any state transportation agency

in the nation. The remaining bridges are in the design phase with construction funding either in place or pending to address their condition.

In CY 2022, 85.3% of MDOT SHA's highway network was in overall preferred maintenance condition, and in CY 2021, 92% of the MDOT SHA and MDTA roadway network was in overall acceptable pavement condition, using MDOT SHA definitions.



MDTA is working on a phased approach to rehabilitate the eastbound span of the William Preston Lane Memorial (Bay) Bridge. Phase I construction began in Fall 2022 and involved replacing a 1.6-mile section of the original 70-year floor system including both the deck and floor beams, extending the life of the bridge approximately 50 years. This project also includes upgrading the parapet to a system compliant with current safety standards and widening of the deck to allow for enhanced emergency vehicle accessibility. This effort is part of a series of projects at the Bay Bridge including a major electrical system upgrade with system redundancy, Automated Lane Closure System (ALCS) with queue detection and All Electronic Tolling (AET) improvements, which opened in December 2022. These projects demonstrate MDTA's commitment to prolong the service life of a signature bridge asset while working to enhance the safety, capacity, and efficiency of this facility for travelers and MDTA personnel.

Construction was completed Fall 2022 on MDTA's \$463 million new US 301 bridge to replace the 81-year-old Governor Harry W. Nice Memorial/Senator Thomas "Mac" Middleton Bridge over the Potomac River. The project was one of Maryland's largest transportation initiatives and improves mobility, safety

and economic opportunities for Southern Maryland, northeastern Virginia, and the region. In March 2022, the U.S. Department of Transportation approved a \$200 million federal Transportation Infrastructure Finance and Innovation Act (TIFIA) loan to finance part of the \$463 million replacement project. In addition to Maryland and federal funding, Virginia contributed \$13 million to the project. The new, wider, four-lane crossing opened to traffic Fall 2022. The new bridge:

- Doubles the vehicle capacity with four 12-foot-wide lanes, replacing the original bridge's two 11-foot-wide lanes.
- Improves safety by installing a barrier-separated median between eastbound and westbound lanes, adding two-foot shoulders and other improvements that meet current safety standards.
- Eliminates lane-shifting safety issues at toll booths by replacing them with all-electronic (cashless) tolling (AET).
- Enables tall ships to pass beneath its 135-foot clearance.



MDOT MTA's published *2022-2031 Capital Needs Inventory* highlights MDOT MTA's progress in reducing a State of Good Repair backlog from 16.2 percent of all assets to 14.4 percent over the past three years, and lays out a plan to further address state of good repair needs over the next ten years. With current funding in this CTP, the backlog is projected to continue to decrease to 5.4 percent of assets by 2027.

### **Transit Fleet**

MDOT MTA is investing in fleet modernization across all modes to support safe and reliable operations and enhance passenger comfort and convenience. Key highlights include:

- The \$400 million replacement of metro railcars and signal system is underway.
- The \$160 million overhaul of the 53-vehicle light rail vehicle fleet continues to move forward.
- The \$54 million overhaul of 63 MARC III passenger coaches which is advancing with 21 overhauled coaches currently in service.

MDOT MTA received a grant for several 60-foot articulated low or no emission vehicles through the Federal Low or No Emission Grant. MobilityLink paratransit vehicles also continue to be replaced and are being evaluated for low or no emission vehicle opportunities. Also, MDOT MTA is currently working on the next five-year contract to purchase all zero emission Core buses.

### **Customer Service**

MDOT aims to provide premier customer service to all customers. There are many examples highlighting MDOT employees providing exceptional customer service.

In December 2021, MDOT MVA completed its IT modernization project known as Customer Connect, which enhanced the customer's experience by providing greater access to information, security, and the ability to conduct more online transactions than ever before. Customer Connect replaced the agency's legacy systems providing customers and employees with a complete view of all the customer's records and status with the MDOT MVA. At MDOT MVA, wait times were reduced by nearly 10 minutes, averaging 11 minutes in the 4th quarter of FY22 compared to 20 minutes in FY21.

MDOT MVA has also expanded online and kiosk services through myMVA. Approximately 74% of customers complete their transaction with the MDOT MVA using an alternative service delivery method. Through a myMVA account, customers can also look up notices, letters, and receipts related to their vehicle, check their REAL ID status, and view any MDOT MVA correspondence related to their vehicle since July 2020 without stepping foot into a branch office.

Over the last several years, the MDOT MVA has partnered with other government agencies to become a "one-stop-shop" for Marylanders. The Department of Natural Resources, the Department of Veterans Affairs, MDOT MTA and the MDTA have opened customer service centers within MDOT MVA branches or currently offer their products in branch offices, or on the online store and kiosks. In addition, MDOT MVA employees are providing customers with birth certificates on behalf of the Maryland Department of Health and TSA Pre-Check and TWIC approval at several MDOT MVA branch offices.

MDOT MAA has embarked on a major terminal improvement program to improve operations and customer service at BWI Marshall. The project will provide a new state-of-the-art baggage screening system to remove constraints to airline growth, a direct walking path between concourses A and B for connecting passengers and a host of concessions and passenger improvements. The project is being procured through a Construction Management at Risk (CMAR) delivery method. The design is nearing completion as of late FY22 and initial enabling tasks such as fuel hydrant and utility relocations are under construction.



MDOT MAA is committed to the health and safety of our guest and employees. In August 2021, MDOT MAA opened a FirstCall Medical Center at the Baltimore/Washington International (BWI) Thurgood Marshall Airport which provides health care services for the traveling public and airport staff. Located inside the main terminal near Concourse C, FirstCall Medical Center offers emergency care, first aid, COVID-19 testing and vaccinations, travel vaccines, occupational medicine, and physical exams. The center is open daily from 6 a.m. to 9 p.m. and facility accepts most major insurance plans and offers self-pay options for all services.

To improve the traveler experience and replace outdated and aging infrastructure, MDOT MAA embarked on a terminal-wide Restroom Improvement Program. Design of the post-security restrooms has been completed and construction began in mid-FY22 with completion expected in FY 2024. Construction includes two new restroom sets in each of the B, C, and D Concourses.

## Leading the Way with Technology, Data, and Innovation

Vehicle and fuel technologies are key to MDOT's efforts to improve congestion, improve air quality, and reduce greenhouse gas (GHG) emissions. MDOT is integrating the following technologies into its plans and operations.

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



JULY 1, 2022



### *Electric Vehicles (EVs)*

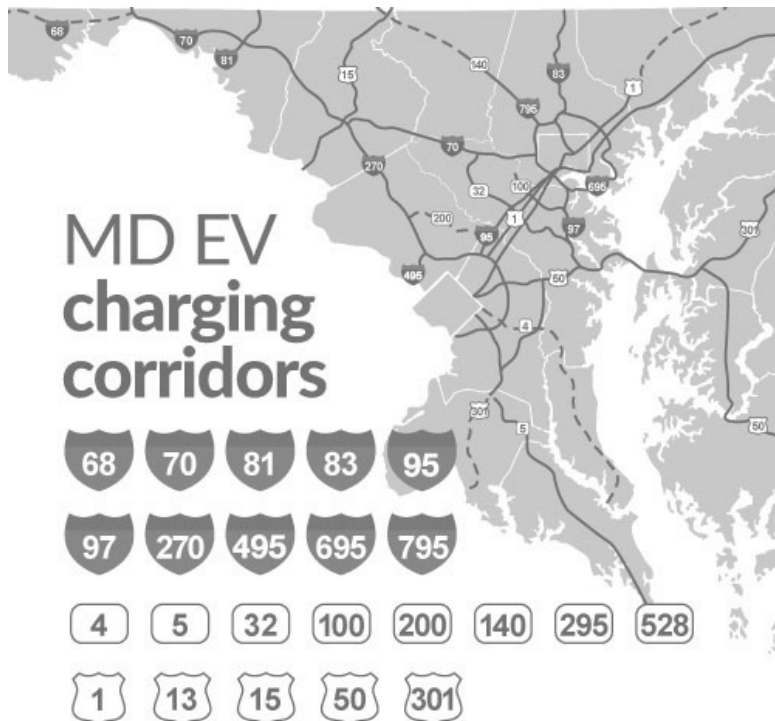
In response to the Infrastructure Investment and Jobs Act (IIJA), MDOT prepared the *Maryland State Plan for National Electric Vehicle Infrastructure (NEVI) Formula Funding Deployment*, describing how \$57M in federal funds will be allocated to EV charging infrastructure in Maryland. FHWA approved the plan in the Fall of 2022. The funds will be distributed in Federal Fiscal Years (FFYs) 2023 through 2027, with the primary objective of building out and certifying Maryland's Alternative Fuel Corridors (AFCs). Once the AFCs are certified, funding may be used to build out additional public charging infrastructure throughout Maryland.

MDOT continues to transition portions of its vehicle fleet to EVs. MDOT is actively replacing its light-duty passenger fleet with EV models in response to legislation passed in 2021 and 2022. MDOT MTA is planning facility upgrades and installation of charging infrastructure, in preparation for introducing zero

emission buses (ZEBs) into the MDOT MTA transit bus fleet. MDOT MAA is planning to replace parking lot shuttle buses at BWI Airport with electric models.

As public interest in EVs continues to grow, the MDOT-led Zero Emission Electric Vehicle Infrastructure Council (ZEEVIC) provides a public forum for discussion and information-sharing from interested parties and stakeholders engaged in expansion of zero emission vehicle (ZEV) infrastructure in Maryland. Maryland is consistently ranked among the top states for ZEV policy accomplishments.

During the last year, from June 2021 to June 2022, there were more than 52,000 EV owners in Maryland, a 50% from October 2021. We ended CY 2022 with 62,000 EV owners. Under MDOT's leadership, Maryland has successfully nominated 23 EV AFCs, three hydrogen AFCs, two liquified petroleum gas (LPG) AFCs, one compressed natural gas (CNG) AFC, and one liquified natural gas (LNG) AFC under FHWA's AFC solicitations. These corridor designations are key to utilizing new federal EV charging infrastructure funding in the Infrastructure Investment and Jobs Act (IIJA).



The MDOT has worked to facilitate and support the deployment of EVs and electric vehicle supply equipment (EVSEs) to mitigate climate change and improve air quality. To support this growing demand, Maryland has been working to deploy a robust EVSE infrastructure of more than 1,240 charging stations and more than 3,370 charging outlets.

The Maryland Public Service Commission (PSC) approved a five-year EVSE pilot program in 2019, under which the utility companies are committed to installing over 900 utility-owned and operated public charging stations on government property. The PSC pilot program established a coordinated strategy to prepare for demands on Maryland's electric grid and ensure equitable access to EV charging across the state. To date, 33 Level 2 and DC Fast Chargers have been installed on nine MDOT-owned sites under this program. Additional sites are in the review and approval stages. Utilization data is collected at each site.

### ***Incident Management Technology***

MDOT SHA and the MDTA continue to investigate innovative technologies to proactively manage and inform the public when incidents occur on our roadways. The increased use of crowdsourced information, publicly available data feeds, and sensors allows MDOT SHA and MDTA to accelerate the adoption of both lifesaving and information-sharing tools. Another approach that has increased efficiency is coalescing multiple office data sources into shareable content, which allows for broader situational awareness, increased data, and ultimately improved data driven decisions.

### ***Systems Management Technologies***

Transportation System Management and Operations (TSMO) is a framework used by transportation agencies to maximize the service potential and to manage roadways as part of a transportation "system," focusing on operational improvements that do not require traditional capacity improvements (e.g., additional lanes, interchanges, routes, etc.). TSMO initiatives achieve this high level of efficacy by utilizing information technology to create intelligent transportation systems (ITS).

Systems management requires deployment of sensors, such as cameras, traffic sensors (e.g., volume, speed, and density), communication infrastructure (e.g., fiber or 5G), to monitor, in real-time, how traffic is moving. That data is then used to active and manage technologies such as ramp meters, dynamic speed advisories, part time dynamic shoulder use, and reversible lanes to improve both the flow of traffic and the safety of those on the roadway.



In August 2020, MDOT transitioned to full-time all-electronic tolling across Maryland, including along the John F. Kennedy Memorial Highway (I-95) and at the Fort McHenry Tunnel (I-95), the Baltimore Harbor Tunnel (I-895), and the Nice/Middleton Bridge (US 301). The system provides convenience for motorists, less engine idling for better fuel efficiency and reduced emissions, decreased congestion, and increased safety. The MDTA implemented temporary all-electronic tolling statewide in March 2020 as part of its COVID-19 response and made all-electronic tolling permanent at the Bay Bridge in May 2020 with the installation of a new tolling gantry. Other MDTA facilities, including the Intercounty Connector (ICC)/MD 200, the I-95 Express Toll Lanes in Baltimore, the Key Bridge (I-695), and the Hatem (US 40) Bridge, had already operated using all-electronic tolling.

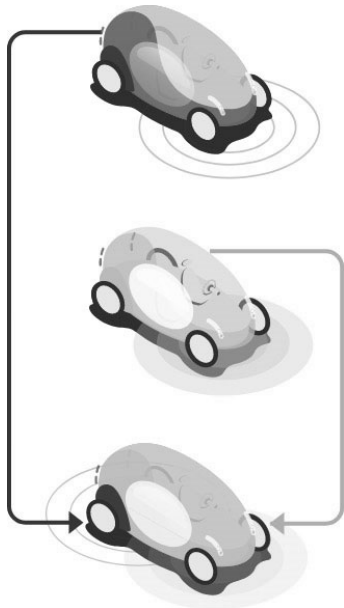
In April 2021, the MDTA brought Maryland into the next generation of tolling with the launch of DriveEzMD, which encompasses *E-ZPass*. The launch included a new website, web chat, expanded customer call center, new toll payment choices, including pay-by-plate, and text notifications.



### **Connected and Automated Vehicle (CAV) Technology**

Connected and automated vehicles (CAV) are an important foundation for the future of mobility in Maryland as we strive to increase access to all transportation options and improve the reliability of our transportation system. Maryland is embracing CAV technology and innovation through collaboration with a wide variety of stakeholders. Maryland's [CAV Working Group](#) provides a central point of coordination for all entities seeking to test and develop CAV technology. CAV will not only affect transportation, but this life-changing technology will impact our health, prosperity, and access to resources during difficult times. This technology can help save lives and is consistent with our goal in Maryland to reach zero fatalities on our roadways.

CAV could change all aspects of mobility—from the way we commute to how we plan and develop infrastructure for future cities and towns. CAV technology leverages connected capabilities with automated features to provide the highest benefit of safety redundancies on the roadway. Connected vehicles “talk and listen” to infrastructure, other vehicles, and mobile devices – to warn a human driver of an impending hazard, enable a vehicle to operate more efficiently, or guide a vehicle to take appropriate action given the surroundings.



Automated vehicles use sensors and other technologies to understand the environment to similarly assist drivers or guide the vehicle; eventually, very high-level automation may be able to perform driving tasks in place of a human driver. Maryland is proactively providing tangible information to our communities and stakeholders to help effectively realize the benefits this vehicle technology can provide. The [Maryland CAV Strategic Framework](#) and the [CAV Accomplishments](#) demonstrate the state's continued leadership in this area and focus on identifying the many life-saving and economic benefits of CAV technology, while continuing to prioritize collaboration across the state. There is a new CAV website and video located at: [cav.mdot.maryland.gov](http://cav.mdot.maryland.gov).

### ***Regional Transit Plan, Transit Studies, and Transit Services***

MDOT MTA continues concrete steps towards the implementation of the Central Maryland Regional Transit Plan (RTP) in coordination with local jurisdictions, Baltimore Metropolitan Council, business organizations, and advocacy groups. Most notable among these actions are the ongoing Feasibility Studies for the first two corridors identified in the RTP for study and investment: the East-West Corridor from Bayview to Ellicott City, and the North-South Corridor from Towson to Downtown Baltimore.

Progress has continued this year towards the 2026 opening of the 16-mile Purple Line light rail from New Carrollton to Bethesda. In April 2022, financial close was reached on a new contract between the concessionaire, Purple Line Transit Partners, and design-builder Maryland Transit Solutions. Full scale construction by the new design/builder began in FY 2023.

MDOT MTA is advancing studies for multiple ways to improve its MARC train service and adapt service to changing travel patterns. This includes working closely with Amtrak and CSX to enable updated schedules to accommodate to the way customers now travel, as well as working closely with Amtrak to advance the Frederick Douglass Tunnel project. This project will deliver several key benefits to MDOT MTA customers including the potential for faster and more frequent MARC train travel to Washington, DC, and a new and improved West Baltimore MARC station with improved operations, comfort, and accessibility.



### ***Transit Apps***

MDOT MTA has taken several steps to provide customers with more useful and timely information to help them choose transit for their trips, as well as to improve fare structure and payment by providing more flexible and faster options. These have included launching real-time digital signs at three major transit hubs, updating Metro SubwayLink real-time data to include live train locations and arrival predictions on Transit App and Google Maps and adding real-time bus crowding information to Transit App.

### ***Reliable, On-Time Service***

As transit ridership in the Baltimore region continues to recover from the COVID-19 pandemic, MDOT MTA continues to adapt service to support changing travel patterns while reflecting MDOT MTA's commitment to prioritizing equity, improving reliability, and expanding access. Ridership is increasing steadily after falling sharply during the height of the pandemic, with local bus ridership reaching 70% of 2019 levels in March 2022. Monthly transit ridership has recovered to over 60% of pre-pandemic levels as of November 2022, with ridership on core bus reaching nearly 75% of its previous ridership. Several service changes have resulted from these efforts including:

- A new Express BusLink route between West Baltimore and Tradeport Atlantic
- Elimination of a surcharge for express bus riders
- The introduction of the CharmFlex 3- and 10-day passes within the CharmPass app that can be used on non-consecutive days

Capital investments in Transit Priority Initiatives and rider amenities are ongoing to directly improve bus operations on key corridors and improve the rider experience across the core service area. These investments include:

- The recently completed construction of the \$27 million North Avenue Rising Project in Summer 2022. This project includes 5.5 miles of dedicated bus lanes, bus stop improvements, intersection improvements, and bicycle and pedestrian safety projects. These investments are already benefiting people accessing and riding transit and are the culmination of a six-year process that began with the successful application for a highly competitive Federal TIGER Grant.
- The in-progress \$43 million Fast Forward Program which will design and construct additional dedicated bus lanes, create new and enhanced transit hubs, add more bus shelters, make ADA and pedestrian safety improvements at and near bus stops, improve real time signs, and enhance wayfinding at Light Rail stations by the end of 2024.
- The awarded \$22 million dollar RAISE grant to advance multi-modal transportation enhancements that will add transit, pedestrian, and bicycle infrastructure along the routes currently served by the CityLink Blue and CityLink Orange (<https://raisebaltimore.com/>).
- The recently awarded RAISE grant and Congressional Dedicated Funding contributes to a planned \$14.65 million project to improve multimodal access to Baltimore Penn Station.

### ***Commuter Choice Maryland***

Commuter Choice Maryland encourages commuters to explore and use alternate means of transportation to and from work, giving them travel choices convenient to them, such as transit, ridesharing (carpool/vanpool), biking, walking, teleworking, and alternative work schedules. These options help reduce commuter stress, reduce congestion, and conserve energy.

The Commuter Choice Maryland Employer Partner Program launched in 2021, with the goal of recognizing Maryland employers and organizations for their leadership in offering transportation benefits and creative program incentives to their employees. Employers of all sizes and industries in Maryland are encouraged to become a partner. Partners also gain access to complimentary guided support; a custom transportation plan and an employee travel behavior survey; an opportunity for a featured story in the quarterly newsletter and access to employer assistance resources. Commuter Choice Maryland also works in partnership with local and regional jurisdictions and provides



complimentary consultations to employers starting or enhancing their workplaces transportation and commuter benefits programs.

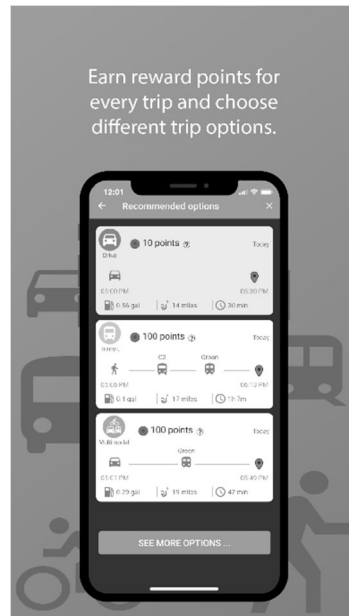
Commuter Choice Maryland also promotes the Maryland Commuter Tax Credit, where Maryland employers who offer qualified commuter can claim a tax credit. Qualified commuter benefits include Guaranteed Ride Home, vanpool, transit and cash in lieu of parking. As of July 1, 2022, commuter benefit offerings have expanded to include telework, carpool, active transportation and multimodal commuter last mile connections. All Maryland employers are encouraged to participate in this program, which helps businesses to retain and attract talent and improve their overall bottom line.

These efforts help to improve the environment, reduce congestion, enhance the quality of life of all Marylanders and increase economic opportunities.

To learn more, please visit [CommuterChoiceMaryland.com](https://CommuterChoiceMaryland.com) or email: [commuterchoice@mdot.maryland.gov](mailto:commuterchoice@mdot.maryland.gov) or call: 410-865-1100 between 8:00 am and 4:30 pm Monday – Friday.

## ***IncenTrip***

In November 2021, MDOT launched the expansion of the incenTrip application statewide into Maryland as a congestion mitigation effort, as more employees were starting to plan their return to the workplace. The purpose of incenTrip is to reduce traffic congestion during weekday peak commute times by encouraging Maryland commuters and employers to use public transportation, ridesharing (carpool and vanpool), walking, and biking. Maryland commuters who use the application during their commute earn points that can be redeemed for cash and other rewards. For more information, visit <https://mdot.maryland.gov/incentrip>.



## **Economic Growth - Keeping Maryland Moving**

Maryland's transportation system is essential to the state's economy. An efficient transportation system provides a competitive advantage to businesses in a regional, national, and global marketplace. Transportation directly impacts the viability of a region as a place that people want to live, work, and raise families, all critical to keep Maryland moving. Transportation infrastructure provides value and investing in Maryland's transportation system creates jobs and supports essential employees and Maryland industries and businesses.

### ***BWI Airport***

Over the last five years (2016-2021), air cargo processed at BWI Marshall has more than doubled. Much of this can be attributed to the shift in consumer buying patterns to e-commerce and last-mile delivery. With the opening of the new Midfield Cargo building in late-2019, BWI Marshall has become one of Amazon's top 5 busiest air cargo facilities in the nation (out of 35) and currently employs over 1,200 persons. In 2021, BWI Marshall handled 4% more cargo than the previous year and maintained 55% of the regional market share handling more cargo than Dulles International and Reagan National airports combined. Moving forward, MDOT MAA continues to explore opportunities to accommodate growth in both the domestic and international air cargo markets.

## ***Maryland's Port of Baltimore***



The Helen Delich Bentley Port of Baltimore generates about 15,300 direct jobs, with almost 140,000 jobs overall linked to Port activities. The Port ranks 1st among the nation's ports for volume of autos and light trucks, roll on/roll off heavy farm and construction machinery, and imported gypsum. It ranks 11th among major U.S. ports for foreign cargo handled and 9th for total foreign cargo value. Overall, it is one of the most diverse cargo ports in the U.S. and a top port in terms of total cargo tonnage and overall dollar value of cargo.

The ongoing cargo increases at Maryland's Port of Baltimore's public marine terminals are spurring capital projects that will place the Port in a very competitive position for future growth. The MDOT MPA is designing and reconstructing its Dundalk Marine Terminal berths to continue to handle the increases in automobiles as that sector recovers from supply chain shortages and to better accommodate the increasing size of heavy farm and construction machinery. Maryland's Port of Baltimore currently handles more automobiles and farm/construction machinery than any other port in the United States.

Four additional ultra-large, Neo-Panamax container cranes that arrived in September 2021 are now fully operational and allows Maryland's Port of Baltimore to handle two supersized vessels simultaneously. In addition, MDOT MPA was awarded a Consolidated Rail Infrastructure and Safety Innovations (CRISI) grant to realign and replace existing rail track at the Intermodal Container Transfer Facility adjacent to Seagirt.



The Howard Street Tunnel Project is currently underway and will allow for double-stacked container rail cars, clearing a longtime hurdle for the Port and giving the East Coast seamless double-stack capacity from Maine to Florida. The Howard Street Tunnel project benefits from public-private investment from the federal government, Maryland, CSX, and others, and is expected to increase the Port's business by about 160,000 containers annually. It will also generate about 6,550 construction jobs and an additional 7,300 jobs from the increased business. More information on the Howard Street Tunnel Project can be found at: <http://www.mpa.maryland.gov/HST>.

### **General Freight**

To meet other freight needs, MDOT is taking an aggressive approach to implement other multimodal freight solutions in Maryland. Please refer to the CTP Freight Summary Section on page FRT-1 of the CTP for a listing of MDOT's freight projects. In addition to capital projects, MDOT is involved in several freight planning efforts, including the implementation of the Statewide Truck Parking Study action items and the recently completed State Rail Plan and State Freight Plan. Additional information on MDOT's freight activities can be found on MDOT's website at: [mdot.maryland.gov/freight](http://mdot.maryland.gov/freight).

### **Public-Private Partnerships**

Public-Private Partnerships (P3) will continue to be an important tool, where we can find opportunities to partner with our federal, state, regional, local, and private partners to advance key projects in Maryland. MDOT has a demonstrated history of successful P3 projects at Maryland's Port of Baltimore (MDOT MPA), travel plazas (MDTA), Purple Line (MDOT MTA), and OpLanes (MDOT SHA/MDTA).

The P3 agreement with Ports America Chesapeake continues to solidify the Port's position as Maryland's economic engine. As a result of continued growth

in business, Ports America is investing in the above-described second 50-foot-deep berth project at Seagirt Marine Terminal. This \$122.1 million investment includes \$105 million from Ports America, \$10.5 million from the Transportation Trust Fund and \$6.6 million in federal funding. For more information visit: <https://www.pachesapeake.com/>.

MDTA partnered with Areas USA for the redevelopment and subsequent operations and maintenance of two travel plazas along the I-95 corridor in Harford and Cecil Counties. Areas USA financed the \$56 million project completed in 2014 and continues to operate and maintain these plazas through a long-term 35-year agreement. For more information visit: <https://mdta.maryland.gov/MD-I-95-Travel-Plazas/Home.html>.



The Purple Line Light Rail P3 project will connect Prince George's and Montgomery counties inside the Capital Beltway, with 21 stations connecting to: Metrorail's orange, green, yellow, and red lines; the MARC Brunswick, Camden, and Penn lines; regional and local bus services; and Amtrak at New Carrollton. Construction is underway of the entire 16-mile Purple Line light rail corridor. For more information visit: <https://purplelinemd.com/>.

MDOT SHA and MDTA continues to advance OpLanes Maryland, a P3 that addresses the significant congestion on I-495 and I-270 in the National Capital Region. The current focus is on "Phase 1 South", from the vicinity of the George Washington Memorial Parkway across the American Legion Bridge to I-370. Phase 1 South addresses congestion and trip reliability through a multi-

faceted approach including replacement of the American Legion Bridge, new high-occupancy toll lanes, and new transit opportunities. For more information visit: <https://oplanesmd.com/>.



### ***Walking/Biking***

Maryland, like many parts of the country, is seeing an increased interest in biking and walking as a significant transportation mode and an integral part of the state's broader transportation approach. Safe infrastructure for people walking and biking is essential to MDOT contributing to the broader statewide goals of reducing greenhouse gas emissions, alleviating congestion, encouraging healthy activities, and supporting activity-based tourism and economic development.



Walktober continues to be a success building on the past Walktober campaigns working in partnership with various state agencies, county governments, and national non-profit organizations to promote infrastructure, safety, and health as they relate to walking. MDOT offered free walk-focused webinars (called Walkinars), with guest panelists discussing a variety of walk-related topics, which continue to be available for viewing on the website. The eighth annual "Walk Maryland Day" on October 5, 2022 was a great success celebrating the state's official exercise. To learn more about Walktober, visit: [mdot.maryland.gov/walktober](https://mdot.maryland.gov/walktober).

MDOT is committed to improving bicycle and pedestrian safety, access and mobility. MDOT SHA's Context Driven approach has improved pedestrian safety statewide. The CTP includes key discretionary programs, such as the

federal Transportation Alternatives Program and the state's Kim Lamphier Bikeways Network Program. Through the Bikeways Program, \$3.6 million is to eligible organizations for the design and construction of transportation-focused bike facilities.

Together, these program investments are strengthened by comprehensive guidance for all MDOT customers in Maryland. Targeted strategies and initiatives identified in this document, along with the 2040 Maryland Transportation Plan, ensure MDOT is responsive to changing needs and opportunities to improve active transportation connectivity and safety for all.

### **Advancing Environmental Stewardship and Resiliency through Sustainable Action**

MDOT is a national environmental innovation leader through our programs and initiatives, which focus on an integrated and multimodal approach, leveraging public-private partnerships and ensuring equity to accomplish goals.

1. MDOT was honored with the 2022 Electronic Product Environmental Assessment Tool (EPEAT) Purchaser Award in four product categories, highlighting the commitment to sustainable electronics purchasing. MDOT is the only state DOT in the world to be recognized for this accomplishment.
2. MDOT received Silver-Level recognition from the State Electronics Challenge for environmentally responsible purchasing and end-of-life management of office electronics.
3. MDOT also received the Maryland Green Registry State Building Energy Award for the Harry R. Hughes Headquarters building, for energy efficiency and building related emissions reductions.
4. MDOT's High-Performance Ponds project, received a 2022 Maryland Quality Initiative (MdQI) Innovation Award for installed "smart pond" technology that regulates the flow of water from stormwater management ponds in Aberdeen, Hagerstown, and Fruitland, Maryland.

MDOT is focusing on establishing a cohesive, proactive, and coordinated response to the impacts of climate change across transportation systems. MDOT is developing a Climate Action Plan to document steps to reduce greenhouse gas emissions, increase resilience, and adapt to a changing climate.

Through partnerships, MDOT is reducing emissions of criteria pollutants. In addition to addressing the National Ambient Air Quality Standards (NAAQS) for criteria pollutants, set by the US Environmental Protection Agency (EPA), MDOT is also working to reduce greenhouse gas (GHG) emissions from the transportation sector.

1. Maryland has goals to reduce GHG emissions statewide by 60 percent by 2030, from 2006 emissions levels.
2. In July 2020, the World Resources Institute (WRI) recognized Maryland as the top GHG-reducing state in the nation. The WRI study on "America's New Climate Economy" found that Maryland has successfully reduced emissions by 38 percent between 2005 and 2017 all while growing our economy.
3. MDOT continues to produce annual reports illustrating the progress made toward reducing transportation sector GHGs and submits those state agency reports to the Maryland Commission on Climate Change and the Maryland General Assembly.

In 2021, MDOT established the Urban Tree Program, providing grant funding to replace trees in communities where transportation construction projects impacted tree cover. Expanding tree cover in areas affected by urban heat island or environmental justice issues is a primary focus of the new program. In addition to the Urban Tree Program, MDOT signed a Memorandum of Understanding (MOU) with the Maryland Environmental Trust (MET) to preserve scenic byways and tree plantings across the state.

By coordinating land-use, transportation, and resource planning with our partners, MDOT helps to ensure that the investments made will meet multiple needs for the citizens of Maryland. MDOT TBUs are minimizing negative impacts and using project mitigation to support conservation goals through the state's Green Infrastructure Plan and Chesapeake Bay Restoration priorities as a guide. To help decrease pollution from entering our waterways, the CTP supports a three-pronged approach: retrofitting older parts of the transportation network with the latest stormwater management technology; restoring natural filters through stream restoration, forest establishment, and wetland creation; and adopting protective operational practices. Further, MDOT works with our partners to promote flood awareness and encourage Maryland residents to be prepared and stay safe during flood events.

MDOT preserves cultural resources by identifying the locations of important historic sites along our transportation system. MDOT also supports the preservation and study of significant historic sites along scenic byways including Harriet Tubman's Birthplace in Dorchester County. MDOT's recent

discoveries on the Tubman family are incorporated into public interpretive signage and exhibits located along the Harriet Tubman Underground Railroad Byway.



## Chapter 30

The Maryland Open Transportation Investment Decision Act – Application and Evaluation (Chapter 30) required MDOT to develop a project-based scoring system to rank major highway and transit transportation projects under consideration for funding in the CTP. Chapter 30 established nine goals and 23 measures to evaluate these major projects. The project-prioritization model required under Chapter 30 does not select major transportation projects for funding but is one of many tools MDOT will utilize in its project-selection process. The project evaluation results for this year are shown in the appendix of this CTP.

MDOT created a Chapter 30 scoring model that establishes how the 23 measures are defined and measured and created a weighting structure to score and prioritize the projects. For more information, visit: [mdot.maryland.gov/Chapter30](https://mdot.maryland.gov/Chapter30).

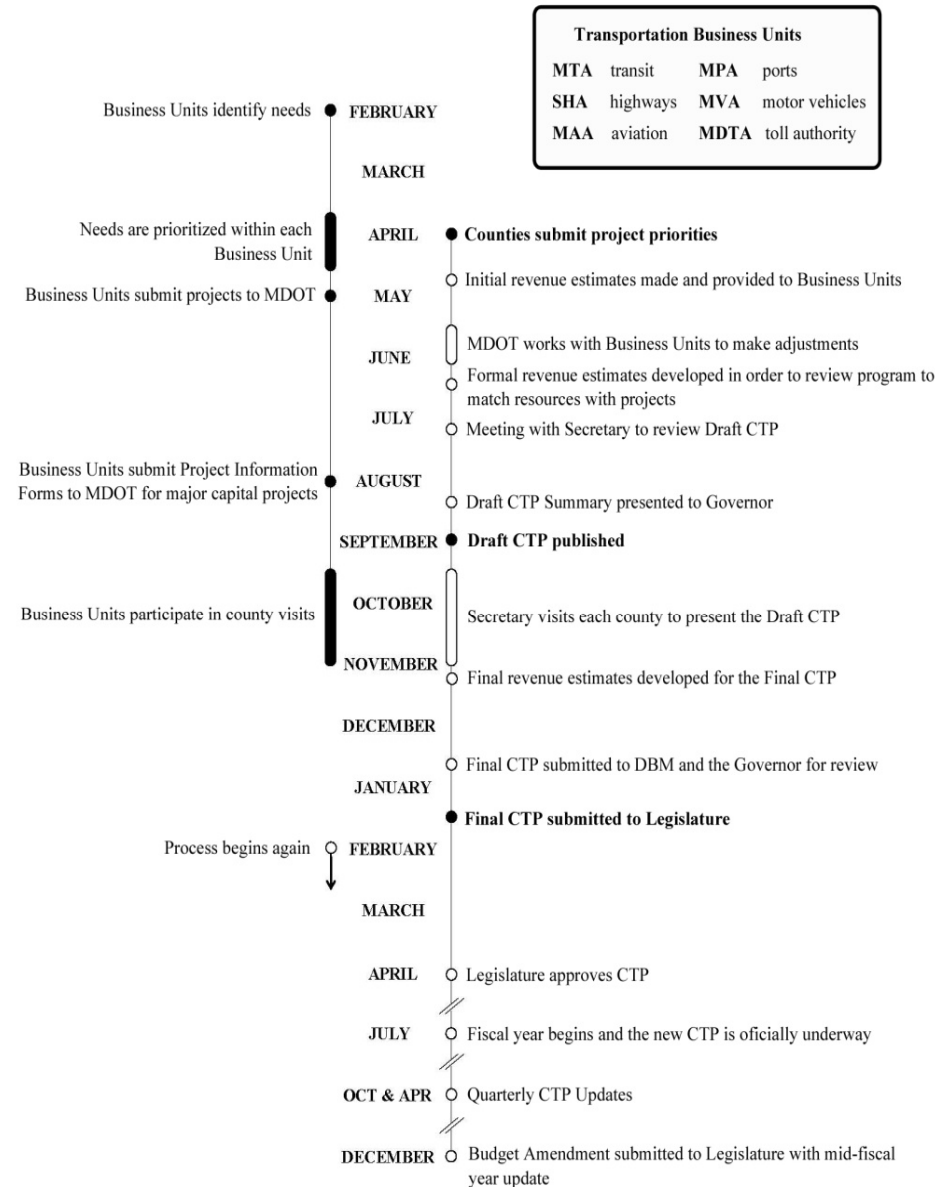
## Process for CTP Development

The CTP takes nearly a full year to create through the work and collaboration of MDOT staff with state, regional and local elected officials. Each year, local jurisdictions are encouraged to submit priority project(s) to the state by April. It is important for MDOT to hear from local jurisdictions to facilitate collaboration on state and local needs. MDOT has established criteria to identify projects and programs responsive to the state's transportation priorities.

These criteria include:

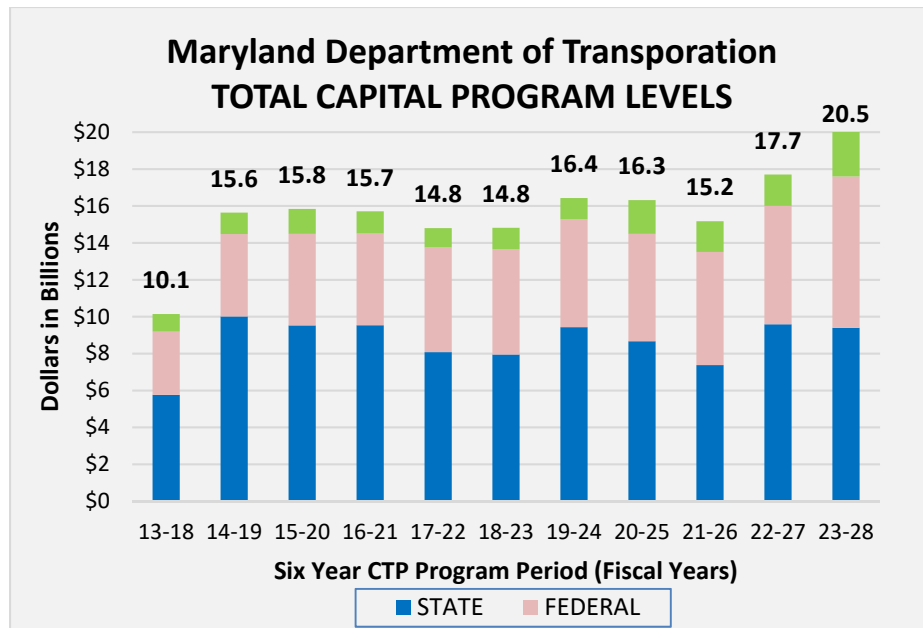
- Meets all federal and other legal mandates (e.g., Total Maximum Daily Load (TMDL) compliance, Positive Train Control (PTC), Federal Aviation Administration (FAA) regulations to maintain airport permits);
- Supports MDOT's program priorities and MTP goals (safety, system preservation, economic development, etc.);
- Meets all federal match requirements to maximize federal revenue sources;
- Supports the state's plans and objectives;
- Supports existing project commitments and upholds intergovernmental agreements;
- Is the single top priority within a local priority letter;
- Is consistent with local plans; and
- Is included in the regional Metropolitan Planning Organization (MPO) long-range plan (if the project is located within an MPO boundary).

## CTP Development Process



## FINANCING MARYLAND'S TRANSPORTATION PRIORITIES

In developing the CTP and establishing funding levels, MDOT must account for state and local economic growth, fluctuations in state transportation revenue, and allocations of federal funding. The state's Transportation Trust Fund supports MDOT investments through a dedicated account. The Transportation Trust Fund utilizes a variety of revenue sources, which provide funding that enable MDOT to address important capital and operating needs including safety, system preservation, multimodal transportation options, environmental stewardship, congestion relieve, and maintaining the competitiveness of Maryland's Port of Baltimore and BWI Marshall Airport.



### State Revenue Projections

Total projected revenues amount to \$36.0 billion for the six-year period. This estimate is based on the revenue sources used by MDOT and includes bond proceeds and federal funds that will be used for operating, capital, and debt payment expenses. Pertinent details are as follows:

- Motor Fuel Tax revenues are projected to total \$8.5 billion over the six-year period. The motor fuel tax rate includes a base rate on gasoline (23.5 cents per gallon) and diesel fuel (24.25 cents per gallon); a Consumer Price Index (CPI) component (estimated to average 8.3 cents per gallon over the program period) and a sales and use tax equivalent component (estimated to average 14.3 cents per gallon). Growth in motor fuel usage is expected to recover from the impact of the pandemic, although future growth rates are minimal, averaging 0.3%, and reflecting the growing role of electric and hybrid vehicles in Maryland's fleet, the increasing fuel efficiency of all vehicles, and slower growth in vehicle miles traveled.
- Motor Vehicle Titling Tax revenues are projected to yield \$6.5 billion over the six-year period. The tax rate is set at 6% of fair market value of the vehicle, less an allowance for trade-in, that is paid on the sale of all new and used vehicles as well as on new residents' vehicles. This revenue source follows the normal business cycles of auto sales with periods of growth and decline, and an underlying upward trend.
- Revenues from Motor Vehicle Registration, Miscellaneous, and Other Fees are projected to generate \$3.8 billion. This forecast assumes revenues will increase an average of 1.6 percent per year over the program period.
- Corporate Income Tax revenues are estimated to be \$2.3 billion over the six-year period. Corporate Income Tax revenues are shared between the state's General Fund and the Transportation Trust Fund. The transportation share of corporate income tax revenues increases to 20 percent from 17.2 percent in fiscal year 2024. Chapter 240 of 2022 provides for a graduated increase over the six-year period in the share of the state's Corporate Income Tax dedicated to transportation. This additional revenue offsets the impact of an increased investment in capital transportation grants provided to local jurisdictions.
- Federal Aid is projected to contribute \$9.4 billion for operating and capital programs, including \$0.5 billion of federal COVID-19 relief funds. MDOT received funding directly from various federal relief legislation and received funds allocated to transportation from the state's Coronavirus Relief Fund. All federal relief funds are expected to be fully spent by the end of fiscal year 2024. The amount of Federal Aid for operating and capital programs increases to \$9.4 billion from \$8.0 billion in the FY 2022 – 2027 CTP as the result of additional federal funds available for the capital program from the Infrastructure Investment and Jobs Act of 2021. Since federal aid supports a significant portion of the capital program, a more detailed discussion of federal aid assumptions is presented in the next section of this summary.

- Operating Revenues are projected to provide a six-year total of \$2.8 billion. Operating revenues include charges for airport operations, including flight activities, rent and user fees, parking, and concessions (\$1.8 billion over the six-year period); transit fares (\$672 million); and fees for port terminal operations and rent (\$318 million).
- Bond issuances are estimated at \$1.8 billion during the six-year period. State law limits MDOT's bonds outstanding to \$4.5 billion and establishes an annual debt outstanding cap in the annual budget bill. Debt outstanding is projected to rise to \$3.6 billion over the six-year period, which remains below the statutory cap. MDOT maintains credit ratings of AAA from Standard and Poor's, Aa1 from Moody's, and AA+ from Fitch Ratings.
- Other sources of revenue are projected to total \$660 million during the six-year period. These sources include General Fund revenues, reimbursements, earned interest, use of fund balance, and miscellaneous revenues.

## FEDERAL AID ASSUMPTIONS

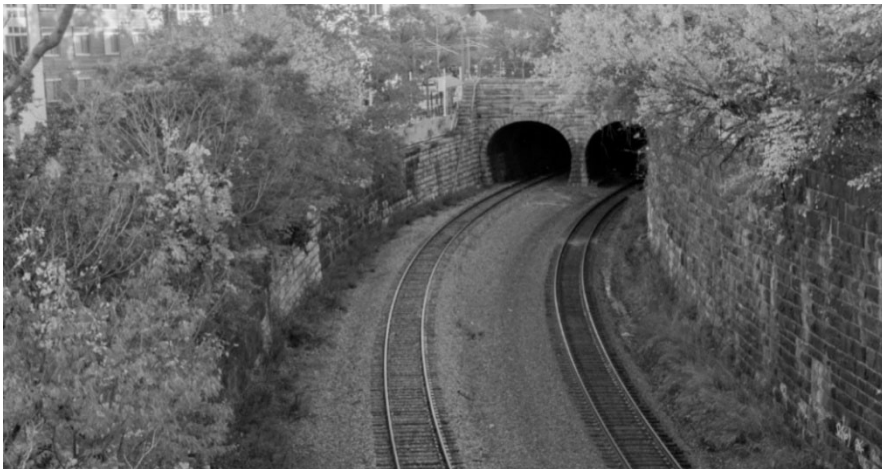
The current federal authorization is the Infrastructure Investment and Jobs Act (IIJA) also known as the Bipartisan Infrastructure Law (BIL), which provides vital federal funding for highway, transit, and other multimodal projects. The IIJA was signed by President Biden on November 15, 2021 and provides authorization for federal fiscal years 2022 through 2027 (FFY 2022-FFY 2027). This Act is more expansive in scope than a traditional transportation authorization and much of the discretionary funding was both

authorized and appropriated in the legislation. The traditional transportation funds are being distributed based on FFY 2022 appropriations.



## Grants

In order to best leverage our state transportation dollars, MDOT continues to pursue all relevant federal discretionary grants to maximize transportation funding opportunities. In addition to formula funds, the IIJA provides a significant increase in federal funding for discretionary grants for transit, highways, airport, port, rail, freight and active transportation, in rural and urban areas. Many of these grant programs are annual over the five years covered by IIJA and focus on the following priority areas: repairing/rebuilding infrastructure, climate change mitigation, resilience, equity and safety. MDOT has pursued many grants already, including the following IIJA grant programs: the Airport Improvement Program (AIP) grant; the Port Infrastructure Development Program (PIDP) grant; the Bridge Investment Program (BIP) grant; the Consolidated Rail Infrastructure and Safety Improvements (CRISI) grant; the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant; the Bus and Bus Facilities grant, the Infrastructure for Rebuilding America (INFRA) grant; the National Infrastructure Project Assistance (MEGA) Program grant; and the Rural Surface Transportation Grant. We also continue working with our local and regional partners to support grant applications across the state. To date (December 2022), MDOT has been awarded a Penn Station RAISE grant, a Martin State Airport Station All Stations Access Program (ASAP) grant and awaits the awards from other competitive grant applications.



## Highways and Transit

Along with the relief and stimulus federal funds received by MDOT traditional federal funding comes from the Federal Highway Trust Fund (FHTF), which provides transportation investment for projects in the following areas: highways and transit; multimodal freight; safety and security; system preservation; bike and pedestrian; congestion mitigation; climate change and electric vehicle infrastructure.

The CTP allocates these federal funds to projects in the program based on reasonable assumptions of authorization given the passage of the IIJA. MDOT expects to have \$720.0 million in highway formula funding and \$291.6 million in transit formula funding in FFY 2022 for MDOT projects. The Purple Line previously received a commitment from the Federal Transit Administration for New Starts funding totaling \$900 million. The Purple Line also received an additional allocation of \$106.2 million in New Starts funding from the American Rescue Plan Act (ARPA).

Federal highway program funds authorized and apportioned to the states are subject to annual ceilings, which determine how much of the appropriated money can be obligated in any given year. This ceiling is referred to as Obligation Authority (OA) and is imposed by Congress annually in response to prevailing economic policy. This CTP assumes an OA level of 91.3 percent for FFY22 and 90.0 percent FFY 23 through FFY27.



## Washington Metropolitan Area Transit Authority — WMATA

In FY23, WMATA anticipated receiving \$331.4 million in FTA formula grants and \$11.5 million in other federal grants (Congestion Mitigation and Air Quality) for bus and rail preservation activities. The Passenger Rail Improvement and Investment Act (PRIIA) of 2008 was reauthorized within the federal IIJA and will continue to provide funding of \$148.5 million annually through FY2028, though a requirement within the reauthorization earmarks \$5 million each year toward the operating budget of WMATA's Office of the Inspector General. In total, WMATA expects to receive \$491.5 million in federal capital funding in FY23. In addition, WMATA fully intends to pursue competitive federal grant funding for as many programs as they qualify. No such funds are included in WMATA's capital budget until they are awarded.

Beyond the federal capital funding, WMATA has been apportioned \$2.4 billion since FY2020 through the various federal COVID relief funding programs for use in its operating budget to help defray revenue losses from continuing low ridership. WMATA expects to use \$686 million of this federal relief funding toward its operating expenses in FY23, leaving approximately \$181 million to help cover its operating funding gap in FY24.

In light of recent safety concerns at WMATA, including the derailment of a 7000-series train which led to the discovery of a larger maintenance and accountability issue, MDOT's top priority regarding WMATA more so now than ever is restoring and ensuring the safety and reliability of the system and its operation. This is demonstrated through investments in safety and state of good repair. Established in law in 2018 and with funding beginning in FY20, Maryland provides its \$167 million share towards WMATA's annual Dedicated Capital Funding Grant. WMATA uses this guaranteed \$500 million in funding to generate capital resources through bond sales. This funding has assisted WMATA in catching up on its backlog of deferred capital needs. In addition to this funding commitment, this CTP includes a total of \$300 million (\$50 million each year in FY23 through FY28) as Maryland's matching contribution to the newly reauthorized federal PRIIA grant. Additionally, Maryland and its other WMATA funding partners, Virginia and the District of Columbia, continue to fulfill their obligation by providing formula funds to match federal grants.

Overall, WMATA's six-year capital budget is \$13.9 billion in FYs 2023 through 2028. This includes \$5.9 billion in state/local funding, \$5 billion in debt (including debt generated from bond sales utilizing the jurisdictional dedicated capital funding), \$3 billion from federal sources, and \$42 million in reimbursable funds to complete the extension of the Metrorail Silver Line.

## Aviation

The FAA, through the Airport Improvement Program (AIP), is authorized to provide federal entitlement and discretionary funding for airport projects. The MDOT MAA estimates annual AIP entitlement funding is at least \$4.9 million for BWI Marshall Airport during the six-year period. The IIJA provides an additional \$25 million a year through a separate grant program with expanded project eligibility using only enplanements to distribute the funds. Traditional AIP Entitlement funding is calculated using enplanement and cargo-based formulas for BWI Marshall Airport and the amount reflects the 75% adjustment based on the airport's authority to collect a \$4.50 Passenger Facility Charges (PFC). The FAA Reauthorization Act of 2018 extended FAA authority to 2023.

In response to the pandemic, Congress enacted the Coronavirus Aid, Relief, and Economic Security (CARES) Act which allocated \$107.7 million in additional funding to Maryland airports, of which 82%, (\$87.8 million) went to BWI Marshall and Martin State airports (\$75.8 million for operating costs, including appropriated debt service and \$12.6 million for capital costs). Additionally, MDOT MAA received \$21 million in Coronavirus Response and Relief Supplemental Appropriations (CRRSAA) funding (\$20M debt service and \$1M appropriated debt) and \$84 million in ARPA funding (\$80M of debt service, \$2M appropriated debt, \$2M for operating expenses).



In Federal FY 2021, MDOT MAA received \$26M in grants (\$17.3 million for Taxiway F Phase 1), \$4.8 for Remote Transmitter Receiver (RTR), \$2.5M residential sound mitigation, \$670,000 for noise and \$1M for reimbursement

of Concourse A/B and BHS CMAR expenses. The AIP also provided another \$29.8 million to other public use airports throughout Maryland.

In FY 2022, MDOT MAA administered \$1.7 million to public-use airports across the state through the Statewide Aviation Grant Program. These grants support the flying public with airport improvement and infrastructure preservation projects, safety equipment acquisitions and environmental compliance activities. This state investment leveraged over \$18.6 million in FAA funds and \$2.1 million in airport owner investment. This level of funding is expected to provide \$15-\$20 million each year over the next six years. In addition, FAA allocated \$3.2 million to non-State-owned public-use airports as part of the federal pandemic relief assistance (i.e., FAA Airport Rescue Grants).



Martin State Airport continues to receive its annual \$150,000 AIP entitlement funding, which is applied to eligible projects. The IIJA provided an additional entitlement funding amount of approximately \$763,000 for Martin State Airport. Several development projects at Martin are expected to become eligible for AIP discretionary funding pending a favorable finding on the ongoing programmatic Environmental Assessment (as required by the National Environmental Policy Act) that is anticipated to be complete in CY 2022.

In FY 2021, MDOT MAA administered \$2.2 million to public-use airports across the state through the Statewide Aviation Grant Program. These grants support the flying public with airport improvement and infrastructure preservation projects, safety equipment acquisitions and environmental compliance activities. This state investment leveraged over \$33.1 million in FAA funds and \$1.0 million in airport owner investment. FAA funding is expected to provide \$15-\$20 million each year over the next six years. In addition, FAA allocated \$2.4 million to non-state-owned public-use airports as part of the CRRSAA, \$3.2 million for airport rescue grants and \$5.3 million for the first year of IIJA.

## Maryland's Port of Baltimore

The MDOT Maryland Port Administration (MDOT MPA) receives nearly \$4.9 million annually through the Energy Transfer Port program for maintenance dredging through the U.S. Army Corps of Engineers (USACE), with the most recent round of funding delivered in FY 2022. The MDOT MPA's Mid-Chesapeake Bay Island Project received a major boost with the allocation of \$37.5 million in the USACE Supplemental FY 2022 Workplan. In April 2022, USACE, state and federal officials announced that an additional \$46.5 million had been secured, bringing the total for federal construction dollars to \$84 million for FY 2022.

In February 2022, the MDOT MPA was awarded \$1.8 million grant from the U.S. Environmental Protection Agency (EPA) for the Port's Diesel Equipment Upgrade Program, which replaces older cargo-handling equipment and dray trucks with newer, cleaner, and more efficient models. The grant will help the MPA further reduce emissions at the Port and surrounding residential neighborhoods. Since the Port's Diesel Equipment Upgrade Program began in 2008, a total of 118 pieces of diesel cargo handling equipment such as forklifts, top loaders, locomotives, and tugs have been replaced or retrofitted with cleaner engines. These replacements and retrofits have prevented more than 5,100 tons of emissions.



In June 2022, the MDOT MPA was awarded \$15.6 million from the Federal Railroad Administration (FRA) Consolidated Rail and Infrastructure Safety Improvements (CRISI) program for its Rail Capacity Modernization Project. The project will reconstruct and update the Seagirt Marine Terminal's intermodal rail yard infrastructure and support increased demand for double stacked trains of containerized cargo to markets across the country.



Terminal security efforts continue to be enhanced with federal assistance through the Federal Emergency Management Agency's Port Security Grant Program. In August 2021, MDOT MPA was awarded \$1.6 million in federal assistance to improve security at its terminals. The funding is being used to solidify cyber security initiatives and access control policies at the MDOT MPA's state-owned public terminals. Since 2005, Maryland's Port of Baltimore's public terminals have received more than \$20 million in the Port Security Grant Program.

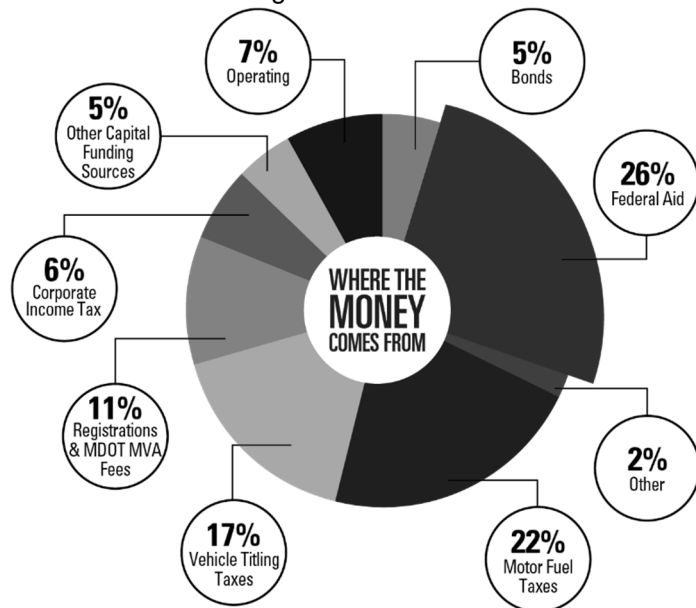
Through the IIJA, the Port will be eligible to apply for additional funding through the Port Infrastructure Development Program, the National Infrastructure Project Assistance grants program (Mega), and the Nationally Significant Multimodal Freight and Highways Projects grants program (INFRA).

## WHERE THE MONEY COMES FROM...

Maryland's transportation system is funded through several dedicated taxes and fees, federal aid, operating revenues, and bond sales, which are assigned to the Transportation Trust Fund. This fund is separate from the state's General Fund, which pays for most other state government operations and programs. MDOT's customers pay user fees for transportation infrastructure and services through motor fuel taxes, vehicle titling taxes, registration fees, rental vehicle sales tax, and operating revenues. The motor fuel tax and vehicle titling tax are two of the largest sources of MDOT revenue. Operating revenues include transit fares and usage fees generated at the Port of Baltimore and BWI Marshall and Martin State Airports.

In addition to collecting revenue within the state, Maryland also receives federal aid for its transportation program. These federal funds must be authorized by a congressional act. The United States Congress enacted federal surface transportation authorizing legislation as part of the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Act (BIL), in November 2021, which provides investment in transportation infrastructure through FFY 2027.

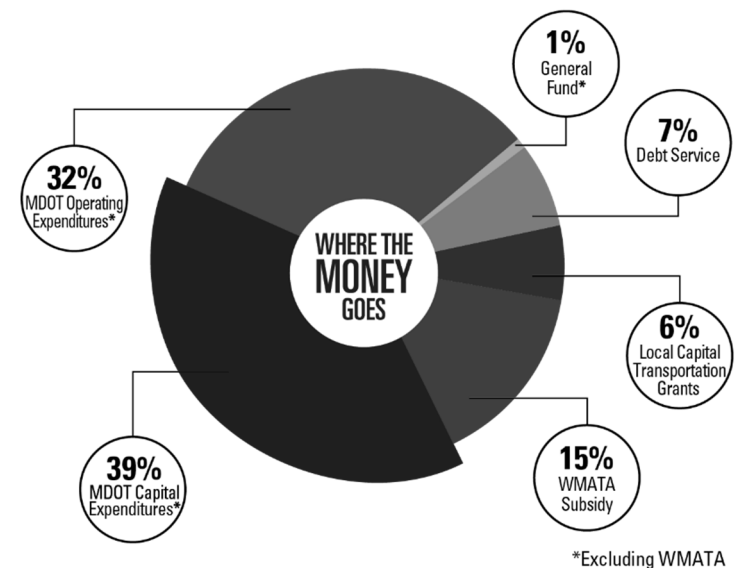
In addition to these state-sourced revenues and federal aid, MDOT utilizes other capital funding sources to fund its capital program. These other capital funding sources include funding from the state's General Fund to support



dedicated capital funds for WMATA and other projects, direct federal aid received by WMATA, local contributions, airport revenue bonds, airport passenger facility charge revenues, and airport rental car customer facility charge revenues. The Final FY 2023 – FY 2028 CTP totals \$20.5 billion, including \$17.5 billion from the Transportation Trust Fund and \$3.0 billion from other capital funding sources. In total, MDOT's operating and capital spending from all fund sources is \$39.4 billion over the six-year period. In addition, MDOT continually looks for opportunities to maximize its finances by leveraging alternative financing sources such as applying for competitive discretionary federal grants and entering into public-private partnerships.

## WHERE THE MONEY GOES...

The MDOT program is fiscally constrained, meaning that the list of projects is tied to estimates of future revenue. The Transportation Trust Fund supports operation and maintenance of state transportation systems, administration, debt service, grants, and capital projects, as well as Maryland's portion of operating and capital subsidies for WMATA. A portion of these funds is directed for General Fund purposes, including environmental, fuel tax collection, and state police programs. After operating costs, debt service, and local transportation grants, the remaining money goes toward funding capital projects, including capital grants to Maryland's counties and Baltimore City for local transportation needs. This document, MDOT's Final FY 2023 – FY 2028 CTP, is the six-year capital budget for all state transportation projects.



## Planned Capital Expenditures

FY 2023-2028 FINAL CTP SUMMARY (\$ MILLIONS)						
TRANSPORTATION BUSINESS UNITS		STATE FUNDS	FEDERAL AID	OTHER*	TOTAL	PERCENT OF TOTAL
Service Modes	MDOT TSO	169.7	7.2	11.8	188.7	0.9
	MDOT MVA	116.6			116.6	0.6
	<b>Sub-Total</b>	<b>286.3</b>	<b>7.2</b>	<b>11.8</b>	<b>305.3</b>	<b>1.5</b>
Aviation	MDOT MAA **	365.4	267.3	543.6	<b>1,176.3</b>	<b>5.7</b>
Maritime	MDOT MPA	871.6	206.5	331.1	<b>1,409.2</b>	<b>6.9</b>
Transit	MDOT MTA	2,255.1	2,000.7	162.0	4,417.8	21.5
	WMATA	1,054.6		1,819.8	2,874.4	14.0
	<b>Sub-Total</b>	<b>3,309.7</b>	<b>2,000.7</b>	<b>1,981.8</b>	<b>7,292.2</b>	<b>35.6</b>
Roads and Bridges	MDOT SHA	2,253.0	5,712.2	90.0	8,055.2	39.3
	HUR	2,268.7			2,268.7	11.1
	<b>Sub-Total</b>	<b>4,521.7</b>	<b>5,712.2</b>	<b>90.0</b>	<b>10,323.9</b>	<b>50.3</b>
<b>TOTAL</b>		<b>9,354.7</b>	<b>8,193.9</b>	<b>2,958.3</b>	<b>20,506.9</b>	<b>100.0</b>

Note: Figures may not add perfectly due to rounding.

\* Funds not received through the Transportation Trust Fund. Includes some funds from the Maryland Transportation Authority (MDTA), Special Transportation Project Revenue Bonds, and federal funds received directly by WMATA.

\*\* Projects using non-trust fund financing sources, such as airport Passenger Facility Charges (PFC) fees, airport revenue bonds, and airport rental car Customer Facility Charges (CFC), are included in the total.

HUR: Highway User Revenue Capital Grants  
MDOT TSO – Transportation Secretary's Office  
MDOT MVA – Motor Vehicle Administration  
MDOT MAA – Maryland Aviation Administration  
MDOT MPA – Maryland Port Administration  
MDOT MTA – Maryland Transit Administration  
WMATA – Washington Metropolitan Area Transit Authority  
MDOT SHA – State Highway Administration

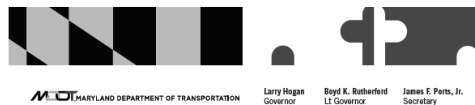
# EVALUATING OUR PERFORMANCE

## Performance Driven

MDOT is a performance driven organization, assessing our transportation system performance through data before making decisions to plan and invest. This is done through the annual Attainment Report on Transportation System Performance, the annual Managing for Results and federal baseline performance measures.

IMPLEMENTING THE MARYLAND TRANSPORTATION PLAN AND CONSOLIDATED TRANSPORTATION PROGRAM

### 2023 Annual Attainment Report On Transportation System Performance



To maintain the highest standards that our customers expect, we must understand where we are succeeding and where extra effort is needed. The Attainment Report provides us with the performance measure information we need to make those decisions. The annual CTP outlines where MDOT will be making investments in the coming years on our roads and highways, at the Port of Baltimore, in our transit systems, at BWI Marshall Airport and Martin State Airport, and all the various facilities that see thousands of people each day. The Attainment Report lets us know the success of those investments and where we can continue to improve, because we want to ensure our dollars are having the greatest impact in improving the lives of Marylanders.

In 2000, the Maryland General Assembly passed a bill requiring MDOT to develop an Annual Attainment Report (AR) on Transportation System Performance. The main objectives of the AR are to do the following:

- Report on progress toward achieving the goals and objectives in the MTP and the CTP; and
- Establish performance indicators that quantify achievement of these objectives; and set performance targets.

The performance measures evolve and are updated periodically in a collaborative effort between the Secretary's Office, the Transportation Business Units, and every 4-5 years, with an AR Advisory Committee. The performance measures were updated in 2019 using input from the AR Advisory Committee, based on the updated 2040 MTP Goals and Objectives (please visit [mdot.maryland.gov/ARAC](http://mdot.maryland.gov/ARAC)). The AR documents show MDOT is achieving its goals and objectives based on performance indicators and helps Maryland citizens assess improvements to its transportation system.

Since 1996, MDOT also has participated in the state's Managing for Results (MFR) effort as part of the budget process. MFR is a strategic planning, performance measurement, and budgeting process that emphasizes use of resources to achieve measurable results, accountability, efficiency, and continuous improvement in state government programs.

Through coordination with MPOs and adjacent state DOTs, MDOT developed baseline performance measures and targets for the MAP-21/FAST Act federal safety, infrastructure condition, and system performance measures:

- Pavement condition of the Interstate System and on the remainder of the National Highway System (NHS).
- Travel time reliability on the Interstate System and the remainder of the NHS.
- Bridge condition on the NHS.
- Fatalities and serious injuries (both number and rate per vehicle miles traveled) on all public roads.
- Traffic congestion.
- On-road mobile source emissions.
- Reliability of truck travel time on the Interstate System.

MDOT will continue to work with USDOT, the regional MPOs, and other stakeholders to ensure we demonstrate the effectiveness of MDOT's programs.

## HOW TO READ THIS DOCUMENT

For each major project, there is a Project Information Form (PIF). Each PIF contains a description of the project, its status, its justification, its compliance status with smart growth, and a brief explanation of how it fits with the goals of the MTP. It also shows any significant change in the project since the previous year's CTP, as well as the funding for the project during the six-year cycle. The information in each PIF is meant to provide a general description of the project along with some specifics such as alignments, status of environmental permitting, or alternatives under study.

### Funding Phases

**Planning** – Once a proposal is funded for project planning, detailed studies and analyses are conducted to evaluate the need for the project, to establish the scope and location of proposed transportation facilities and to obtain environmental approvals.

**Engineering** – Engineering projects involve detailed environmental studies and preliminary and final design. Having been through a detailed analysis based on the information from the Project Planning phase, these projects are candidates for future addition to the Construction Program.

**Right-of-Way** – This funding is to provide the necessary land for the project or to protect corridors for future projects.

**Utilities** – This funding is to pay for utility relocations that are required by the project that are the responsibility of MDOT.

**Construction** – This last stage includes the costs of actually building the designed facility.

**Total** – This is the sum of any funding shown for Planning, Engineering, Right-of-Way, and Construction.

**Federal-Aid** – This is the amount of the total that will utilize federal funding.

**State (Special)** – This is the funding coming from the Transportation Trust Fund that is a Special fund in the Governor's budget.

**Other** – This is funding from sources that are not federal or special. This funding could be from counties, the general fund, airport bond issuances, or private entities.

Construction does not begin until a project receives necessary environmental permits, the state meets air and water quality requirements, and the contracts are bid. PIFs can include specific facilities and corridor studies that examine multimodal solutions to transportation needs.

The CTP also contains information on minor projects. These projects are smaller in scope and cost. They also can include road resurfacing, safety improvements, and sidewalk and bicycle trail construction.

POTENTIAL FUNDING SOURCE:						<input checked="" type="checkbox"/> SPECIAL	<input checked="" type="checkbox"/> FEDERAL	<input type="checkbox"/> GENERAL	<input type="checkbox"/> OTHER		
PHASE	TOTAL					PROJECTED CASH REQUIREMENTS				SIX	BALANCE
	ESTIMATED	EXPENDED	EXPENDED	CURRENT	BUDGET	FOR PLANNING PURPOSES ONLY				YEAR	TO
	COST	THRU	IN	YEAR	YEAR	...2023...	...2024...	...2025...	...2026...	TOTAL	COMPLETE
	(\$000)	2020	2020	2021	2022						
Planning	34,402	16,216	6,796	3,035	1,651	2,500	2,000	4,000	5,000	18,186	0
Engineering	20,920	8,920	4,345	3,000	2,000	1,000	1,000	2,000	3,000	12,000	0
Right-of-way	0	0	0	0	0	0	0	0	0	0	0
Utilities	2,022	34	34	141	141	106	100	500	1,000	1,988	0
Construction	49,639	7,126	2,621	9,806	5,239	2,802	2,819	8,601	13,246	42,513	0
<b>Total</b>	<b>106,983</b>	<b>32,296</b>	<b>13,796</b>	<b>15,982</b>	<b>9,031</b>	<b>6,408</b>	<b>5,919</b>	<b>15,101</b>	<b>22,246</b>	<b>74,687</b>	<b>0</b>
Federal-Aid	55,016	12,533	4,387	14,028	8,261	3,502	2,960	7,610	6,123	42,483	0
Special	51,966	19,762	9,409	1,954	771	2,906	2,960	7,491	16,123	32,204	0
Other										0	