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 Transportation Secretary’s Office (MDOT TSO), the Maryland Aviation Administration (MDOT MAA), Maryland Port Administration (MDOT MPA), Motor Vehicle Administration (MDOT MVA), State Highway Administration (MDOT SHA), Maryland Transit Administration (MDOT MTA) – and related authorities to the MDOT, including the Maryland Transportation Authority (MDTA) and the Washington Metropolitan Area Transit Authority (WMATA).

In this document, you will find a Project Information Form (PIF) for every major project, which includes project details, financial information and construction status as well as a list of minor capital projects. MDOT works together with residents, local jurisdictions, and local and State elected officials to include projects in the CTP that preserve investments, enhance transportation services, and improve accessibility throughout the State. In order 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 also is 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 Final six-year capital investment program for transportation, the Final FY 2020 – FY 2025 Consolidated Transportation Program (CTP).

The CTP is the capital budget outlook and a key part of the State Report on Transportation (SRT) that 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. The MDOT just updated the MTP, a 20-year vision for Maryland’s transportation system, in January 2019. The MTP was updated after five years through an extensive outreach effort with the public, local jurisdictions, and state agencies to ensure it reflects the needs and priorities of Marylanders. To learn more or review the 2040 MTP, visit the MTP website at: mdot.maryland.gov/MTP. 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.

ESTABLISHING PRIORITIES

This year’s CTP reflects the priorities of MDOT as embodied in the goals outlined in the MTP, our mission (below), and the results we aim to achieve. These priorities must address federal and state requirements; local government mandates, interests, and concerns; and customer needs.

MISSION STATEMENT

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

While the existing revenues are addressing many needs, MDOT recognizes that these revenues cannot address every need. Consequently, MDOT will use our resources strategically and efficiently to ensure that transportation investments address our mission and goals, as well as to:

• Facilitate economic opportunity in Maryland;
• Provide a safe and secure transportation experience;
• Provide exceptional customer service;
• Provide an efficient, well connected transportation experience;
• Use resources wisely;
• Deliver transportation solutions and services of great value;
• Communicate effectively with our customers;
• Be a good neighbor;
• Be a good steward of our environment; and
• Be fair and reasonable to our partners.
The Maryland Open Transportation Investment Decision Act – Application and Evaluation (Chapter 30) requires MDOT to develop a project-based scoring system to rank major highway and transit transportation projects under consideration for funding in the Consolidated Transportation Program (CTP). Chapter 30 establishes nine goals and twenty-three 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 Final CTP.

MDOT has created a Chapter 30 scoring model that establishes how the twenty-three measures are defined and measured as well as created a weighting structure to score and prioritize the projects. For more information see the following website:
mdot.maryland.gov/newMDOT/Planning/Chapter_30_Score/Index.html

Facilitate Economic Opportunity in Maryland

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 attracting a competent workforce. Transportation infrastructure provides value and investing in Maryland’s transportation system creates jobs and supports Maryland industries and businesses. MDOT works to ensure its investments support a healthy and competitive state economy. In FY 2019 the MDOT Capital Program supported over 25,000 jobs. It did this by undertaking projects that improve access to jobs, as well as improve freight and commodity flows and the movement of goods and services in and through Maryland. MDOT is currently advancing its largest construction program in its history reflecting unprecedented growth in transportation investments. Over the past four years, MDOT has completed 1,069 projects worth nearly $5.9 billion. As of the fall of 2019, there were 718 projects totaling $7.8 billion underway.

The Hogan Administration has declared Maryland “Open for Business” and continues to challenge MDOT to facilitate economic opportunity and to help create jobs. To do this, MDOT must focus on fixing our highways and bridges and addressing congestion issues all around the State by employing efficient and innovative transportation solutions. This year’s Final CTP continues the implementation of key new projects to address long-standing transportation issues across the State. Cost savings and innovative project delivery mechanisms have allowed MDOT to be in the fortunate position to move numerous projects forward to address many of the State’s needs and invest public dollars in the most efficient and cost-effective way while supporting economic development and creating or supporting jobs and minimizing impacts to Marylanders.

The Port of Baltimore helps keep Maryland “Open for Business” by continuing to break cargo records and maintaining its role as one of Maryland’s top economic engines. In CY 2018, the Port’s public and private marine terminals handled 43.0 million tons of cargo. This broke the prior record of 41.0 million tons in 1974 and ranked the Port as 11th in the nation for international cargo tonnage, and ninth in cargo value, at $59.7 billion. It is expected that 2019 will be the fourth consecutive year the State-owned terminals handled more than 10 million tons of general cargo. The Port of Baltimore also set a record in 2018 by handling 807,194 cars and light trucks. The trend for 2019 continues to be higher than previous years. Also, in 2018, 27.1 million passengers came through BWI Marshall Airport. This is a new record, making BWI the busiest airport in the region and producing an annual economic impact of $9.3 billion, while supporting 106,000 jobs.

Freight

Freight activity in Maryland and throughout the East Coast is expected to increase significantly in the coming decades. In 2018, the Port handled a record 850,147 cars and light trucks, the eighth consecutive year it finished first among all U.S. ports for cars. It also finished first for heavy roll on/roll off machinery. Maryland’s location at the crossroads of the I-95 corridor and significant rail and marine corridors means that the infrastructure in Maryland is critical to the State, regional, and national economy. As much of Maryland’s freight network is shared with passenger or vehicle operations, both freight
and passenger growth will exacerbate already congested infrastructure throughout the State. The resulting chokepoints create significant challenges for freight and passenger movement in the region. It is imperative that MDOT work with local, state and federal officials and freight stakeholders to plan and facilitate the necessary improvements to accommodate freight demand and allow for the cost-effective and safe movement of goods by all modes of transportation. MDOT partnered with not only local and federal partners but the private sector to obtain for Maryland two Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants. Cecil County has been awarded $20 million in partnership with the Maryland Transportation Authority (MDTA) to build a new interchange at I-95 and Belvidere Road creating a direct connection to existing and planned distribution, warehousing, manufacturing and retail business in the Cecil County Principio Enterprise Zone. MDOT Maryland Port Administration (MDOT MPA) was awarded $6.55 million to add a second berth capable of serving 50-foot draft ultra large container vessels and help modernize the Port. Maryland will also receive $125 million in other federal discretionary grant funding for the Howard Street Tunnel expansion in partnership with CSX.

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 all of MDOT’s freight projects. In addition to capital projects, MDOT is involved in several freight planning efforts, including a Statewide Truck Parking Study and updated the Strategic Goods Movement Plan in 2017. Additional information on MDOT’s freight activities can be found on MDOT’s website at: mdot.maryland.gov/freight.

Real ID

Under Governor Hogan's leadership, the Maryland Department of Transportation Motor Vehicle Administration (MDOT MVA) aims to provide premier customer service to all Maryland citizens while working to meet the federal deadline for REAL ID. In August 2019, the U.S. Department of Homeland Security (DHS) gave Maryland its stamp of approval for compliance with federal REAL ID requirements by recertifying MDOT MVA’s REAL ID process, making Maryland the first state to achieve this designation. With more than five million licensed drivers and identification card holders in Maryland, and over 2.6 million of those driver’s and card holders already REAL ID compliant, MDOT MVA is using education, outreach, and operational ingenuity to make Maryland REAL ID Ready by the October 1, 2020 federal deadline.

To give customers that premier experience that is simple and convenient, and to meet the Real ID deadline, MDOT MVA extended hours on Tuesdays and Saturdays at 15 of its busiest locations, serving more than 10,000 citizens during extended hours over four months. MDOT MVA also permanently extended hours on Thursdays until 6:30 p.m. at all branch locations and opened two new temporary spaces in Parkville and Columbia to provide extra room for additional customer transactions. With extended hours and new space for more customer transactions, MDOT MVA has been able to provide more than 4,100 appointment options statewide, daily for its customers. In addition to more appointment choices there is a commitment to any customer that makes an appointment to turn in their documents for REAL ID that they will be seen by a customer service agent within 15 minutes.

If you are unsure about your identification status MDOT MVA’s REAL ID Lookup Tool (mva.maryland.gov/realid/realidlookup.htm) provides 24/7 access to check REAL ID status by entering a driver’s license or ID card number on the secure website. In addition, an Online Document Guide (license.mva.maryland.gov) provides a checklist of documents and allows customers to schedule an appointment at any MDOT MVA branch.

Provide a Safe & Secure Transportation Infrastructure

MDOT will not compromise on our commitment to continually improve the safety and security of our customers and partners in everything we do. It is critical that we commit to safety and security in our designs, in our construction, as well as how we operate and maintain 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 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.
**MDOT Safety Pledge**

Safety continues to be the number one priority for MDOT. MDOT continues to urge Marylanders to demonstrate safe behavior by focusing on some simple, common rules of the road.

- **Have a safe and sober ride...** a designated driver, cab, ride share, or public transportation.
- **Park the phone before you drive.** Distractions lead to more than 28,000 injuries per year in Maryland.
- **Always buckle up!** It’s the single most important way to save your life in a crash.
- **Adapt your driving.** Leave a little early. You won’t feel the need to speed or drive aggressively.
- **Look twice** for pedestrians, bicyclists, and motorcyclists, especially when changing lanes or approaching an intersection.
- **Use crosswalks and bike lanes.** Be visible on the road.
- **Move over** when approaching an emergency vehicle or tow truck using visual signals. If you are unable to move over, slow down.

For more information, see the safety pledge at: surveymonkey.com/r/MDOTsafetypledge.

Traffic fatalities in Maryland declined from 558 in 2017 to 513 in 2018. While this is a decline no life lost is acceptable. MDOT continues to strive to do what it can to reduce traffic fatalities. At this summer’s MACo conference, MDOT MVA debuted a pilot program to test the driver Alcohol Detection System for Safety, making Maryland the first state in the nation to test this technology. This sensor system automatically analyzes the alcohol in a driver’s breath as they exhale and if the driver is impaired with a breath alcohol concentration above the legal limit, the vehicle will not move.

**Strategic Highway Safety Plan**

MDOT promotes traffic safety through the many infrastructure and behavioral programs and projects implemented by the MDOT State Highway Administration (MDOT SHA) and MDOT MVA Highway Safety Office, which is the lead agency for the State’s Strategic Highway Safety Plan (SHSP). 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. As an outgrowth of this initiative, many local communities have developed, or are in the process of developing, local road safety plans using the SHSP as a guide. The Federal Highway Administration (FHWA) has designated this program as a proven countermeasure because it tailor’s solutions to local issues and needs.

Recent investments completed to enhance public safety and security include projects at BWI Marshall Airport to create state-of-the-art passenger security screening areas between Concourses B and C and between Concourses D and E. These projects are providing for a post-security connection between Concourses A, B and C, as well as between Concourses D and E (the International Terminal).

In the summer of 2019, MDOT SHA completed the MD 500 urban reconstruction improvements between MD 208 and MD 410. These included the construction of a landscaped median, new sidewalks, new crosswalks, bicycle lanes, and various traffic calming improvements to improve pedestrian and bicyclist safety. This $12 million investment is one example of how MDOT SHA is working toward the safety and accommodation of all users of our roads.
In March, MDOT SHA reduced speed limits along several urban arterial routes, including MD 190, MD 187 and MD 97 (Georgia Avenue) in Montgomery County. The next improvements will be made to MD 410 and MD 188 in Montgomery County and MD 210 and US 1 in Prince George’s County.

**Airport Safety Projects**

To promote compatible land use and protect navigable airspace near BWI Marshall and Martin State airports from hazardous structures and activities, MDOT Maryland Aviation Administration (MDOT MAA) continued collaboration with Anne Arundel, Howard and Baltimore counties to review proposed development and issued Airport Zoning Permits for over 400 community infrastructure development projects. Additional recent MDOT MAA investments to enhance public safety and security include:

- Replacement and modernization of the exit-lane technology systems at Concourses A and B to maintain egress and airside security of the BWI Marshall terminal.
- Installation of 65 Bleeding Control Kits throughout the BWI Marshall terminal and support properties. These kits provide lifesaving bleeding control equipment such as tourniquets, pressure dressings and gauze bandages and puts them into the hands of the public to initiate life saving measures until the arrival of paramedics. This program supports the 2005 White House “Stop the Bleed” campaign – a National initiative to provide bystanders with the tools and knowledge to stop life threatening bleeding.
- Installation of LED high-mast lighting on the Concourse A apron to improve safety and efficiency of airline and baggage ground handling operations at night
- Remarking of walkways in front of the BWI Marshall terminal to enhance pedestrian safety along the busy passenger drop-off/pick-up curbside.

**Provide an Efficient, Well-Connected Transportation Experience**

The users of Maryland highways face some of the nation’s worst congestion. This fact has stifled economic development across the State. The Hogan Administration continues to direct MDOT to address long-standing congestion issues by initiating projects statewide that will serve to increase mobility and move traffic more efficiently. Construction of new highway capacity to accommodate travel has not kept pace with demand.
Use Resources Wisely

MDOT receives resources from our customers and they expect excellent products and services in return. In order to better serve our customers, MDOT must maximize the value of every dollar we spend. MDOT continues to place a high priority on allocating funds toward system preservation. The CTP reflects significant investments in the bridge program, road and runway resurfacing, rail car overhauls and replacements, bus replacements, and general facility rehabilitation, replacement and upkeep.

A key focus area is the condition of bridges across Maryland. MDOT SHA continues to make significant progress in reducing the number of poor rated bridges (bridges are safe but need repairs/replacement) on the State’s highway system to ensure safe travel for Maryland motorists and users of our system. There were 69 bridges identified as poor rated when Governor Hogan took office in 2015. All 69 of those bridges have either been addressed or are currently under construction. Each year, additional bridges are identified as poor rated.

In addition, MDOT SHA spent more than $210 million on improving roads in Fiscal Year 2019. MDOT SHA has improved or treated more than 60% of our pavement network since 2015. This milestone marks the improvement of nearly 10,500 lane miles, calculated by miles of highway multiplied by the number of lanes, improving safety and enhancing the customer experience for millions of drivers across the State.

Deliver Transportation Solutions and Services of Great Value

MDOT will continue to deliver transportation solutions on time and within budget. We will use strategies to ensure that the transportation solution meets the needs of our customers and eliminates unnecessary costs.

Regional Transit Plan for Central Maryland

MDOT MTA is leading the development of a new Regional Transit Plan for Central Maryland. Providing a 25-year vision of mobility, this plan will define public transportation goals for Central Maryland including Anne Arundel, Baltimore, Harford and Howard counties as well as Baltimore City. The Regional Transit Plan will reflect our rapidly changing world and changes in the ways we travel. For example, the sharing economy provides new alternatives including sharing services for bikes, cars, scooters, and rides. Additionally, mobility apps provide multimodal and real-time information about transportation options, empowering us to make choices that work for us.

MDOT MTA is collaborating with a broad range of partners including a newly-formed Central Maryland Regional Transit Plan commission, local governments, other transit providers, and the public to develop this plan. The plan will focus on seven topics to provide a better understanding of what transit resources exist while also exploring opportunities to improve mobility. Those topics include: State of Good Repair, Funding, New Mobility, Customer Experience, Service Quality and Integration, Access, and Corridors. To learn more about the Regional Transit Plan, visit rtp.mta.maryland.gov.

Purple Line

Construction is underway along the entire 16-mile Purple Line light rail corridor. Since the project broke ground in August 2017, utility relocation, earthwork, bridge reconstruction, construction of the Glenridge Operations and Maintenance Facility, and tunnel excavation have been ongoing. Light rail vehicle production is also underway. Meetings with the eight Community Advisory Teams along the Purple Line are continuing throughout construction.

MDOT officials signed the $5.6 billion public-private partnership contract in April 2016 with the Purple Line Transit Partners to design, build, finance, operate, and maintain the light rail system. With a first phase opening in 2022, the Purple Line will run east-west inside the Capital Beltway, with 21 stations connecting to: Metrorail’s Orange, Green, and Red lines; the MARC Brunswick, Camden, and Penn lines; and Amtrak at New Carrollton. For more information, visit: purplelinemd.com.
**Practical Design**

To benefit the entire Maryland transportation network, MDOT has been developing engineering policies for all of its business units that incorporate the principles of practical design, which focuses on producing safe and efficient projects that address the most important needs at the most economical cost. The goal is to build good projects to achieve a safe, well-performing transportation system throughout the State without shifting the cost burden to maintenance. MDOT’s Practical Design Policy provides a process for all planning, preliminary engineering, and design activities. The policy ensures that safety is never compromised, design solutions are reached collaboratively, and the project’s needs are met.

MDOT uses the Practical Design process to define the needs of each project at the outset and ensures that design solutions meet these needs for the least cost. This process has been refined to increasingly focus on context in identifying project specific outcome performance that address the needs of our diverse users. This data driven approach ensures that our customers receive projects of great value, while also leaving additional resources to provide for a better overall system.

**Maintain a High Standard and Modernize Maryland’s Multimodal Transportation System**

**Reliable, On-Time Service**

The launch of BaltimoreLink in June 2017 provided more people with faster and more reliable access to transit, jobs, and services in the region. Since the launch of BaltimoreLink, on-time performance (OTP) has dramatically improved to a high of 71.4% in March 2019. This compares to last year’s 68.9% and the pre-BaltimoreLink OTP rate of 59.5%. To achieve improved OTP, MDOT MTA has implemented new programs and innovations to make riding easier and more efficient than ever. Over five miles of dedicated bus lanes are producing an average travel time savings of nine percent, with up to 31 percent travel time savings in some corridors. In addition, Transit Signal Priority is reducing travel time by up to 22 percent during peak periods.

MDOT MTA’s revenue vehicles are being replaced and overhauled to improve the customer experience with more comfortable, reliable vehicles. MDOT MTA recently purchased 140 clean diesel buses and ensured long-term commitment through a five-year replacement contract. Replacement Metro SubwayLink railcars are in production and Light RailLink railcars are undergoing a comprehensive overhaul now. MobilityLink paratransit vehicles also continue to be replaced. MARC Train began operating eight new locomotives in 2018 and is overhauling 63 of the passenger cars.

**Cashless Tolls**

In July 2019, Governor Hogan announced the MDTA toll modernization plan, which will save Marylanders more than $28 million over five years. The Key Bridge and the Hatem Bridge are now cashless, with motorists paying tolls via E-ZPass or video tolling. The Bay Bridge has been operating under a cashless toll system during certain periods to help improve traffic flow during peak times, with a plan to go full-time cashless tolling in the future. Currently, 74% of Bay Bridge drivers use E-ZPass.
Be a Good Neighbor

As the owner of statewide transportation facilities, MDOT must work with our neighbors to find solutions that work for our customers and are sensitive to our neighbors. This includes examining all of the modes of travel including flying, driving, riding transit and even freight coming into the Port.

Maryland, like many parts of the country, is seeing an increased interest in biking and walking as significant transportation mode choices. Each is an integral part of the state’s broader transportation approach, and a key element to how the agency seeks to deliver on our mission of providing excellent customer service. Safe infrastructure for cyclists and pedestrians is also essential in how MDOT contributes to the broader statewide goals of reducing greenhouse gas emissions, alleviating congestion, encouraging healthy activities, and supporting activity-based tourism and economic development.

Be a Good Steward of our Environment

MDOT is committed to environmental stewardship and continues to be a national leader in implementing innovative and multimodal strategies that protect our natural, cultural, and community resources. The following examples illustrate how MDOT works in coordination with State, local, and national partners, among others, to ensure that we make progress toward our state and local goals related to air and water quality, as well as energy and land conservation.

Through partnerships with the Maryland Department of Environment (MDE) and the State’s Metropolitan Planning Organizations (MPOs), MDOT is reducing emissions of criteria pollutants, such as particulate matter, as well as the ozone precursors, volatile organic compounds (VOCs) and nitrogen oxides (NOx). 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. Maryland has goals to reduce GHG emissions statewide by 40 percent in 2030, from 2006 emissions levels. MDOT produces 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.

Criteria pollutant and GHG emissions from the transportation sector are greatly reduced through the advancement of vehicles technologies. In particular, the passage of corporate average fuel economy (CAFE) standards, the advent and adoption of electric and hybrid-electric vehicles, and the burgeoning opportunity afforded through connected and automated vehicle technologies.

MDOT also invests in a variety of Travel Demand Management (TDM) strategies which provide alternatives to driving alone and limit emissions from the transportation sector. TDM efforts, such as carpooling, car sharing, transit, teleworking, and variable pricing infrastructure, as promoted in the Commuter Choice Maryland program, reduce congestion and lower commuting costs, in addition to providing environmental benefits.

Continuing our commitment to the environment and dedication to using resources wisely, MDOT currently has five photovoltaic (PV) systems installed on its properties, which total approximately 1.8 megawatts (MW). Under the new, MDOT renewable Energy Master Contract, six Master Contractors will compete to install additional PV systems on MDOT property. The program is one of the first of its kind by a state transportation agency, and also allows for Maryland Counties, municipalities, instrumentalities of the State, and other non-State of Maryland governments or government agencies and not for profit
In a program that could serve as a national model of environmental stewardship, MDOT partnered with the Maryland Department of the Environment and the private sector in a public-private partnership benefiting the Chesapeake Bay through advanced stormwater control technology that can help reduce pollutants and curb local flooding. As part of an agreement with Maryland Environmental Service (MES), MDOT will contribute $4 million to facilitate installation of “smart pond” technology in 2020 at existing stormwater management sites on four Walmart properties and other privately-owned land. The partnership is the first of its kind in the nation involving a state transportation department.

By coordinating land-use, transportation, and resource planning with partners in other agencies and local governments, MDOT helps to ensure that the investments made will meet multiple needs for the citizens of Maryland. Using the State’s Green Infrastructure Plan and Chesapeake Bay Restoration priorities as a guide, MDOT agencies are minimizing negative impacts and using project mitigation to support the State’s broader conservation goals. 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 will move the State closer to meeting mandated water quality targets.

**Commuter Choice Maryland**

Maryland has the second longest average commute in the Nation where commuters spend an average of 32 minutes sitting in traffic traveling to work – resulting in diminished productivity, extreme frustration and lost time. To mitigate traffic congestion and support both the mobility, health and wealth of its community, environment, and business partners, MDOT has launched Commuter Choice Maryland.

The benefits of Commuter Choice Maryland are significant. Commuter Choice Maryland encourages commuters to explore and use alternate means of transportation to and from work, giving them travel choices when convenient to them, such as transit, ridesharing (carpool/vanpool), biking, walking, teleworking, and alternative flexible work schedules. All of these options help to reduce commuter stress, reduce congestion and conserve energy. We have also seen that Commuter Benefits helps to attract and retain top employee talent.

Maryland businesses who offer Commuter Benefits can also take advantage of the Maryland Commuter Tax Credit, designed to encourage businesses of all sizes to provide Commuter Benefits to their employees.

To learn more, please visit CommuterChoiceMaryland.com or email: commuterchoice@mdot.maryland.gov or call: 410-865-1100 between 8:30 am and 5:00 pm Monday – Friday.
Process for CTP Development

The CTP takes nearly a full year to create through the collaboration and work 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 uses the following criteria to identify projects and programs that respond 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 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).
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 provides funding that enables MDOT to address important capital and operating needs including congestion relief, safety improvements, transit availability; and maintain the competitiveness of the Port of Baltimore and the BWI Marshall Airport.

State Revenue Projections

Total projected revenues amount to $31.1 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. The projection does not assume any future State tax or fee increases beyond those changes enacted to date.

Pertinent details are as follows:

- Opening Balance: MDOT will transition to a $175 million fund balance over the program period to accommodate working cash flow requirements throughout the year.
- Motor Fuel Tax: This revenue is projected to be $7.3 billion over the six-year period. As of July 1, 2019, the motor fuel tax rates were 36.7 cents per gallon gasoline and 37.45 cents per gallon diesel fuel. These rates include the revenue components provided by the Transportation Infrastructure Investment Act of 2013. The Consumer Price Index (CPI) effect is estimated to average 4.2 cents per gallon over the program period. The 5 percent sales and use tax equivalent rate effective July 1, 2019 is 10.7 cents per gallon. The rate is estimated to average 10.9 cents per gallon over the program period.
- Motor Vehicle Titling Tax: This source is projected to yield $5.9 billion. The titling tax of 6 percent of the fair market value of motor vehicles, less an allowance for trade-in vehicles, is applied to new and used vehicles sold and to vehicles of new residents. This revenue source follows the cycle of auto sales with periods of decline and growth. It is projected that this six-year planning period will follow a normal business cycle around an underlying upward trend.
- Motor Vehicle Registration/Miscellaneous, and Other Fees: These fees are projected to generate $4.0 billion. This forecast assumes revenues will increase an average of 1.5 percent every two-year cycle.
- Corporate Income Tax: The transportation share of corporate income tax revenues is estimated to be $1.3 billion. MDOT receives 14.6 percent of the State’s 8.25 percent corporate income tax revenues.
- Federal Aid: This source is projected to contribute $6.5 billion for operating and capital programs. This amount does not include $599 million received directly by WMATA. The majority of federal aid is capital; only $638 million is for operating assistance. 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: These revenues are projected to provide a six-year total of $3.1 billion, with $1.1 billion from MDOT MTA, $347 million from MDOT MPA, and $1.7 billion from MDOT MAA. MDOT MTA revenues primarily include rail and bus fares, which became indexed to inflation beginning in fiscal year 2015, as provided by the Transportation Infrastructure Investment Act of 2013. MDOT MPA revenues include terminal operations, the World Trade Center, and other Port related revenues. MDOT MAA revenues include flight activities, rent and user fees, parking, airport concessions, and other aviation-related fees.

- Bond Proceeds: It is projected that $2.3 billion of bonds will be sold in the six-year period. The level of bonds that could be issued is dependent on the net revenues of MDOT. This level of bonds is affordable within the financial parameters used by MDOT.

- Other Sources: The remaining sources are projected to provide $764 million. These sources include General Fund revenues, county contributions to MDOT projects, earned interest from trust funds, reimbursements, and miscellaneous revenues.

**FEDERAL AID ASSUMPTIONS**

Enacted in December 2015, the Fixing America's Surface Transportation (FAST) Act re-authorized federal funding for highway, transit and other multimodal projects through September 30, 2020. The FAST Act included some policy changes, a new focus on freight and provided funding certainty for five full years through September 2020 including built-in inflation from existing funding levels. Congress must develop a new authorization Act for federal funding to continue or extend the existing act by the end of this federal fiscal year.

Authorization does not mean appropriation. While Congress authorized a five-year transportation bill, each year, Congress must then appropriate the funds through the federal budget process, which can be at lower amounts than authorized. For FFY 20, this CTP includes the Congressional appropriation of FAST Act authorized amounts for FFY 2020 and continues this funding through FFY 2025.

Federal aid, representing 21 percent of the total funding in Maryland's Transportation Trust Fund (TTF), supports the multimodal investments in the State’s FY 2020 - FY 2025 Consolidated Transportation Program (CTP).

**Highways and Transit**

Most of the federal funds received by MDOT come 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, and congestion mitigation.

The CTP allocates these federal funds to projects in the program based on reasonable assumptions of authorization given the FAST Act. MDOT expects to have approximately $665 million in highway formula funding and $199 million in transit formula funding in FFY 2020 for MDOT projects. The Purple Line has received a commitment from the Federal Transit Administration for New Starts funding. The FFY 2018 Appropriations Act supported the Administration's request for $900 million for Maryland’s Purple Line, and to date the project has received $445 million in appropriations from the combined FFY 2016 - FFY 2020 Appropriations bills.

Federal highway program funds authorized and apportioned to the states are subject to annual ceilings, which determine how much of the authorized money can be obligated in any given year. This ceiling is referred to as Obligational Authority (OA) and is imposed by Congress annually in response to prevailing economic policy. Since FFY 2004, OA has ranged from 84 percent to 95 percent. The OA level received in FFY 2019 was 90.1 percent. Given that Congress has passed a long-term bill with inflation built in, this CTP assumes an OA level of 94.0 percent for FFY 2020 through FFY 2025.

**Washington Metropolitan Area Transit Authority — WMATA**

Under the Fixing America's Surface Transportation (FAST) Act, in FFY 2020, the Washington Metropolitan Area Transit Authority (WMATA) anticipates receiving $348.5 million in FTA formula grants and $3.6 million in other federal grants (Congestion Mitigation and Air Quality) for bus and rail preservation activities. Additionally, FFY 2020 funding of $148.5 million is provided through the Passenger Rail Investment and Improvement Act (PRIIA). In total, WMATA expects to receive $500.6 million in federal capital funding in FFY 2020.

The region's jurisdictions created WMATA through an interstate compact as an agency of the State of Maryland, the District of Columbia and the Commonwealth of Virginia. Even with the recent creation of dedicated funding
in all three jurisdictions, federal funding is still WMATA’s largest single source of capital funding. Overall, WMATA’s six-year capital budget is $9.3 billion; with $2.9 billion from federal sources, $5.9 billion in state/local funding, and $408 million from other sources.

MDOT’s top priority is to restore the safety and reliability of the WMATA system. This is demonstrated through investments in safety and state of good repair. This CTP includes a total of $300 million ($50 million each year in FY 2020 through 2025) as Maryland’s matching contribution required by the federal PRIIA legislation. To date, the signatory parties have fulfilled their promise by providing funds to match federal grants provided from FY 2010 through FY 2019.

**Aviation**

The Federal Aviation Administration (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 will range from $3.5 million to $4.0 million for the BWI Marshall Airport during the six-year period. Entitlement funding is calculated using enplanement and cargo-based formulas for the BWI Marshall Airport and adjusted based on the airport’s authority to collect Passenger Facility Charges (PFC). The FAA Reauthorization Act of 2018 extended FAA authority to 2023. The MDOT MAA has received entitlement AIP funding in FFY 2019 of $4.9 million toward the reconstruction of Taxiway Z. In addition, the MDOT MAA received $5.0 million of discretionary AIP funding in FFY 2019 toward the reconstruction of Taxiway Z. In December 2019, $3.4 million of Supplemental AIP funding was received toward Taxiway F lighting and relocation to meet EB75 standards.

Martin State Airport continues to receive its annual AIP entitlement funding of $150,000 which is applied to eligible projects. 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) which is anticipated to be complete in early 2020.

In FY 2019, MDOT MAA administered $4.46 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 $21 million in matching FAA funds and $2.2 million in airport owner investment. This level of funding is expected to provide $15-$20 million each year over the next over the next six years.

**Port of Baltimore**

The MDOT MPA received approximately $300 thousand in other environmental related grants to support its efforts in being a good steward of our environment. The MDOT MPA expects to receive approximately $4.0 million in dredging and environmental grants in FY 20.

The MDOT MPA was awarded a BUILD Grant of $6.6M in December of 2018 through the U.S. Department of Transportation to support Ports America Chesapeake, MDOT MPA’s tenant, with the Seagirt Marine Terminal Berth 3 modernization project. This project will increase capacity for ultra-large containerships and improve the nation’s economic competitiveness by making the Port of Baltimore more efficient. The project includes adding a second 50-foot deep berth, landside improvements at the new berth, and dredging to widen and deepen the turning basin.

Terminal security efforts are enhanced with federal assistance through the Port Security Grant Program. The MDOT MPA anticipates federal assistance of approximately $900 thousand to facilitate several projects to improve security at its terminals.

Announced by USDOT in July 2019, Maryland will receive $125 million as part of the federal Infrastructure For Rebuilding America (INFRA) Grant Program. The funding will allow the state in partnership with CSX to increase clearance of the Howard Street Tunnel and bridges over the rail to allow for double-stack shipping containers. This will increase the number of containers handled by the Port of Baltimore and generate a significant amount of new jobs.
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, operating revenues, and corporate income taxes. 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 Airport. 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, known as the FAST Act, in December 2015, which provides investment in transportation infrastructure only through FFY 2020.

Where The Money Comes From

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, and capital projects. A portion of these funds is directed for General Fund purposes, including environmental, fuel tax collection, and state police programs. Funding is also provided as capital grants to Maryland’s counties and Baltimore City for local transportation needs. After operating costs, debt service, and local transportation grants, the remaining money goes toward funding capital projects. This document, Maryland’s Final CTP, is the six-year capital budget for all State transportation projects. This Final FY 2020 – FY 2025 CTP totals $16.3 billion, $13.6 billion of which comes through the Trust Fund and $2.7 billion from “Other” fund sources, including local contributions, WMATA direct funding, PFC airport fees, etc.

Where The Money Goes

Total projected Trust Fund revenues amount to $31.1 billion for the six-year period covered by this CTP. These amounts are based on the assumption that the economy will continue along a moderate growth scenario for the next six years. MDOT maximizes its finances by leveraging them with bonds, discretionary grants and Public-Private Partnerships.
Planned Capital Expenditures

<table>
<thead>
<tr>
<th></th>
<th>STATE FUNDS</th>
<th>FEDERAL AID</th>
<th>OTHER*</th>
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<th>PERCENT OF TOTAL</th>
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<td>903.0</td>
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<td>MDOT SHA</td>
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<td>TOTAL</td>
<td>7,747.3</td>
<td>5,822.0</td>
<td>2,756.4</td>
<td>16,325.7</td>
<td>100.0</td>
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Note: Figures may not add perfectly due to rounding.
* Funds not received through the Trust Fund. Includes some funds from Maryland Transportation Authority (MDTA), Passenger Facility Charges (PFC), Customer Facility Charges (CFC) and federal funds received directly by WMATA.
** Projects using non-trust fund financing sources are included in the total.

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

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;
- 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 last year, in the spring of 2018, with the AR Advisory Committee, based on the updated 2040 MTP Goals and Objectives (please visit 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 has also 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 respond to these new requirements now that the final regulations and guidance have been issued to ensure we demonstrate the effectiveness of MDOT’s programs.

Finally, MDOT is internally assessing its performance in meeting our customers’ needs through our quarterly MDOT Excellerator program. This performance measurement system uses data to target structural and process improvement efforts to make MDOT better. This is achieved through ten teams representing all of the TBUs. The teams develop and implement new and improved initiatives across the organization. For more information, visit: mdot.maryland.gov/MDOTExcellerator.
HOW TO READ THIS DOCUMENT

The Maryland Department of Transportation (MDOT) is organized into transportation business units responsible for different modes of travel. Projects in the Consolidated Transportation Program (CTP) are listed under the transportation business unit responsible for the project’s delivery.

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 Maryland Transportation Plan (MTP). It also shows any significant change in the project since the previous year’s CTP, as well as the funding for the project over 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.

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.

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. Following this introduction is an explanation of some of the significant changes from last year’s CTP. This section lists major projects added to the CTP or projects that have advanced to a new stage of development. It also lists changes in construction schedules and projects removed from the CTP. The CTP also includes information regarding the economic trends and assumptions and future revenue projects that inform the capital programming process.

<table>
<thead>
<tr>
<th>POTENTIAL FUNDING SOURCE:</th>
<th>SPECIAL</th>
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<th>GENERAL</th>
<th>OTHER</th>
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<tr>
<td>PROJECT CASH FLOW</td>
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<tr>
<td>PHASE</td>
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<td>EXPEND</td>
<td>CURRENT</td>
<td>BUDGET</td>
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<tr>
<td>Planning</td>
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<td>Construction</td>
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<td>Total</td>
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