

Maryland Department of Transportation



MDOT OVERVIEW
FY 2017 Budget Allowance

Transportation System Performance Highlights for 2016

MDOT's performance is summarized below by the goals set in the current Maryland Transportation Plan – Economic Prosperity, Safety & Security, System Preservation, Environmental Stewardship and Community Vitality.

ECONOMIC PROSPERITY

The economy of Maryland depends on an effective transportation system – one that includes roadways, transit systems, aviation systems, ports and other transportation systems that work together to allow efficient movement of people and goods within and through the state. This multimodal transportation system enables commuting, shopping, leisure travel, the delivery of materials and the shipping of products from Maryland businesses. Making investments in the State's transportation system not only supports a healthy state economy, but also continues to enhance access to markets across the globe. Adequate spending on transportation services and maintenance allows business activities and personal travel to be more efficient and cost-effective, supporting and enhancing Maryland's position of economic competitiveness.

The FY 2016–FY 2021 CTP includes a package of investments in the State's multimodal transportation system that will contribute to Maryland's economic development. Projects include improvements to Baltimore/ Washington International Thurgood Marshall Airport (BWI Marshall), expansion of the Port of Baltimore (the Port), transit center construction, Purple Line light rail, advanced traffic management systems, intersection capacity improvements, and bicycle and pedestrian improvements. The recently-opened Maryland House and Chesapeake House travel plazas on I-95 and the Seagirt Marine Terminal are examples of successful transportation Public Private Partnerships (P3) projects in the state. The Purple Line P3 is supporting economic development and many of MDOT's other policy goals while taking advantage of innovative financing and project delivery mechanisms.

Transportation investments create jobs, support residents and businesses, and position Maryland for success in today's economy. The diverse, multimodal projects listed in the FY2016–FY 2021 CTP also include funds for multimodal transportation projects – transit, bicycle and pedestrian improvements – supporting and enhancing local economic development and jobs creation, providing cost savings for residents and enhancing tourist activity. These investments provide a more robust, resilient and inclusive transportation network with additional options for travelers. The transportation infrastructure of Maryland affects not only its own economy, but the regional and national economy due to its location. The I-95 highway corridor, along with major rail and marine corridors, position it as a gateway to international trade and national goods movement. MDOT continues to work on multimodal freight initiatives, including adding double-stack freight capacity in the Baltimore & Potomac (B&P) tunnel, a large project supporting economic benefits associated with the Panama Canal expansion and congestion at other eastern seaboard ports.

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□ Key Initiatives:

MDOT: Approximately \$790 million has been programmed in the FY 2016–FY 2021 CTP for 10 statewide projects that support economic development announced as part of an 84-project, \$1.97 billion package announced in June 2015. Support short line rail lines such as those on Maryland’s Eastern Shore (\$26 million in the FY 2016–FY 2021 CTP for the State-Owned Freight Rail). In addition, SB 868 (Chapter 204) took effect in July 2015, authorizing the establishment and requirements of transportation network services such as Uber and Lyft in the state.

MAA: In FY 2015, BWI Marshall set an all-time passenger record, with over 22.7 million passengers, a 2.4% increase from FY 2014. In addition, international passenger traffic rose 55% in June 2015 – the highest international total for any one month in BWI Marshall’s history. In addition, BWI Marshall is requesting proposals for the design, development, financing, construction and operation of an airport hotel in FY 2016.

MDTA: Support the *E-ZPass* system to expedite the toll collection process, reduce toll plaza delays, decrease emissions and increase revenue for the agency. The \$54 million annual toll reduction (over a quarter billion dollars over five years) will stimulate Maryland’s economy for years to come (\$62.8 million in the FY 2016–FY 2021 CTP to Replace the Electronic Toll Collection and Operating System - 3rd Generation).

MPA: In 2015, the Port welcomed Maersk container shipping, with an expected 31,000 new containers per year and service to the Far East, Mediterranean and Northern Europe. In August 2015, the Port began working with an Asian container service to receive Under Armour imported goods, expected to ship around 800 containers a year.

MTA: The BaltimoreLink initiative will redesign the existing local and express bus routes, improve all aspects of bus service in the Baltimore metropolitan area and provide connectivity to MTA’s other modes of transit thereby increasing connectivity to local and regional job centers. Early route improvements include new service to the Amazon Distribution Center and to the Horseshoe Casino, and increased service on the Quickbus 40 improving transit to and from the West side of Baltimore City.

MVA: Invest in new technologies to maintain secure and accessible data for all MVA transactions. Promote efficiency and cost-effective measures at MVA offices, during license and registration processes, and in partnerships with Law Enforcement, Child Support Enforcement, Arrest Warrants, Courts Point System, Tax Compliance, Board

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of Elections, Organ Donor, and the Chesapeake Bay and Agriculture Programs (\$11.8 million in the FY 2016–FY 2021 CTP for Project Core Enterprise Management System).

SHA: Continue to reduce delay on Maryland’s roadways – in 2014, SHA reduced delay by 36.3 million vehicle-hours, saving roadways users \$1.26 billion. Continue to evaluate the potential expansion of the Coordinated Highways Action Response Team (CHART) program to determine its effect on user cost savings and reduction of delay on Maryland roadways (\$104.9 million in the FY 2016–FY 2021 CTP for CHART).

SAFETY & SECURITY

Effective safety planning, programming, and project delivery by MDOT’s transportation business units and partners contributes to enhancing the safe movement of people and goods and reducing traffic injuries and fatalities in Maryland. In 2014, there were 443 traffic fatalities in Maryland, the lowest number since 1948 when 401 highway deaths were reported, and also a decline from the 2013 number of 466. MDOT is dedicated to improving safety on all roads, bridges, transit networks, harbors and airports in the state. Three MDOT transportation business units - MTA, MPA, and SHA - won awards in 2015 recognizing their commitments to safety. MTA was awarded the GOLD Award for Safety for its Safety Rules and Compliance Program and MPA won two awards for excellence in customer safety. In October 2015, SHA won the AASHTO 2015 President’s Award in the Highway Traffic Safety category for the Ocean City Pedestrian Safety Team. Another notable achievement includes the completion of the Runway Safety Areas (RSA) program at Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall), in which \$350 million in airfield program improvements were accomplished well ahead of schedule.

The FY 2016–FY 2021 CTP and the Calendar Year (CY) 2011-2015 Strategic Highway Safety Plan (SHSP) guide strategic implementation for reducing fatalities and serious injuries on Maryland’s roadways, using a data-driven approach to identify solutions for the most pressing behavioral and infrastructure issues in Maryland. The Federal Fiscal Year (FFY) 2015 Highway Safety Plan, funds proven- effective projects to address crashes related to impaired driving, unbelted motorists, distracted drivers, aggressive driving, motorcycles, pedestrian and bicyclists, and older and younger drivers. New safety initiatives within these documents focus on impaired driving crashes, which have averaged approximately 8,000 annually over the last five years. Using crash and citation data, the Maryland Highway Safety Office (MHSO) and law enforcement agencies collaborate to locate high risk impaired driving areas and then direct resources to those locations for Driving Under the Influence (DUI) enforcement operations, such as checkpoints.

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A number of safety education and enforcement campaigns have been implemented throughout the year to drive down fatalities and create awareness on a variety of multimodal transportation safety issues. The *Smooth Operator Program*, implemented in the summer months, aims to stigmatize and reduce aggressive driving; the Road Ready e-brochure, published annually, informs drivers about major upcoming construction projects, and raises awareness about safety in work zones; the *Ocean City Walk Smart!* campaign continues to prevent pedestrian fatalities during the busy summer months along the coast; and MDTA leads efforts during April's Distracted Driving month to educate drivers about the dangers of using a cell phone or texting while driving.

□ Key Initiatives:

MDOT: Continue to implement the \$1.97 billion funding program for highway and bridge safety projects in Maryland, whereby approximately \$355 million will be spent to improve safety in 25 locations.

MAA: Ahead of the FY 2015 Federal deadline established by the U.S. Congress, BWI Marshall's commercial runways met the updated RSA standards. Approximately \$350 million in airfield program improvements, including runway pavement reconstruction, grading, airfield lighting improvements, taxiway upgrades, enhancements to navigational aids and other associated projects were completed. Security improvements include \$22.0 million in the FY 2016–FY 2021 CTP for an International Checked Baggage Inspection System at BWI Marshall.

MDTA: Continue to support efforts to reduce distracted driving fatalities and serious injuries year-round by providing education, enforcement efforts and increased activities during April National Distracted Driving Awareness Month. Also, improve security of the toll roads by investing \$1.4 million (as listed in the FY 2016–FY 2021 CTP) for Installing Security Systems and Video Surveillance at Major Bridges.

MPA: Continue to provide safe and reliable customer service at the Port of Baltimore's (The Port) cruise terminal. In 2015, the Port won two international customer service awards from Royal Caribbean Cruise Line that recognize the Port's efforts to safely board and debark passengers from cruises. MPA will continue to advance port security through the \$1.7 million in the FY 2016–FY 2021 CTP for the Terminal Security Program.

MTA: Enhance public safety and security for transit riders through installation of high-resolution surveillance cameras to monitor and record activity associated with rail platforms. The cameras are a part of the Homeland Security CCTV Phase IV and

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are viewable by the MTA Police in realtime. Cameras are to be installed at the following MARC stations: College Park, Penn Station, and West Baltimore (\$1.2 million in the FY 2016–FY 2021 CTP for CCTV Improvements).

MVA: The MHSO continues to explore innovative solutions to reduce impaired driving fatalities and serious injuries. Launched in 2015, the ENDUI (End DUI) smart phone application helps people plan ahead or find a safe ride home to avoid impaired driving with features allowing users to: prevent impaired driving by allowing users to create a designated driver contact list; easily locate transit and taxi options; estimate their blood alcohol concentration level; and participate in two motor skills tests to gauge response time.

SHA: Continue to improve work zone safety to reduce sharp increases in fatality and injury trends over the past three years. Each April is Work Zone Awareness month, but throughout the year, education strategies, including social media, web banners, radio public service announcements and an e-brochure “Road Ready” are used to save lives in work zones. Dynamic Message Signs are another way SHA communicates important messages that help improve safety on Maryland Roads (\$3.2 million in the FY 2016–FY 2021 CTP for CHART - Areawide Dynamic Message Signs Deployment - Phase 3).

SYSTEM PRESERVATION

From the Eastern Shore to Western Maryland, it is essential that the State maintain and preserve its strong and well-established transportation network. Maintenance of the State’s existing transportation system is one of the top priorities of the MDOT Administration and its business units. In the FY 2016– FY 2021 CTP, bridge and roadway maintenance are two significant funding priorities in the State, followed by rail and bus maintenance. Preservation and maintenance projects dominated the landscape of infrastructure investments in FY 2015 at a cost of \$622 million, including 66 highway segment resurfacing projects, 22 bridge rehabilitation/replacements, 10 safety/ geometric improvements and 354 other rehabilitation projects.

Maryland’s roads and bridges connect communities, economic centers and destinations, while also moving commuters, businesses and visitors within and through the state efficiently, safely, and on time. SHA has spent more than \$287 million in FY 2015 on resurfacing roads, a 12% increase from FY 2014. The number of “structurally deficient” bridges in the state – bridges that are safe for travel, but need to be programmed for repairs or replacement – is an essential measure of system preservation. SHA has been making strides in reducing this number year after year, and by April 2015, the number of SHA structurally deficient bridges in the state was at an all-time low – 69 bridges out of 2,565 statewide – due to SHA’s ongoing focus on repair and rehabilitation of SHA bridges. In

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addition, the only structurally deficient MDTA bridge is programmed for replacement starting in 2018, which will bring MDTA's number of structurally deficient bridges down to zero once the bridge is replaced.

Preserving the quality of Maryland's transit systems, airports, ports, and bicycle and pedestrian facilities is critical to maintaining the state's connectivity with surrounding states and the globe. A total of \$6.12 billion (\$1.02 billion each year through 2021) is included in the FY 2016–FY 2021 CTP for system preservation projects in Maryland: \$250 million for the Maryland share of Washington Metropolitan Area Transit Administration (WMATA) state of good repair and preservation program, \$103 million for MVA preservation projects, \$194 million for MDOT, \$234 million for MAA, \$229 million for MPA, \$363 million for MTA, and \$5.1 billion for SHA. In 2015, MTA will continue to invest in Maryland's transit network through Automatic Vehicle Location (AVL) systems for the state's Local Bus network, and an Asset Management Plan to provide insight into maintenance/capital needs. To continue to provide safe, reliable and efficient transportation options within the state, that support Maryland's growing economy, MDOT is committed to ensuring its transportation system remains high-quality, reliable and efficient.

❑ **Key Initiatives:**

MDOT: Continue to fund system preservation needs in the FY 2016– FY 2021 CTP at \$6.1 billion through FY 2021.

MAA: In July 2015, the FAA gave a \$16.8 million grant to Baltimore/ Washington International Thurgood Marshall Airport (BWI Marshall) to complete the fourth phase of a multi-phase comprehensive taxiway improvement program for Runways 10/28 and 15R/33L. This Airport Improvement Program (AIP) grant helped fund the fourth phase of the overall program, including the relocation and reconfiguration of various parts of the airport taxiway system to meet FAA safety and design standards, elimination of unclear taxiway configurations, provision of a dual parallel taxiway system, and enhancement of airport capacity to permit unrestricted operations during low-visibility conditions (\$78.2 million in the FY 2016–FY 2021 CTP for Phase 4).

MDTA: Support preservation of all MDTA facilities and expand the current system preservation program to include preventative maintenance activities. Critical highway links that underwent maintenance work in 2015 included the Bridge Deck Overlay on the Baltimore Beltway south of the Key Bridge, I-95 south of the Fort McHenry Tunnel, Pavement Resurfacing of NB/SB I-95 between MD 24 and Tydings Memorial Bridge, and the Rehabilitation of I-95 Bridges over Herring Run and CSX (\$3.1 million in the FY 2016– FY 2021 CTP for deck of I-95 Fort McHenry Tunnel).

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MPA: Continue to renovate port facilities at Dundalk Berth 4, manage an effective dredging program to maintain and improve shipping channels to the Port of Baltimore, and work towards increasing the capacity at the Cox Creek Dredged Material Containment Facility (DMCF) (\$164 million in the FY 2016–FY 2021 CTP for increasing the capacity at the Cox Creek DMCF and \$60.2 million for the reconstruction of berths 1- 6 at Dundalk Marine Terminal).

MTA: Continue to invest in the maintenance and preservation of all MTA facilities, including working with the FTA on the development of the MARC Northeast Maintenance Facility in Perryville, Maryland. Maintain and replace transit vehicles, including annual bus procurement to replace vehicles in service for 12 or more years and the Light Rail vehicle mid-life overhaul (\$7.9 million in the FY 2016– FY 2021 CTP for the MARC Northeast Maintenance Facility).

MVA: Maintain facilities, information and communication systems to ensure seamless operation (\$4.0 million in the FY 2016–FY 2021 CTP for security system preservation and improvement, \$4.4 million for telecommunication system preservation and improvement, and \$2.8 million for central document processing system preservation).

SHA: Continue investing in maintenance of structurally deficient bridges throughout the state, simultaneously increasing the use of more durable roadway materials and recycled materials. An online asset management dashboard is being developed to publish interactive maps with pavement conditions and bridge status.

QUALITY OF SERVICE

Every day, MDOT implements projects, programs, initiatives and technologies to provide efficient and reliable transportation services that meet the needs and expectations of system users. To provide quality service, MDOT employs strategies to increase efficiency, such as streamlining the Purple Line through practical design changes to provide cost-effective transit service (such as buying fewer trains, downsizing the train maintenance facilities and modifying station architecture requirements); and augmenting MVA online services to reduce costs while enabling system users to conduct many types of transactions from a personal computer. In addition, MDTA will be updating the *E-ZPass* website for ease of use for customers.

To enhance customer service, MDOT tracks customer priorities and customer experience with Maryland transportation facilities and services. MDOT monitors customer service and

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satisfaction email services, hosts online comment centers, and conducts customer satisfaction surveys. Public comments and priorities are taken into consideration as MDOT and its partners develop strategies and projects that will improve facilities and services. In July 2015, tolls for bridges, tunnels and roadways across Maryland were lowered as part of a statewide toll-reduction plan, while still maintaining an MDTA budget of approximately \$2 billion over six years. In October 2015, BaltimoreLink, a \$135 million multi- phase plan, was initiated to redesign the entire local and express bus routes throughout Baltimore and provide interconnection to other transit modes.

A key component of delivering quality service is to provide a reliable transportation system so that Maryland's transportation system users can plan to travel to their destination comfortably, conveniently and on time. Reliability is also extremely important to freight and goods movement, as Maryland's businesses depend upon the transportation system to move workers and goods quickly and dependably. MDOT is addressing this need by making strategic investments to reduce congestion on Maryland roadways, including Widening I-81 (Phase 1) from four to six lanes between the Potomac River and MD 68 (Lappans Road), widening approximately one mile of the I-695 Outer Loop from US 40 to MD 144 from three to four lanes, and constructing a diamond interchange to improve access to and from MD 5.

□ Key Initiatives:

MDOT: MDOT has reached out to stakeholders to identify the most important transportation needs to improve transit in the Baltimore Region. Using an MTA Stakeholder Work Group, MDOT has been reaching out to business leaders, local jurisdictions and transit users to better understand their needs and interests for improving transit and transit performance. Hearing from elected officials, business leaders and transit users is vital to developing a path forward.

MAA: Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall) was rated the best U.S. airport for healthful meal options by the Physicians Committee for Responsible Medicine (PCRM). The PCRM's 2014 Airport Food Review, released in 2015, found that 92% of BWI Marshall restaurants serve at least one nutritious option for travelers.

MDTA: The \$54 million annual toll reduction (over a quarter billion dollars over five years) was made possible by efficiencies in MDTA's capital and operating budgets that allow the agency to meet its financial responsibilities and implement the toll reduction. The MDTA maintains a robust capital budget of \$1.9 billion over six years. These investments will fund key projects, including cleaning and painting the westbound Bay Bridge, re-decking I-95 south of the Fort McHenry Tunnel, and replacing the Canton

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Viaduct (an elevated section of I-895 north of the Harbor Tunnel) (\$258.3 million in the FY 2016–FY 2021 CTP for Canton Viaduct replacement).

MPA: Averaging nearly 40 container moves per hour per crane, the Port of Baltimore is also known for being one of the most efficient seaports on the East Coast (\$29.6 million in the FY 2016–FY 2021 CTP for in the Port of Baltimore Export Expansion Project).

MTA: The BaltimoreLink initiative will include CityLink, 12 new high-frequency, color-coded bus routes to improve connections to jobs and other transit modes. Other key elements of the initiative will be the construction of transitways and transit hubs, and the use of priority transit signals. Announced a new 5-day weekly MARC pass with a lower fare than the 7-day weekly MARC pass fare, responding to concerns from MARC commuters regarding the June 2015 fare increase.

MVA: Maryland vehicle owners can now test vehicle emissions using two new, convenient self-service Vehicle Emission Inspection Program (VEIP) kiosks, one located at the Glen Burnie VEIP station and one located at the Gaithersburg MVA branch office – available 24 hours a day, seven days a week (\$9.4 million in the FY 2016–FY 2021 CTP for VEIP preservation).

SHA: SHA will address congestion and improve connectivity of communities through investment in key construction projects, including: \$23.8 million in the FY 2016–FY 2021 CTP for Widening MD 2/4 (Solomon’s Island Road) to provide a third through lane and auxiliary lane in each direction, \$154.0 million for MD 404, Shore Highway construction, \$9.5 million for MD 5, Point Lookout Road construction, \$14.8 million for MD 140, Reisterstown Road construction from Garrison View Road to Painters Mill Road (Baltimore), and \$48.7 million for Base Realignment and Closure (BRAC) intersections near Aberdeen Proving Grounds.

ENVIRONMENTAL STEWARDSHIP

MDOT’s commitment to environmentally sustainable transportation is delivered through the development and implementation of innovative and forward-looking strategies to ensure that Maryland’s transportation system protects statewide natural, cultural and community resources. By coordinating land-use, transportation and natural resource planning with partners in other state business units and local governments, MDOT helps ensure that maintaining, operating and expanding the transportation system minimally impacts the environment. This is accomplished in part by using Maryland’s Green Infrastructure Plan and Chesapeake Bay Restoration priorities as a guide to minimizing negative impacts and using best-management practices to support Maryland’s conservation goals.

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To help decrease pollution from entering Maryland's waterways and meet the Federal Total Maximum Daily Load (TMDL) requirements, the FY 2016– FY 2021 CTP supports a comprehensive approach including: 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. In total, this multifaceted approach helps move Maryland closer to meeting mandated water quality targets.

MDOT is deploying multiple strategies to help reduce emissions and manage energy consumption from all facets of the transportation sector. This includes selecting more environmentally friendly options during fleet replacement for SHA and MTA, operator requirements limiting idling, installation of alternative fuel and electric vehicle charging stations at MDOT facilities, and other operational strategies such as installing solar power grids and more efficient lighting and traffic signals.

MDOT is implementing these strategies and many others in cooperation with our partners in the metropolitan planning organizations (MPOs), the Maryland Department of the Environment (MDE), local governments and the private and not-for-profit sectors. Through leadership and guidance in the areas of environmental compliance, stewardship and sustainability, MDOT, MDTA and transportation business units have a proven record of being national leaders in both long-range environmental planning and policy programs, and day-to-day operations.

□ Key Initiatives and CTP Projects

MDOT: MDOT addresses climate change through incentive programs and technology investment to reduce vehicle emissions and manage transportation energy consumption. MDOT chairs the Maryland Electric Vehicle Infrastructure Council (EVIC), which spearheads Maryland's effort to promote the adoption of electric vehicles (EVs) through outreach, infrastructure planning and legislation. MDOT is also working on updating its Green Book, which serves as the primary input into the transportation sector portion of the 2015 Greenhouse Gas Reduction Act (GGRA) Plan Update and highlights MDOT's activities in achieving greenhouse gas (GHG) emission reductions consistent with goals set forth in the GGRA. In addition, MDOT is also working on a post-2020 analysis that assesses GHG emission trends and forecasts for the transportation sector in Maryland and documents the primary factors impacting these emission trends. Similar to the 2025/2030 analysis conducted previously, the objective of this analysis is to understand potential long-term trends in GHG emissions from the transportation sector in Maryland (\$24.0 million in the FY 2016–FY 2021 CTP for Transportation Emission Reduction Program).

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MAA: In 2014, MAA passed 12 Energy Conservation Measures, aimed to decrease the agency's energy usage. Since the passing of those measures, MAA has seen increased efficiencies in lighting, water conservation, heating and air conditioning, and solar energy usage. Savings from 2014 were around \$2.2 million, and 2015 savings increased to just below \$2.5 million.

MTA: MTA is going beyond its environmental policy commitments by actively engaging in ongoing sustainability initiatives in energy conservation, materials and waste management, fuel management and alternative fuels, stormwater management, and award winning green infrastructure projects (\$424 thousand in the FY 2016–FY 2021 CTP for energy savings improvements). MTA now provides service with 41 new 40-foot clean technology buses, bringing the share of clean technology buses in MTAs fleet up to 89%.

MDTA: MDTA is addressing the Environmental Protection Agency (EPA) Chesapeake Bay Restoration goals by completing and refining an inventory of impervious areas, investigating innovative approaches to implement stormwater retrofits, and designing and constructing bio-swale and bio-filter stormwater retrofits along MDTA highways, to achieve the goal of treating 20% of untreated impervious surfaces by 2020.

In FY 2015, MDTA received approval from MDE for stormwater management and erosion and sediment control (ESC) plan review and permitting authority. This significant change allows MDTA to approve ESC field changes during construction, reduces project delays and costs, ensures desired environmental outcomes, and improves customer service to all stakeholders. In 2015, over 4,000 ESC inspections were performed by MDTA, independent environmental monitor inspections and quality assurance inspections with 16 non-compliance findings, for a compliance rate of 99.6%.

Renewable Energy – Utilizing a grant program from the Maryland Energy Agency, MDTA coordinated the installation of two anemometer towers at the Francis Scott Key and Point Breeze facilities in December 2014. Over a year, data from the towers will be collected and used to calculate an average windspeed, then cross-referenced to the promulgated standards from the Department of Energy (DOE) Wind and Water Technologies office. If the data supports the installation of a wind turbine at either or both locations, MDTA will start to evaluate engineering and fiscal considerations and potentially plan for the infrastructure in the future.

Environmental Management – MDTA continues to maintain an active environmental management program. Through routine facility assessments, annual employee

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training, development of Standard Operating Procedures and the development of an Environmental Management System (EMS), MDTA is continually evaluating the effectiveness of its environmental management programs, as well as its overall

MPA: MPA developed an Environmental Strategy and Action Plan (“Plan”), a roadmap for meeting the agency’s environmental responsibilities including voluntary goals for continuous improvement. The Plan provides for calculating and evaluating emission data in order to implement air emission reduction programs, such as replacing dray trucks and cargo handling equipment, greening the MPA fleet, and improving efficiency of cargo operations. The MPA is developing or updating its water quality improvement and TMDL reduction plans, and a major component is the installation of innovative or emerging technologies. The algal turf scrubber, floating treatment wetlands and green roofs are a few examples of these technologies that allow for their advancement and acceptance. Another significant aspect of the Plan is the evaluation of alternative fuels, including solar, wind and fuel cells, as well as using more efficient lighting and promoting energy conservation through training of employees (An example project is the Stormwater Drain Structure Inspection and Rehab Program, which has \$900 thousand dedicated in the FY 2016–FY 2021 CTP).

MVA: MVA continues to work with MDE to ensure compliance with State emissions regulations, and continues to monitor the number of registered vehicles in non-attainment counties to ensure Vehicle Emission Inspection Program (VEIP) testing compliance. Maryland vehicle owners can now test vehicle emissions using two new, convenient self-service VEIP kiosks, one located at the Glen Burnie VEIP station and one located at the Gaithersburg MVA branch office – available 24 hours a day, seven days a week. The MVA’s “Green Way” is a project to promote the use of Alternative Service Delivery (ASD) as an alternate means of accessing MVA services (online), and therefore reducing the VMT and trips to the MVA.

SHA: SHA completed the Climate Change Adaptation Plan with Detailed Vulnerability Assessment pilot project in Anne Arundel and Somerset counties and initiated analysis in FY 2015 of six additional counties for vulnerability to future flooding. SHA continues to investigate and develop new tools and methods to determine asset vulnerability to climate change and expand analysis to all tidally influenced counties of Maryland. National Environmental Policy Act(NEPA) reviews for SHA projects now include screening for locations subject to future sea level inundation.

SHA continues to far exceed the 30% facility recycling rate mandated under the Maryland Recycling Act, and achieved a recycling rate of 55% in CY 2014. SHA used 267,694 tons of recycled asphalt pavement in highway construction projects in CY2014; an increase of 74% over CY2013. SHA increased its inventory of

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stormwater management facilities to 3,638 and continued to meet its goal to maintain 90% of inventoried facilities functioning as designed in FY 2015. SHA has reduced 65,241 pounds of nitrogen pollution, 10,523 pounds of phosphorus pollution and 5,201,477 pounds of sediment pollution into local waterways since FY 2011. In addition, 52,566 trees were planted in FY 2015 to meet requirements of the Watershed Implementation Plan (\$588 million in the FY 2016–FY 2021 CTP Total Maximum Daily Load (TMDL).

COMMUNITY VITALITY

MDOT works to provide a comprehensive multimodal transportation network that is well connected and provides modal options for all users, including visitors and residents throughout Maryland. This includes projects to enhance and connect the State’s highway, transit, rail, freight, pedestrian and bike networks, ensuring communities across Maryland have improved access to key activity centers for goods and services while supporting healthy ways of life.

On a statewide level, the SHA’s Complete Streets policy advances MDOT’s overarching mission of “enhancing the quality of life for Maryland’s citizens by providing a balanced and sustainable multimodal transportation system for safe, efficient passenger and freight movement.” On a local level, initiatives within Maryland that promote and support bicycle and pedestrian travel include *Cycle Maryland*, which aims to make bicycling a viable transportation alternative, as well as the following programs: the Maryland Bikeways Program, Safe Routes to School, Transportation Alternatives, Federal Lands Access Program and the Recreational Trail Program. Together, these programs fund bicycle and pedestrian projects throughout the rural and urban areas of the state, supporting local jurisdictions with funding to assist in making biking and walking convenient, safe and reliable.

❑ Key Initiatives and CTP Projects

MDOT: Support alternative transportation options by improving transit accessibility, bicycle and pedestrian facilities, and overall transit access by making strategic investments in every corner of the state. Expand bicycling and walking opportunities by ensuring localities have access to funding for alternative transportation programs (\$91.6 million in the FY 2016–FY 2021 CTP for Transportation Enhancements Program/ Alternatives). Ensure that transit is reliable and efficient for all users by establishing a Transit Performance Plan that will highlight reliability, ridership, on time performance and farebox recovery. Improve connectivity by improving Maryland’s roads and bridges, upgrading highways to ensure safe and reliable travel. Implement a streamlined and cost-effective plan to enhance the transportation Public-Private Partnership (P-3) delivery method for the Purple Line.

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MAA: Support passenger growth and ensure safe and efficient passenger experience by continuing terminal improvements and airfield construction. Continue to support noise mitigation programs, ensuring communication between MAA and the surrounding communities through various active and engaged outreach programs such as the BWI Neighbors Committee, BWI Community Enhancement Program, Quarterly Noise Report, Airlines Progress Report and noise monitoring (\$40.4 million in the FY 2016–FY 2021 CTP for Terminal Development).

MDTA: Support the system preservation of tunnels and bridges along I-95 through pavement resurfacing, better lighting, and repairing and rehabilitating over 50 bridges north of the Fort McHenry Tunnel. MDTA is also working to reconfigure northbound and southbound I-95 Tunnel and the I-95 Express Toll Lanes (I-95 ETL) in order to provide a total of four continuous mainline lanes in each direction (\$74.7 million in the FY 2016–FY 2021 CTP for this project).

MPA: Continue to support and invest in environmental programs to improve air quality around the Port of Baltimore (the Port). Enhance air quality surrounding the Port with \$500,000 from the U.S. Department of Transportation (USDOT) by replacing old diesel trucks that are used to haul freight around port facilities with newer, cleaner trucks.

MTA: The BaltimoreLink initiative will transform the connectivity of transit in region by providing additional and more frequent connections from Local Bus to rails, commuter bus and mobility locations. MTA will improve on time performance and reliability of local transit options through real-time data improvements, increased on time reporting and improved maintenance tracking (\$486 thousand in the FY 2016–FY 2021 CTP for CAD/AVL Systems). MTA will continue to provide options to MTA bicycle-riding customers such as the MARC Penn Line trains equipped with the popular bike car, part of MTA’s newly-expanded MARC weekend bike car service.

MVA: Support the implementation of convenient and efficient use of alternative services to reduce customer wait times and enhance connectivity in branch offices through Internet and improved technology, kiosks, electronic delivery through a smartphone/ tablet application and telephone Interactive Voice Response (IVR) systems (\$10.3 million in the FY 2016–FY 2021 CTP for Alternative Service Delivery (ASD) Systems).

SHA: Continue to advance strategies to balance the safety and efficiency of roads with access to other modes of transportation, such as facilities for bikes and

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pedestrians through Maryland's Statewide Complete Streets policy. Use of practical design principles will aid in addressing the highest community needs.

Source: Annual Attainment Report – For a full report see

http://www.mdot.maryland.gov/newMDOT/Planning/CTP/Final_CTP_16_21/Documents/Attainment_2016_1_18_Single_LR.pdf

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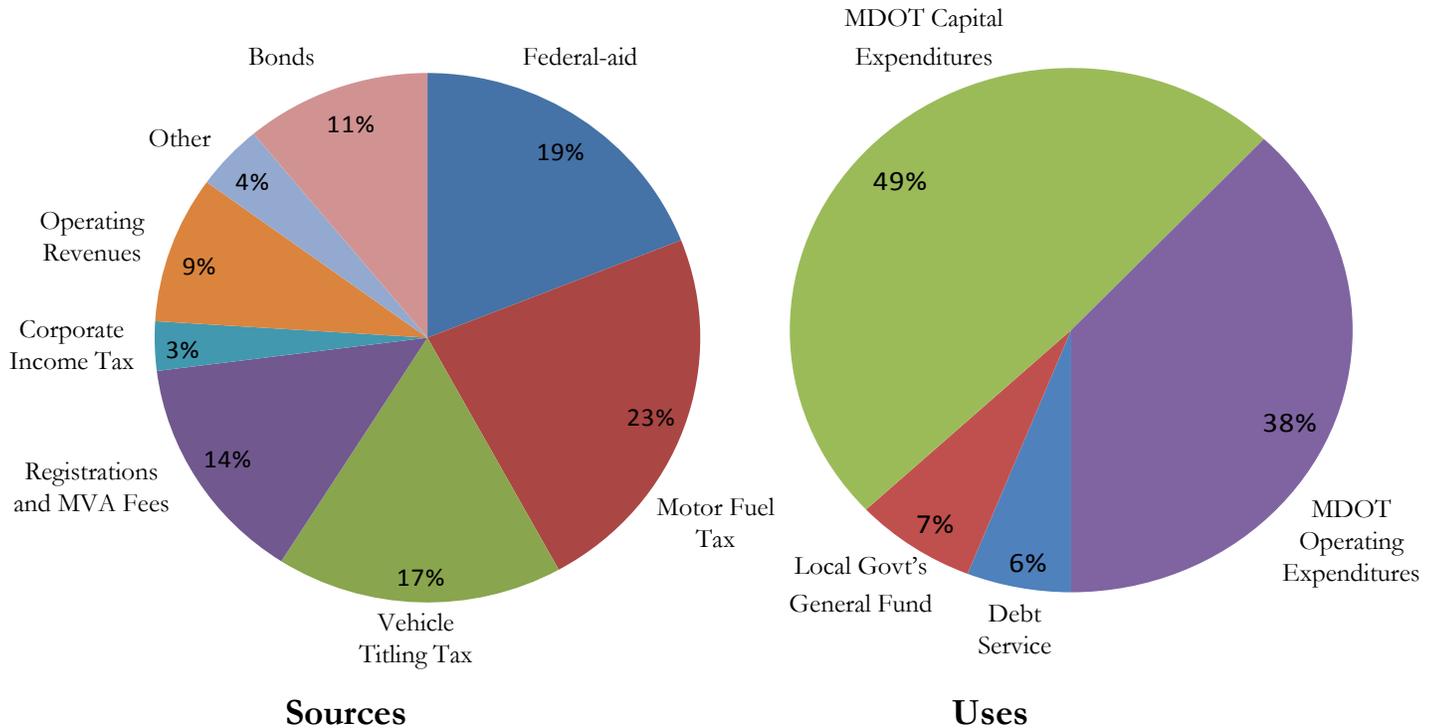
Trust Fund Outlook

FY 2016 – 2021

Transportation Trust Fund

FY 2016 – 2021

(Millions of Federal and State \$)



NOTE: Includes non-budgeted federal assistance to WMATA.

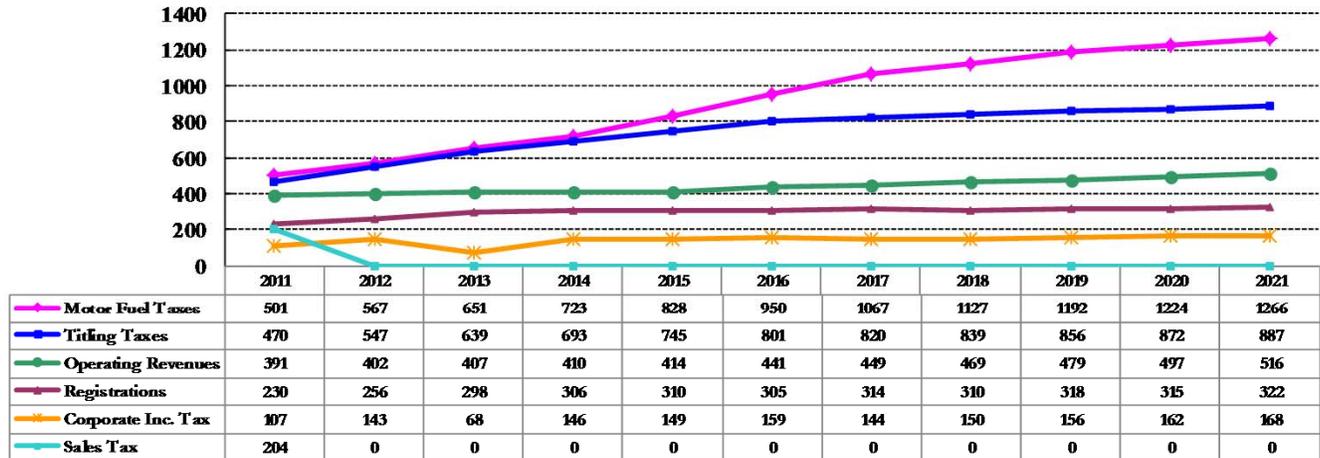
- ❑ The Transportation Trust Fund is dedicated to the support of transportation in Maryland. Revenues and expenditures each total approximately \$4.9 billion annually.
- ❑ The motor fuel tax and vehicle titling tax are the two largest sources of state revenue. Federal-aid covers a significant portion of the State's transportation capital program.
- ❑ Revenues are not earmarked for specific programs. About 93 percent of the total revenues remain with the Department of Transportation.
 - Seven percent is allocated through the Highway User Revenue Account and current statutory deductions to local governments and the State General Fund.

Maryland Department of Transportation

Major Revenues

FY 2011- 2021

\$ millions



NOTE: Amounts shown are Net Receipts

- Transportation user revenues are projected to increase moderately through the six-year planning period (FY 2015-2020).
- Transportation revenues have historically not been inflation-sensitive, and significant growth has resulted only from statutory rate increases. However, titling tax revenues and motor fuel tax revenues contain an inflation component. The indexing and sales and use tax equivalent components of motor fuel tax will vary with inflation.
- Motor fuel tax receipts are forecasted to increase between 0.5% a year. Titling tax receipts, while increasing over the long term, are projected to follow the business cycle in vehicle sales throughout the forecast period.
- Operating revenues have increased steadily and should continue to rise due to growth at the Port of Baltimore and BWI Airport.
- Registration Fees were last increased in FY 2005. Corporate Income Tax receipts reflect the changes to the portion allocated to MDOT based on legislation passed in the 2011 legislative session.

Maryland Department of Transportation

Major Revenues

FY 2011- 2021

- ❑ The 2007 Special Legislative Session increased the Sales & Use Tax rate from 5% to 6% and allocated portion of the proceeds to MDOT. MDOT's share was reduced for five fiscal years by the 2008 Session. The 2011 legislative session eliminated MDOT's distribution; in exchange MDOT receives a higher distribution of Highway User Revenues.
- ❑ Based on legislation passed during the 2013 session of the Maryland General Assembly, at the beginning of FY14 motor fuel tax indexing and a sales tax equivalent went into effect. The TTF receives a sales and use tax equivalent rate on all motor fuel other than aviation and turbine fuel that is calculated by multiplying a certain percentage by the prior year's average retail price for regular unleaded motor fuel (less federal and state excise taxes) purchased in the state. The current percentage (effective January 1, 2016) is 4%. The rate will increase to 5% on July1, 2016, and that rate will remain constant in future years.

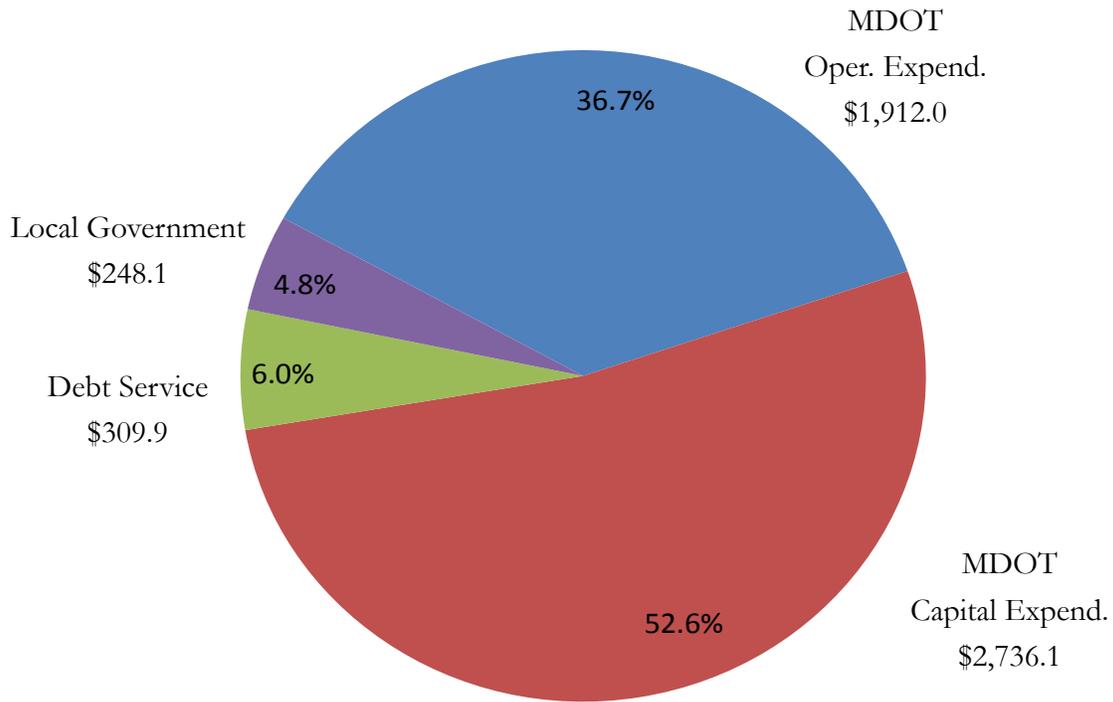
Maryland Department of Transportation

FY 2017 Allowance Summary

Maryland Department of Transportation

Total FY 2017 Allowance

(Millions of Federal and State \$)



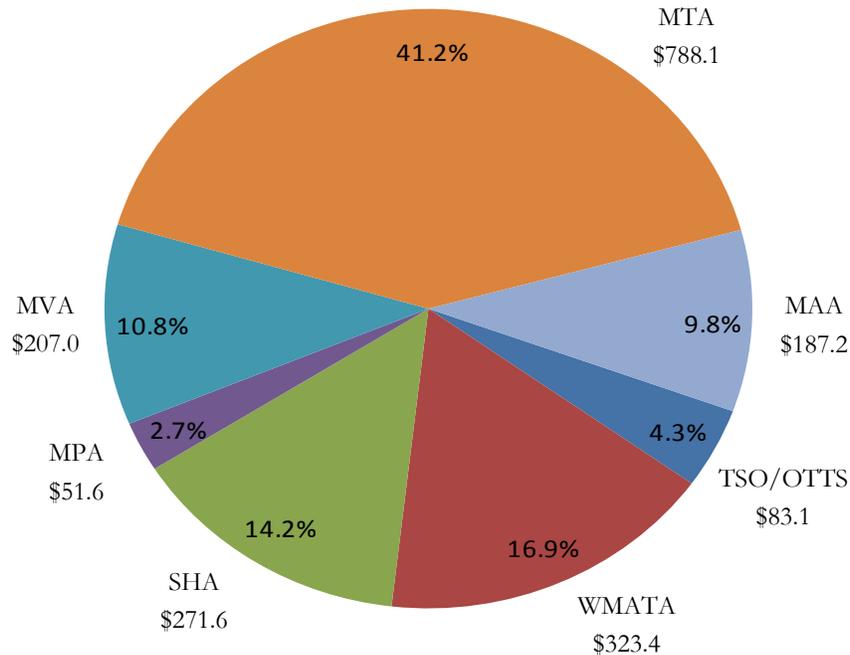
Total = \$5,206

NOTE: Does not include BRFA Reductions

- ❑ The Counties and Municipalities (including Baltimore City) receive revenues from the gasoline and motor vehicle revenue account. The Local government distribution is defined by statute.
- ❑ MDOT's FY 2016 capital expenditures are supported by \$1,020.4 million in federal funds (excludes local capital of \$65.9 million).
- ❑ Operating expenditures include all modal administration activities and are supported by \$449.1 million in operating revenues and \$97.2 million in federal funds.

Maryland Department of Transportation FY 2017 Operating Allowance

(Millions of Federal and State \$)



Total = \$1,912

NOTE: Does not include BRFA Reductions

- ❑ Operating revenues (\$428.8 million), MVA cost recovery fees (\$208.2 million) and federal operating revenues (\$95.0 million) offset 39 percent of the gross budgeted expenditures listed above.
- ❑ Maryland Port Administration and Maryland Aviation Administration recover operating expenditures through user fees from shipping lines, airlines and concessionaires.
- ❑ Maryland Transit Administration budget reflects total expenditures. Washington Metropolitan Area Transit portion includes only Maryland's share of subsidy.
- ❑ Motor Vehicle Administration recovers a majority of its operating costs from miscellaneous motor vehicle related fees (i.e. fees other than titling tax and vehicle registrations).

Maryland Department of Transportation

Operating and Capital Budget Summary

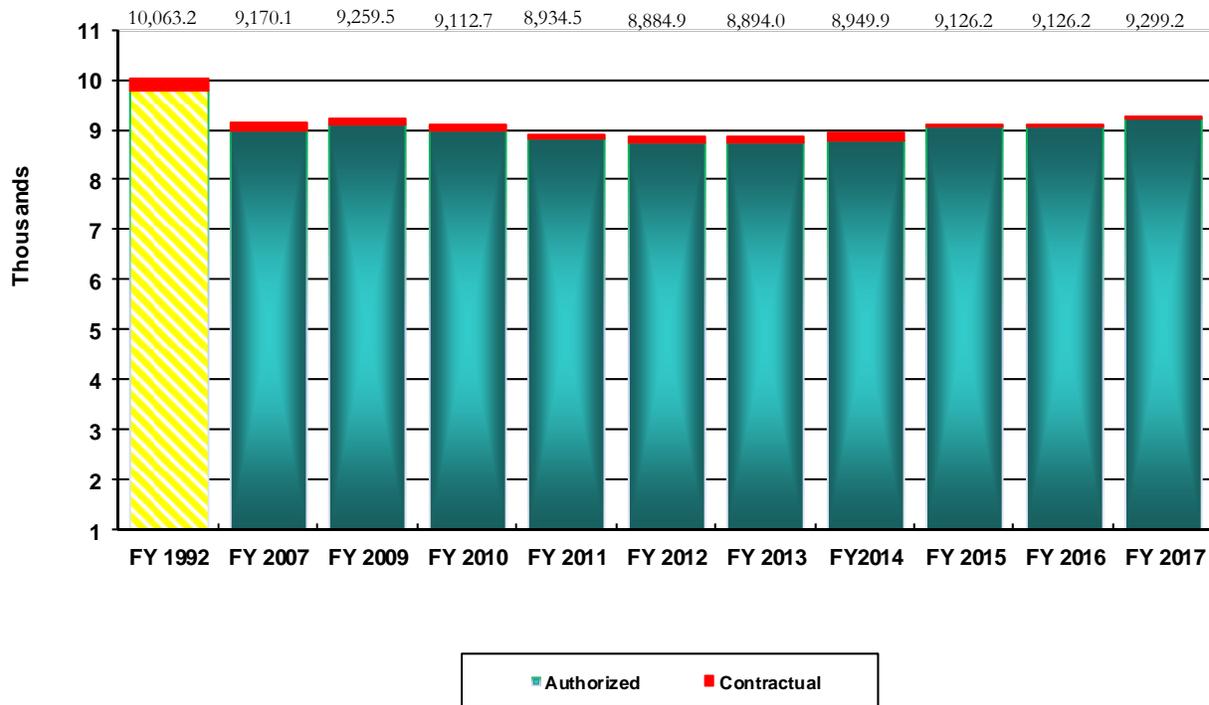
By Fiscal Year

(\$ millions)

	Fiscal Year <u>2016</u>	Fiscal Year <u>2017</u>	<u>Change</u>
<u>Operating Program</u>			
The Secretary's Office	83.1	83.1	0.0%
Washington Metropolitan Area Transit	320.4	323.4	0.9%
Motor Vehicle Administration	204.7	207.0	1.1%
Maryland Aviation Administration	186.9	187.2	0.2%
Maryland Port Administration	51.0	51.6	1.2%
Maryland Transit Administration	763.3	788.1	3.2%
State Highway Administration	262.0	271.6	3.5%
Total Operating	<u>1,871.4</u>	<u>1,912.0</u>	<u>2.1%</u>
Special Funds	1,773.9	1,813.7	2.2%
Federal Funds	96.6	97.2	0.6%
Reimbursable Funds	0.9	0.9	0.0%
<u>Capital Program</u>			
The Secretary's Office	104.0	143.8	27.7%
Washington Metropolitan Area Transit	130.7	153.6	14.9%
Motor Vehicle Administration	23.2	29.6	21.6%
Maryland Aviation Administration	155.3	120.5	-28.9%
Maryland Port Administration	121.2	116.9	-3.7%
Maryland Transit Administration	439.4	675.3	34.9%
State Highway Administration	1,332.1	1,496.4	10.9%
Total Capital	<u>2,305.9</u>	<u>2,736.1</u>	<u>15.7%</u>
Special Funds	1,600.4	1,715.7	6.7%
Federal Funds	705.5	1,020.4	30.9%
Reimbursable Funds	239.1	257.8	7.2%
<u>Distribution of Shared Revenues</u>			
County and Municipality Funds	169.3	177.4	4.6%
County and Municipality Capital Program	70.8	70.7	-0.1%
Total	<u>240.1</u>	<u>248.1</u>	<u>3.2%</u>
Special Funds	174.2	182.3	4.4%
Federal Funds	65.9	65.9	0.0%
Debt Service Requirements (Special Funds)	282.7	309.9	8.8%
Department Total	<u>4,700.1</u>	<u>5,206.1</u>	<u>9.7%</u>
Special Funds	3,831.2	4,021.6	4.7%
Federal Funds	868.0	1,183.5	26.7%
Reimbursable Funds	0.9	0.9	0.0%

Note: 1/ Does not include BRFA Reductions.
2/ Numbers may not add due to rounding.

Maryland Department of Transportation Position History



- ❑ MDOT has 173 new regular authorized positions in FY 2017. New positions are in SHA (27.0) for the increased capital program, in MVA (18.0) to convert Highway Safety positions from a University contract, and MTA (130.0) for BaltimoreLink. Three (3) IT positions were abolished by DBM in SHA (1.0), MVA (1.0) and MTA (1.0).
- ❑ MDOT's total position request in FY 2017 (authorized and contractual) represents a 1.9 percent increase.
- ❑ In FY 2017, contractual employees represents .44 percent (40.7 FTEs) of total positions and are used primarily at, SHA and MTA.

Maryland Department of Transportation

Operating Program History FY 2014 – 2017

Maryland Department of Transportation

Total Operating Expenditures

FY 2014 – FY 2017

(\$ thousands)

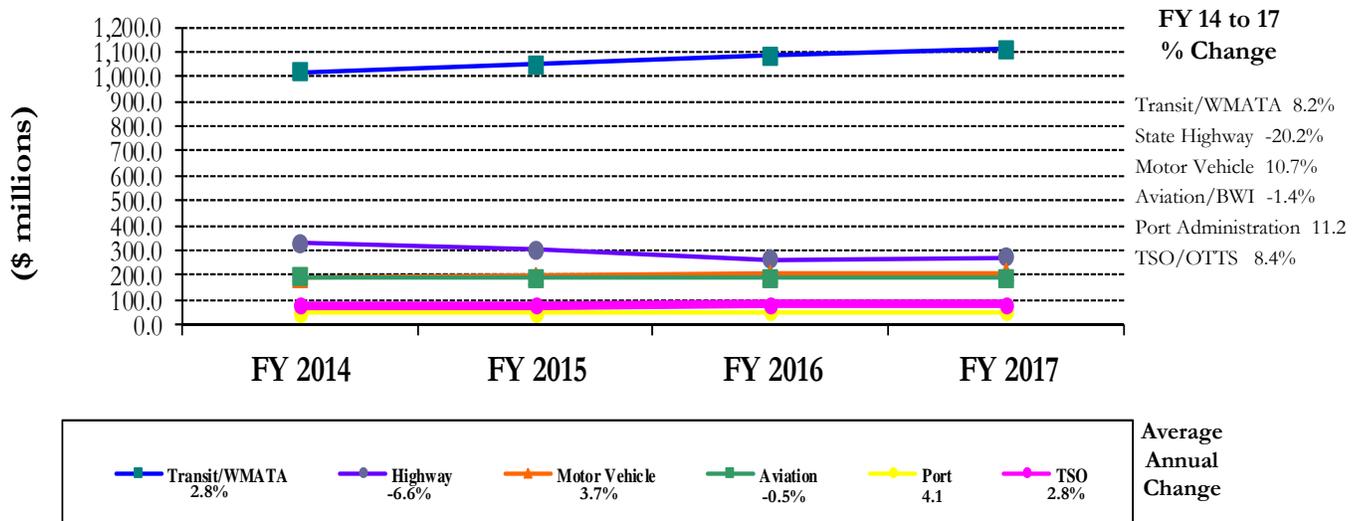
(\$ thousands)	<u>Actual FY14</u>	<u>Actual FY15</u>	<u>Amd App FY16</u>	<u>Allowance FY17</u>	<u>FY 15-17 Average Increase</u>
Authorized	8,818.5	9,085.5	9,085.5	9,258.5	1.6%
Wages & Benefits	613,622	633,780	644,635	664,711	2.7%
Other Operating Costs	<u>1,229,163</u>	<u>1,225,744</u>	<u>1,226,702</u>	<u>1,247,129</u>	0.5%
Operating Program Cost	1,842,785	1,859,524	1,871,337	1,911,840	1.2%
Annual Change		0.9%	0.6%	2.1%	
Special Funds	1,751,506	1,768,724	1,773,882	1,813,699	1.2%
Federal Funds	90,567	89,842	96,555	97,241	2.5%
Reimbursed Funds	712	957	900	900	9.5%

Note: Does Not Include “BRFA”.

Operating Budget Challenges

- MDOT continues to maintain and enhance the quality of service experienced by users of Maryland’s transportation system.
- MDOT enterprise agencies (MVA, MPA & MAA) continue to improve customer service.
- The MTA’s FY 2017 operating allowance includes additional positions and funding to implement BaltimoreLink.
- Increases in the costs of labor and materials add to the cost of on-going MDOT operations and maintenance activities.

Maryland Department of Transportation Operating Expenditures By Administration FY 2014- 2017



- MDOT operating expenditures have grown an average of 1% annually between 2014 – 2017.
- WMATA and the MTA operating costs have increased largely as a result of service improvements and paratransit mobility services.
- SHA expenditures are increasing due to personnel costs, maintenance costs, and winter maintenance increase of \$5 million a year until the budgeted level reflects the rolling five year average of actual expenditures.
- MVA’s increases are due to personnel costs and fixed charges.
- MPA’s increases are due to personnel costs.
- MAA increases are due to the continued rise of personnel cost, kiosk staffing, shuttle and HVAC services.

Maryland Department of Transportation

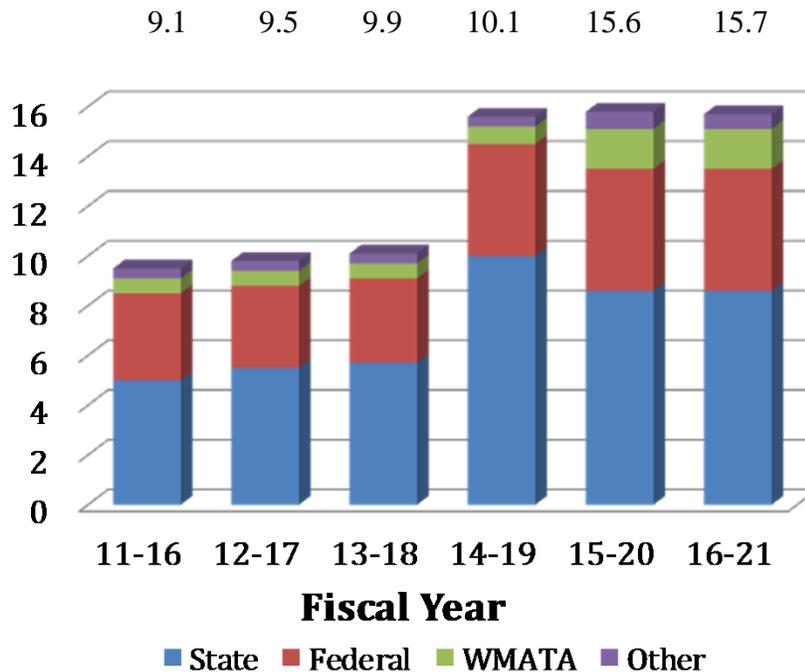
Capital Program

Maryland Department of Transportation

FY 2016-FY 2021 Capital Program

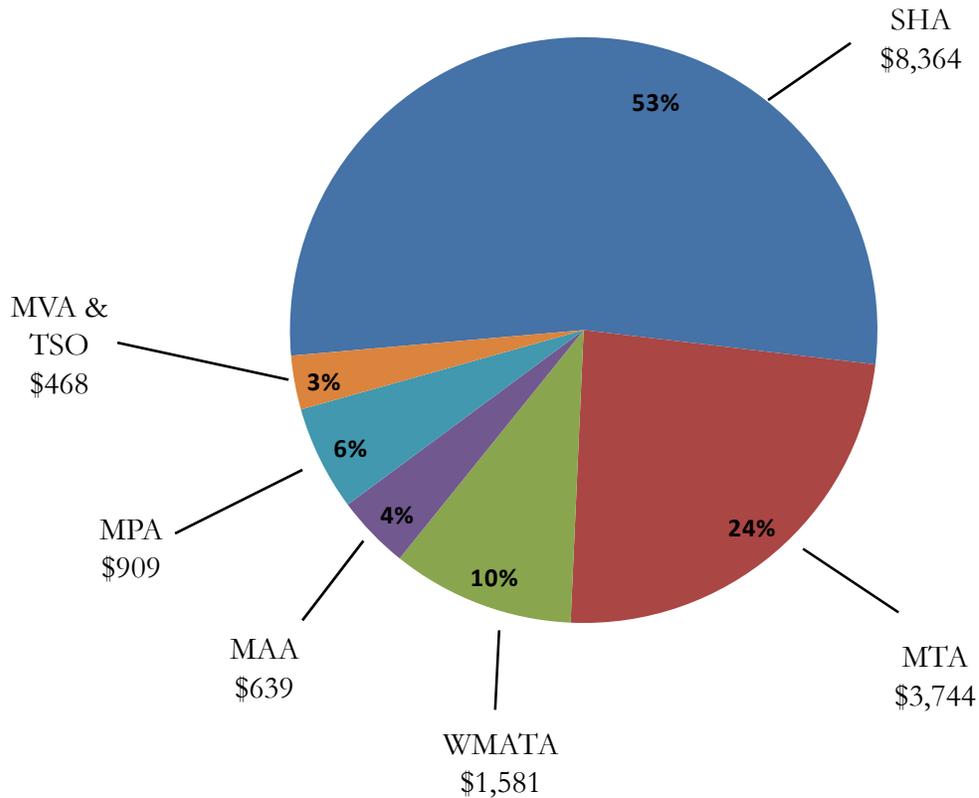
(Comparison to Five Previous CTP's)

\$ billions



- ❑ The significant increase in capital funding over the last two CTP's is due to the planned increase in funding from the Transportation Act. Most projects have started construction in 2015.
- ❑ The total capital program for FY 2016 - 2021 is \$15.7 billion. This includes funding from State and federal sources as well as other funding sources. The other funding comes mostly from passenger facility charges at BWI Marshall Airport but also comes from local contributions, customer facility charges, Maryland Economic Development Corporation and other miscellaneous sources.
- ❑ Approximately 31% of the FY 2016 funding is federal funds, including federal funds received directly by WMATA (\$106.1 million).

Maryland Department of Transportation FY 2016-FY 2021 Capital Program (\$ millions)



- ❑ Includes other non-budgeted funds from the Maryland Transportation Authority, Passenger Facility Charges, Customer Facility Charges, Maryland Economic Development Corporation (MEDCO) and federal funds received directly by WMATA