

Maryland Department of Transportation



**MARYLAND DEPARTMENT
OF TRANSPORTATION™**

MDOT OVERVIEW
FY 2018 Budget Allowance

Transportation System Performance Highlights for 2017

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

An efficient and robust multimodal transportation network is directly linked to Maryland's economic success, connecting life's opportunities. Whether using it to commute to work, attend business events through air travel, ship goods cross-country by truck or train or air, or walk to businesses in a community center, the State's transportation network serves a wide variety of purposes for residents, visitors and businesses. An effective transportation system reliably moves both goods and people, supporting the state economy and strengthening businesses by enabling commerce and the day-to-day activities through which it is accomplished. Located in the logistics center of the Mid-Atlantic, Maryland's economy benefits from the cultivation and provision of cargo transportation services.

Maryland's transportation infrastructure is not static – it is as dynamic as its citizens and its economy. As the population grows and changes, the demand for transportation changes with it. The transportation system investments and improvements must evolve to respond to the demand. MDOT provides new and enhanced multimodal facilities to mitigate delay and congestion, strategically serving growing regions and expanding markets as travel demand increases.

Maryland's FY 2017–FY 2022 CTP lists the State's six-year capital budget for transportation projects, including a range of multimodal projects such as transit and aviation improvements. These projects reflect the types and variety of investments the State of Maryland plans to make over the next six years. Some notable projects include construction of the Upper Chesapeake Rail Trail, a new interchange and park-and-ride lots at US 15 Catocin Mountain Highway and Monocacy Boulevard, and North Avenue Rising in Baltimore, a project to make over North Avenue that includes repaving the road and adding dedicated bus and bike lanes along its five-mile length. All these investments have a direct impact on the economic prosperity of the State, creating local jobs, easing access to and from commercial centers, and increasing the efficiency of freight movement and improving employees' commutes.

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□ Key Initiatives:

- **TSO:** TSO works with partners to address travel demand and support economic growth along the Northeast Corridor (NEC). TSO activities include implementing the Strategic Goods Movement Plan, and advancing projects including the Susquehanna River Rail Bridge project (rail crossing), reliability upgrades for the Amtrak/ MARC station at BWI Airport along with several other projects along the Washington-Boston Northeast Corridor, and is studying the Baltimore and Potomac (B&P) Tunnel on the NEC.
- **MAA:** Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall Airport) set an all-time passenger record, with more than 24.7 million passengers in FY 2016, an increase of 8.4% from FY 2015. BWI Marshall Airport has had 17 consecutive months of continuous monthly passenger records. BWI Marshall Airport is preparing for continued growth, as outlined in the FY 2017-FY 2022 CTP, with improvements in Concourses D and E and the International Concourse Extension.
- **MDTA:** This network is essential for the movement of people and freight and will aim to decrease delays along the most congested section of I-95 north of Baltimore City.
- **MPA:** In 2016, the Port welcomed the first container ship to arrive through the newly expanded Panama Canal. As one of the three east coast ports that can currently accommodate the larger Neo-Panamax cargo ships, the Port of Baltimore is set to be an efficient and cost-effective option for marine cargo.
- **MTA:** The BaltimoreLink network is currently underway with four new Express BusLink routes launched in June 2016. These routes, part of the entire BaltimoreLink system, greatly improves suburb-to-suburb connectivity, with final plans aimed to connect multiple transit modes and stations, improving accessibility and strengthening economic opportunities along these corridors. The network will expand access to jobs and services, with 33,600 more people within one-quarter mile of the system and adding 20% more jobs accessible within 30 minutes in the Baltimore metropolitan area.
- **MVA:** Enhance customer service initiatives that offer an increase in service enhancements and business processes that will benefit MDOT customers. Offer secure driver's license and identification cards that are nationally recognized. Increase

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- interagency partnerships and implement system enhancements that will allow for better integration of systems across all areas. \$18.2 million in the FY 2017-FY 2022 CTP will enhance the MVA customer-facing system and business processes to support customer interactions and service delivery.
- **SHA:** Continue to reduce congestion and monitor performance on Maryland's state and interstate roadways under the Coordinated Highways Action Response Team (CHART). The CHART program aids in improving safety and mobility and enhancing commerce with the reduction of travel time by providing critical traffic information to travelers, clearing crashes, assisting stranded motorists and monitoring current roadway conditions (\$105.1 million in the FY 2017-FY 2022 CTP for CHART). CTP projects include I-270 Innovative Congestion Management; MD 175, Annapolis Road, Base Realignment and Closure (BRAC) intersection improvements; MD 22, Aberdeen Thruway, BRAC intersection improvements; and I-270 Interchange at Watkins Mill Road, Metropolitan Grove MARC Station access.

SAFETY & SECURITY

Maryland's Toward Zero Deaths approach to highway safety builds partnerships within and between government agencies, safety stakeholders, transportation professionals, nontraditional partners and private citizens in order to reduce transportation-related fatalities to half by 2030 and eventually to zero. A number of coordinated efforts addressing the State's toughest safety issues, including impaired driving, distracted driving and occupant protection, were implemented throughout the year to educate people on these unsafe behaviors and enforce traffic laws. For example, in March, overhead message signs, reading, "Wear Shamrocks, Not Handcuffs, Drive Sober," reminded drivers to plan for a sober ride home. In April, Maryland State Police (MSP), MDTA Police, American Automobile Association (AAA) and AT&T launched a statewide signage campaign to raise awareness about the distractions of handheld devices when driving. In May, MDOT, the National Highway Traffic Safety Administration (NHTSA), and Baltimore County Police hosted a crash simulation, demonstrating the need for all passengers, especially those in the backseat, to buckle up when in a vehicle. In advance of the Fourth of July holiday weekend, MDOT and the MSP increased awareness efforts of the State Police Impaired Driving Effort (SPIDRE), an elite enforcement team that uses crash data to target and remove impaired drivers.

To continue implementing proven measures like the ones listed above, Maryland stakeholders from engineering, education, enforcement and emergency response developed and adopted the 2016-2020 Strategic Highway Safety Plan (SHSP). The Plan provides more than 30 separate strategies for lowering fatalities and serious injuries related to impaired

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drivers, distracted drivers, unbelted motorists, aggressive drivers, bicyclists, pedestrians and infrastructure. Seeing only minimal declines in alcohol and drug related crashes in particular, strategies in the SHSP focus heavily on impaired driving. Maryland intends to spend approximately \$4 million in federal funds in this area, including dedicating a significant portion to SPIDRE.

Safety efforts focused on engineering solutions are also applied to safety problems. For example, bridge replacements ensure safe crossings; pavement preservation projects reduce safety-related roadway defects and improve control of the vehicle; and installation of proven safety countermeasures like guardrails help keep vehicles on the roadway. Upcoming safety investments on Maryland's roadways include a \$48.5 million bridge deck and superstructure replacement for the bridge carrying I-895 over the Patapsco River Flats.

Another notable achievement is the recognition of MTA police, who were honored for keeping the transit system safe. Among the top 12 transit agencies in America, MTA has the lowest number of serious crimes.

□ Key Initiatives:

- **MAA:** Enhance public safety by completing the second phase of the Runway Safety Area (RSA) Standards Compliance and Pavement Management Program (PMP) Improvements. The PMP program consists of the design and construction of the Runway 10-28 RSA compliance, standards and improvements to meet the Federal Aviation Administration (FAA) standards.
- **MDTA:** MDTA Police, in coordination with MSP, AAA and AT&T, launched a coordinated statewide effort to reduce crashes related to the distractions of handheld cell phones. MDTA installed 26 signs, alerting motorists that "It Can Wait!" prior to 13 rest areas. The signs are a reminder of Maryland's law that prohibits the use of handheld electronic devices while driving.
- **MPA:** MPA dredged roughly 2.6 million cubic yards of material from the Baltimore Harbor and Channels to ensure the shipping lanes, which carry key commodities in and out of the region, are safe for navigation. MPA will continue to advance port security through improvements identified in the FY 2017- FY 2022 CTP Terminal Security Program. Key improvements include: iCCTV coverage expansion and upgrades; CCTV Analytic; intrusion beam barrier installation; access control installation at North Locust Point Terminal; placement of mobile security booths; and a Cyber Vulnerability Assessment.

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- **MTA:** MTA provides excellence in its safety and security programs, and in operations. American Public Transit Association (APTA) awarded the MTA with the GOLD Award for Heavy Rail Security and Light Rail Safety. The Heavy Rail award recognizes MTA's Zone Enforced Unified Sweeps, which prevent serious offenses and crimes from occurring throughout the system. The Light Rail Safety award highlights MTA's success in keeping employees and contractors safe while working in the track area.
- **MVA:** MVA monitors Maryland's Ignition Interlock Program. An ignition interlock is a device that prevents a vehicle from starting when it detects a certain level of alcohol on the driver's breath. To help save lives by removing more drunk drivers from Maryland roadways, Governor Larry Hogan supported and signed the Drunk Driving Reduction Act of 2016 (Noah's Law), which went into effect October 1, 2016. The law will save lives by requiring ignition interlock for all convicted drunk drivers.
- **SHA:** SHA launched a new education effort aimed at bicycle safety, called "A Cyclist Might be Someone You Know." Campaign messaging, spread throughout Maryland using public service announcements, billboards, social media and outreach events, reinforces to cyclists and drivers the need to look out for each other, see and be seen, and to expect and respect each other. Work continues on the MD 2 pedestrian roadway safety audit. Safety projects include US 1 College Park Pedestrian, Bicycle and Safety Improvements; MD 404 Widening between US 50 and the Denton Bypass; US 113 Widening (Phase 4), Worcester Highway; and MD 5 Intersection Improvements.

SYSTEM PRESERVATION

The State's roadway and bridge network serves as the backbone of the transportation network, connecting communities, economic centers and transportation hubs. The preservation and maintenance of Maryland's existing transportation infrastructure and assets is essential to assure that its assets can continue to contribute to mobility throughout the state. This is a priority for MDOT and its transportation business units, working to ensure that the system is maintained, works efficiently and reflects investments on a life-cycle basis that has the potential to reduce long-term costs. Bridge and highway maintenance continues to be a significant funding priority in the FY 2017-FY 2022 CTP with investments in resurfacing, bridge replacement, capacity improvements, facility and asset rehabilitation, as well as continuing preservation activities. In FY 2016 alone, system preservation investments totaled \$1.1 billion, with 72 highway segment resurfacing projects, nine bridge rehabilitation projects, 62 safety/roadway design improvements and 212 other multimodal rehabilitation projects.

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The condition of the roadways and bridges are vital for ensuring these connections remain viable, efficient and safe. SHA has continually invested in roadway resurfacing, spending more than \$294 million in FY 2016, an increase of 10% from FY 2015. This is part of an additional \$250 million investment in our pavements made by the Governor over the next three fiscal years. Likewise, bridge rehabilitation has been a key focus for SHA, with the goal of reducing the number of bridges identified as “structurally deficient.” Though these bridges are safe for travel, they need to be programmed for repairs or replacement. As of April 2016, 69 bridges are classified as structurally deficient out of the 2,564 bridges on the SHA highway network, a decrease of nearly 52% since 2006. MDTA’s bridge maintenance actions have already resulted in significant improvements to the MDTA infrastructure and will ensure the agency’s ability to continue to provide EZ-passage throughout Maryland.

The preservation and maintenance of the State’s transit system, ports, airports, and bicycle and pedestrian facilities, and vehicle registration records is critical for continuing the connectivity and efficiency of the network. MDOT allocates approximately \$6.0 billion in the FY 2017- FY 2022 CTP for system preservation projects throughout Maryland across the transportation business units. This includes \$300 million for the Maryland share of Washington Metropolitan Area Transit Authority (WMATA) state of good repair and preservation program, \$175 million for MDOT, \$85 million for MVA, \$205 million for MAA, \$215 million for MPA, \$425 million for MTA and \$4.9 billion for SHA. These investments across agencies and modes will ensure Maryland’s transportation system continues to provide safe, reliable and efficient transportation options.

□ **Key Initiatives:**

- **MAA:** Investment in runway, terminals and passenger facilities at Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall Airport) and other airports around the state. BWI is continuing to invest and complete the multi- phase comprehensive Runway Safety Area (RSA) Standards Compliance and PMP Improvements, including runway rehabilitation and connecting/creating taxiways to meet FAA safety and design standards.
- **MDTA:** Support preservation of all MDTA facilities and expand the current system preservation program to include preventative maintenance activities, such as the rehabilitation and maintenance on the US 301 Harry W. Nice Memorial Bridge in FY 2016. Future highway links and bridges that are planned for preservation investments include the I-95 John F. Kennedy Memorial Highway, I-95 Fort McHenry Tunnel, I-695 Francis Scott Key Bridge, I-895 Baltimore Harbor Tunnel Thruway and the US 50/301 Bay Bridge.

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- **MPA:** Continue to renovate port facilities at Dundalk Berths 1- 4, manage an effective dredging program to maintain and improve shipping channels to the Port of Baltimore and continue the Port of Baltimore Export Expansion Project, focusing on Seagirt and Fairfield Marine Terminals.
- **MTA:** Continue to invest in the maintenance and preservation of all MTA facilities, including the construction of the new MARC BWI Rail Station, annual bus procurement to replace vehicles in service for 12 or more years and perform a mid-life overhaul of the Light Rail vehicle fleet, Metro Rail signals and track repair, Metro Rail railcar replacement, and the construction of the new Kirk and Bush facilities.
- **MVA:** Maintain facilities while preserving and improving the operations of the agency by modernizing IT infrastructure. Comprehensive IT modernization plan aims to improve customer service and increase employee productivity.
- **SHA:** Continue investing in maintenance of structurally deficient bridges throughout the state, simultaneously increasing the use of more durable roadway materials and recycled materials. Some of the major preservation and maintenance projects include the I-695 Baltimore Beltway bridge over Crosby Road, bridge replacement on I-95/I-495 over Suitland Road, I-83 Harrisburg Expressway bridge over Padonia Road and I-81 Maryland Veterans Memorial Highway bridge over the Potomac River.

QUALITY OF SERVICE

The Quality of Service goal is focused on the customer experience. Marylanders depend on the State's transportation network every day as they connect to life's opportunities. They rely on the system to be reliable and efficient as commuters travel back and forth to work, transport providers move goods to market, tourists get to their destinations, the service industry provides services to clients, and residents meet their family's obligations including medical care and education. To meet the expectations of a comfortable, convenient and well-connected experience, MDOT executes various projects, programs and initiatives for ensuring quality of service throughout the network. This includes the overhaul and replacement of nearly 150 MARC coaches and 14 MARC diesel locomotives (in the FY 2017-FY 2022 CTP), Bus and Metro Rail vehicle replacements, Light Rail car overhauls, supporting alternative delivery systems for MVA customers such as the Internet and kiosks, and MDTA's update to the Electronic Toll Collection hardware and Operating System software.

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MDOT joined other state agencies in the continued reduction of fees, tax and tolls. The latest round of fee elimination and reduction at MDOT accounting for \$7.76 million in savings to the public, such as the E-ZPass® Transponder fee being reduced from \$9 to \$7.50, the E-Zpass “On-The-Go” being reduced from \$34 to \$32.50, and the MVA fee of \$20 for veteran designation on driver’s licenses has been eliminated outside the time of renewal.

Another key element to a high quality transportation system is a resilient network that is reliable for the movement of goods. Automobile crashes, weather and other unexpected events can lead to delays and with Maryland’s businesses, freight and goods movement and residents depending on consistent and predictable travel times, MDOT is investing in decreasing congestion and improving travel conditions. This includes constructing express toll lanes (ETL) along I-95 John F. Kennedy Memorial Highway, construction of the MD 200 InterCounty Connector and implementation of Innovative Congestion Management (ICM) tools along I-270.

❑ **Key Initiatives:**

- **MAA:** To keep flights boarding and unloading with ease, continue improvements at Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall Airport) through the Loading Bridge Replacement Program, which consists of the purchase and installation of 15 new passenger-loading bridges. The replacement of the loading bridges is essential to supporting the safe movement of passengers on and off aircraft using terminal facilities.
- **MDTA:** Innovations in the State’s toll facilities, including the development and operating of the third generation of the electronic toll-collection systems, new tolling systems and customer-service operations for E-ZPass. This project will meet the evolving needs of toll users and adapt to the changing technologies.
- **MPA:** Continue improvements at the South Locust Point Cruise Terminal for the comfort and convenience of cruise line passengers, such as new check-in counters, furniture and carpeting and an upgraded public address system.

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- **MTA:** MTA launched the Express BusLink in June 2016, as part of BaltimoreLink. The \$135 million BaltimoreLink transit improvement plan connects people to jobs and improves suburb-to-suburb connectivity. These routes have express travel times and strengthen the comprehensive regional transit network.
- **MVA:** Unveiled new self-service Vehicle Emission Inspection Program (VEIP) kiosks, which are available 24/7 and are conveniently installed at existing VEIP and MVA offices throughout the greater Washington and Baltimore regions. In addition, the cost of self-service kiosks was reduced from \$14 to \$10.
- **SHA:** SHA's initiatives and projects will address congestion and improve quality of service throughout the state, including the \$106 million widening of I-695 from US 40 to MD 144, the construction of a noise wall along MD 295 to benefit the Riverview/Baltimore Highlands Community and the addition of an auxiliary lane to southbound I-81 between MD 58 and US 40. SHA also announced the I-270 Congestion Management project, a \$103 million plan to ease traffic delays along the heavily congested I-270 corridor in Montgomery County.

ENVIRONMENTAL STEWARDSHIP

Through leadership and guidance in the areas of environmental compliance, stewardship and sustainability, MDOT has a proven record of being a national leader in both long-range environmental planning and policy programs and day-to-day operations.

MDOT efficiently uses limited resources, while minimizing environmental impacts through the use of innovative and forward-looking strategies to ensure Maryland's transportation system protects natural, cultural and community resources. Maryland's Green Infrastructure Plan and Chesapeake Bay Restoration priorities provide a guiding framework, informing how MDOT agencies minimize impacts and utilize mitigation to support the State's conservation goals. MDOT's protection of natural lands occurs through land use, transportation and resource planning coordination with agency and local government partners including consideration of the long-term impacts of transportation system

investments on land development and preservation. Bay protection and restoration is multifaceted, 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 that will move the State closer to meeting mandated water quality targets.

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MDOT is also working to reduce transportation emissions into the air and manage energy consumption related to transportation. Over the last decade, Maryland has made substantial progress in combating air pollution and greenhouse gas (GHG) emissions – this progress originated from a diverse and innovative approach. The approach has relied on MDOT’s continued support and expansion of Travel Demand Management (TDM) programs, including Commuter Choice Maryland and Commuter Connections, to provide incentives to commuters for carpooling and using transit. SHA, MTA and MDTA all have continued to advance strategies to increase the efficiencies of their fleets, including purchasing natural gas and clean technologies vehicles. Additionally, MTA has installed 45 electric vehicle-charging stations at 19 park-and-ride locations. MDOT also continues to chair the Maryland Electric Vehicle Council (EVIC). EVIC continues to develop policies and secure funding to promote the successful integration of electric vehicles into Maryland’s communities and transportation system.

□ Key Initiatives and CTP Projects

- **TSO:** In 2016, TSO released two reports documenting specific strategies, policies and projects that are continuing to help Maryland meet Clean Air Act requirements and reduce GHG emissions. The 2015 Greenhouse Gas Reduction Plan provides specifics regarding MDOT’s actions since passage of the Greenhouse Gas Reduction Act in 2008 and ongoing strategies to help Maryland reduce GHG emissions by 40% per the 2030 goal. The 2016 Strategy for Air Quality and GHG Emission Goals highlights MDOT's progress in reducing mobile source criteria air pollutants, moving the entire state toward attaining all National Ambient Air Quality Standards (NAAQS) and sustaining emission reductions that will help meet long-term air quality goals, while also enhancing Maryland’s economy and quality of life.
- **MAA:** In the FY 2017-FY 2022 CTP, MAA set aside \$16 million to purchase 20 new clean diesel, 60-foot articulated buses to replace the aging shuttle bus fleet at the Consolidated Rental Car Facility. The new buses will help maintain service levels, increase dispatch reliability and further mitigate particulate matter emissions from bus operations.
- **MDTA:** MDTA continues to maintain a comprehensive inventory of its stormwater Best Management Practices (BMPs) and drainage systems and leverages geographic information services as a visualization and analysis tool of this data. A key aspect of the program is to train personnel in pollution prevention, particularly at maintenance facilities.

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- **Electronic Tolling** – In the FY 2017-FY 2022 CTP, MDTA has committed over \$65 million to replace its electronic toll collection system. The Next Generation system will substantially increase the capacity for handling Video Tolling and citations, enabling MDTA to reduce traffic delays and emission hot spots over time, at toll plazas by transitioning to all electronic tolling.

Environmental Management – MDTA continues to maintain an active environmental management program.

- **MPA:** In 2016, MPA, MDOT and MDE entered into an agreement to work collaboratively to identify, develop and, when appropriate, implement new cost-effective, voluntary programs that will reduce emissions and increase energy efficiency. Achievements of the workgroup to date include identifying emission sources related to port activities; updating and prioritizing a list of activities, technologies, equipment, practices and projects that could potentially improve air quality and/or conserve energy; preparing a master list of possible funding sources to support these projects; and applying for grants to fund these projects.

MPA will continue to implement its Environmental Strategic Plan, including taking steps to reduce emissions, implement alternative power sources, conserve energy, manage stormwater and reduce Total Maximum Daily Load (TMDL).

MPA is continuing to manage the Dray Truck Replacement Program (Dray Trucks are designed to haul shipping containers) in partnership with MDE. As of June 2016, the program has replaced 151 dray trucks operating at the Port of Baltimore with new trucks that exceed all current Environmental Protection Agency (EPA) heavy-duty engine standards.

MPA continues to implement strategies supporting stewardship of the Chesapeake Bay through funding and implementing projects consistent with the Water Quality Management Plan.

MPA, represented by Kathy Broadwater, Deputy Executive Director, participated in the EPA's National Ports Initiative Workgroup of the Mobile Sources Technical Review Subcommittee, which makes recommendations to EPA for opportunities/strategies to reduce air pollution and GHG, to achieve environmental sustainability for ports, and improve air quality for near-port communities.

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MTA: MTA manages the Commuter Choice Maryland program, which provides incentives encouraging Maryland employees to choose transit or vanpools instead of driving to work. Commuter Choice offers employers monthly pass distribution options, allowing employees to ride MTA, Local Bus, Commuter Bus, Light Rail, Metro Subway and MARC Train for less than full fare. The program offers significant savings for commuters and a valuable addition to employer benefit packages.

Commuting by public transportation, rather than driving alone, allows an individual to reduce annual CO2 emissions by an estimated 4,800 pounds per year. The BaltimoreLink project is a \$135 million investment to streamline existing bus and rail modes in the Baltimore area into a unified, interconnected transit system to improve access to jobs and the broader regional transportation network. The project will provide access to 130,000 more jobs than are accessible via the current network and increase the service area by 18 square miles, which will increase the number of people with access to transit by more than 30,000. This project represents a cost-efficient, flexible and sustainable approach to enhancing access to reliable transit throughout Baltimore.

- **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 VEIP testing compliance. Currently there are nine VEIP kiosks locations, four at VEIP Stations and five at branch offices. The original two kiosks launched in August 2015 have performed more than 2,300 VEIP tests and have a customer satisfaction rating of 85% to 90%. MDE and MVA continue to look at new technologies for testing such as mobile units, telematics and remote testing for future enhancements to VEIP, ensuring maximum customer satisfaction, lower wait times and air quality benefits.

MVA increasingly offers services electronically, which are available online 24 hours a day, 7 days a week. Customers may also conduct many transactions using self-service kiosks and automated interactive voice response telephone systems. These services reduce the need for a trip to an MVA office.

- **SHA:** SHA recently deployed the Chesapeake Bay Restoration Viewer, which provides Maryland residents an online-map with access to information on completed and proposed projects SHA is implementing to improve water quality in the Chesapeake Bay. These projects are BMPs that reduce pollutants in stormwater runoff and are anticipated to reduce annual pollutant loading and offset impacts of runoff by as much

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as 75% by 2020. SHA implements various projects to help achieve these goals, including tree planting, stream restoration, stormwater control structures, outfall stabilization and pavement removal. SHA exceeded its interim FY 2016 goal of 9% by treating 10% of MDOT's impervious surface not previously treated by stormwater management controls.

The SHA Climate Change Program developed the "Climate Change Adaptation Plan with Detailed Vulnerability Assessment" in October 2014 with a grant from the Federal Highway Administration (FHWA). The pilot report studied Anne Arundel and Somerset Counties and includes use of FHWA's Vulnerability Assessment Scoring Tool (VAST) and the creation of the Hazard Vulnerability Index (HVI). SHA is developing a checklist for project managers to screen projects in the inundation zones for sea level rise and will complete it when Coast Smart Guidelines (with checklist) are finalized.

SHA continues to incorporate the use of reclaimed and recycled construction materials into highway construction projects. SHA used 233,429 tons of reclaimed asphalt pavement and 8,498 tons of reclaimed aggregate in highway construction projects in CY 2015, the most recent year in which data is available.

MDOT was represented by Ms. Sonal Ram, P. E., Director, Office of Environmental Design, at the Transportation Leaders' Summit on Restoring the Nation's Pollinator Habitat, as a means for state DOTs to share BMPs employed across the nation to create a federal strategy to promote the health of pollinators.

COMMUNITY VITALITY

MDOT has a comprehensive and integrated multimodal transportation network that provides efficient, safe and seamless transportation options for residents and visitors alike. Multimodal systems allow citizens to optimize their decisions about transportation. Communities thrive when they can take advantage of the diverse services of all modes to move them reliably and conveniently from each origin to each destination. Programs and initiatives led by MDOT and its transportation business units support cycling and walking as everyday modes of transportation, recreation and vital elements of livable and healthy communities. These efforts, combined with the promotion of Transit-Oriented Development (TOD), increase and enhance transportation connections to move people and goods within and between activity centers and better connect people with life's opportunities.

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On the statewide level, MDOT shows its support for a balanced transportation network through targeted improvements, such as its recent \$14.9 million investment to enhance bicycle, pedestrian and multi-use trails across the state. This investment will improve key connections and link transportation options as well as improve safety and economic development in 21 counties and 10 municipalities throughout Maryland, further enhancing Maryland's attractiveness as a cycling and tourist destination. On a local level, initiatives that promote multimodal transportation options include the launch of Express BusLink in 2016, the first new service offered as part of BaltimoreLink, which will provide longer-distance, commuter-oriented trips to both downtown job centers as well as between regional suburban job centers. The new BaltimoreLink transit plan will better connect people to jobs, entertainment centers, transit modes and improve suburb-to-suburb connectivity.

Maryland's comprehensive road and bridge network facilitates important regional linkages between activity centers for Maryland residents and visitors. Maryland's road network supports communities by providing access to jobs, services, recreational and tourist areas, and commercial areas. However, when activity on the roads creates severe congestion, it increases the cost of mobility for everyone and reduces the efficiency and effectiveness of the transportation network. On a statewide level, Maryland works to improve congestion by improving travel times throughout the I-270 corridor, including constructing a new \$129.6 million interchange to reduce congestion on local roads and improve safety for residents and commuters.

Collectively, MDOT programs and investments increase and enhance transportation options for people and goods – making desired destinations more accessible, reducing the cost and time spent on transportation.

❑ **Key Initiatives and CTP Projects**

- **TSO:** Support alternative transportation options by providing technical support and grant opportunities for Bikeways, Bikeshare and for the Federal Surface Transportation Block Grant Program (STBG) (formerly Transportation Alternatives) Set-Aside (TA Set-Aside), (\$53 million in the FY 2017- FY 2022 CTP).
- **MAA:** Support passenger growth and ensure safe and efficient operations, economic vitality and environmental stewardship while continuing to provide/promote air service opportunities from Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall Airport). Support significant terminal and airfield improvements at BWI Marshall Airport, including the new Concourse D/E Connector, airfield pavement management program improvements and international concourse extension.

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- **MDTA:** Continue the system preservation of tunnels, highways and bridges through the construction of express toll lanes (ETL), innovative and customer service-oriented toll systems, and improved interchanges. Continue system preservation and safety efforts for tunnels, bridges and highways, improve interchanges, and support innovative and customer service-oriented toll systems.
- **MPA:** Continue to support and advance environmental programs that improve air quality in the Port of Baltimore. Execute projects that enhance and promote competitive and secure state of the art terminals capable of efficiently handling diverse cargoes through the acquisition of parcels of land adjacent to or near existing marine terminals at the Port (FY 2017-FY 2022 CTP).
- **MTA:** Continue to improve bus on time performance (OTP) and reliability through real-time data improvements, increased on time reporting and improved maintenance tracking to facilitate a more reliable and efficient bus system. The ExpressLink, the first new services offered as part of the BaltimoreLink initiative, will create an integrated transit system that is easy-to-use and helps alleviate downtown congestion by opening up the transit grid and connecting people to emerging job centers.
- **MVA:** Seek ways to improve customer wait times by providing alternative methods for interacting with MVA at a customer's convenience. Invest in information technology modernization projects as well as facility and VEIP enhancements to improve the ease of customer accessibility to MVA's services and products.
- **SHA:** With MDOT funding, continue to prioritize safe and interconnected pedestrian access along state highways through comprehensive grant programs such as \$2.77 million in Bikeways Program grants, \$1.03 million in Recreational Trails Program grants and \$11.1 million in Transportation Alternatives Program grants.

Source: Annual Attainment Report – For a full report see

http://www.mdot.maryland.gov/newmdot/planning/ctp/ctp_17_22/documents/2017_ar_01_12_17.pdf

FY 2018 Managing for Results Strategic Plans

http://dbm.maryland.gov/Documents/MFR_documents/2018/MarylandDepartmentofTransportation.pdf

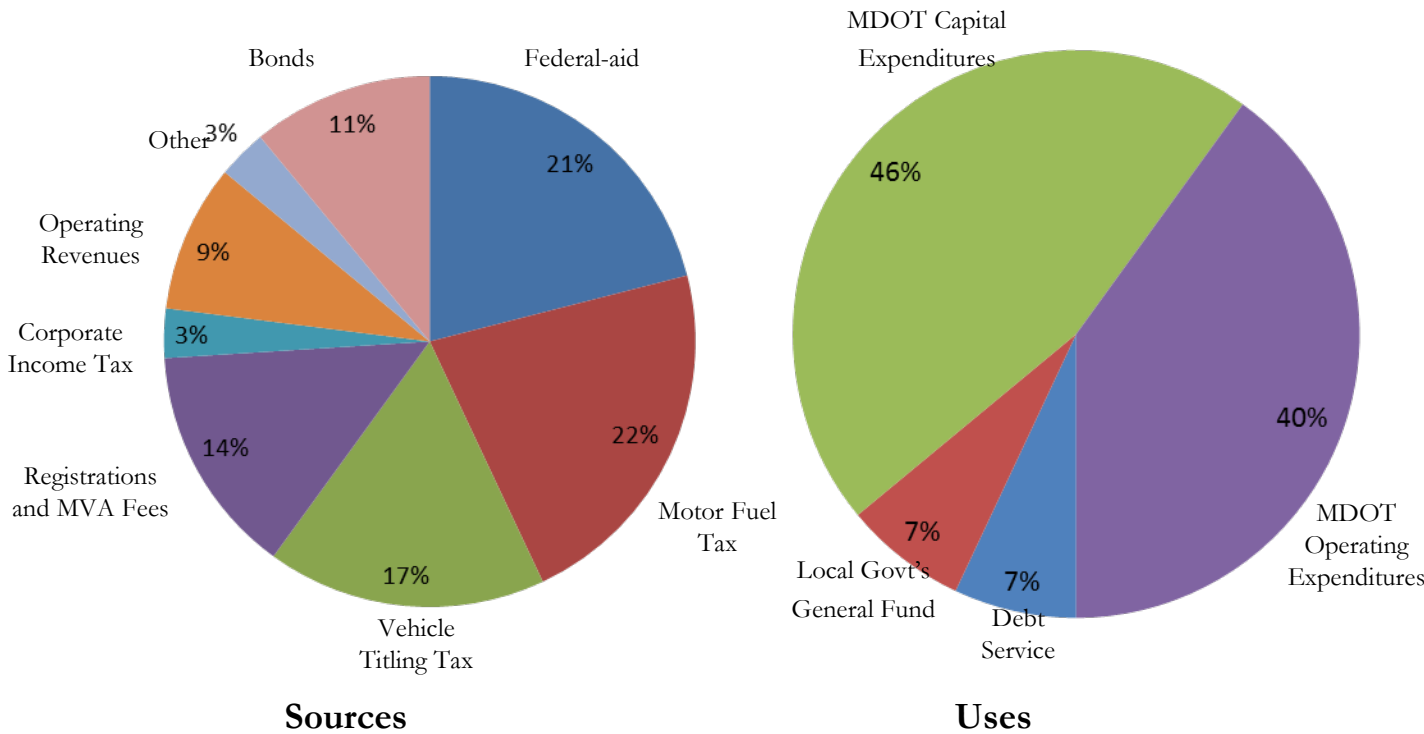
Maryland Department of Transportation

Trust Fund Outlook FY 2017 – 2022

Transportation Trust Fund

FY 2017 – 2022

(Percent of Federal and State \$)



NOTE: Includes non-budgeted federal assistance to WMATA.

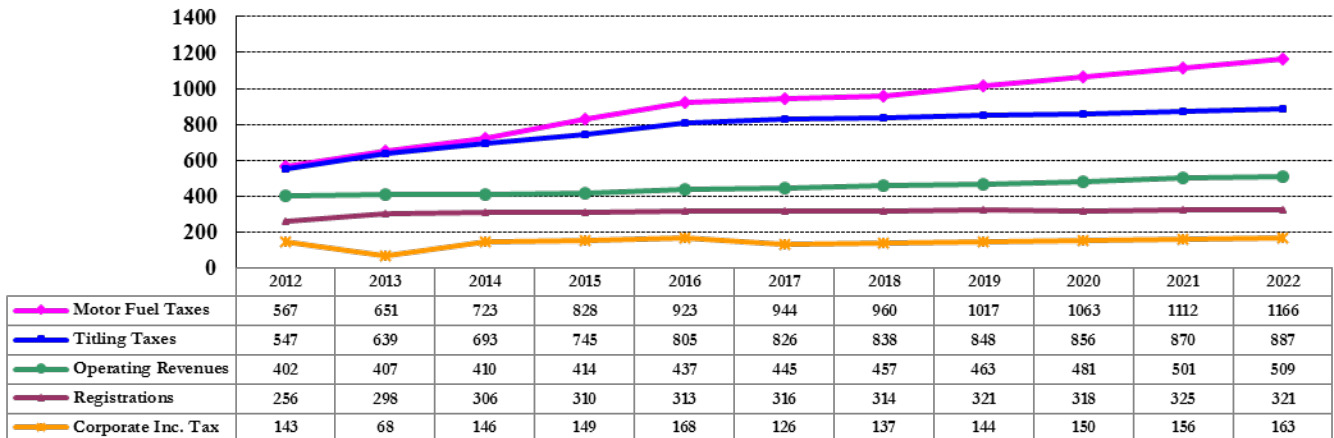
- ❑ The Transportation Trust Fund is dedicated to the support of transportation in Maryland. Revenues and expenditures each total approximately \$4.9 billion annually.
- ❑ The motor fuel tax and vehicle titling tax are the two largest sources of state revenue. Federal-aid covers a significant portion 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 2012- 2022

\$ millions



NOTE: Amounts shown are Net Receipts

- ❑ Transportation user revenues are projected to increase moderately through the six-year planning period (FY 2017-2022).
- ❑ 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% and 0.9% 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 2012- 2022

- Based on legislation passed during the 2013 session of the Maryland General Assembly, indexing and sales and use tax equivalent components were added to the motor fuel tax. Effective July 1, 2013, there is an annual adjustment to the motor fuel tax based on the annual increase in the Consumer Price Index. The sales and use tax equivalent rate is calculated by multiplying the prior year's average retail price for regular unleaded motor fuel (less federal and state excise taxes) by percentage rates specified in statute. The percentage rate was phased in over four fiscal years, beginning with 1% effective July 1, 2013 and increasing to 5% effective July 1, 2016.

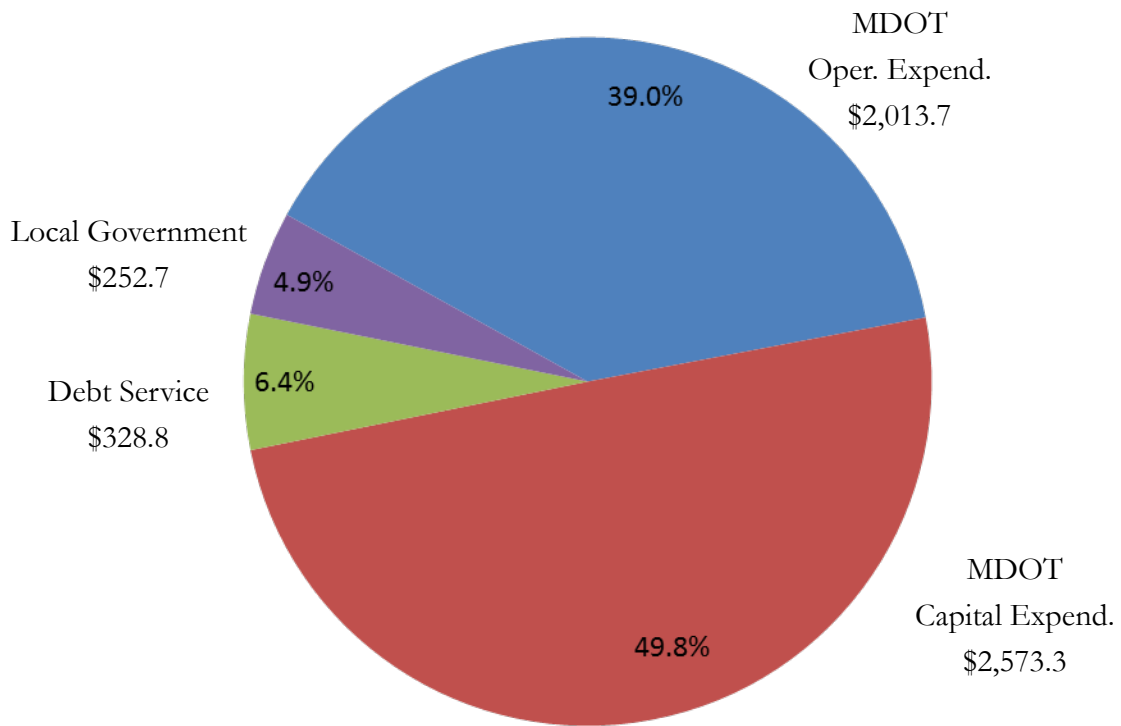
Maryland Department of Transportation

FY 2018 Allowance Summary

Maryland Department of Transportation

Total FY 2018 Allowance

(Millions of Federal and State \$)



Total = \$5,168.5

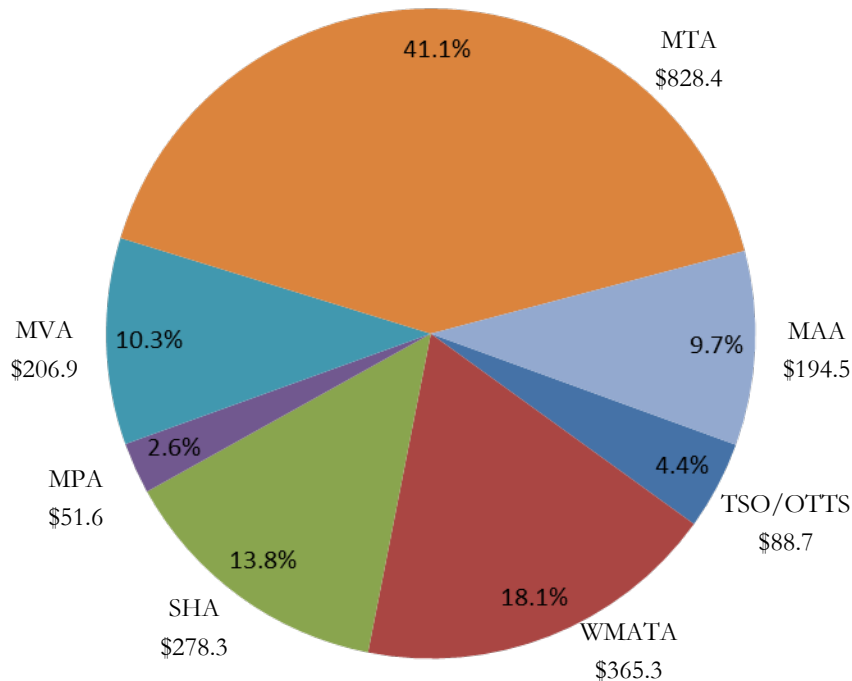
NOTE: Does not include BRFA Reductions

- ❑ 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 2018 capital expenditures are supported by \$949.6 million in federal funds (excludes local capital of \$72.4 million).
- ❑ Operating expenditures include all business unit activities and are supported by \$457.2 million in operating revenues and \$97.6 million in federal funds.

Maryland Department of Transportation

FY 2018 Operating Allowance

(Millions of Federal and State \$)



Total = \$2,013.7

NOTE: Does not include BRFA Reductions

- ❑ Operating revenues (\$457.2 million), MVA cost recovery fees (\$212.8 million) and federal operating revenues (\$97.6 million) offset 38 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

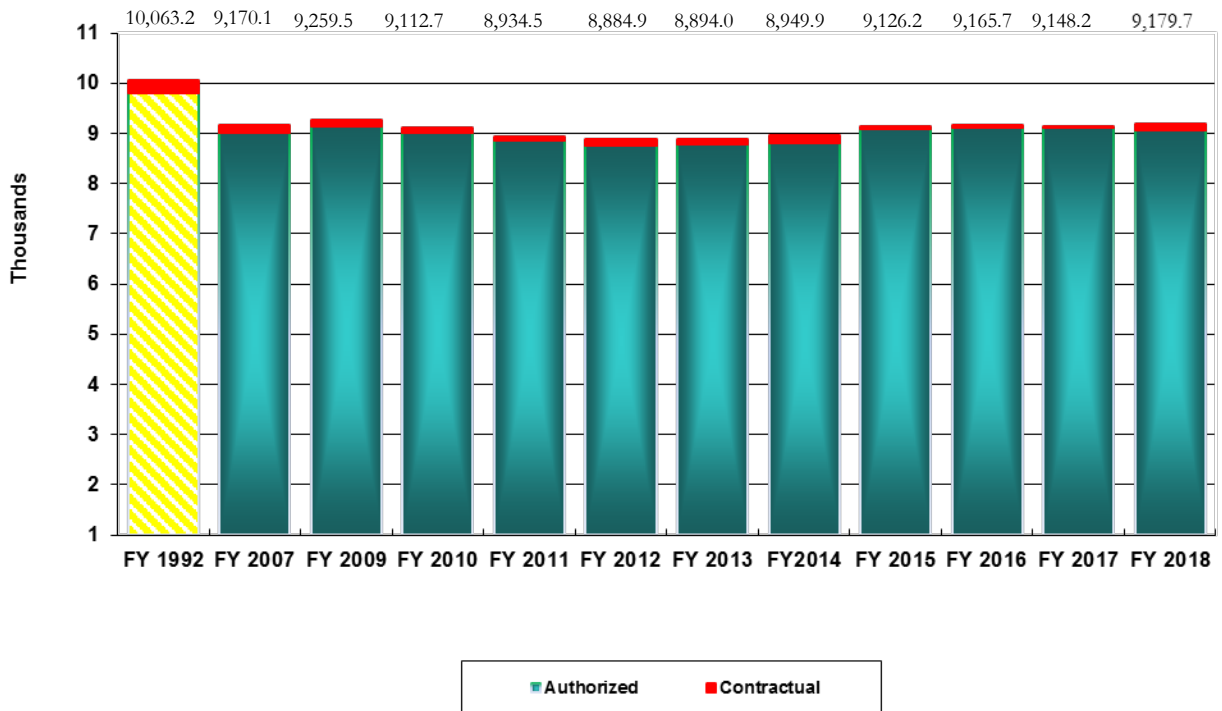
By Fiscal Year

(\$ millions)

	Fiscal Year <u>2017</u>	Fiscal Year <u>2018</u>	<u>Change</u>
<u>Operating Program</u>			
The Secretary's Office	86.1	88.7	3.0%
Washington Metropolitan Area Transit	323.4	365.3	13.0%
Motor Vehicle Administration	208.8	206.9	-0.9%
Maryland Aviation Administration	187.9	194.5	3.5%
Maryland Port Administration	51.6	51.6	0.0%
Maryland Transit Administration	787.7	828.4	5.2%
State Highway Administration	272.0	278.3	2.3%
Total Operating	<u>1,917.5</u>	<u>2,013.7</u>	<u>5.0%</u>
Special Funds	1,819.4	1,916.2	5.3%
Federal Funds	97.2	97.6	0.4%
Reimbursable Funds	0.9	0.0	-100.0%
<u>Capital Program</u>			
The Secretary's Office	137.0	103.8	-24.2%
Washington Metropolitan Area Transit	125.4	155.9	24.3%
Motor Vehicle Administration	21.8	22.4	2.8%
Maryland Aviation Administration	134.2	106.6	-20.6%
Maryland Port Administration	125.7	98.6	-21.6%
Maryland Transit Administration	636.0	634.3	-0.3%
State Highway Administration	1,410.9	1,451.7	2.9%
Total Capital	<u>2,591.0</u>	<u>2,573.3</u>	<u>-0.7%</u>
Special Funds	1,574.7	1,623.7	3.1%
Federal Funds	1,016.3	949.6	-6.6%
Reimbursable Funds	0.0	0.0	0.0%
<u>Distribution of Shared Revenues</u>			
County and Municipality Funds	177.4	175.5	-1.1%
County and Municipality Capital Program	92.3	77.2	-16.4%
Total	<u>269.7</u>	<u>252.7</u>	<u>-6.3%</u>
Special Funds	182.3	180.4	-1.0%
Federal Funds	87.5	72.4	-17.3%
Debt Service Requirements (Special Funds)	309.9	328.8	6.1%
Department Total	<u>5,088.1</u>	<u>5,168.5</u>	<u>1.6%</u>
Special Funds	3,886.3	4,049.1	4.2%
Federal Funds	1,201.0	1,119.6	-6.8%
Reimbursable Funds	0.9	0.0	0.0%

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

Maryland Department of Transportation Position History



- ❑ MDOT reduced regular authorized positions by 50 and increased contractual positions by 81.5 in FY 2018.
- ❑ MDOT’s total position request in FY 2018 (authorized and contractual) represents a .34 percent increase.
- ❑ In FY 2018, contractual employees represents 1.33 percent (122.2 FTEs) of total positions (9,179.7) and are used primarily at SHA and MTA.

Maryland Department of Transportation

Operating Program History FY 2015 – 2018

Maryland Department of Transportation

Total Operating Expenditures

FY 2015 – FY 2018

(\$ thousands)

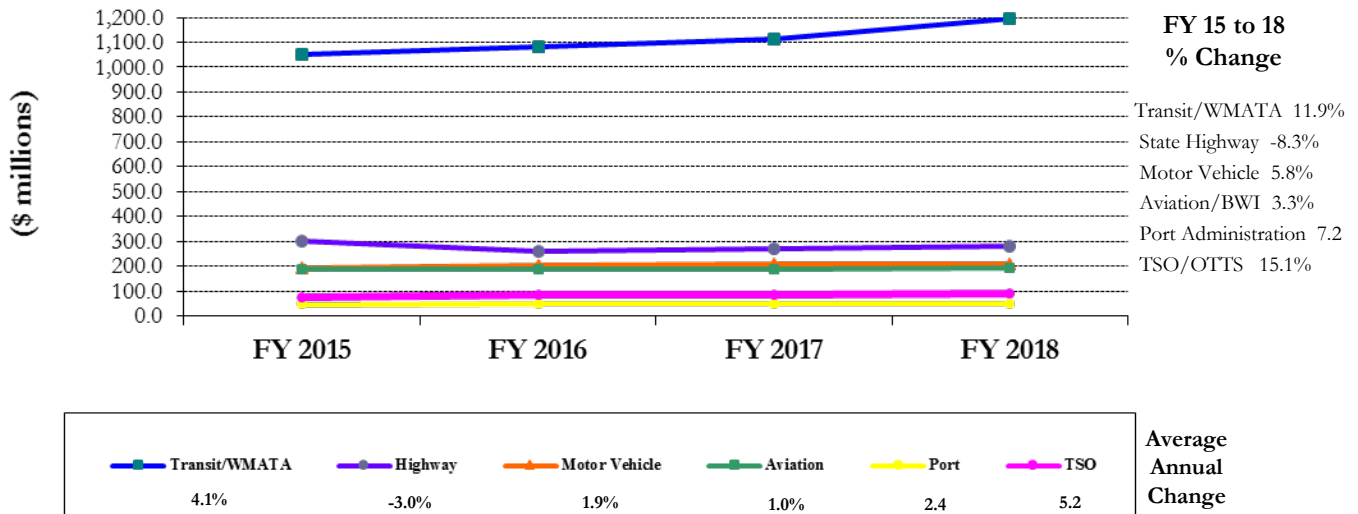
	<u>Actual FY15</u>	<u>Actual FY16</u>	<u>Amd App FY17</u>	<u>Allowance FY18</u>	<u>FY 15-18 Average Increase</u>
Wages & Benefits	633,780	644,433	663,250	674,374	2.1%
Other Operating Costs	<u>1,225,744</u>	<u>1,272,800</u>	<u>1,254,301</u>	<u>1,339,355</u>	3.1%
Operating Program Cost	1,859,524	1,917,233	1,917,551	2,013,729	2.7%
Annual Change		3.1%	0%	5.0%	
Special Funds	1,768,724	1,829,006	1,819,410	1,916,176	2.7%
Federal Funds	89,842	87,325	97,241	97,553	3.0%
Reimbursed Funds	957	902	900		-35.3%

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 2015- 2018



- ❑ MDOT operating expenditures have grown an average of 2.7% annually between 2015 – 2018.
- ❑ WMATA and the MTA operating costs have increased largely as a result of service improvements and commuter and paratransit services.
- ❑ SHA expenditures are increasing due to safety 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 operating budget include funding for new legislation for the Drunk Driving Reduction Act of 2016 – Noah’s Law (SB945) and the Motor Vehicle Insurance-Program to Incentivize and Enable Uninsured Vehicle Owners to be Insured (SB888).
- ❑ MPA’s operating budget includes security and IT enhancements.
- ❑ MAA increases are due to security, customer services, and IT enhancements.

Maryland Department of Transportation

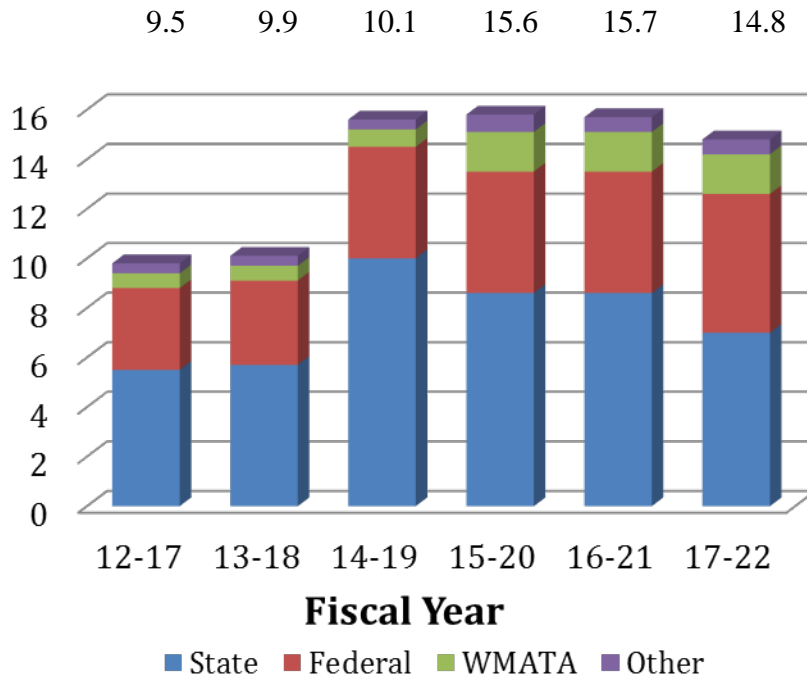
Capital Program

Maryland Department of Transportation

FY 2017-FY 2022 Capital Program

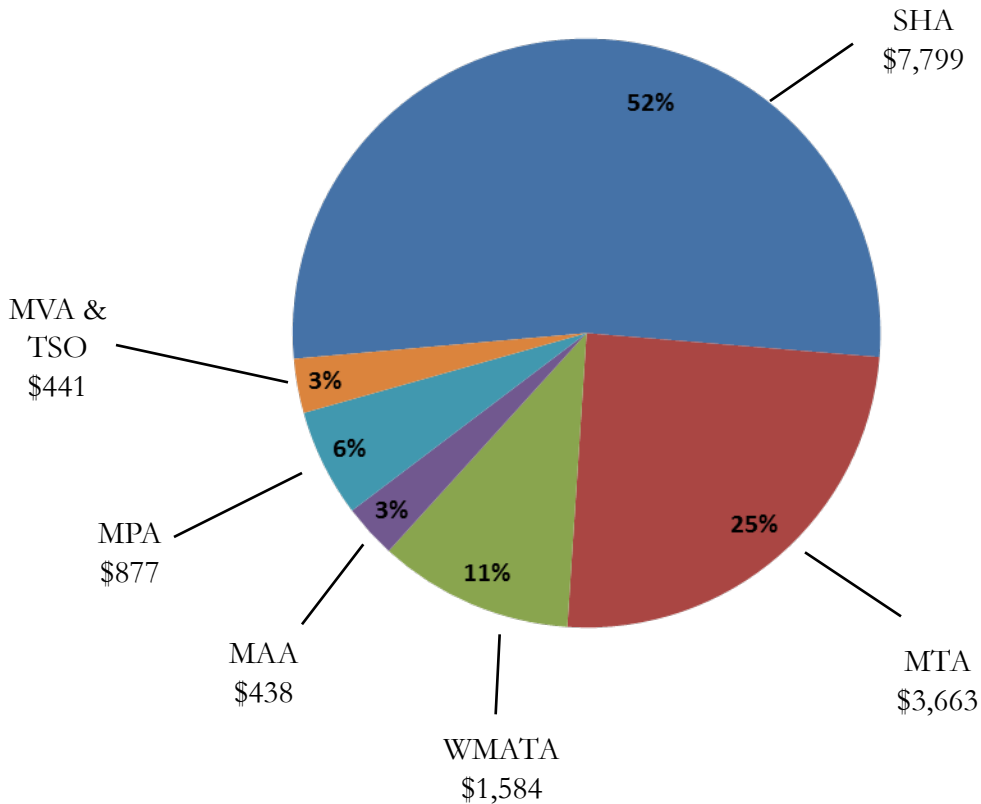
(Comparison to Five Previous CTP's)

\$ billions



- ❑ The total capital program for FY 2017 - 2022 is \$14.8 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 38% of the FY 2017 funding is federal funds, including federal funds received directly by WMATA (\$99.9 million).

Maryland Department of Transportation FY 2017-FY 2022 Capital Program (\$ millions)



- Includes other non-budgeted funds from Funds not received through the Trust Fund. Includes funds from Passenger Facility Charges (PFC), Maryland Transportation Authority (MdTA) funds, Certificates of Participation (COPs), County participation and federal funds received by WMATA directly.

MDOT RESPONSE TO DLS ANALYSIS

DLS Budget Analysis Issues (Page 16)

1. Regular and Contractual Full-time Equivalent Operating and Capital Programs

The Secretary should discuss with the committees the impacts the loss of regular positions will have on carrying out the functions of the department and the extent to which new contractual FTEs will be used for ongoing functions.

MDOT Response:

MDOT is not anticipating the position reductions to have any discernable impact on the Department's ability to provide its functions and services. The majority of these positions were long-term vacancies that should be cleared off the books.

MDOT's request for 81.5 contractual FTEs is exactly for the purpose described in the analysis, to cover temporary staffing needs. These positions will be needed to deliver capital projects and provide customer service in the next 3 years. As the DLS analysis shows in Exhibit 5 on page 10, MDOT will be delivering the largest capital program in our history.

For the 71 SHA positions, the FTE request is cost neutral. The budget request is only for the contractual positions and not for additional funding. Instead of paying consultants, SHA will have the contractual staff to manage the projects.

For MVA, their request is to help manage the surge of volume that comes with the start of new major Legislation initiatives. These positions are needed to support the increased enrollment resulting from enactment of the Drunk Driving Reduction Act of 2016 – Noah's Law (SB945).

MDOT is not asking for long-term employees, but rather is seeking short-term contractual positions to assist during this period.

MDOT RESPONSE TO DLS ANALYSIS

Operating Budget Recommended Actions (page 22)

1. Add the following language:

Provided that it is the intent of the General Assembly that projects and funding levels appropriated for capital projects, as well as total estimated project costs within the Consolidated Transportation Program, shall be expended in accordance with the plan approved during the legislative session. The department shall prepare a report to notify the budget committees of the proposed changes in the event that the department modifies the program to:

- (1) add a new project to the construction program or development and evaluation program meeting the definition of a “major project” under Section 2-103.1 of the Transportation Article that was not previously contained within a plan reviewed in a prior year by the General Assembly and will result in the need to expend funds in the current budget year; or
- (2) change the scope of a project in the construction program or development and evaluation program meeting the definition of a “major project” under Section 2-103.1 of the Transportation Article that will result in an increase of more than 10% or \$1,000,000, whichever is greater, in the total project costs as reviewed by the General Assembly during a prior session.

For each change, the report shall identify the project title, justification for adding the new project or modifying the scope of the existing project, current year funding levels, and the total project cost as approved by the General Assembly during the prior session compared with the proposed current year funding and total project cost estimate resulting from the project addition or change in scope.

Further provided that notification of project additions, as outlined in paragraph (1) above; changes in the scope of a project, as outlined in paragraph (2) above; or moving projects from the development and evaluation program to the construction program, shall be made to the General Assembly 45 days prior to the expenditure of funds or the submission of any contract for approval to the Board of Public Works.

MDOT Response:

The Department concurs with the recommended language.

MDOT RESPONSE TO DLS ANALYSIS

Operating Budget Recommended Actions (Continued)(page 23)

2. Add the following language:

The Maryland Department of Transportation (MDOT) may not expend funds on any job or position of employment approved in this budget in excess of x,xxx.x positions and xx.x contractual full-time equivalents paid through special payments payroll (defined as the quotient of the sum of the hours worked by all such employees in the fiscal year divided by 2,080 hours) of the total authorized amount established in the budget for MDOT at any one time during fiscal 2017. The level of contractual full-time equivalents may be exceeded only if MDOT notifies the budget committees of the need and justification for additional contractual personnel due to:

- (1) business growth at the Helen Delich Bentley Port of Baltimore or Baltimore/Washington International Thurgood Marshall Airport, which demands additional personnel; or
- (2) emergency needs that must be met, such as transit security or highway maintenance.

The Secretary shall use the authority under Sections 2-101 and 2-102 of the Transportation Article to implement this provision. However, any authorized job or position to be filled above the regular position ceiling approved by the Board of Public Works shall count against the Rule of xx imposed by the General Assembly. The establishment of new jobs or positions of employment not authorized in the fiscal 2017 budget shall be subject to Section 7-236 of the State Finance and Procurement Article and the Rule of xx.

MDOT Response:

The Department concurs with the recommended language.

MDOT RESPONSE TO DLS ANALYSIS

Operating Budget Recommended Actions (Continued)(page 24)

3. Adopt the following narrative:

Transportation Trust Fund Forecast Assumptions: The committees are concerned that the 3.4% average annual increase in departmental operating expenses that the Maryland Department of Transportation (MDOT) used in its fiscal 2017 through 2022 Transportation Trust Fund (TTF) forecast understates the amount of operating expenses likely to be incurred over the forecast period and, as a consequence, leads to an overestimate of the level of funding that will be available during the forecast period to support the capital program. The committees note that only three times since fiscal 2017 has the five-year average annual increase in departmental operating expenses dipped below 3.50% and those instances covered the years of the Great Recession. It is therefore the intent of the committees that the out-year estimates of departmental operating expenses that MDOT incorporates in TTF forecasts be inflated, at a minimum, by a rate equal to the five-year average annual increase in operating expenses experienced during the period ending with the most recently completed fiscal year.

MDOT Response:

MDOT respectfully does not concur with the recommended narrative.

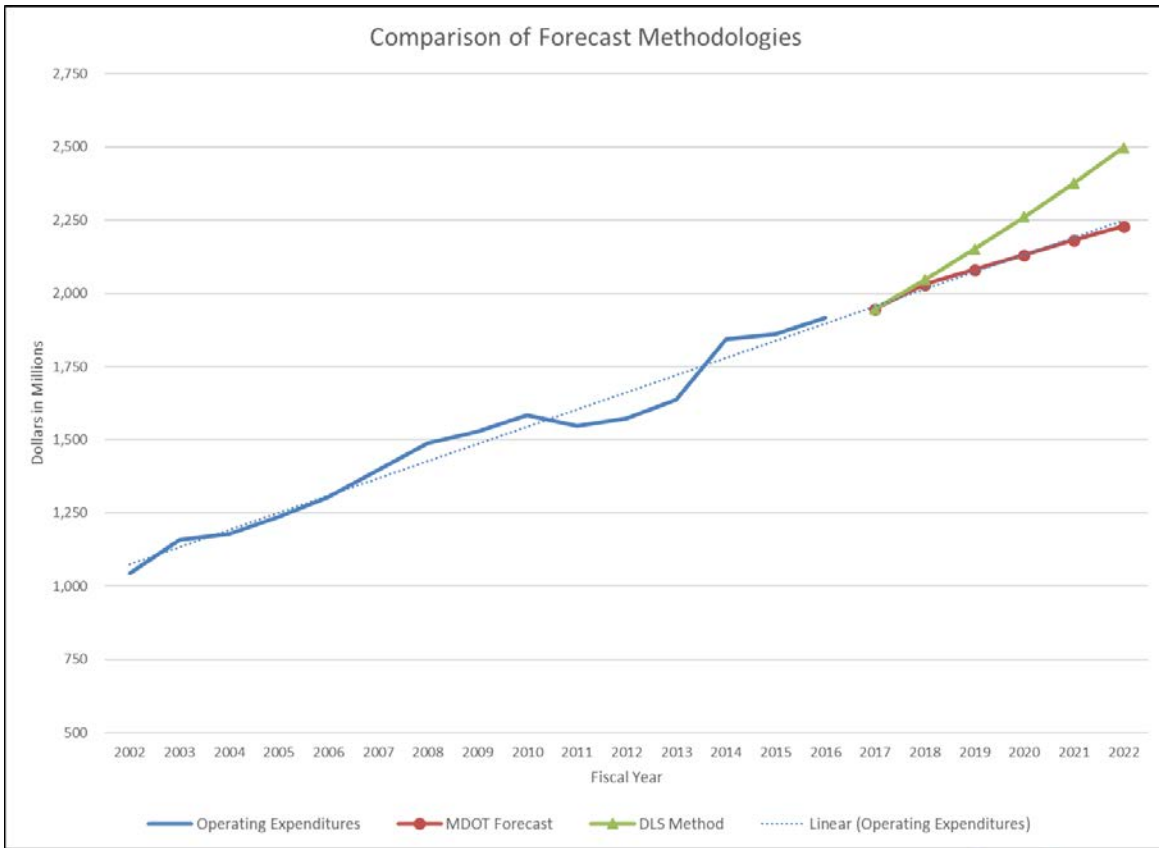
MDOT's experience using 'historical average annual percentage change' as a forecasting method has shown that this method is not appropriate within the overall financial model used to develop the Transportation Trust Fund (TTF) Six-year Financial Plan.

The financial model tracks and compares the sources of revenues coming into the TTF with the major uses of those funds. The two largest sources of funds are from the motor fuel tax and the vehicle titling tax. The long-term projections of these revenues are developed using 'regression analysis'. This forecasting method produces a straight line projection of future revenues.

The annual percentage change method being suggested will produce a curved projection line of the operating expenditures. This line curves upward due to the compounding effect inherent in this method. This effect is illustrated in the chart comparing the two methods with the historical expenditures.

J00 – MDOT – Fiscal 2018 Budget Overview

MDOT RESPONSE TO DLS ANALYSIS



Using different forecasting methods within the same financial model can produce misleading results. For this reason, MDOT chose not to use the annual average percentage change method suggested in last year’s narrative. In the broader context of the TTF financial model, that method will create a statistical imbalance between our projections of sources and uses of funds.