MARYLAND STATE HIGHWAY ADMINISTRATION

FY15 YEAR IN REVIEW

SHA State Highway Administration
Maryland Department of Transportation

Maryland Department of Transportation

MESSAGE FROM THE SECRETARY

This past year, under Governor Hogan's leadership, we have taken several significant steps towards improving our entire transportation network through the use of practical design, innovative project delivery, strategic costs savings and targeted investments. We are vigilant in developing new ways to implement cost effective transportation services that provide better and faster transportation solutions for those who live, work and travel in Maryland.

For example, we have aggressively focused on reducing the number of structurally deficient bridges through vigorous statewide inspection and repair efforts. Our combination of employing the latest technologies in our operational strategies, as well as prudent investments in our transportation systems, allows Maryland's residents, businesses and visitors to travel more safely and efficiently through our state.

Our dedication to expanding economic opportunities by creating jobs and connecting communities, while preserving our environmental resources, guides us toward a brighter future for Maryland. The FY 2016–2021 Consolidated Transportation Program outlines the goals, objectives and priorities of the Hogan-Rutherford Administration and reinforces our commitment to invest in our highways, interchanges and bridge projects throughout the state. Our program also supports rural transit and innovative urban transit projects.

Pete K. Rahn
Secretary

The Maryland Department of Transportation continues to build, maintain and provide a broad network of transportation services that focus on safety, economic development, community revitalization and environmental stewardship. The State Highway Administration Year in Review gives a brief summary of the accomplishments from Fiscal Year 2015 and exciting new initiatives underway in the current fiscal year.

Maryland Department of Transportation

SHA State Highway Administration
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SHA OVERVIEW

The Maryland State Highway Administration (SHA) highway system provides mobility and access for people and goods from and through Maryland. SHA operates, maintains and rebuilds the numbered, non-toll routes in Maryland's 23 counties – more than 17,000 lane-miles and 2,565 bridges. SHA highways carry 66 percent of the state's traffic but comprise one-fifth of the roads.

SHA delivers more than $1 billion of work annually that is competitively awarded to private entities, sustaining thousands of jobs in the highway industry for contractors, suppliers, engineering firms and small and minority businesses.

MESSAGE FROM THE ADMINISTRATOR

Your ability to safely get from point A to point B – whether by walking, bicycling, driving or riding transit is important to all of us at the State Highway Administration (SHA). We are also concerned with businesses efficiently delivering your internet purchases, groceries, furniture and services. When everything goes well, most of us do not think about transportation. When things go awry, such as a crash closing an interstate causing hours of delay, it is hard to focus on anything else.

At SHA, we think about transportation every day, all day. The State's highway system is the backbone of the transportation network east to west and north to south.

Perhaps the most visible service SHA provides is snow removal. This report focuses on FY 2015, during which winter weather kept crews busy with more than normal snow storms. Most recently, the record-setting historic Blizzard of 2016 kept our crews busy for well over a week.

The tremendous amount of snow required front-end loaders, blowers and trucks to haul snow away and to be dumped in a suitable location. Although the process is time consuming, SHA was able to restore the vast majority of the system within 10 days of the storm's end, as compared to the big 2010 storm when we completed operations after 16-18 days.

Gregory C. Johnson, P.E.
Administrator

Thank you for taking the time to read SHA's FY 15 Year in Review. As you travel through Maryland, please drive carefully and remain alert, always buckle up and share the roads with cyclists, pedestrians, motorcyclists and other drivers. We want everyone to get home safely.

SUPPORTING MARYLAND'S ECONOMY

An important goal for SHA is to "Support Maryland's economy and communities with reliable movement of people and goods." Improving mobility enhances commerce throughout the state. SHA has numerous programs to enhance transportation and multimodal operations to ensure the safety and accessibility of all customers.

With a focus on policies, programs and projects to ease bottlenecks and traffic congestion (due to weather, crashes, and vehicle breakdowns), SHA uses a data-driven, performance-based approach to provide a high quality, reliable highway system.

FUNDING IN FY 2015

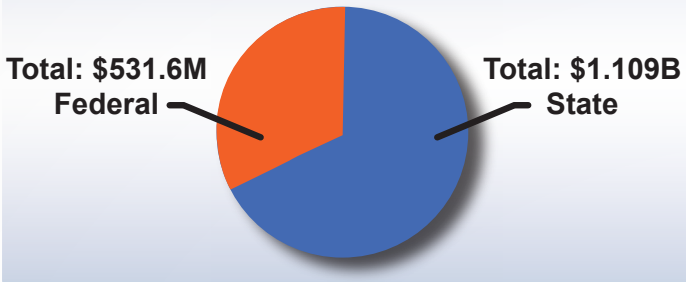
SHA roads carry more than 37 billion vehicle-miles of travel* a year. In addition, SHA roads are estimated to carry millions of tons of freight with value into the billions of dollars.

- Operate and maintain more than 17,000 lane-miles** of roads;
- Maintain and inspect 2,565 bridges, and assist local governments with federal funding for 2,336 locally owned bridges;
- Connect transportation facilities such as bicycle and walking paths, bus, light rail and subway stations, the Helen Delich Bentley Port of Baltimore and the Baltimore-Washington International Thurgood Marshall Airport;
- Collaborate with citizens, communities and elected officials to deliver hundreds of high-quality projects, from system preservation to major investments through planning, design and construction;
- Operate 37 facilities, including shops and offices;
- Manage the 24/7 Statewide Operations Center in Hanover, along with testing laboratories, maintenance and traffic and safety functions.

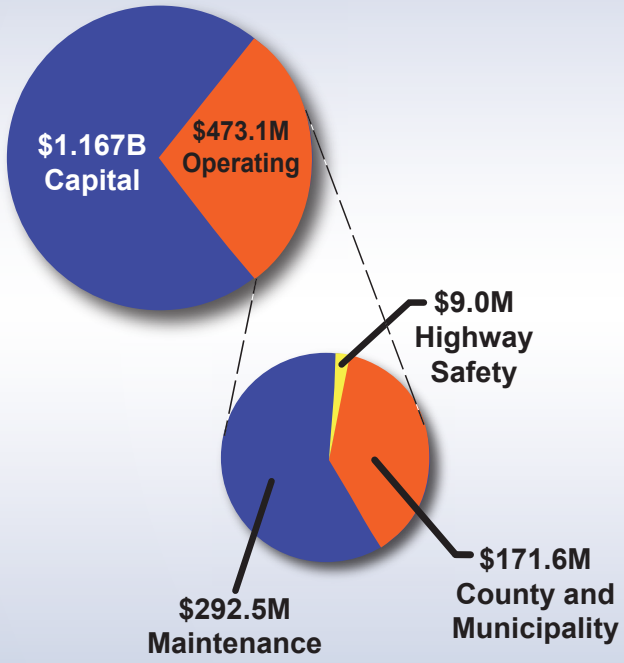
*Vehicle miles of travel (VMT) is the number of miles traveled by all the vehicles on all roads (for example, two vehicles traveling two miles equals four VMT).

**Lane-miles is the term used for the mileage down the center line multiplied by the number of lanes.

SHA Sources of Funding for FY 2015
Total: $1.64 Billion



SHA Uses of Funding for Operating FY 2015



MD 7 bridge over James Run

MD 24 road/ slope repair

MD 822 UMES roundabout

OPERATING MAINTENANCE FUNDS SPENT	FY 2015
Routine Maintenance	$108.0M
Bridge Maintenance	$3.9M
Environmental Design and Compliance	$5.9M
Traffic/CHART Operations	$22.6M
Winter Operations	$116.3M
Electricity	$9.4M
Maintenance Support	$19.8M
Other	$6.6M
TOTAL	$292.5M

FY 2015 ACCOMPLISHMENTS – MAJOR PROJECT COMPLETIONS

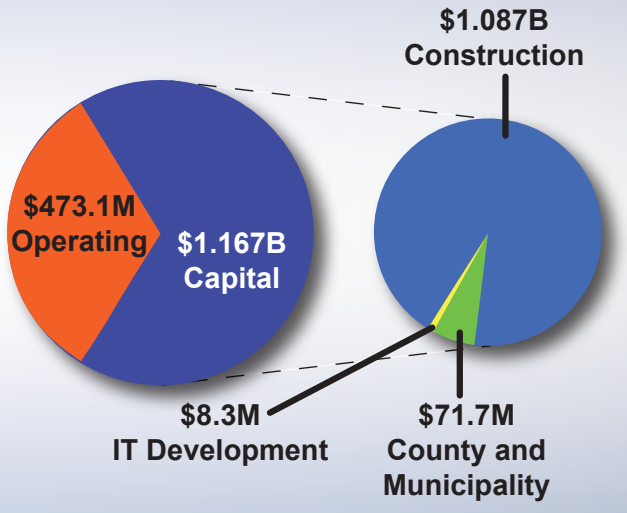
SHA completed numerous major projects in FY 2015:

- MD 4, Pennsylvania Avenue; replaced bridges over MD 223 (Prince George's) – ***$25.7 million***
- I-68, National Freeway, and MD 51, Industrial Boulevard; rehabilitated bridges over Wills Creek/CSX/CumberlandThruway and on MD 51 (Allegany) – ***$18.5 million***
- I-70, Eisenhower Memorial Highway; I-70, replaced bridges over MD 63 (Washington) – ***$15.3 million***
- US 15, Catoctin Mountain Highway; replaced bridge on Motter Ave. (Frederick) – ***$15.5 million***
- I-95/I-495, Capital Beltway; resurfaced roadway from D'arcy Road to Arena Drive (Prince George's) – ***$11.2 million***
- I-68, National Freeway; replaced/rehabilitated bridge decks over Kelly Blvd. and CSXT, and over Patterson Ave. (Allegany) – ***$10.8 million***
- MD 24, Rocks Road; resurfaced and reconstructed road/slope from south of Sharon Road to north of Stirrup Run Culvert (Harford) – ***$9 million***
- I-95; I-95 South; truck parking expanded at southbound Welcome Center (Howard) – ***$5.7 million***
- MD 822, University of Maryland Eastern Shore Access Road; constructed roundabout / intersection improvements / sidewalk (Somerset) – ***$5.4 million***
- MD 7, Philadelphia Road; replaced bridge over James Run (Harford) – ***$4 million***
- MD 234, Budds Creek Road; replaced bridge over Allens Fresh Run (Charles) – ***$3.3 million***
- US 219, Garrett Highway; replaced bridge over Cherry Creek (Garrett) – ***$3.3 million***
- MD 648, Baltimore Annapolis Boulevard; replaced bridge over Cattail Creek (Anne Arundel) – ***$1.4 million***

MD 234 bridge over Allens Fresh Run deck pour preparation

MD 648 bridge over Cattail Creek work in progress

SHA Uses of Funding for Capital FY 2015

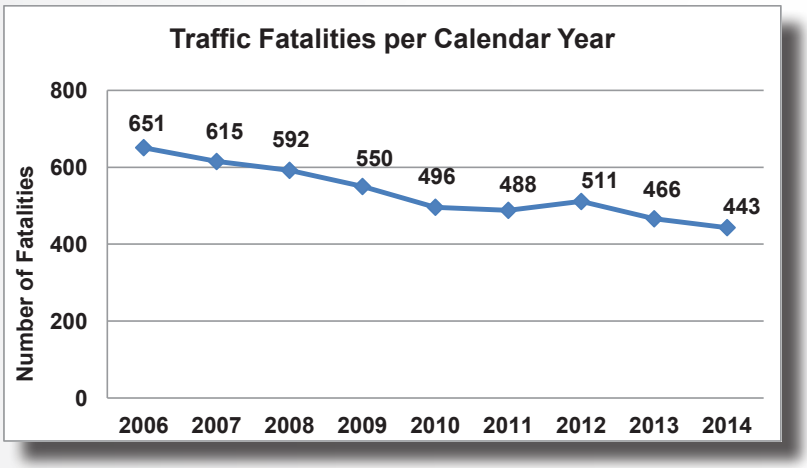


CAPITAL CONSTRUCTION FUNDS SPENT	FY 2015
Major Projects (planning, design, right of way and construction phases)	$180.8M
Bridge Rehabilitation Projects	$164.7M
Pavement Resurfacing/Rehabilitation Projects	$267.1M
Safety-related Infrastructure Projects	$115.0M
Multimodal Access Projects	$46.4M
Traffic Management	$75.8M
Environmental Projects	$87.1M
Facilities, Equipment, Research	$111.5M
Reimbursable Expenses, Other	$38.6M
TOTAL	$1.087B

TOP ACCOMPLISHMENTS BY KEY PERFORMANCE AREA (KPA)

HIGHWAY SAFETY KPA

- The only acceptable number of traffic fatalities is zero. Unfortunately, driver-related issues are still the major factor in the majority of crashes and we do lose hundreds of people to traffic crashes every year. In 2014, that number reached a record low of 443. The final crash data is not complete for 2015, but it appears that Maryland's overall fatalities will increase by 12 to 15 percent. The increase in fatalities reflects a projected increase in VMT, and is not specific to Maryland as many other states are also seeing an increase in fatalities.



- Achieved an 8 percent decrease in total injuries from 2008 to 2014. Severity 2 injuries (possible injuries) decreased from CY 2013 to CY 2014.

- Confirmed five bicyclist fatalities in CY 2014, down from seven in CY 2013.

- The annual number of fatalities in traffic crashes involving heavy trucks on all roads in Maryland decreased to 50 in CY 2014, down from 58 in CY 2013.

- Completed pedestrian roadway safety audits in 24 locations, to date. PRSAs, a formal Federal Highway Administration process involving an examination of roadways and intersections for potential pedestrian safety improvements, help SHA select and program pedestrian safety enhancement projects and educational outreach. PRSA teams recommended over 800 short- and long-term engineering improvements to increase pedestrian safety. Began implementing these recommendations to improve pedestrian safety in Ocean City, College Park and in Montgomery, Prince George's and Baltimore counties.

- Developed the comprehensive Walk Smart College Park! campaign to promote pedestrian safety along US 1 in College Park.

MOBILITY/ECONOMY KPA

CLEARING ROADWAYS

- Effectively managed roadway incidents, saving drivers nearly $1.3 billion in user costs and reducing delay by 36.3 million vehicle-hours in CY 2014 (the most recent data available), compared to $1.16 billion and 32.7 million vehicle-hours in CY 2013. Provided 24-7 Coordinated Highways Action Response Team (CHART) emergency patrol service in the Baltimore, Frederick and Washington, D.C., metropolitan areas.

- Increased patrol hours in CY 2014 to 90,873 hours, up from 71,472 hours the previous year (a 27 percent increase). Patrol hours help SHA quickly respond to stranded motorists and clear incidents, improving safety and mobility and enhancing commerce throughout the state. Handled 111,057 events, such as incident responses, assistance with disabled vehicles, and traffic management

- Provided SHRP 2 traffic incident management training to 1,629 responders (including representatives of several law enforcement, fire, emergency medical services and transportation agencies at the state, county and local levels). Maryland drivers identified clearing roadways after a crash as one of the top four SHA responsibilities in the last several Maryland driver satisfaction surveys.*

MD 355 sidewalk

MD 170 bicycle lane

PEDESTRIAN AND BICYCLE MOBILITY

Providing pedestrian and bicycle access helps encourage multimodal travel options.

- Invested $22.5 million to improve and construct sidewalks and address Americans with Disabilities Act (ADA) accessibility, including the construction of 11.5 new directional miles of sidewalk. Nearly 67.5 percent of SHA sidewalks are ADA-compliant; SHA is retrofitting sidewalks for ADA-compliance at a rate of 2 percent per year. All new sidewalks are ADA-compliant.

- Invested $2.8 million for dedicated bicycle improvement projects. Increased the number of directional miles improved for bicycles, consisting of marked bicycle lanes and shared use lanes, by 79.2 miles since FY 2011. Increased the percentage of existing accessible pedestrian signals to 70 percent since the program began in FY 2006. These signals provide visual information and audible information, such as speech messages that sight-impaired pedestrians can use to safely cross streets at signalized locations.

PARK AND RIDE IMPROVEMENTS

Park and ride facilities provide commuters with alternatives to single vehicle travel.

- Completed three park-and-ride projects which added 350 additional spaces (100 spaces at MD 175/ Snowden River Parkway, 200 spaces at MD 424/US 50 (Davidsonville), and 50 spaces at I-70/MD 75). Added over 1,100 park-and-ride spaces since 2008.

ACCESS PERMITS

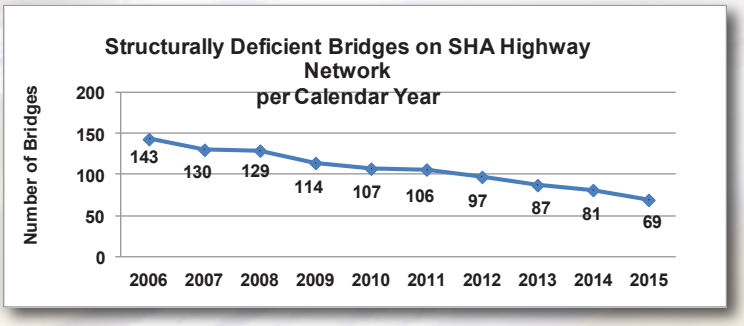
- Supported economic development by issuing 123 access permits to support private development and coordination with local jurisdictions. Improved access permits application process, database, webpage, communications, and outreach with stakeholders.

  *Maryland drivers identified maintaining roadways, keeping bridges safe, clearing the road after a crash, and plowing, salting and sanding of snow-covered roadways as the top four SHA responsibilities in the last several Maryland driver satisfaction surveys.

SYSTEM PRESERVATION AND MAINTENANCE KPA

KEEPING BRIDGES SAFE

- Recorded 69 SHA structurally deficient bridges in CY 2015, the lowest number since SHA records began, which is less than 3 percent of SHA's 2,565 bridges. Addressed 17 structurally deficient bridges, and minimized the number of bridges that may become structurally deficient. Continued an aggressive bridge rehabilitation program which has numerous contractor construction crews working full time year-round.



Thomas Johnson Bridge

MAINTAINING ROADWAYS

- Invested more than $287 million for resurfacing and pavement maintenance. More than 87 percent of the SHA pavement network had acceptable or better ride quality in CY 2014 (the most recent data available), as represented by the International Roughness Index. Improved 15 percent of SHA roads in CY 2014 with a mix of pavement preservation treatment to prolong the service life of the roads. SHA placed an estimated 1.2 million tons of hot mix asphalt on SHA road and bridge projects in CY 2015, the largest amount since 2005. Overall, SHA placed an estimated 1.28 tons using all SHA funds in 2015.

CLEARING SNOW-COVERED ROADWAYS

- Reached bare pavement on interstate and primary highways during the winter of 2014-2015 on average within 2.2 hours after the end of frozen precipitation, which surpasses our target of bare pavement within 4 hours. Reduced pounds of salt per lane mile per inch of precipitation by 14 percent from the previous winter season, while continuing to ensure the safety of the traveling public.

Clearing snow-covered roadways

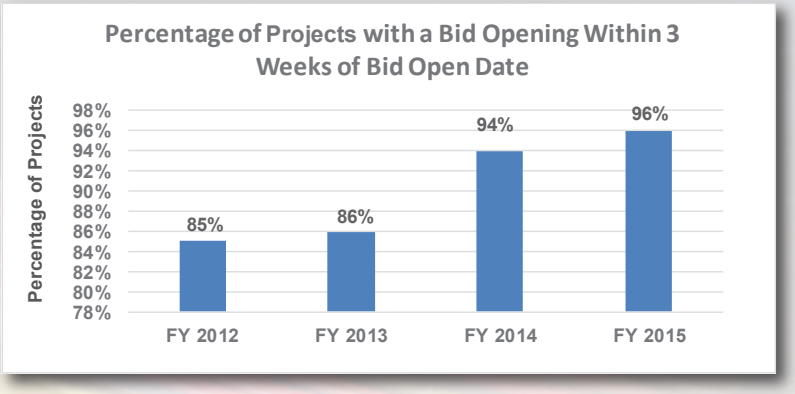
Winter storm in Western Maryland

MANAGING OUR AGENCY KPA

- Issued $704.9 million “notices to proceed” for 239 construction and maintenance contracts.

- Delivered 94 percent of 340 active construction projects within budget – for the second year in a row.

- Awarded 59 architectural and engineering contracts, resulting in $222.6 million of contract authority for consultant support services.



- Opened bids on 96 percent of 141 capital improvement projects valued at $1 million or more within 21 days of the bid opening date, surpassing SHA’s 90 percent target. Since SHA began tracking bid openings in FY 2012, bid dates have steadily improved.

- Advertised 87 percent of 140 capital improvement projects valued at $1 million or more within 30 days of the original ad date, nearly achieving SHA’s 90 percent target.

- Paid 99 percent of all invoices within 30 days of receipt.

- Provided on-the-job, entry-level employment skills training for 48 individuals in a workforce development partnership with the Department of Labor, Licensing and Regulation and its local partners. The program aims to provide a career pathway to jobs in the highway and capital transit construction industries.

ENVIRONMENTAL COMPLIANCE AND STEWARDSHIP KPA

EROSION AND SEDIMENT CONTROL

Inspection of sediment basin during construction

State and federal regulations mandate erosion and sediment control (ESC) during construction of any land disturbing activity. At any given time, SHA has many construction and maintenance activities that cause earth disturbance and require ESC. The SHA quality assurance team has attained at least 99 percent compliance in the inspection program since business plan tracking began in FY 2004. Consequently, Maryland Department of the Environment (MDE) designated SHA as the approving authority for ESC and stormwater managementplans for all SHA projects in February 2015. This delegated authority allows SHA to approve field changes during construction, reduces project delays and costs, ensures desired environmental outcomes, and improves customer service to all stakeholders. The SHA team performed over 4,000 ESC inspections and issued only 16 non-compliance ratings, resulting in a 99.6 percent in-compliance rating for ESC requirements on SHA construction projects. Continued outstanding compliance performance is ensured through delivery of training and enforcement of ESC certification requirements. At the close of FY 2015, 5,461 SHA employees, consultants and contractors were ESC-certified and the delivery of compliance with delegated authority training to SHA construction project engineers was well underway.

CHESAPEAKE BAY RESTORATION

Broad Creek Headwaters wetland and stream restoration

Total maximum daily load (TMDL) is the maximum level of a pollutant that can be discharged to a body of water while maintaining water quality standards. Under the federal Environmental Protection Agency's Clean Water Act, states are required to establish water quality standards. The SHA six-year capital budget (FY 2015 – FY 2020) includes nearly $600 million to finance projects that reduce nitrogen, phosphorus and sediment from entering the Chesapeake Bay, including: stream restoration, tree planting, impervious pavement removal, stormwater outfall and treatment facility upgrades.

Working to meet targets established in Maryland's Watershed Implementation Plan, 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. SHA also increased the SHA inventory of stormwater management facilities to 3,638 facilities, while continuing to meet its goal in FY 2015 to maintain 90 percent of inventoried facilities functioning as designed.

CONSTRUCTION RECYCLING

SHA encourages the use of recycled asphalt pavement (RAP) in the construction of its highways to reduce project costs and environmental impacts. SHA placed 267,694 tons of RAP in highway construction projects in CY 2014, which is 16 percent of the total hot mix asphalt used that year, and an increase of 74 percent over CY 2013. Notably, 2,600 tons of foamed asphalt stabilized base (FASB) utilizing 100 percent RAP material was placed in a pilot project on US 29. FASB allows use of significant quantities of recycled asphalt and concrete materials and reduces greenhouse gas emissions by avoiding the quarrying of virgin aggregate and eliminating heating of the aggregate to produce the mix.

Workers applying a test strip of recycled base material to northbound US 29

CUSTOMER COMMUNICATIONS, SERVICE AND SATISFACTION KPA

- Won the AASHTO 2015 President's Transportation Award in Highway Traffic Safety for the Ocean City Pedestrian Safety Team. The team effort Walk Smart!, which has successfully eliminated pedestrian fatal crashes and reduced pedestrian crashes and injuries, showcases the success of effective partnership and coordination between the three "E's" of traffic safety: engineering, enforcement and education.

- Continued to position SHA as a social media leader among state and federal agencies. Grew the primary social media accounts by approximately 10,000 fans on Facebook to reach more than 50,000 and 12,000 more on Twitter to reach a total of 33,000 followers.

- Handled over 26,000 service requests through the Customer Care Management System (CCMS), with issues ranging from pothole repair to mowing and projects.

Administrator Johnson reads to elementary school children on Walk to School Day.

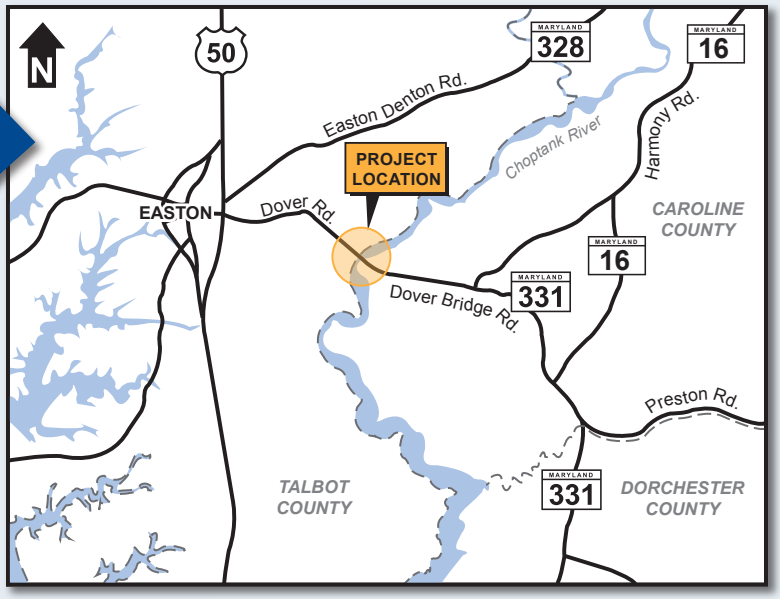
- Supported National Bike to School Day and urged drivers to be alert for bicyclists around schools during arrival and dismissal times. Several Maryland schools hosted events, supported by Maryland's Safe Routes to School program, which provides funding to support walking and bicycling to and from elementary and middle schools. SHA Administrator Greg Johnson read to a classroom at Patterson Park public charter school, (at right) about walking to school.

- Nearly 50 percent of Maryland drivers said that Maryland roads were better compared to similar roads in other nearby states, according to the 2014 Maryland driver satisfaction survey, which is a slight increase from the 2012 survey. Only 15.7 percent of Maryland drivers in 2014 said congestion was the number one concern that interferes most with safe travel, compared to 30.5 percent in 2012 – a 50 percent decrease.

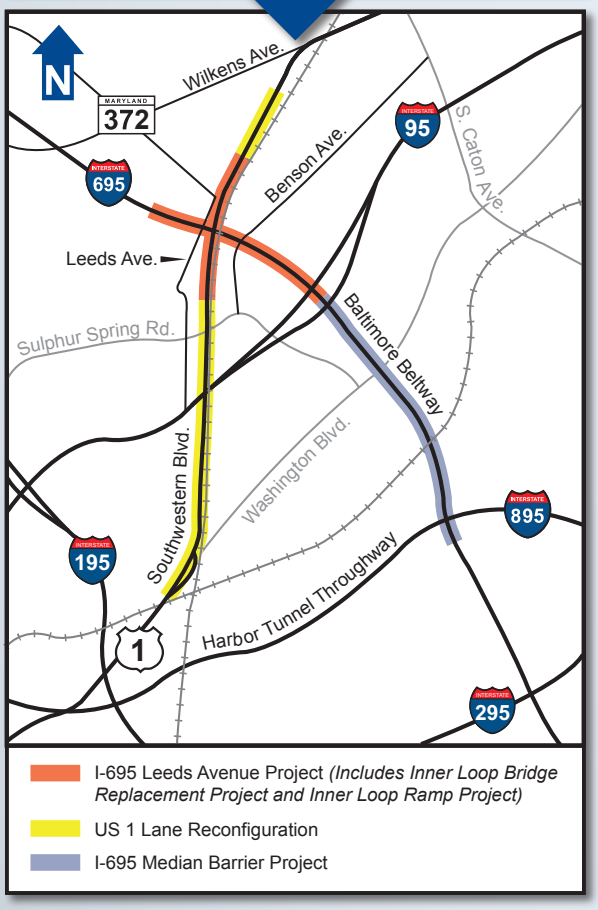
HIGHLIGHTS OF PROJECTS AWARDED BY SHA IN FY 2015

- MD 210 Livingston Road/Kerby Hill Road; interchange construction (Prince George's) – ***$87 million***
- MD 331 over Choptank River; bridge construction (Talbot, Caroline) – ***$55.7 million***
- I-695 over Benson Avenue, Leeds Avenue, US 1 and Amtrak; bridge replacements (Baltimore) – ***$42.8 million***
- US 15 at Monocacy Boulevard; interchange construction (Frederick) – ***$35.9 million***

MD 331 over Choptank River



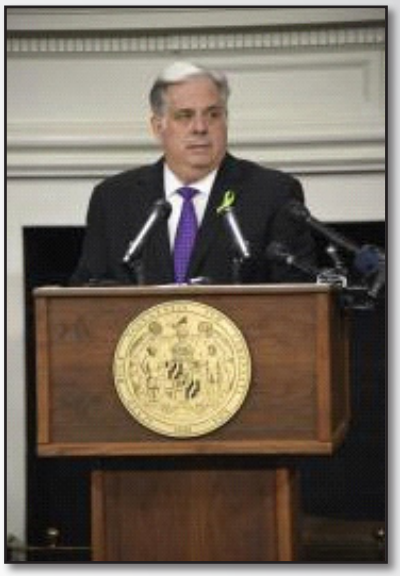
I-695 over Benson Avenue, Leeds Avenue, US 1 and Amtrak



MD 210 Livingston Road/ Kerby Hill Road

GOVERNOR'S PRIORITY PROJECTS

Governor Hogan announced $1.97 billion in transportation funding for highways and bridges in June 2015 (photo, right). The priority projects include $1.35 billion in new projects going to construction and $625 million in preserved projects. Status of the new major projects is included below. The costs shown are the total project costs as shown in the final Consolidated Transportation Program and dates are subject to change.



Governor Larry Hogan
Courtesy of TGO

MD 404 Widening

(Queen Anne's, Talbot, and Caroline) - *$160 million*

Safety and operations improvement and congestion relief project to widen MD 404 from a two-lane road to a four-lane divided highway from US 50 to Denton. The project was advertised for request for qualifications on October 20, 2015, and the notice to proceed (NTP) is scheduled for Spring 2016. Construction will start in Summer 2016. A public meeting was held on November 10, 2015, at North Caroline High School to discuss project progress and potential impacts to the surrounding community.

I-270 Innovative Congestion Management

(Montgomery) - *$100 million*

Congestion relief project to improve safety and reliability along I-270, north of I-495 to I-70. SHA Innovative Contracting division is developing overall project goals to frame the progressive design-build procurement document. The core traffic team is meeting regularly to develop performance metrics and is conducting ongoing coordination with FHWA. This project is being combined with the I-270 and Watkins Mill Road interchange project. A new cost, schedule, and modifications to scope are ongoing. The advertisement date is scheduled for Summer 2016.

US 113 Widening (Phase 4)

(Worcester) - *$86 million*

Safety and operations improvement, and congestion relief project to upgrade US 113 from two to four lanes from Five Mile Branch Road to north of Public Landing Road. Design/build construction to start in Fall 2017. The engineering phase is underway and right-of-way is to begin during FY 2016. The design/build advertisement date is late Spring 2016.

US 219 Realignment

(Garrett) - *$90 million*

Traffic operations enhancement, access improvement, and economic growth project for a new interchange at I-68. Construction to start in Spring 2018. SHA is conducting preliminary planning activities (surveying, archeology). SHA is evaluating alignments within the scope of US 219 corridor Planning and Environmental Linkages (PEL) study, to be completed in Spring 2016. Preliminary engineering is scheduled to begin in early 2016. Design approval is anticipated in Summer 2017.

MD 175/MD 295 Interchange Reconstruction

(Anne Arundel) - *$111 million*

Safety improvement, and current and future congestion relief project at MD 175 to improve access to Fort George G. Meade. The project is now in the final design phase with the advertisement date projected to be Summer 2018, with construction to start in Fall 2018.

US 50 Severn River Bridge Lane Reconfiguration

(Anne Arundel) - ***$27 million***

Congestion relief project along US 50 bridge over the Severn River. The planning team is finalizing the schedule with anticipated location design approval in Summer 2016 and beginning noise and air quality studies. A public informational workshop is anticipated in late Spring 2016. Construction to start in Fall 2017 with completion in Spring 2018.

Full I-95/I-495 Interchange to Access the Greenbelt Metro Station

(Prince George's) - ***$152 million***

Safety and operations improvement and future growth support project to improve access to the Greenbelt Metro Station. Design is ongoing with semi-final review in December 2015 and final review scheduled for Spring 2016. SHA is currently preparing the interstate access permit approval (IAPA), which consists of an update of the 2005 IAPA document with submission to FHWA for approval by Winter 2016. Construction to start in Spring 2017, with completion in Spring 2020.

US 1 College Park Pedestrian, Bicycle, and Safety Improvements

(Prince George's) - ***$56 million***

Traffic operations improvement, pedestrian and bicycle safety improvement, and facilities revitalization project to reconstruct US 1 to a four-lane divided highway. Design is underway with final review anticipated in Spring 2016. Construction to start in Fall 2018.

MD 140 Widening at Painters Mill Road

(Baltimore) - ***$18 million***

Motorist, bicycle and pedestrian safety improvement and congestion relief project on northbound MD 140 from Painters Mill Road to Garrison View Road. Construction of the southbound widening by a developer to begin in Spring 2016. SHA's northbound widening project is 95 percent complete with design. The advertisement date is late Fall 2016. Construction should begin in Spring 2017 with completion in Fall 2018. Advanced construction of a culvert was completed in December 2015.

MD 2/MD 4 Highway Widening (Phase 2)

(Calvert) - ***$30 million***

Congestion relief and future growth project from MD 2/MD 4 (Solomons Island Road) from north of Stoakley Road to south of MD 765A (Main Street) in Prince Frederick. The National Environmental Policy Act (NEPA) reevaluation was completed on September 15, 2015. Stormwater management and the erosion and sediment concept are approved. The final review is scheduled for Spring 2016. Construction to start in Spring 2017.

MD 5 Intersection Improvements

(St. Mary's) - ***$14 million***

Safety and traffic operations improvement and congestion relief project for northbound and southbound MD 5 left-turn lanes at Abell Street/Moakley Street and associated MD 5 widening. Preliminary engineering and right-of-way phases are underway. SHA is working with First Saints Community Church and is coordinating with Leonardtown, Southern Maryland Electric Cooperative, Verizon, and Metrocast to relocate utility poles. A public meeting was held in January 2016. The semi-final review is scheduled for Spring 2016. Construction is to start in Fall 2018.

MD 5 Point Lookout State Park

(St. Mary's) - ***$20 million***

Safety improvement project for MD 5 from south of Camp Brown Road to the causeway at Point Lookout State Park. The SHA project team is working with the Department of Natural Resources to resolve MD 5 ownership and "toll" issues. SHA is evaluating environmental impacts for constructability (high water table, soil stability). The preliminary investigation meeting is scheduled for Spring 2016. Construction to start by Fall 2018.

MD 85 Highway Reconstruction – Phase I

(Frederick) - ***$118 million***

Congestion relief and economic growth project on the MD 85 (Buckeystown Pike) interchange at I-270 and MD 85 between Spectrum Drive and Shockley Drive/Crestwood Drive in Ballenger Creek. SHA is conducting the post-final review with ongoing bi-monthly coordination meetings. A practical design review is also underway. SHA is working towards the MDE permit. Plans, specifications, and estimates are scheduled for Winter 2017. The advertisement date is scheduled for Spring 2017. Construction to start in Summer 2017.

MD 32 Widening – Phase I

(Howard) - ***$33 million***

Congestion relief and safely improvement project to widen MD 32 (Patuxent Freeway) from MD 108 to Linden Church Road, to create a four-lane divided highway. The design phase is underway and this design-build project will advertise in Summer 2016. Construction is anticipated to begin in Spring 2017 with completion by 2020.

Governor Hogan with SHA's Dayton Shop for MD 32 event.
Courtesy of TGO

MD 32 Widening – Phase II

(Howard) - ***$107 million***

Capacity and safety improvement project along MD 32 (Sykesville Pike) from Linden Church Road to I-70. The improvements will create a four-lane divided highway. The design phase is underway and this design-build project will advertise in 2018. Construction is anticipated to begin in 2019 and be completed in 2021.

VISUALIZING

MD 32 AT TRIADELPHIA ROAD BRIDGE

MD 404

CHANGING Maryland *for the Better*

PRIORITIES

SHA INNOVATIONS

SHA continually explores new methods, technologies, and improved processes to better serve our customers. This helps Maryland improve the quality of its services, be more competitive, and makes state government more efficient and responsive. Notable innovations include:

ACCESS MANAGEMENT

SHA decentralized access management from headquarters to the district offices to improve customer service to our stakeholders. Review and final approval authority for granting access to highways under SHA jurisdiction was transferred to the district engineers. District office staff now offer a locally tailored, more personalized service to customers, with assistance from headquarters as needed. Staff are changing their communications efforts to work with customers to "get to yes!"

SHA improved its access management webpage and database. The website is simpler, easier to navigate and more substantive; important guidelines were updated to reflect the new process, including information on the first SHA access management forum. The database is being streamlined and made useful for all employees for performance measurement purposes, workload forecasting, and operations analysis. The document submittal process is being digitized to meet emerging industry standards and customer expectations.

SHA continues its outreach effort with the development and engineering industries. Multiple teams of access management staff from headquarters and the district offices have partnered with private sector volunteers experienced with the process to oversee implementation of improvements and develop additional recommendations. Outreach, active communication, and collaboration will continue and will become a regular part of doing business at SHA, helping to make state government more efficient and responsive, and to better serve our customers.

PRACTICAL DESIGN

SHA is developing a practical design strategy that we're calling practical transportation, since it's about more than just design. In addition to developing an approach on new projects, SHA is also evaluating projects currently in the pipeline to identify practical transportation solutions that improve the quality of life (live, work, learn, and play) of the citizens of Maryland and all users of the transportation system, and support economic development. SHA is working with the Secretary's Office and with the Maryland Transportation Authority (MDTA) to develop an engineering policy that incorporates transportation design solutions into MDOT workflows. This makes state government more efficient and responsive, and improves transportation.

INCORPORATING PRACTICAL DESIGN PHILOSOPHY WITH INCREASED USE OF DETOURS

Detours reduce construction costs by 25 to 40 percent, depending on the project. Construction costs on a project can be separated into three main categories – workers, machines and materials. Regardless of the number of construction stages, the amount of material used is the same. Time associated with workers and machines is significantly reduced when traffic is detoured to allow a bridge project to be built in one stage, versus multiple stages with traffic in the work zone. Time is money, so less time on two of the main cost categories equates to less money, helping to make state government more efficient.

ACCELERATED APPROACH ON ADDRESSING BRIDGES RATED FIVE

The structurally deficient rating is an early warning sign for engineers to use to prioritize funding and to initiate rehabilitation or replacement of a bridge. The rating applies to the three main elements of a bridge (deck, superstructure or substructure). These elements are rated on a scale from zero (closed to traffic) to nine (relatively new). If any element is rated a four or less, the bridge is structurally deficient, by federal standards. This does not mean a bridge is unsafe; if a bridge is unsafe, it will be closed.

SHA's accelerated approach to bridges rated five for a significant time period involves replacing or rehabilitating these bridges before they become structurally deficient. This proactive approach reduces the number of structurally deficient bridges and allows SHA to repair sooner, for less remedial/reconstruction work, thereby helping to improve transportation while making state government more efficient.

ELECTRONIC BIDDING

SHA is working to bring 100 percent electronic bidding for all capital contracts to SHA and MDOT. This will allow companies doing business in Maryland to bid anytime and anywhere right up until the last minute. The system will make it easier for contractors to make changes to their bids and bid on multiple projects simultaneously, allow SHA to more easily capture bid data to complete more useful bid analyses, and make bidding projects in Maryland more competitive by expanding opportunities for contractors and suppliers across the state and in the mid-Atlantic region. It includes a small business network that will be especially helpful in bringing prime contractors and disadvantaged business enterprise contractors together. SHA is in the procurement phase of this initiative; our goal is to have our projects available for online bidding by December 2016. Once completed, it will make state government more efficient and responsive, and make Maryland more competitive.

DOVER BRIDGE RENDERINGS

New Bridge with Old Bridge in Closed Position

New Bridge with Old Bridge in Open Position

Larry Hogan, ***Governor***
Boyd K. Rutherford, ***Lt. Governor***
Pete K. Rahn, ***MDOT Secretary***
Gregory C. Johnson, P.E., ***SHA Administrator***

Maryland Department of Transportation
State Highway Administration

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DLS Budget Analysis Issues

Performance Analysis: Managing for Results

System Preservation and Maintenance – Highway Maintenance Conditions
Page 10

SHA should discuss the challenges that have prevented it from achieving the goal for this objective, particularly the marked deterioration in performance in calendar 2015.

MDOT Response:

The extreme weather over the past two winter seasons caused deterioration to highway conditions, such as line striping, pavement markings, signs, guardrails, and curbs that will require extra effort to improve the maintenance condition to the desired level. In addition, the extended winter season did not afford as much opportunity for typical late fall and early springtime work, such as brush and tree maintenance, ditching, culvert/inlet cleaning and repair, and drop-off/build-up maintenance. Finally, the loss of some inmate labor crews in certain areas of the state did not allow for the completion of planned work, such as mowing and litter pick-up.

Under Governor Hogan's initiative – Invest in Highways, Interchanges and Bridges - $250 million has been added over the next three fiscal years to the resurfacing and pavement program which is included in the FY 2016-2021 Consolidated Transportation Program. This increase in the highway resurfacing program will directly address the deterioration in our highway condition.

Additionally, the Governor's increased investment in the preservation of the state's highways reduced the number of bridges that are listed as structurally deficient to 69 in calendar year 2015. This is the lowest recorded number since SHA began recording data and represents less than 3 percent of SHA's 2,565 bridges.

DLS Budget Analysis Issues (Continued)

Issues

1. **Transportation Watershed Implementation Plan Funding a *DE Facto* Transportation Trust Fund Responsibility – Page 29**

Given the changed circumstances since the mandate was passed and in recognition the TMDL funding has become a *de facto* TTF responsibility, it is recommended that language be added to the budget bill expressing the intent that the TMDL funding mandated in statute should be provided by the TTF. Proposed language is included in the recommended action section of this analysis for consideration by the committees.

MDOT Response:

MDOT supports the Governor's Allowance.

2. Certain Local Government Uniform Financial Reports Not Submitted – Page 29

It is recommended that State transportation aid funding under the Highway User Revenues program suspended until the jurisdictions submit delinquent annual audit reports and UFRs. Suggested language is included in the Recommended Actions section of this analysis for consideration.

MDOT Response:

MDOT supports the Governor's Allowance.

Operating Budget Recommended Actions

1. Add the following language:

   It is the intent of the General Assembly that the funding for transportation-related Watershed Implementation Plan projects mandated by Section 8-613.3 of the Transportation Article be provided through appropriation from the Transportation Trust Fund.

   MDOT Response:

   MDOT supports the Governor's Allowance.

2. Add the following language to the special fund appropriation:

   , provided that $5,845 of this appropriation made for the purpose of providing transportation aid to the Town of Deer Park in Garrett County may not be expended until the town has submitted audit reports and Uniform Financial Reports as required under Sections 16-304 and 16-306 of the Local Government Article for fiscal years 2013, 2014 and 2015. Funds restricted pending the receipt of these documents may not be transferred by budget amendment or otherwise to any other purpose and shall be cancelled.

   Further provided that $1,633 of this appropriation made for the purpose of providing transportation aid to Caroline County on behalf of Marydel may not be expended until the town has submitted audit reports and Uniform Financial Reports as required under Sections 16-304 and 16-306 of the Local Government Article for fiscal years 2012, 2013, 2014 and 2015. Funds restricted pending the receipt of these documents may not be transferred by budget amendment or otherwise to any other purpose and shall be cancelled.

   MDOT Response:

   MDOT supports the Governor's Allowance.

Paygo Capital Budget Recommended Actions

1. Concur with Governor's allowance.

MDOT Response:

The Department concurs.