





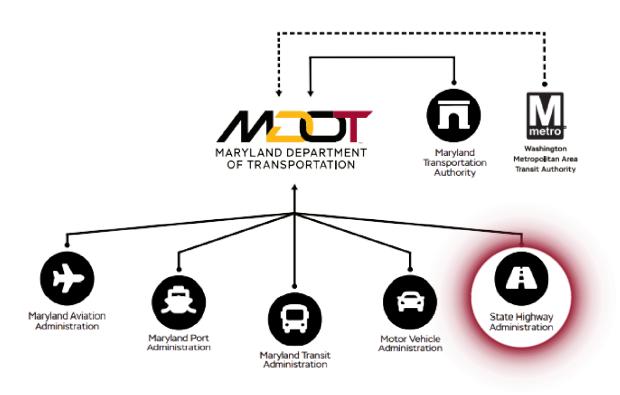
# **CONTENTS**

- 03 INTRODUCTION TO MDOT SHA
- 05 MESSAGE FROM THE ADMINISTRATOR
- 07 FUNDING
- 11 MDOT SHA BY THE NUMBERS
- 13 MDOT SHA FACILITIES
- 15 ACCOMPLISHMENTS
- 21 MDOT SHA PRIORITY PROJECTS
- 25 COMPLETED PROJECTS
- 29 CUSTOMER COMMUNICATIONS
- 31 MDOT SHA PROGRAMS
- 39 EMERGENCY RESPONSE
- 41 SAFETY
- 43 ENVIRONMENTAL ACCOMPLISHMENTS
- 45 MDOT SHA CARES
- 47 AWARDS
- 49 GLOSSARY

# INTRODUCTION TO MDOT SHA

## MDOT State Highway Administration (MDOT SHA)

The Maryland Department of Transportation (MDOT) has six multimodal Transportation Business Units (TBUs), which include the MDOT State Highway Administration (MDOT SHA). The organization works together as ONE MDOT toward one shared mission.



### **MDOT Mission**

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

## **MDOT SHA Vision**

To provide a safe, well-maintained, reliable highway system that enables mobility choices for all customers and supports Maryland's communities, economy and environment.

## **MDOT SHA Values**



#### **INTEGRITY**

We do the right thing even when it is not easy.



#### **TEAMWORK**

We work together to advance solutions for the organization.



#### **INCLUSION**

We respect, collaborate with, and listen to each other.



#### COMMITMENT

We do what we say we are going to do.



# MESSAGE FROM THE ADMINISTRATOR



Roadways are more than concrete and asphalt paths that move vehicles from Point A to Point B. In the broadest sense, roadways help get us to life's opportunities.

At the Maryland Department of Transportation State Highway Administration (MDOT SHA), our mission every day is to keep our state roads and bridges safe, open and in excellent condition. With traffic volumes returning to pre-pandemic levels, maintaining this high-level of service can be a challenge, especially given weather conditions and other

hard-to-plan-for events. But our 2,800 MDOT SHA workers are more than up to the task.

Our team works every day to develop multi-model solutions so that vehicles, pedestrians, and bicyclists can share the road safely. We continue to look for ways to use a data-driven approaches, as well as smart devices and technology to deliver these projects more effectively and efficiently.

We have built a shelf of projects that will benefit residents and businesses for future generations, focusing on asset management, accessibility and mobility. Asset management looks to preserve our current system while looking at ways to better our infrastructure. Accessibility looks for ways for everyone – pedestrians, bicyclists and motorists – to have safe access to our roadways. Mobility uses technology and data to improve the efficiency of our existing footprint.

Above all, we are driven to provide a safe and reliable roadway system for all users, including our employees who maintain them. We rely on the concepts outlined in our Context Driven Guide, as well as our Vision Zero philosophy, to guide us every day as we look for design solutions to help protect our most vulnerable users.

As we enter 2023, we pledge to continue to listen to our customers' needs and reexamine our processes to address their needs.

Tim Smith
Administrator



# **FUNDING**

## **MDOT SHA Funding FY 22**

# **Operating FY 2022**

Highway Safety: \$15.3 million Maintenance: \$303.6 million

Total: \$318.9 million

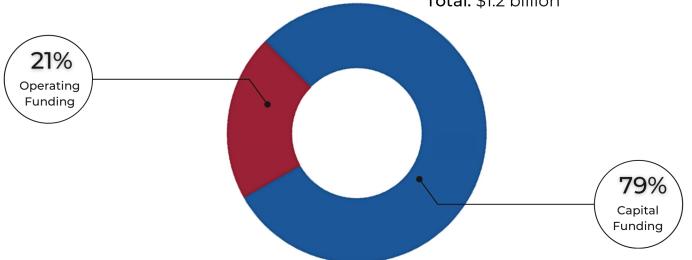
# Capital FY 2022

Capital Projects: \$877.7 million

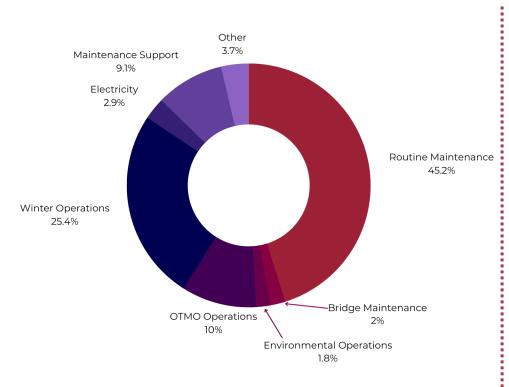
County & Municipality: \$340.2 million

IT Development: \$4.5 million

Total: \$1.2 billion

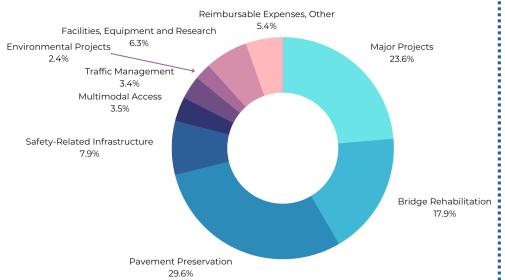


# Operating Maintenance Funds Spent FY 2022





# Capital Projects Funds Spent FY 2022





Reimbursable Expenses, Other

\$47.5M

## Infrastructure Investment and Jobs Act (IIJA)

In November 2021, the United States (U.S.) Congress enacted federal surface transportation authorizing legislation known as the Infrastructure Investment and Jobs Act (IIJA). The legislation provides investment in transportation infrastructure through Federal Fiscal Year (FFY) 2027.



The IIJA sets policy and budget authority for the USDOT during the next five years, totaling approximately \$567 billion nationally for surface transportation. IIJA is not all new money. It includes all federal formula funding, including ongoing projects that were already in last year's budget.

Further, IIJA has increased opportunities for discretionary competitive grants. MDOT continues to seek these opportunities to maximize our transportation funding.

# -MDOT SHA Proposed IIJA Projects



### District 1

- A. Dorchester: MD 343 at Crusader Street
- B. Somerset: MD 413 Trail Marion Station to Westover (Phase 2)
- C. Wicomico: US 50 West of MD 347 to East of Rockwalkin Road
- D. Worcester: MD 90 Planning Study



#### District 2

- A. Caroline: MD 404 Denton to MD 16 Study
- B. Cecil: MD 222 Port Deposit Drainage
- C. Kent: MD 514 MD 20 to Sutton Way Sidewalks
- D. Queen Anne's: MD 18 Study Castle Marina Road to Kent Narrows
- E. Talbot: MD 328 Planning Study US 50 to Black Dog Alley
- F. Talbot: US 50 at Chapel Signal Reconstruction
- G. Talbot: US 50 at MD 322 Lighting Project



#### District 3

- A. Montgomery: MD 97 Montgomery Hills
- B. Prince George's: I-95/I-495 Bridge Replacement over MD 4
- C. Prince George's: I-95/I-495 at Medical Center Drive
- D. Prince George's: MD 717 over Western Run



#### District 4

- A. Baltimore: I-795 at Dolfield Boulevard Interchange
- B. Harford: US 1 Bypass at MD 24



#### District 5

- A. Anne Arundel: I-97 Transportation Systems Management and Operations US 50 to MD 32
- B. Calvert: MD 231 Intersection/Safety Improvements
- C. Charles: MD 6 La Plata Streetscape
- D. St. Mary's: MD 5 Great Mills



#### District 6

- A. Allegany: I-68 Cumberland Viaduct Deck Replacement
- B. Allegany: US 220 Cresaptown Intersection Improvements
- C. Garrett: US 219 Old Salisbury Road to PA Line
- D. Washington: I-81 Phase II



#### District 7

- A. Carroll: MD 32 2nd Street to Main Street
- B. Carroll: MD 97 Westminster Study
- C. Frederick: US 15 I-70 to MD 26
- D. Howard: Transportation Systems Management and Operations on I-70, US 29 and US 40

# MDOT SHA BY THE NUMBERS



77.5% total value of goods moved in MD are by truck



MDOT SHA owns and maintains the interstate, U.S. and Maryland numbered non-toll routes in



17,340 +

Lane Miles of Roads and Ramps Maintained



2,500 +

State Bridges Maintained



Maintenance Shops

2,956 **MDOT SHA Employees** 

**Engineering Districts** 



MDOT SHA roads carry

65% of

road 16% of mileage

that translates to

5 4 8 9 4 0 0 0 0 0 estimated vehicle miles traveled in Maryland in 2022

**MDOT SHA Roads** are estimated to carry 217.5 million tons of freight with more than \$285 billion in value.



# **MDOT SHA Funding**

State Funds: \$828 million

Federal Funds: \$713.4 million



# MDOT SHA FACILITIES

MDOT SHA Headquarters, complexes, district offices, maintenance shops and landscape depots are homes for MDOT SHA operations. Employees in these locations provide the traveling public with a safe, well-maintained highway system that enables mobility choices for all customers and supports Maryland's communities, economy and environment.

## MDOT SHA Headquarters -

MDOT SHA Headquarters is comprised of the Office of the Administrator, the Deputy Administrator for Administration and the Deputy Administrator for Planning, Engineering, Real Estate and Environment. MDOT SHA Headquarters is located in Baltimore City.



## MDOT SHA Hanover Complex -

MDOT SHA's Hanover Complex is home to the Statewide Operations Center, the Offices of Asset Management, Construction, Transportation Operations and Mobility, Maintenance, Materials Technology, Traffic and Safety and Homeland Security and Occupational Safety. The complex is located in Hanover, Maryland in close proximity to MDOT Headquarters and BWI Marshall Airport.



## MDOT SHA Maintenance Shops .....

MDOT SHA Maintenance Shops are responsible for coordinating all maintenance activities on state highways in their districts. All 28 MDOT SHA Maintenance Shops provide services such as pavement resurfacing, sign installation and repairs, traffic barrier repairs, mowing and trimming operations, litter pick-up, snow removal, traffic control for accidents and emergencies and pavement markings.



District 7 - Westminster Shop



District 6 - La Vale Shop



District 4 - Owings Mills Shop

#### **MDOT SHA District Offices**

District Offices oversee all district operations including traffic, construction, maintenance, project development, right-of-way and utilities.

#### District 1 (Dorchester, Somerset, Wicomico and Worcester counties)

- Headquartered in Salisbury
- Maintains 157 bridges and 1,984 lane miles of roadway
- District Engineer: Mark Crampton (410-677-4000)

#### District 2 (Caroline, Cecil, Kent, Queen Anne's and Talbot counties)

- Headquartered in Chestertown
- Maintains 214 bridges and 2,057 lane miles of roadway
- District Engineer: Ken Fender (410-778-3061)

#### District 3 (Montgomery and Prince George's counties)

- Headquartered in Greenbelt
- Maintains 513 bridges and 3,434 lane miles of roadway
- District Engineer: Derek Gunn (301-513-7300)

#### District 4 (Baltimore and Harford counties)

- Headquartered in Hunt Valley
- Maintains 467 bridges and 2,371 lane miles of roadway
- District Engineer: Sutapa Samanta (410-229-2300)

#### District 5 (Anne Arundel, Calvert, Charles and St. Mary's counties)

- Headquartered in Maryland's Capital, Annapolis
- Maintains 359 bridges and 2,826 lane miles of roadway
- District Engineer: Kimberly Tran (410-841-1000)

#### District 6 (Allegany, Garrett and Washington counties)

- Headquartered in LaVale
- Maintains 410 bridges and 1,905 lane miles of roadway
- District Engineer: Anthony Crawford (301-729-8400)

#### District 7 (Frederick, Carroll and Howard counties)

- Headquartered in Frederick
- Maintains 484 bridges and 2,463 lane miles of roadway
- District Engineer: Andrew Radcliffe (301-624-8100)



District 1 - Headquarters



District 4 - Headquarters



District 7 - Headquarters

# **ACCOMPLISHMENTS**

## Preserving Maryland's Structures



MD 39 Bridge in Garrett County

As part of Maryland's efforts to improve road safety, MDOT SHA is responsible for maintaining, repairing, and strengthening the state's bridges to help keep highway users safe. Maintenance of Maryland's roads, bridges, and other structures is vital for the state's overall infrastructure since it prevents structural failures and prolongs the life of bridges. For bridges to remain safe, they need to be inspected regularly to make sure they are in good working order. This also determines whether maintenance or preservation work needs to be prioritized.

During the past year, MDOT SHA's Office of Structures has conducted 1,341 bridge inspections, 798 inspections of small structures (including 144 retaining walls), and 38 inspections of underwater structures as part of their work to ensure public safety. It was as a result of this work that MDOT SHA now only has 26 bridges rated poorly, an all-time low. All of these bridges are either in the process of construction, funded for construction, or in the design stage.

## Keeping Highway Workers Safe

Maryland's Move Over Law was expanded on October 1, 2022, as part of the state's continuing effort to protect law enforcement, emergency responders, and any motorist that may encounter a roadside emergency and must stop near travel lanes.

The expanded law requires motorists to make a lane change or slow down when approaching any stopped, standing, or parked vehicle displaying warning signals – including hazard warning lights, road flares, or other caution signals including traffic cones, caution signs, or non-vehicular warning signs. If it is not safe or feasible to move over, motorists must slow to a reasonable and prudent speed that is safe for existing weather, road and vehicular or pedestrian traffic conditions.



## Pedestrian and Bicycle Safety



Through its partnerships with community groups and organizations, MDOT SHA promotes bicycle and pedestrian networks. Alternative modes of transportation, such as walking and bicycling, are available in Maryland. Walking and bicycling have become increasingly popular in recent years as commuting options to promote a more sustainable lifestyle increased. In the course of this year, MDOT SHA designed and constructed new sidewalks throughout the state.

An investment of \$2.2 million in FY 2022 was made in the construction of new directional sidewalks along MD 424 in Anne Arundel County as well as the installation of a sidewalk between Crestmount Road and Cedar Avenue on US 1 in Howard County. These projects improved pedestrian accessibility and safety along busy community corridors with numerous homes, businesses, churches, schools and recreational facilities.

MDOT SHA also invested \$3 million in FY 2022 in designing and constructing sidewalk improvements to achieve ADA-compliant accessibility, including the reconstruction of sidewalks in Baltimore, Carroll, Frederick, Harford, Prince George's, Queen Anne's, Talbot and Worcester counties.

In response to customer feedback, MDOT SHA has identified critical areas and priority corridors for pedestrians and bicyclists. In Montgomery County, at several locations on US 29 (Columbia Pike), MDOT SHA began installing traffic signals, crosswalks and pedestrian crossings at key intersections. Additionally, MDOT SHA completed a "Road Diet," which converted one travel lane in each direction on MD 187 (Old Georgetown Road) between south of the Capital Beltway (I-495) and Nicholson Lane that created protected and buffered bicycle lanes.

In Howard County, the state began a priority project on US 1 (Washington Boulevard) at the intersections of Brewers Court, Guilford Road, Rowenbury Drive and Doctor Patel Drive to address safe pedestrian and bicycle connectivity.

On the Eastern Shore, MDOT SHA, after close collaboration with community stakeholders, reduced the speed limit on MD 707 (Grays Corner Road) from 50 mph to 40 mph.

# Improved Efficiencies and Enhanced Customer Service

In 2022, MDOT SHA drastically improved state hiring efficiencies by automating the entire New Hire Packet using DocuSign. This effort converted 35 documents digitally and enabled our new employees to complete all of their required paperwork online, resulting in a more efficient and convenient process. The MDOT SHA Office of Administration continues to automate processes and handles very few documents in paper form currently. Through MDOT SHA stewardship, we have reduced outsourcing our print jobs by 90% saving \$8,000 monthly, and automated business processes across multiple departments through 50 templates in DocuSign, replacing 150-200 paper documents.



## Emergency Repairs to Aging Infrastructure

The summer of 2022 was challenging in terms of extreme weather events that found vulnerabilities in the aging infrastructure. On June 15, after a thunderstorm, a hole in the pavement opened on the right shoulder of southbound I-270 prior to I-370. As it turned out, what was seen from a driver's point-of-view was just the tip of the iceberg. The void underneath was a 20-feet x 15-feet x 12-feet hole. This necessitated a double right-lane closure on one of the state's busiest roads. Crews worked feverishly to have all travel lanes open before the busy July 4th holiday weekend. Crews opened the lanes on July 2.

On July 14 during the afternoon commute, an MDOT SHA employee noticed what appeared to be a hole in the road on northbound I-97 prior to the I-695 ramps. MDOT SHA quickly assembled a team and secured a contractor who was able to re-open the lanes less than two days later, well in advance of the heavy traffic of people returning from the beach.



Crews applying asphalt lifts after filling in the void under I-97

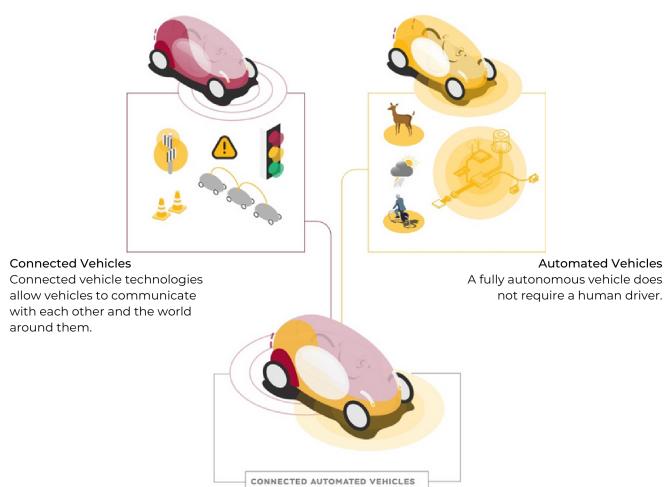
Anne Arundel County

## Harnessing Cutting-Edge and Growing Technology

Connected and Automated Vehicles (CAVs) are on our roads today with sensors that rely on our infrastructure to operate efficiently. CAVs are increasing safety on our roads with features such as automatic emergency braking. As these technologies improve, MDOT SHA is preparing proactively and adapting to work in synchrony with these technologies rather than failing to tap into the efficiency and safety benefits CAVs can bring to drivers on our roadways.

MDOT SHA is piloting a project on MD 214 (Central Avenue) at the Addison Road – Seat Pleasant Metro Station entrance in Prince George's County. The effort piloted new technology for longer term development and staff training for crosswalk safety. The main purpose was to identify barriers to the project delivery as it relates to connected vehicle technologies and incentivizes the private industry to pursue connected vehicle technologies.

Another core element of MDOT SHA's goal to improve mobility is the active, real-time management of our roadway system. MDOT SHA's Office of Transportation Mobility & Operations, home to MDOT SHA's nationally recognized Coordinated Highways Action Response Team (CHART), also houses our Statewide Operations Center (SOC), MDOT SHA's 24/365 traffic management center. In 2022, MDOT SHA took the first step in realizing this goal by training TMC Operators on the use of MDOT SHA's signal control software, enabling them to enact incident and congestion-based timing plans. These plans were developed for a pilot corridor, US 50, and enacted for the first time over Memorial Day weekend, marking the birth of real-time traffic management operations for MDOT SHA and Maryland.



## Reaching the Beach Safely and Efficiently



View of the St. Martin River Bridge

During the summer months, Ocean City becomes Maryland's second-largest city. In June, Governor Hogan announced \$15 million in funding to move MD 90 (Ocean City Expressway) corridor improvements into the crucial design phase. MD 90 improvements between US 50 (Ocean Gateway) and MD 528 (Coastal Highway) are Worcester County's top transportation priority. The funds will enable MDOT SHA to complete the planning phase and move the project to the design phase which includes widening the St. Martin River and Assawoman Bay bridges.

The highway also is the primary access point for the Town of Ocean Pines and supports access to Bishopville and Showell. During summer weekends, the western end of MD 90 at US 50 (Ocean Gateway) carries approximately 33,000 vehicles per day. The average daily traffic volume is expected to increase by 10% by 2045. MD 90 also experiences significant traffic congestion should there be an incident or traffic impediment on US 50 at the southern end of Ocean City.

In addition to improving safety and reducing traffic congestion, eventual improvements to MD 90 will increase response times for emergency services, particularly during the summer months. MD 90 and US 50 are primary hurricane evacuation routes. MDOT SHA solicited public input about the MD 90 Corridor Study from mid-October to November 30, 2022.

## **Electric Vehicle Charging Stations**

MDOT SHA was an active partner with the Maryland Public Service Commission (PSC) and permitted local utility companies to install Electric Vehicle Charging Stations at several MDOT SHA Park and Ride locations.

The first site includes three stations at the Myersville Park and Ride facility off I-70 in Frederick County. The installation was made possible through a partnership between MDOT SHA and Potomac Edison Company (First Energy). The chargers were activated November 11, 2022.



## Safe Roads in Winter While Protecting the Environment

MDOT SHA continued to reduce overall salt use while continuing to maintain a high level of service for motorists.

MDOT SHA pretreats highways in advance of snowstorms by spraying salt brine on roads and bridges prior to a snowstorm and allowing enough drying time. The brine prevents snow and ice from bonding or "packing" on the surface of the highway.

The department is intensifying its use of pre-treated salt. Pre-treating with salt brine (approximately 23% salt and 77% water) helps salt better adhere to the road and prevents waste due to "bounce and scatter" as it's applied. Studies have shown that pre-treating salt can lead to a 30% reduction in overall salt usage.

MDOT SHA has designated at least one Direct Liquid Application (DLA) route in each of its seven engineering districts. MDOT SHA will use only salt brine in the actual treatment of these roads during a snowstorm. To date, MDOT SHA as increased DLA routes to more than 400 lane miles.

## Keeping Maryland Beautiful -

Maryland is a beautiful state – with mighty mountains to the west, a grand ocean to the east, and the largest City of Baltimore and a neighbor to the Nation's Capital in between. However, there is a scourge that is plaguing our roadsides and drainage systems – LITTER.

Litter along our highways has cost taxpayers more than \$62 million dollars over the last eight years. On average, that's \$7.7 million dollars a year. In addition to dollars wasted on cleanup efforts, litter poses a significant hindrance to MDOT SHA maintenance crews working on mowing operations and is a danger to all highway users.

MDOT SHA deploys targeted litter patrols frequently and partners with local jurisdictions to collect tons of litter from Maryland roadsides. From June 2020 to October 2022, crews have picked up nearly 12 tons of litter at a cost of approximately \$17.4 million.

MDOT SHA also continues to partner with Anne Arundel County for targeted litter patrols each quarter.



# MDOT SHA PRIORITY PROJECTS

In 2015, officials announced an unprecedented \$1.97 billion investment in transportation funding for highways and bridges from Western Maryland to the Eastern Shore. Following is a list of those priority projects identified and either completed in CY 2022 or still under construction.

# MD 32 Phase 2 Widening between Linden Church Road and I-70 Howard County

In August 2022, officials announced the completion of Phase 2 of the MD 32 expansion project between MD 108 (Clarksville Road) and I-70, a top priority for Howard County. The \$127.7 million added a lane in each direction with a center median, as well as a new ramp to I-70. Together with Phase 1 (MD 32 from MD 108 to Linden Church Road), this project enabled a critical segment of MD 32 in Howard County.

Phase 2 construction began in 2019 following the completion of Phase 1. In addition to roadway widening, this phase included replacement of the Triadelphia Road Bridge over MD 32, creation of an access road connecting the Vistaview community to MD 144 (Frederick Road), reforestation efforts and construction of bioswales to filter and manage stormwater before it enters the Chesapeake Bay watershed. MD 32 is a busy commuter route. In addition, the MD 32 expansion will benefit civilian and military employees of nearby Fort Meade in Anne Arundel County, which is the state's largest employer.



MD 32 Project

### US 1 College Park Corridor Improvement Project

#### Prince George's County

Construction continues on the \$52.4 million US I (Baltimore Avenue) project to improve traffic operations, pedestrian and bicyclist circulation and safety in College Park. The project is one of Prince George's County's top priorities. It will not only produce a safer, more attractive and less congested gateway to the University of Maryland, it also will spur economic development and recovery in one of the region's most important corridors.

Improvements include widening the roadway and adding a raised median, adding pedestrian enhancements including Americans with Disabilities Act (ADA)-compliant sidewalks and ramps, new intersection lighting, upgraded drainage and stormwater management facilities and signage and pavement markings. The project, which kicked off in spring 2020, should be complete in 2023.

#### I-270 Innovative Congestion Management (ICM) Project

#### Montgomery and Frederick Counties

In 2016, officials announced the I-270 ICM Project, aimed at providing congestion relief to one of the most congested roads in the state, the 34.4-mile I-270 corridor from I-70 to I-495. This \$132 million safety-improvement project will ease 14 bottlenecks and save drivers up to 30 minutes on their morning commutes between Frederick County and the Capital Beltway in Montgomery County.

Ramp metering is one component of the overall ICM infrastructure and technology improvements that will result in more predictable and consistent commutes for thousands of drivers. Ramp metering uses traffic signals and sensors to manage traffic flow entering the highway. The system balances highway demand and capacity, maintains optimal highway operation and reduces congestion for safer, more efficient travel.

While a first for Maryland, ramp meters have been used elsewhere as a proven, cost-effective tool to help improve safety and efficiency and reduce congestion. In September 2021, MDOT SHA activated the new ramp metering system on 23 ramps leading to southbound I-270. MDOT SHA plans to install ramp metering on 22 ramps onto northbound I-270, for a total of 45 ramps at 18 interchanges, in 2023.



ICM Ramp metering

### I-95/I-495 (Capital Beltway) Bridges over Suitland Parkway

#### **Prince George's County**

In September 2022, MDOT SHA completed the \$41 million project to replace the Capital Beltway bridges over Suitland Parkway. The original bridges were built in 1963 and outlived their useful service lives. Work included bridge replacement, an additional one-foot clearance for Suitland Parkway and drainage improvements. The new bridges now provide a safe, reliable and efficient transportation network for those who travel along this stretch of the Beltway in Prince George's County.

# I-83 (Harrisburg Expressway) Bridges over Padonia Road Baltimore County

In July 2022, crews wrapped up work on the \$25.8 million project to replace the I-83 dual bridges over Padonia Road. Originally constructed in 1950, the dual bridges carrying northbound and southbound I-83 traffic over Padonia Road required replacement. The bridge replacement work began in 2018 and also included construction of a dedicated left-turn lane for motorists traveling from eastbound Padonia Road to northbound I-83, improvements to two ramp movements from southbound I-83 to Padonia Road and culvert widening for Beaver Run under I-83.

# US 40 (Pulaski Highway) Dual Bridges over Gunpowder Falls and Little Gunpowder Falls Baltimore/ Harford County Line

In summer 2018, work began to rehabilitate the superstructure and widen the decks of dual bridges along US 40 between White Marsh and Joppatowne. The project includes replacing the steel and concrete girders, replacing the riding surface and widening the bridge decks to provide a minimum of 10-foot shoulders. This \$32 million project will result in enhanced safety and improved ride quality for bicyclists, motorcyclists, and motorists. Construction is expected to be complete in spring 2023.



Construction on US 40 Dual Bridges

## US 1 (Washington Boulevard) Bridge over CSX Transportation

### **Baltimore County**

Replacement of the US 1 (Washington Boulevard) Bridge over the CSX Transportation (CSXT) rail line in Halethorpe continues. Built in 1929, the steel girder bridge is safe for travel but has outlived its useful service life. Once complete in late fall 2023, the longer and higher structure will include wider shoulders, a new left turn lane for northbound US 1 traffic to Clarke Boulevard, new retaining walls and reconstruction of the Clarke Boulevard intersection. The new bridge will allow double-stack rail cars to travel on this section of the CSXT track, which is key factor for a positive freight economy in the state.

### I-695 Southwest Outer Loop from US 40 to MD 144

### **Baltimore County**

This \$121 million project to reconstruct and widen 1.44 miles of the outer loop of I-695 between US 40 and MD 144 wrapped up last year. Work also included replacing the Edmondson Avenue and Ingleside Avenue bridges over I-695, adding new retaining walls and sound barriers, realigning the ramp to MD 144 and reconstructing Ingleside Avenue beneath I-695.

# MD 5 (Point Lookout Road) between Camp Brown Road and the Lake Conoy Causeway St. Mary's County

Construction of the \$25.2 million project to upgrade and widen 2.2 miles of Point Lookout Road from Camp Brown Road to the Lake Conoy Causeway is expected to wrap up by early 2023. This project will result in improved safety for recreational vehicles, bicyclists and pedestrians traveling along this historic route to Point Lookout State Park.

#### I-270/MD 85 Interchange

#### Frederick County

In fall 2022, Administrator Tim Smith joined Secretary Jim Ports, elected officials, and MDOT SHA officials to cut the ribbon and announce the completion of the \$93 million project to reconstruct and expand the I-270/MD 85 (Buckeystown Pike) interchange in Frederick County. In 2015, officials announced funding for this project, a top-priority for Frederick County, as part of his administration's record investment in roads and bridges. Frederick County provided \$1.5 million to partially fund engineering for this project.

Improvements were aimed at enhancing safety, reducing congestion, replacing two poorly rated bridges with one new structure and expanding traffic capacity in a heavily traveled residential and commercial area. Northbound MD 85 traffic now accesses northbound I-270 by way of an innovative design known as a partial diverging diamond, where traffic signals direct motorists to cross in opposing directions, efficiently moving large volumes of traffic and increasing safety.

The project also included a wider, median-divided MD 85, new sidewalks and ramps, new bicycle lanes, wider exit ramps and new stormwater structures and pipes.



# **COMPLETED PROJECTS**

MDOT SHA completed 38 major projects including Transportation Alternatives Program (TAP) projects. Projects are listed by district below:

## District 1

## **Dorchester County**

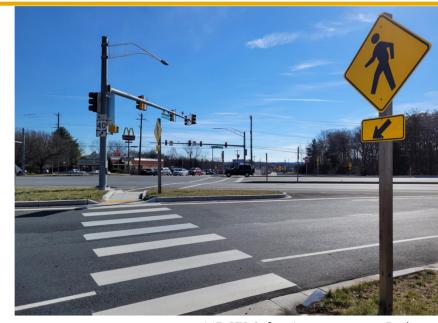
- Cannery Park Rails to Trails (TAP) \$274,000
- US 50 Fender Repairs to Bridge over Nanticoke River\$2M

## **Worcester County**

MD 376 (Bay Street) Intersection Capacity Improvements from US 113 to East of Flower Street \$3.6M

# District 2 Cecil County

MD 272 (North East Road) Safety Improvements from south of US 40 to Rogers Road \$7.2M



MD 272 Safety Improvements Project

# District 3

## **Montgomery County**

US 29 (Colesville Road) Safety and Resurfacing Improvements from MD 97 to St. Andrew's Way \$2.4M

## **Prince George's County**

- MD 3 (Crain Highway) Safety Improvements at Forest Drive \$5.9M
- ✓ I-95/I-495 (Capital Beltway) Bridge
   Replacements over Suitland Parkway
   \$41.1M
- I-95/I-495 (Capital Beltway) BridgeReplacements over Suitland Road\$36.4M
- ✓ I-95/I-495 (Capital Beltway) Bridge Replacements over MD 214 \$33.2M

## District 4

## **Baltimore County**

- I-83 (Harrisburg Expressway) Bridge Replacements over Padonia Road
   \$28.1M
- ✓ I-695 (Baltimore Beltway) Widening from US 40 to MD 144 \$125.2M
- MD 45 (York Road) Safety and Resurfacing Improvements \$16.9M
- ✓ I-695 (Baltimore Beltway) Drainage Improvements and Stream Restoration at Cromwell Bridge Road \$13.6M
- I-70 Bridge Rehabilitation over Patapsco River and CSX \$6.7M
- Cove Road Bridge Rehabilitation over I-695/MD 695\$6.1M

- MD 140 (Reisterstown Road)
  Resurfacing Improvements from
  Pleasant Hill Road to Painters Mill
  \$4.6M
- MD 695 (Broening Highway) Resurfacing Improvements from Maryland Avenue to east of Ralls Avenue \$3.7M
- MD 146 (Dulaney Valley Road) Three
   Culvert Replacements over Drainage
   Ditches
   \$2.3M
- MD 30 (Hanover Pike) Safety
  Improvements at Mount Gilead Road
  \$1.9M
- ✓ I-83 (Jones Falls Expressway)
   Environmental Preservation from
   I-695 to Pennsylvania state line
   \$1M



I-695 Widening from US 40 to MD 144 Project

## **Harford County**

MD 924 (Emmorton Road/Bond Street) Safety and Resurfacing Improvements from Plumtree Road to Ring Factory Road and from US 1 Bus to Kenmore Avenue \$3.9M Segment 2 of Ma & Pa Trail (TAP)
\$2.2M

## District 5

## **Anne Arundel County**

- US 50 and I-97 Environmental Preservation \$1.1M
- Phase 2 of Broadneck Peninsula Trail(TAP)\$3.2M
- ✓ I-195 Interchange Lighting
   Reconstruction at MD 295 and MD 170
   \$5.3M

## **Charles County**

✓ Indian Head Boardwalk Bicycle/Pedestrian Route \$2.7M



Phase 2 of Broadneck Peninsula Trail

## District 6

## **Allegany County**

- MD 51 (Oldtown Road) Bridge Replacement over C&O Canal \$4.7M
- MD 51 (Industrial Boulevard) Bridge Replacement over CSX and Canal Parkway \$13.9M

## **Garrett County**

- MD 39 (Hutton Road) Bridge
   Replacement over Youghiogheny
   River
   \$9.2M
- MD 39 (Hutton Road) Resurfacing Improvements from Ashby Ellis Road to US 219 \$3.7M

## District 7

## **Carroll County**

Safety Improvements on MD 32
 (Sykesville Road) from Johnsville Road
 to Bennett Road

 \$3.6M

## Frederick County

- Safety Improvements at I-270
   (Washington National Pike) and MD
   85 (Buckeystown Pike) Interchange
   \$93.1M
- Ø Bridge Replacement on MD 355(Urbana Pike) over Bennett Creek\$20.2M
- Safety Improvements at MD 26 (Liberty Road) Intersection at Old Annapolis Road/Water Street Road
   \$5.1M
- Commuter Action Improvements for Ridesharing Facilities on US 15 (Jefferson National Pike) along Mt. Zion Road and Elmer Derr Road
   \$4.2M



MD 32 Safety Improvement Project

## **Howard County**

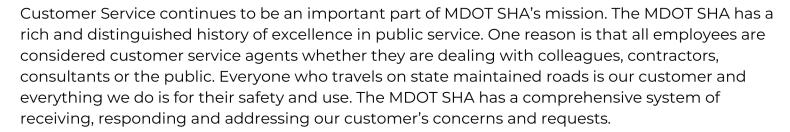
- Safety Improvements on MD 32 (Patuxent Freeway) from Linden Church Road to I-70 \$127.7M
- Environmental Preservation on I-95 from Prince George's County line to Baltimore County line

\$918,000

 Resurfacing on MD 32 (Patuxent Freeway) at Dorsey Run Road Interchange
 \$3.4M

# **CUSTOMER COMMUNICATIONS**

## Customer Care Management System (CCMS)



The Customer Care Management System (CCMS) is MDOT SHA's foremost method of upholding its distinguished history of excellence in public service. CCMS' processes embody real-life customer service skills by simulating how best to serve our customers.

I commute from Warfordsburg to Ft. Meade every day during the week...Washington County looks great. Thank you for doing your jobs and making the county look good! Thank you to all the state highway and road workers in Howard County...you all do a great job maintaining the state roads and highways...Keep up the good work!

"Thank you" on behalf of the town of Powellville for cleaning up the Adkins Mill Pond... This year we did not have to reach out to anyone... Thanks for the added effort!

Approximately 21,536 service request tickets have been submitted in CCMS, of which 85% have been closed. District Maintenance engineers in the shops can use data from CCMS to get ahead of customers' concerns and address frequently requested tasks and maintain areas that routinely need attention.

MDOT SHA celebrated Customer Service Week by highlighting the positive feedback we have received from our customers through various methods.

This year's theme was, "Celebrate Service." More than 75% of customers who completed the CCMS survey rated our service as good or excellent. Out of nearly 800 surveys, 99% of motorists who received assistance from the CHART Traffic Incident Management Patrols have rated the service as good or excellent. To celebrate our staff, MDOT SHA maintains a kudos page, listing compliments from our customers.

MDOT SHA's future will build upon a foundation that includes continuing to deliver the very best customer service experience for everyone.

## Social Media

MDOT SHA continues to amplify its message and increase its interaction with customers through social media. Using Facebook, Twitter and Instagram, MDOT SHA grew its audience in 2022 by significant numbers. The metric worth highlighting for 2022 is post impression. Post impressions is a term for the total number of times a post is visible in user timelines and feeds. This metric provides a simple representation of brand visibility.

Here is a snapshot of MDOT SHA's post impressions year to date:

#### Post Impressions:



Increased 2.8 million from 6.6 million **Total:** 9.4 million



Increased 4.9 million from 2.7 million **Total:** 7.6 million

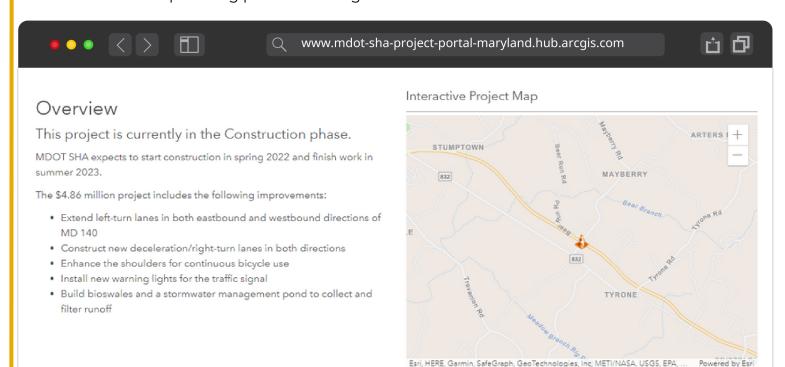


Increased 82,000 from 41,000 **Total:** 123,000

## Project Portal

Communicating with the public about ongoing projects like bridge replacements, intersection safety improvements, and bicycle and pedestrian enhancements is a priority for MDOT SHA. To give Maryland residents visibility into current and future roadway projects, MDOT SHA created Project Portal.

Project Portal offers a comprehensive view of major current, funded and planned projects occurring across Maryland. The public can quickly and easily access specific project information, including a general overview, interactive map, news, schedule, pictures and video, supporting documents and upcoming public meetings.

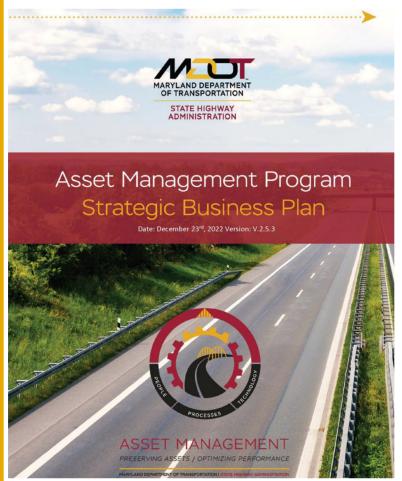


# **MDOT SHA PROGRAMS**

## Asset Management

The MDOT SHA Asset Management Program helps us preserve and improve the existing highway system through efficient maintenance and delivery of safety, mobility and asset improvement projects. It takes a fresh look at how we maintain our infrastructure with an in-depth review of all of our assets, large to small.

From lighting and signage to roads and bridges, our focus on people, process and technology enables MDOT SHA to make better, more transparent decisions to get the most value. The agency made great progress in 2022 to develop statewide asset data repositories and technology solutions to modernize field operations and maintenance activities.



MDOT SHA continues to use innovative preservation treatments, in addition to pavement rehabilitation, to maximize the service life of its pavements. In Fiscal Year 2022, MDOT SHA maintained its pavements in a similar condition as 2021, performing pavement preservation on approximately 8% of the pavement mileage.

MDOT SHA recorded its lowest number of poorly rated bridges (26) during the annual condition submission to the Federal Highway Administration (FHWA) on March 15, 2022. This number can be attributed to a strong system preservation program that targets addressing the right bridges at the right time including preventative maintenance and minor rehabilitation.

#### Stakeholder Involvement •

In 2022, MDOT SHA Asset Management Program stakeholders accomplished numerous deliverables including the Strategic Business Plan and long-range management plans for critical asset classes. The strategic business plan establishes a five-year implementation strategy to integrate risk-based practices into everyday activities and standard operating procedures.





#### MDOT SHA LEADERSHIP

Administrator, Deputy Administrators, and other leaders who establish MDOT SHA-wide vision for asset management, direct funding allocations for the MDOT SHA Asset Management Program, and provide decision-making support.



#### ASSET MANAGEMENT COUNCIL

Advisory council of asset management leadership experts that provides guidance and input into broad policies and strategies related to the MDOT SHA Asset Management Program.



#### ASSET MANAGEMENT OFFICE

Asset management experts who provide thought leadership, support, and guidance to Asset Class Sponsor Offices and Districts as well as tracking and reporting for the MDOT SHA Asset Management Program as a whole.



#### ASSET CLASS SPONSOR OFFICES & DISTRICTS

Asset class experts who perform the day-to-day lifecycle management and planning for all asset classes.



#### PROGRAM SUPPORT OFFICES

A network of offices across MDOT SHA that assist in providing resources to the MDOT SHA Asset Management Program.

## Op Lanes Maryland

The Maryland Department of Transportation State Highway Administration (MDOT SHA) is leading the development and delivery of Op Lanes Maryland (formerly known as the I-495 & I-270 P3 Program). The Op Lanes Maryland name reflects the program's evolution and progress toward building a new American Legion Bridge and providing Marylanders with new options and opportunities for more reliable travel in the National Capital Region.

#### What is Phase 1 South? -

Phase 1 South, the first project of the program's plan, plays a critical role in addressing congestion in the National Capital Region by improving travel times and reducing delay, moving more people on the interstates, improving the movement of goods and services and taking traffic off local roads in Montgomery County, Prince George's County and Washington D.C. The project is expected to reduce system-wide delays by up to 38% during peak travel periods and reduce congestion-related delays on local roads by 4.8% daily.

In addition to replacing the 60-year-old American Legion Bridge, the project will provide two new high occupancy toll (HOT) lanes on I-495 from south of the George Washington Memorial Parkway in Fairfax, Virginia to I-270 and on I-270 to just north of I-370. No improvements would be made at this time on I-495 between I-270 and MD 5. In the HOT Lanes, vehicles that carry three or more occupants, such as regional

Frederick 40 70 PHASE 1 SOUTH 495 from the GW Parkway 80 in Virginia to I-370, including a replacement of the American Legion Bridge ▲ NORTH Clarksburg 355 Gaithersburg 370 28 28 270 Rockville Greenbelt Great Falls Potomac Silver Spring 495 Bethesda Dulles Toll Road 50 (267) Washington Arlington 50 Upper

transit buses and carpools, can travel free, while other vehicles can pay a toll to ensure more reliable travel times. The existing general-purpose lanes on both interstates will be free to use as they are today.

Pedestrian and bicycle improvements also are part of Phase 1 South, including a shared-use path linking Maryland's Chesapeake and Ohio Canal towpath and Virginia's new trails via the American Legion Bridge. The project's multimodal commitment includes increasing bus bays at Shady Grove Metrorail Station and parking capacity at Westfield Montgomery Mall Transit Center.

Phase 1 South avoids all residential and business displacements and significantly reduces impacts to parkland, right-of-ways and other resources within the study area.

### What's new?

A Final Environmental Impact Statement (FEIS) for the I-495 & I-270 Managed Lanes Study (MLS) was published by MDOT SHA and the Federal Highway Administration (FHWA) in June 2022. In response to nearly 5,000 comments on the Draft Environmental Impact Statement (DEIS) and Supplemental DEIS, the FEIS provided the final traffic, engineering and environmental analyses for Phase 1 South, as well as a comprehensive mitigation plan to address natural, cultural, and socioeconomic impacts.

June 2022

August 2022

November 2022

MDOT SHA and FHWA published the FEIS for the I-495 & I-270 MLS. FHWA issued ROD for the MLS, final milestone in NEPA process. MDOT extended the predevelopment work deadline for Phase 1 Developer.

FHWA issued the Record of Decision (ROD) for the MLS in August 2022, selecting Phase 1 South as the Selected Alternative. The ROD marked the end of a four-year National Environmental Policy Act (NEPA) process that included 16 public workshops and seven public hearings with extended comment periods.

During November 2022, MDOT extended the deadline for Phase 1 Developer, Accelerate Maryland Partners (AM Partners), to complete ongoing predevelopment work – including preliminary design and collaboration with stakeholders – by March 21, 2023, to accommodate the 10-month delay of the NEPA process. The new deadline grants AM Partners a day-for-day extension in the amount of time to submit a proposal.

The Committed Section Proposal will include the design, construction, financing, operation, and maintenance of HOT lanes on I-495 from Virginia's George Washington Memorial Parkway, across a new American Legion Bridge and on I-270 from its interchange with I-495 to I-370.

Following approval from MDTA and MDOT, the Committed Section Proposal will serve as the basis of the first section P3 Agreement and will be reviewed by the Comptroller, Treasurer, certain legislative committees and the Department of Legislative Services before the Board of Public Works (BPW) approval and construction can begin.

The Phase 1 North project, which involves I-270 between I-370 and I-70, remains in the planning stage and NEPA is expected to begin in 2023.

## Context Driven

The Maryland Department of Transportation State Highway Administration (MDOT SHA) released a web resource to the Context Driven guide last year, which is customized to meet the transportation needs of communities and roadway users across the state.

The new web portal links users to details about the more than 200 Context Driven projects that MDOT SHA has implemented. These projects, such as adding bicycle lanes, speed limit reductions and traffic signal installations, aim to improve mobility, safety and provide multi-modal access across Maryland.

#### Access:

How much can you get to?



Mobility:
How far can
you go?

Published in 2020, the Context Driven guide is an aid that can be used to create transportation solutions for individuals based on the "context" of an area. In the document, Maryland's communities are divided into six categories – urban core, urban center, traditional town center, suburban activity center, a suburban area or rural area.

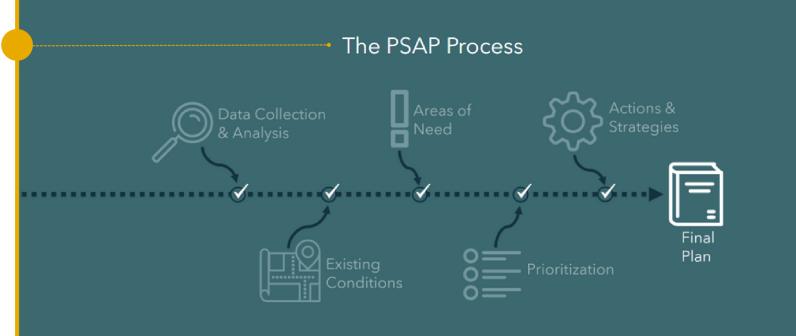
The highest priority of the Context Driven approach remains the same - to identify solutions that balance vehicular and pedestrian traffic and reduce the likelihood and severity of crashes involving pedestrians.



### Pedestrian Safety Action Plan (PSAP)

Federal, state, and local agencies are working side by side with citizens to review safety, identify strategies and reduce crashes in order to create a better quality of life for all of Maryland. Maryland is committed to Vision Zero, a strategy aimed at eliminating serious traffic-related injuries and fatalities. MDOT SHA is providing a framework for roadway design and creating an actionable plan to improve roadway safety and balance access and mobility in all contexts throughout Maryland.

From our urban cores to the rural stretches of the state, MDOT SHA is developing a toolkit of safety measures and updates while providing training to the agencies and their constituents. This plan is known as the Pedestrian Safety Action Plan (PSAP) and through PSAP, we will work with communities to improve pedestrian safety by identifying challenges, setting goals and objectives, focusing on areas of need, setting priorities and taking action.



### The 4 E's of Traffic Safety

The Maryland Strategic Highway Safety Plan (SHSP) guides all our efforts. It is data-driven, goal-oriented and each update sharpens our focus, by further leveraging the 4 E's of transportation safety.



#### **Enforcement**

State and local law enforcement agencies



#### Education

Driver education, citizen advocacy groups, educators, prevention specialists, etc.



#### Engineering

Highway design, traffic, maintenance, operations, planning, etc.



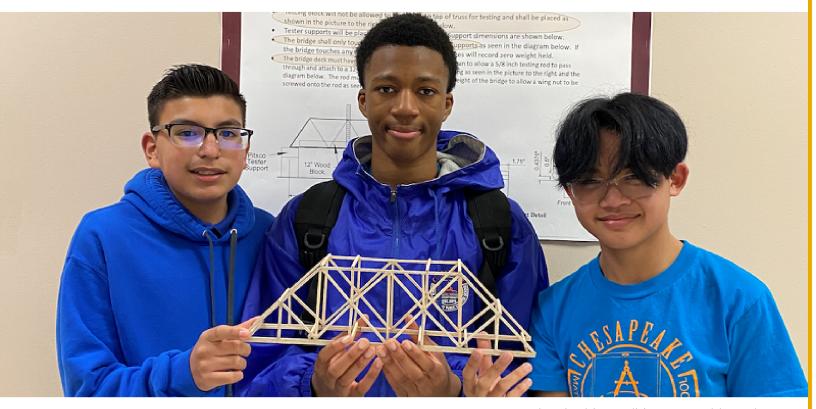
#### Emergency Medical Services First responders, paramedics,

First responders, paramedics, fire and rescue, etc.

# Maryland Transportation and Civil Engineering (TRAC)

Through the Maryland Transportation and Civil Engineering (TRAC) program, students across Maryland can engage with civil engineering and transportation-related curriculums that expose them to real-world transportation issues. Hoping to inspire the next generation of engineers and transportation officials, the Maryland TRAC Program's mission is to encourage higher education and careers in STEM.

TRAC, a hands-on educational outreach program developed by the American Association of State Highway and Transportation Officials (AASHTO), uses education modules to introduce middle and high school students to the complex and diverse world of engineering and construction. Curriculum topics include Bridge Building, Connected Automated Vehicles and Magnetic Levitation. Students can also participate in the Roadways in Developing Elementary Students (RIDES) program offered by AASHTO. This program introduces a STEM curriculum with a focus on transportation topics.



National Bridge Builder Competition Winners

#### Accomplishments this year included:

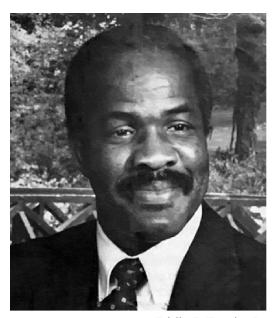
• Each year, AASHTO hosts the National Bridge Builder Competition, where students participating in the TRAC Program compete against other students from across the nation to test the strength-to-weight ratio of their balsa wood truss bridges. During the March 2022 Competition, Tiger Construction, Inc (TCI), from CMIT Academy North Middle School in Maryland, placed first in the 7th-8th grade group, winning the top prize in their division!

### Tombs Scholarship

In 2022, MDOT SHA paid tribute to one of its first Black American engineers by establishing the Eddie B. Tombs Sr. Scholarship. The scholarship will aid aspiring students at Morgan State University, a historically Black university.

In 1957 Eddie B. Tombs Sr. was one of the first Black Americans hired to perform engineering work for MDOT SHA, known then as the State Roads Commission. A Navy veteran and well-known in his community as a leader of his church and civic organizations, he was an integral contributor to the preliminary planning of three major highways: the Baltimore Beltway (I-695), Interstate 70 and the National Freeway (I-68).

This scholarship will encourage Morgan State University-bound high school seniors to pursue a bachelor's degree in civil engineering or transportation and urban infrastructure studies. Recipients will receive \$16,000 during the course of their four-year education and join MDOT SHA's workforce as summer interns.



Eddie B. Tombs Sr.

- In February 2022, the Chesapeake Lighthouse Foundation (CLF) hosted their school-based Bridge Builder Invitational, where MDOT SHA representatives were in attendance. Teams from various age groups had the opportunity to compete against their peers, testing the strength-to-weight ratio of their balsa wood bridges.
- Seven Maryland schools participated in the program, reaching approximately 1,000 students in 2022. One teacher called it the "best all-inclusive way to introduce engineering and bridges."

### **EMERGENCY RESPONSE**

MDOT SHA is no stranger to emergencies and this year was no different. Through the evening and morning rush hours and in severe weather conditions, our crews are committed to keeping our roadways open and operating safely.

#### What is CHART?

#### Coordinated Highways Action Response Team (CHART)

Coordinated Highways Action Response Team (CHART) began in the mid-1980s as the "Reach the Beach" initiative, focused on improving travel to and from Maryland's Eastern Shore. Since that time, CHART has become an Office of Transportation Mobility and Operations (OTMO) program responsible for providing traffic monitoring, 24/7 traffic management, traveler information (MD 511) services, incident response and management services.

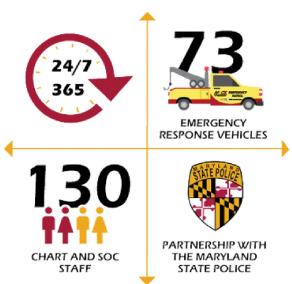


MDOT SHA's state-of-the-art command and control center, known as the Statewide Operations Center (SOC) is the "hub" of the CHART program, functioning 24 hours-a-day, 7 days-a-week with 3 satellite Traffic Operations Centers (TOCs) spread across the state to handle peak-period traffic.

### Traffic Management Center (TMC)

Traffic Management Center (TMC) Operations is responsible for monitoring, collating, coordinating, documenting and performing traffic management activities.

Each CHART Operations Center is staffed by TMC Operators who monitor traffic conditions, dispatch responders to incidents, disseminate information to travelers, and coordinate among various stakeholder agencies in order to improve mobility and safety on the roadway.



### Incident Response and Management

CHART Emergency Traffic Patrols (ETPs) primary function is traffic incident management to enhance responder safety, coordinate the quick clearance of Maryland's travel lanes, improve interagency communications and reduce secondary crashes. MDOT SHA's CHART incident management program saved motorists \$1.8 billion in user costs due to reduced delay, fuel savings and crash reductions and helped reduce delays by 39 million vehicle hours in CY 2021.





### Patrol Operations

CHART Patrol Division operates more than 50 Emergency Patrol vehicles covering more than 2,000 lane miles of state highways. CHART Emergency Response Technicians (ERTs) respond to more than 35,000 stranded motorists and 30,000 roadway incidents annually.

In their custom patrol vehicles, CHART ERTs can establish temporary traffic control at incident scenes, relocate disabled or damaged vehicles from travel lanes to a safe location and perform minor repairs for motorists disabled on the shoulder.



### SAFETY

Safety for all of Maryland's roadways users—pedestrians, bicyclists, motorists—is a top priority for MDOT SHA. And so is keeping our construction, maintenance and traffic response workers safe when building new roads, mowing grassy medians and assisting stranded motorists.

### Work Zone Safety



Ronnie Wright speaking at National Work Zone Awareness Week Event

In April during "National Work Zone Awareness Week," MDOT SHA held a press conference at an active work zone in Howard County. The event was live-streamed on social media and included a Governor's Proclamation and as well as a personal narrative from a maintenance worker. He recounted his experience of being struck from behind by a motorist while sitting in his work vehicle.

When the Move Over Law in Maryland was expanded on October 1, 2022, requiring motorists to make a lane change or slow down when approaching any stopped, standing, or parked vehicle displaying hazard warning lights, road flares or other caution signals, MDOT SHA participated in a press conference with AAA and other partners, increased messaging on social media and installed new roadway signage to alert motorists about the new guidelines.

MDOT SHA led the efforts in November during "Crash Responder Safety Week," raising awareness of the critical role motorists have in keeping responders safe as they perform duties on Maryland's roads. A Governor's Proclamation was secured and daily messages were posted on MDOT SHA's social media platforms.

### Bicycle Safety

Bicycling is an important part of Maryland's integrated transportation network that connects people to life's opportunities. With more than 10,000 registered participants in "Bike to Work Week 2022," MDOT SHA issued a press release and posted daily messages on social media leading up to "Bike to Work Week 2022" that took place May 16-22.

Motorists were reminded to expect more bicyclists on our roadways, share the road with bicyclists and allow three feet when passing them. Both motorists and bicyclists also were urged to follow all traffic safety laws. Information on using and understanding hand signals when bicycling and information on properly fitting your child with the correct size helmet were also shared.



### Pedestrian Safety

With approximately 50,000 vehicles a day during the summer months traveling on Coastal Highway, an eight-lane highway that is also used by pedestrians and bicyclists, MDOT SHA, in partnership with the Maryland Highway Safety office and the Town of Ocean City, brought back the popular Cheswick the Crab Safety Campaign to remind vacationers and local residents to walk, bike and drive safe when traveling through the resort town.

The iconic Cheswick the Crab lifeguard—the name and face of the Walk Smart, Drive Smart and Bike Smart campaign since 2015—shared beach-friendly safety messages on transit buses, boardwalk trams, roadway billboards, boat billboards, aerial banners, social media platforms, in print publications and radio advertisements. Additionally, free copies of the "Cheswick the Crab and the Smart Summer" paperback book were available at the Ocean City Convention & Visitors Bureau.

### **ENVIRONMENTAL ACCOMPLISHMENTS**

As MDOT SHA administers the highways, the Office of Environmental Design (OED) ensures that animals, plants and waterways are protected and well governed under federal and state law.

### Turtles 🌯



In partnership with the Maryland Department of Natural Resources, MDOT SHA reduced the number of turtles killed along MD 363 in Deal Island. MDOT SHA installed 12,600 linear feet of polyethylene tubing to create a roadway barrier that keeps turtles from danger. The site will be monitored during the next year to determine success and evaluate the potential to expand these conservation efforts.



MDOT SHA continues to support bees and other pollinators through the establishment of native meadows and propagation of native plants. OED recently completed a Geographic Information System (GIS) based inventory of approximately 150 potential pollinator habitat sites across the state. OED will install additional pollinator habitats sites during the next seven years.

#### Chestnuts ---



The American Chestnut Foundation (ACF) located a rare specimen of mature chestnut tree in the protected limits of an MDOT SHA radio tower in western Maryland. The once dominant, native tree species was impacted severely by the invasive chestnut blight. MDOT SHA helped ACF collect viable seeds for germination and study as they work to identify natural resistance in the American chestnut.

### Bicycle-Pedestrian Routes

Marylanders who enjoy the outdoors also benefited from MDOT SHA programs. MDOT SHA is launching a \$6.4 million bicycle-pedestrian route project that will connect the Rhode Island Avenue Trolley Trail to the Anacostia Tributary Trail in Hyattsville. As part of the project, crews will pave and enhance natural surface trails, providing opportunities for pedestrians and bicyclists to share access to recreational centers and the Gateway Arts District. American with Disabilities Act (ADA)-compliant pedestrian and bicycle facilities will enhance network connectivity and improve safety.



### Transportation Alternatives Program

The Transportation Alternatives Program (TAP) awards grants to projects that enhance mobility and accessibility, as well as the cultural, aesthetic, historic and environmental character of our state's transportation network. TAP is funded by the Federal Highway Administration (FHWA) Transportation Alternatives (TA) Set-Aside, a reimbursable federal aid funding program.

#### Highlights:

- Number of active projects: 98
- Number of projects awarded in the most recent award cycle: 12
  - Funds awarded: \$12.4M
- Awards to date, all projects: \$123M



Indian Head Boardwalk

#### Notable projects completed this year:

#### Indian Head Boardwalk

- Award amount: \$3.3M
- Recipient/Project Sponsor: Town of Indian Head
- Description: Constructed a 1,200-foot boardwalk connecting Indian Head to the Potomac River.

#### Ma & Pa Connector Trail Segment 2

- Award amount: \$1.69M
- Recipient: Harford County Department of Parks and Recreation
- Description: Constructed a segment of the larger
   Ma & Pa Heritage Trail, a multimodal trail in Bel Air connecting Main Street to North Avenue.

### Recreational Trails Program

This program disburses federal funds to develop and maintain land and water-based recreational trails. Local groups are the beneficiaries. This year's program underwrote the construction of new trails, trail restoration, water access and trailhead improvements. The program was recognized as the 2021 Outstanding State Recreational Trails Program by the Coalition for Recreational Trails.

#### Highlights:

- Number of active projects: 63
- Number of projects awarded in most recent award cycle: 14
  - Funds awarded: \$1.13M
- Awards to date, all projects: \$5.2M

#### Notable projects completed this year:

- The Audubon Naturalist Society was awarded \$273,106 and successfully constructed a 1,700-linearfoot ADA-accessible 8-foot-wide bonded wood fiber trail in Chevy Chase. ADA-compliant parking, bathrooms and a trailhead were constructed.
- Charles County was awarded \$80,000 and used it to repair cracks, sealcoat, stripe and paint the 13.6-mile Indian Head Rail Trail.

### **MDOT SHA CARES**

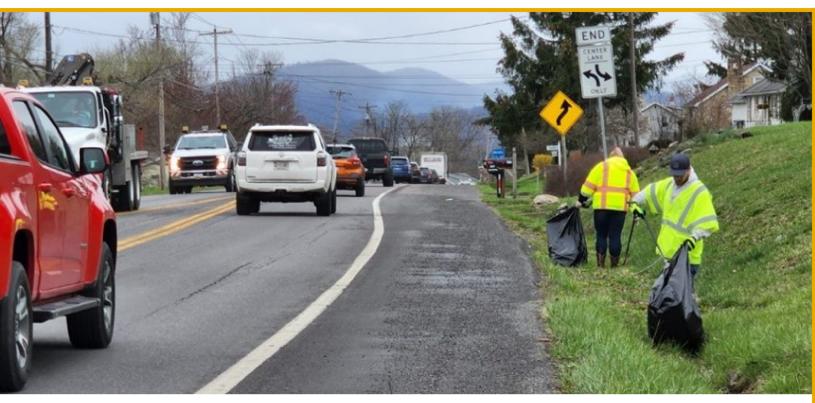
### **Employees Making a Difference**

MDOT SHA works hard to be a good partner with other agencies and to make a difference in communities across Maryland.

In July, 2022, MDOT SHA, The Secretary's Office (TSO) and our sister transportation agencies partnered with the Maryland State Department of Education (MSDE) and the Boys and Girls Club of Maryland for the second statewide Back to School Supply Drive. Staff from Western Maryland to the Eastern Shore helped collect more than \$2,000 and essential school supplies to ensure 1,000 students were prepared for success in the 2022-2023 school year.

Shop crews also were out and about in their local communities attending National Night Out events, hosting career days and participating in Touch-a-Truck events like the parade at the Celebree School in Westminster.





Litter clean-up efforts out near La Vale Shop in Western Maryland

### Maintenance Crews Work with Community Against Trash

During the past eight years, MDOT SHA's maintenance crews have cleaned up approximately 14 million pounds of litter from along state roadways—the equivalent to about 500 large dump trucks full of trash.

Litter not only damages our environment, but it wastes roughly \$7.7 million in tax dollars each year. Crews begin in the spring after the winter thaw and schedule regular litter clean-up blitzes in each county until the next winter begins.

To assist in trash clean-up efforts, MDOT SHA's Adopt a Highway program provides small businesses and community organizations an opportunity to show their state pride and reduce litter. Groups "adopt" a one-mile stretch of roadway to clean up. MDOT SHA provides groups with training, safety vests, trash bags and tips on how to safely pick up trash and recyclables found roadside.



#keepmarylandbeautiful

"Recycle Ruby" and "Can-it Clay." Those stopping by the MDOT booth were also provided with reusable trash bags that could hold trash until travelers arrived at locations where they could safely put litter in its place.

In 2022, MDOT launched an anti-litter campaign, "Be a Superhero— Put Litter in its Place!" to educate Marylanders on the price we all pay for litter and to urge everyone to put litter and recycling materials in their proper place.

In addition to promoting the campaign across social media platforms, MDOT, MDOT SHA and other TBUs exhibited at the

### **AWARDS**

In 2022, MDOT's devotion to excellence and connecting Marylanders to life's opportunities was recognized with numerous awards.

At the Maryland Quality Initiative (MdQI) annual ceremony in May, MDOT SHA was recognized with five awards.

- Two awards were received for the \$89.3 million project to replace and widen the I-81 dual bridges over the Potomac River and from south of US 11 MD 68/MD 63 connecting Washington County, Maryland to Berkeley County, West Virginia.
  - The Partnering Award for MDOT SHA's cooperation with RK&K and Triton Construction.
  - The Modal Award, presented for the work of a TBU or agency.
- A **Modal Award** was given for the Wilson Run Replacement Culvert in Garrett County.
- Additional Partnering Awards received were for:
  - Replacement of drainage structures on MD 146 in Baltimore County.
  - Replacement of a bridge along MD 355 over Little Bennett Creek in Montgomery County.



- The Office of Materials Technology (OMT) won the Perpetual Pavement Awards for the third time from the Asphalt Pavement Alliance including the By Design Award for MD 100 in Anne Arundel County and the By Performance Award for I-68 in Allegany County.
- The Office of Highway Development (OHD) the District 4/Baltimore County area Construction team won the annual MDOT Environmental Award in Sustainability for their innovative repair of severe erosion at the I-695 Cromwell Bridge Road/Loch Raven Bridge interchange.
- MDOT SHA's Organizational Development Division repeated honors from Training magazine, for the third time winning the newly branded Apex Award, making the magazine's Top 100 list.
- The MDOT SHA TRAC (Transportation and Civil Engineering) program for young people interested in engineering produced a national winner: a 7th 8th grade team from CMIT Academy North Middle School won the coveted AASHTO National Bridge Competition.

## **GLOSSARY**

AAA - American Automobile Association
AASHTO - American Association of State Highway & Transportation Officials
ACF - American Chestnut Foundation
ADA - Americans with Disabilities Act
AM Partners - Accelerate Maryland Partners
BWI - Baltimore/Washington International Thurgood Marshall Airport
CAV - Connected and Automated Vehicles
CCMS - Customer Care Management System
CHART - Coordinated Highways Action Response Team
CLF - Chesapeake Lighthouse Foundation
CSX - Class I Freight Railroad
CY - Calendar Year
DEIS - Draft Environmental Impact Statement
DLA - Direct Liquid Application
ERT - Emergency Response Technician
ETP - Emergency Traffic Patrols
FEIS - Final Environmental Impact Statement
FFY - Federal Fiscal Year
FY - Fiscal Year
FHWA - Federal Highway Administration
HOT - High Occupancy Toll
ICM - Innovative Congestion Management
IIJA - Infrastructure Investment and Jobs Act
IT - Information Technology
MD - Maryland
MDOT - Maryland Department of Transportation
MdQI - Maryland Quality Initiative
MDTA - Maryland Transportation Authority

MLS - Managed Lanes Study

- MPH Miles Per Hour
- MSDE Maryland State Department of Education
- **NEPA** National Environmental Policy Act
- OED Office of Environmental Design
- OHD Office of Highway Development
- **OMT** Office of Materials Technology
- **OTMO** Office of Transportation Mobility and Operations
- PSAP Pedestrian Safety Action Plan
- PSC Public Service Commission
- RIDES Roadways in Development Elementary Students
- **ROD** Record of Decision
- SHA State Highway Administration
- SHSP Maryland Strategic Highway Safety Plan
- **SOC** Statewide Operations Center
- TAP Transportation Alternatives Program
- TBU Transportation Business Unit
- TMC Traffic Management Center
- **TOC** Traffic Operations Centers
- TRAC Maryland Transportation and Civil Engineering
- TSO The Secretary's Office
- **US** United States
- **USDOT** United States Department of Transportation

