

2026–2030

MARYLAND

**STRATEGIC
HIGHWAY
SAFETY
PLAN**



DECEMBER 2025

LETTER FROM THE SECRETARY

The safety of everyone using Maryland’s transportation network remains our top priority at the Maryland Department of Transportation (MDOT). As we launch the 2026–2030 Strategic Highway Safety Plan (SHSP), we reaffirm our commitment to Vision Zero—eliminating traffic-related deaths and serious injuries on all roadways.

Building on the progress of the 2021–2025 SHSP, this new plan embraces a comprehensive, community-focused, and proactive approach to transportation safety. This plan reaffirms that MDOT is Serious About Safety. We are proud to emphasize collaboration across agencies, organizations, and communities to ensure that safety strategies reflect the diverse needs and lived experiences of all Marylanders.

This SHSP is anchored in the Safe System approach, which recognizes that people will make mistakes—but the transportation system should be designed to ensure those mistakes are not fatal. This means prioritizing safe roads, safe speeds, safe vehicles, safe people, and post-crash care. We are working to create a safer environment for all users, including pedestrians, cyclists, motorists, and transit riders, regardless of age or ability. At the same time, we remain focused on addressing dangerous, intentional behaviors such as impaired driving, speeding, distraction, and failure to use seat belts, which continue to be leading contributors to severe crashes and fatalities.

Maryland’s new Complete Streets policy supports this vision by committing to the design and operation of transportation networks that are accessible, safe, and convenient for everyone. This policy ensures that our investments reflect the diverse mobility needs of our communities—urban, suburban, and rural alike.

In developing the 2026–2030 SHSP, we held four community engagement sessions across the state to listen, learn, and incorporate local perspectives. These conversations have shaped our understanding of the barriers to safety and guided us toward more inclusive and effective solutions.

We also recognize that technology continues to transform transportation. This plan acknowledges advancements in vehicle automation, connected vehicle technology, and intelligent infrastructure, ensuring that innovation supports our safety goals and leaves no one behind.

We are grateful to the Maryland Highway Safety Office, our SHSP Executive Council, the Emphasis Area Teams and the members of the public who provided feedback for their contributions in shaping this plan. Their collaboration, expertise, and dedication are critical to our shared mission.

Safety is everyone's responsibility. By working together with local governments, community advocates, law enforcement, health professionals, engineers, educators, and all users of the transportation network in Maryland, we can and will make Maryland's roads safer for all.

Thank you for your continued partnership and commitment to saving lives.

A handwritten signature in black ink, appearing to read 'SJB', is positioned above the name and title of the signatory.

Samantha J. Biddle

Acting Secretary, Maryland Department of Transportation

EXECUTIVE SUMMARY

Between 2020 and 2024, an annual average of 580 deaths and 3,053 serious injuries occurred on Maryland public roadways.* The Maryland Department of Transportation Motor Vehicle Administration’s (MDOT MVA) Highway Safety Office (MHSO), the Maryland Department of Transportation State Highway Administration (MDOT SHA), and the State of Maryland recognize that these incidents are preventable. In Maryland, as in the United States, motor vehicle crashes continue to be a leading cause of death. The consequences extend beyond the individual, affecting families, workplaces, and communities.

To address this challenge, Maryland maintains strong partnerships with government agencies, private organizations, and other stakeholders. Under the Zero Deaths Maryland umbrella, the State uses a comprehensive, data-driven strategy grounded in the “four Es” of safety—Education, Emergency Medical Services, Enforcement, and Engineering. This approach applies a systems-based perspective to understand and prevent severe crashes by examining the interaction between road users and roadway environments.

*Data as of May 7, 2025





Maryland's Strategic Highway Safety Plan (SHSP), updated for the 2026–2030 cycle, continues to strengthen the collaborative efforts between MDOT business units, allied agencies, and community partners in support of MDOT's Serious About Safety initiative—an enhanced, department-wide strategy to reduce preventable fatalities and improve transportation safety across all modes. This initiative leverages executive leadership, employee safety programs, and integrated branding to broaden both internal and public awareness of safety priorities. Through unified outreach, targeted content, and high-visibility engagement, MDOT works closely with local jurisdictions, stakeholders, and the public to promote a culture of safety, ensure consistent messaging, and optimize the use of resources to save lives on Maryland's roads.

As part of developing the 2026–2030 SHSP, Maryland convened stakeholders from multiple disciplines to define a

clear path forward. Through collaborative workshops and surveys, the development team confirmed six Emphasis Areas (EAs): Distracted Driving, Impaired Driving, Infrastructure, Occupant Protection, Speed and Aggressive Driving, and Pedestrians and Bicyclists.

Maryland's framework—illustrated in Figure 1—is based on the Safe System Approach and relies on integrated data, ongoing evaluation, and coordinated action. The SHSP uses data throughout its lifecycle to shape strategy, monitor implementation, and assess outcomes. Each EA team is composed of professional stakeholders and coordinated through strong communication and joint planning efforts.

Maryland remains committed to reducing roadway fatalities and serious injuries as far and as fast as possible by 2030. This 2026–2030 SHSP aligns every

strategy with that direction—guiding progress toward a future where no one dies on Maryland roads.

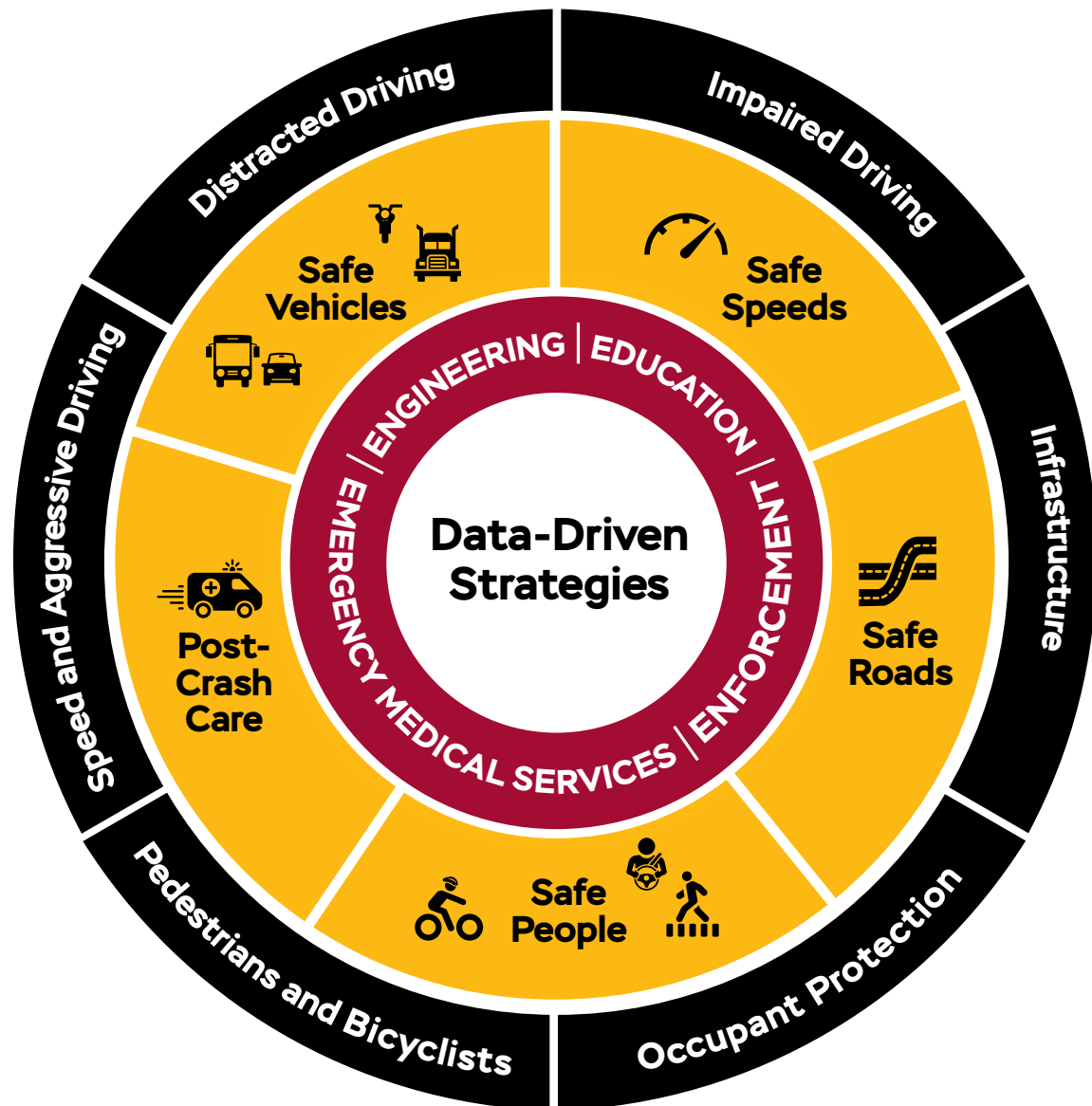


Figure 1. Maryland’s Strategic Approach to Reduce Fatalities and Serious Injuries
 Data are the foundation for the SHSP’s development, implementation of strategies, and progress tracking. The four Es are the cornerstones of the action plan that are driven by coordination, collaboration, and communication amongst the six EA teams.

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ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
ACRS	Automated Crash Reporting System
BAC	Blood Alcohol Concentration
BRTB	Baltimore Regional Transportation Board
CAV	Connected and Automated Vehicle
CMV	Commercial Motor Vehicle
CSIL	Candidate Safety Improvement Locations
CVSP	Commercial Vehicle Safety Plan
DOH	Department of Health
EA	Emphasis Area
FAST ACT	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
HSIP	Highway Safety Improvement Plan
HSP	Highway Safety Plan
IJA	Infrastructure Investment and Jobs Act
MAP-21	Moving Ahead for Progress in the 21st Century Act
MDTA	Maryland Transportation Authority
MDOT MTA	Maryland Department of Transportation Maryland Transit Administration
MDOT MVA	Maryland Department of Transportation Motor Vehicle Administration
MDOT SHA	Maryland Department of Transportation State Highway Administration
MHSO	Maryland Highway Safety Office
MIEMSS	Maryland Institute for Emergency Medical Services Systems
MDSP	Maryland Department of State Police
MTP	Maryland Transportation Plan
NHTSA	National Highway Traffic Safety Administration
NOAA	National Oceanic and Atmospheric Administration
OIT	Office of Information Technology
PSAP	Public Safety Answering Point
PSAP	Pedestrian Safety Action Plan
SAFETEA-LU	Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users
SHSP	Strategic Highway Safety Plan
SRTS	Safe Routes to School
STIP	Statewide Transportation Improvement Program
TRCC	Traffic Records Coordinating Committee
TRSP	Traffic Records Strategic Plan
TZD	Toward Zero Deaths
VMT	Vehicle Miles Traveled
VRU	Vulnerable Road User
3HSP	Triennial Highway Safety Plan

Background

History of the SHSP in Maryland

Maryland's Strategic Highway Safety Plan (SHSP) has been significantly enhanced since its inception in 2003. Emerging issues, prevailing legislation, and federal guidance have all played a key role in its evolution. Maryland consults with the National Highway Traffic Safety Administration (NHTSA) and Federal Highway Administration (FHWA) to update and affirm the content of each revision. As shown in Figure 2, Maryland has sponsored and developed six SHSPs, including the current 2026–2030 SHSP, with each iteration building upon previous experiences and results. Past SHSPs provide a solid foundation for constructing future plans.

The initial plan, which spanned 2003–2005, was modeled after the American Association of State Highway and Transportation Officials (AASHTO) national plan and focused on the State's transportation safety concerns

across 23 program areas. In 2006, Maryland updated the SHSP based on the process recommended by the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The result was a comprehensive, statewide safety plan that established Emphasis Areas (EAs) and aligned goals in consultation with federal, state, local, and private-sector stakeholders.

In 2010, Maryland joined other states in adopting the national Toward Zero Deaths (TZD) vision. Through a Governor's Proclamation, TZD was endorsed by a range of key stakeholders, including the Maryland Chiefs of Police Association, the Maryland Sheriffs' Association, the Maryland Emergency Medical Services (EMS) Board, and the Maryland Association of County Health Officers. For the 2011–2015 SHSP, Maryland committed to reducing fatalities and serious injuries by one-half from a 2008 baseline by 2030, with the ultimate aim of reaching zero deaths.

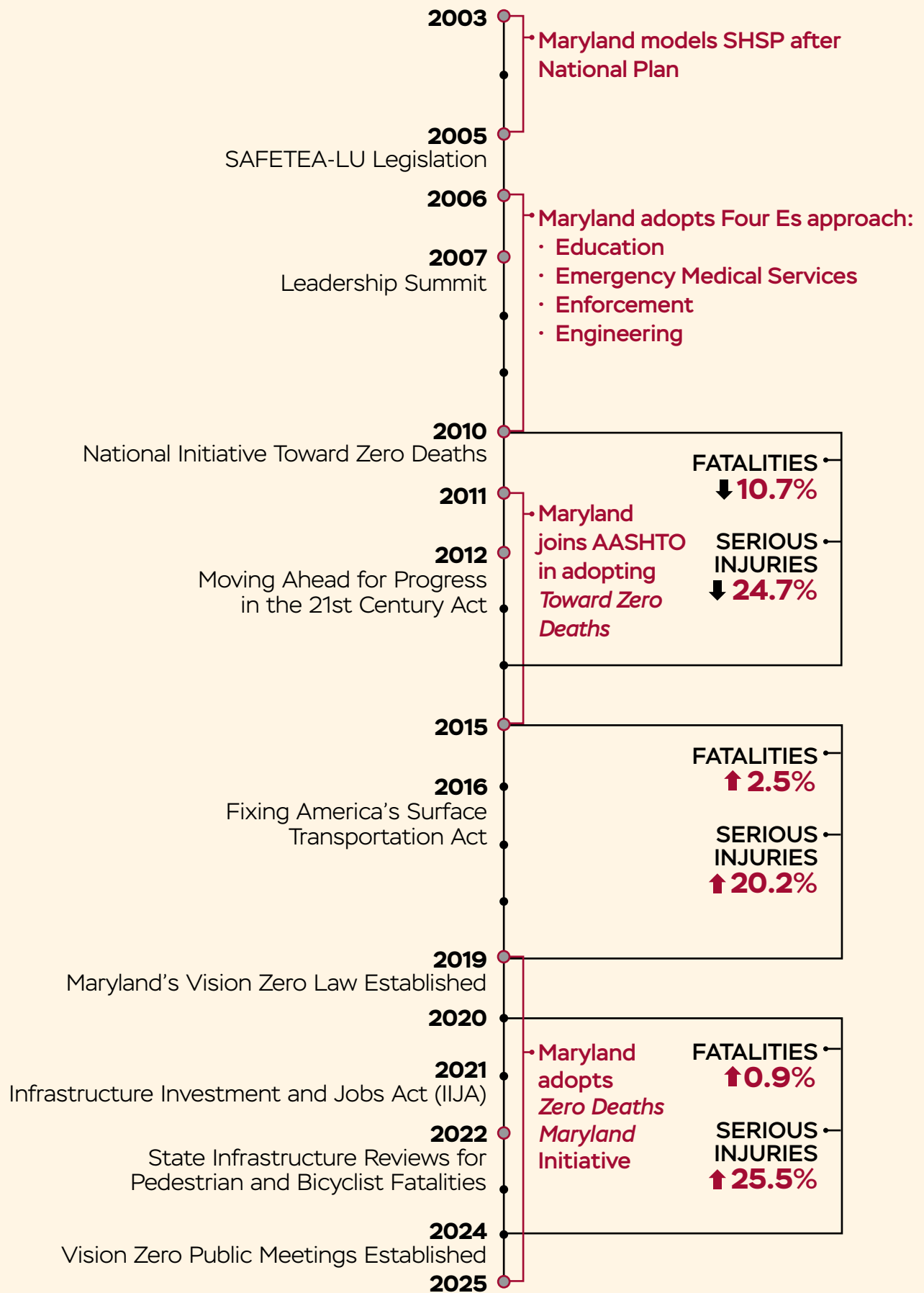


Figure 2. Maryland's SHSP Timeline Overview

Refer to Section 2.1 for additional information regarding crash trends as shown on the timeline.

Using a data-driven approach, the 2011–2015 plan identified six initial EAs:

- ▶ Distracted Driving
- ▶ Impaired Driving
- ▶ Infrastructure
- ▶ Occupant Protection
- ▶ Pedestrians
- ▶ Aggressive Driving

The EAs from the previous plan were retained in the 2016–2020 SHSP, with Bicyclists added to the Pedestrian EA. That plan continued to uphold the TZD vision while aligning with national transportation safety legislation, including MAP-21 (2012) and the FAST Act (2015). Passage of the Infrastructure Investment and Jobs Act (IIJA) in 2021 further bolstered Maryland’s safety efforts by making historic investments in the transportation sector to improve public safety, modernize infrastructure, and create jobs, providing new opportunities to implement SHSP strategies through enhanced federal funding.

In 2019, the Maryland General Assembly passed House Bill 885, establishing the Vision Zero program. This law directed Maryland Department of Transportation (MDOT) to designate a coordinator, collaborate across state and local agencies, and report annually on progress toward reducing roadway fatalities and serious injuries to zero

by 2030. In 2022, House Bill 254 added new requirements for infrastructure reviews following any pedestrian or bicyclist fatality on state roadways, ensuring corrective actions are proposed and published within six months.

The State has also enacted several Vision Zero-related laws that further reinforce the SHSP’s strategies. House Bill 513, the Maryland Road Worker Protection Act of 2024, strengthened work zone safety enforcement, expanded the use of automated work zone speed control systems, increased penalties for excessive speeding in work zones, and directed revenue toward highway and work zone safety programs. Senate Bill 345 (2024) enhanced the Vision Zero framework by requiring quarterly public meetings led by the Vision Zero Coordinator, involving senior MDOT leadership, to review fatal crash investigations involving Vulnerable Road Users (VRUs), analyze infrastructure review findings, and make public recommendations. These meetings must be livestreamed and archived for at least five years to ensure transparency and accountability.

The 2021–2025 SHSP further incorporated systemic enhancements, innovation and implementation that is data-driven. The result is an evidence-based approach that culminates in the confirmation of the plan’s six EAs.

Maryland continues to apply a multi-disciplinary approach to crash prevention and severity reduction, combining strategies across roadway design, user behavior, policies, and technologies. Key stakeholders include academic researchers, engineers, public health professionals, law enforcement, first responders, transportation planners, and government officials. Maryland maintains that all crashes are preventable, and that no death on the road is acceptable.

The SHSP continues to track key performance measures: fatalities, fatality rate, serious injuries, serious injury rate, and non-motorized fatalities and serious injuries.

For the 2026–2030 cycle, goals are based on the 2020–2024 five-year crash data average, with a linear projection estimating a 30% reduction by 2030.

Annual interim goals are calculated with a linear projection estimating a 30% reduction by 2030. These are waypoints on the road toward zero traffic-related deaths and serious injuries.

Crash data reported by the MDOT Maryland Highway Safety Office (MHSO) are derived from the Maryland State Police Automated Crash Reporting System (ACRS). These data are regularly updated and may change over time.

Development of the 2026–2030 SHSP

In early 2025, Maryland contracted the Crash Center for Research and Education (Crash Core) to lead the development of the 2026–2030 SHSP. Crash Core is a Maryland-based, non-profit research organization dedicated to transportation safety. To begin the process, the development team conducted one-on-one interviews with key traffic safety partners across Maryland. These partners included leaders from government agencies, education and outreach professionals, law enforcement, transportation planners, and emergency services agencies. During these interviews, the team collected input on the status of safety initiatives and identified evolving roadway safety priorities for the State.

The interviews addressed a range of topics, including needs related to the four Es of transportation safety—education, emergency medical services, enforcement, engineering—as well as stakeholder perspectives on the utility of the prior SHSP, their level of engagement with EA teams, and emerging issues that should be included in the new SHSP.

Insights from these interviews informed the development of an online survey distributed to a broader group of stakeholders. The survey was used to refine SHSP goals, evaluate potential

action steps, identify new issues, and assess the current status of work in each EA. These discussions focused on each EA team member’s vision for the updated SHSP, measurable outcomes, and strategies to ensure the relevance of the action plan over time. In addition, four public engagement meetings—one in each Maryland region—were held to solicit feedback from local residents. Input gathered at these sessions helped identify community-specific safety concerns, confirm priorities, and strengthen the alignment between statewide strategies and local needs.

A safety partner workshop was convened in April 2025 to reach consensus on proposed strategies and action steps. This workshop brought together EA team members and representatives from state and local agencies, non-governmental organizations, private partners, and other stakeholders. Based on input from this workshop, the updated SHSP reflects the structure and intent of the previous plan while incorporating updated methodologies, stakeholder insight, and recent legislative developments. The result is a coordinated and data-driven framework designed to reduce fatalities and serious injuries across Maryland’s transportation network.

The SHSP is closely aligned with MDOT’s policies and priorities. MDOT’s mission emphasizes safety, system preservation, environmental



stewardship, and the integration of innovative technologies—principles that directly shape the SHSP’s vision, goals, and action steps. Through its Serious About Safety commitment, MDOT ensures roadway safety remains the top priority across all modes of transportation. MDOT’s policies on multimodal connectivity and complete streets extend protection to vulnerable road users, while its focus on innovation—such as automated enforcement, data analytics, and connected and automated vehicle readiness—directly informs SHSP strategies. By aligning with MDOT’s policies and priorities, the SHSP serves as both a statewide safety framework and a central tool for advancing MDOT’s mission to deliver a safe, sustainable, and equitable transportation system for all Marylanders.



Connections to Other Maryland Safety Plans

An SHSP is a major component and requirement of the Highway Safety Improvement Program (HSIP) under 23 U.S.C. §148. It provides a statewide-coordinated and data-driven framework to reduce highway fatalities and serious injuries on all public roads. The SHSP identifies Maryland's key safety needs and guides investment decisions toward strategies and countermeasures with the most potential to save lives and prevent injuries.

Maryland's SHSP functions in alignment with several statewide and modal transportation safety plans that guide decision-making, funding, and performance tracking. These include the HSIP, the Triennial Highway Safety Plan (3HSP), the Commercial Vehicle

Safety Plan (CVSP), and the Statewide Transportation Improvement Program (STIP). Each of these documents shares consistent goal-setting methodologies and performance measures, reinforcing Maryland's commitment to reducing fatalities, fatality rates, serious injuries, serious injury rates, and the non-motorist fatality and serious injury rate. The SHSP also connects with the Trail Plan, which offers tools for maintenance to local jurisdictions and emphasizes Complete Streets, as well as the State Rail Plan and State Freight Plan, each of which includes an associated safety action plan. These modal safety action plans are intended to be incorporated into SHSP EA action plans to ensure full integration of safety strategies across all modes.

Maryland coordinates its Highway Safety Improvement Program (HSIP) and Statewide Transportation Improvement

Program (STIP) with the Maryland Strategic Highway Safety Plan (SHSP) to ensure transportation safety investments align with the State’s data-driven priority emphasis areas and performance targets. The SHSP provides the overarching framework for collaboration among key partners, including the Maryland Department of Transportation (MDOT), the Maryland State Highway Administration (SHA), the Maryland Highway Safety Office (MHSO), the Maryland Department of State Police, the Maryland Department of Health, metropolitan planning organizations (MPOs), and local governments represented through the Maryland Association of Counties and the Maryland Municipal League. MPOs also develop their own Transportation Improvement Programs (TIPs), which are incorporated into the statewide STIP, ensuring that regional transportation priorities and safety projects align with statewide strategies. Through SHSP emphasis area teams, MPO planning processes, and interagency coordination, safety priorities identified through crash data analysis and stakeholder engagement are translated into infrastructure improvements and systemic safety countermeasures funded through HSIP and programmed in the STIP. This coordinated approach ensures that

infrastructure, behavioral safety, enforcement, planning, and public health initiatives collectively support Maryland’s goal of reducing traffic fatalities and serious injuries on all public roads.

The 2026–2030 SHSP is further supported by the State’s adoption of the 2024 Complete Streets Policy, which provides a standardized approach for the planning and design of transportation facilities for all users within MDOT right-of-way. This policy emphasizes context-sensitive design, safety, and multimodal access across MDOT projects and agencies.

Additionally, the MDOT Motor Vehicle Administration (MVA) Workgroup on Connected and Automated Vehicles (CAV) coordinates efforts related to emerging mobility technologies and its safe integration into Maryland’s roadway system.



The SHSP is also closely tied to various modal and local efforts, including the State Bicycle and Pedestrian Master Plan, the Pedestrian Safety Action Plan (PSAP), and local jurisdictional SHSPs and Vision Zero initiatives.

These interconnected documents and programs ensure consistency in planning and execution at all levels of government and across disciplines, ultimately strengthening Maryland’s ability to deliver effective, statewide safety outcomes.

Multiple State Agencies and Advocates Work Together for the SHSP



2

Maryland Crash Trends And Traffic Records

2.1 Crash Trends

As described by FHWA, “a systemic approach to safety involves widely implemented improvements based on high-risk roadway features correlated with specific severe crash types. The approach helps agencies broaden their traffic safety efforts at little extra cost.” More than one-quarter of the Highway Safety Improvement Program (HSIP)

funks that Maryland receives from the Federal government are used for systemic improvements. These include but are not limited to lighting, pavement markings, signing, sidewalk upgrades, and traffic barrier upgrades.

Between 2020 and 2024, 2,899 people were killed in motor vehicle-related crashes in Maryland, averaging 580 deaths per year. During the same period, 15,266 individuals sustained serious injuries, or approximately 3,053 per year. On average, 291 crashes were reported each day across the state, resulting in 1.6 deaths and 8.4 serious injuries daily.

Since 2015, traffic-related deaths and serious injuries have shown an upward trend. These increases follow several years of progress marked by sustained declines in both fatalities and injuries between 2009 and 2014.

Crash trends are influenced by a variety of factors, including economic conditions, travel behavior, and roadway

ONE WEEK IN MARYLAND

11

FATALITIES

59

SERIOUS INJURIES

2,037

POLICE-REPORTED CRASHES



Statewide Fatalities and Serious Injuries

	2020	2021	2022	2023	2024	FIVE-YEAR AVERAGE	% CHANGE FROM 2020 TO 2024
Fatalities	573	563	564	621	578	580	0.9%
Serious Injuries	2,730	3,057	2,992	3,060	3,427	3,053	25.5%

Source: eMAARS and ACRS

Vehicle Miles Traveled, Fatality Rate, Maryland and National

YEAR	VMT ² (100 MILLION MILES)	MD FATALITIES ³	MD FATALITY RATE ³ (FATALITIES PER 100M VMT)	NATIONAL FATALITY RATE ⁴
2020	505.92	573	1.13	1.34
2021	566.16	563	0.99	1.38
2022	567.84	564	0.99	1.34
2023	575.37	621	1.08	1.26
2024 ¹	571.67	578	1.01	1.20

¹ As of May 7, 2025

² Source: www.roads.maryland.gov/oppen/Vehicle_Miles_of_Travel.pdf

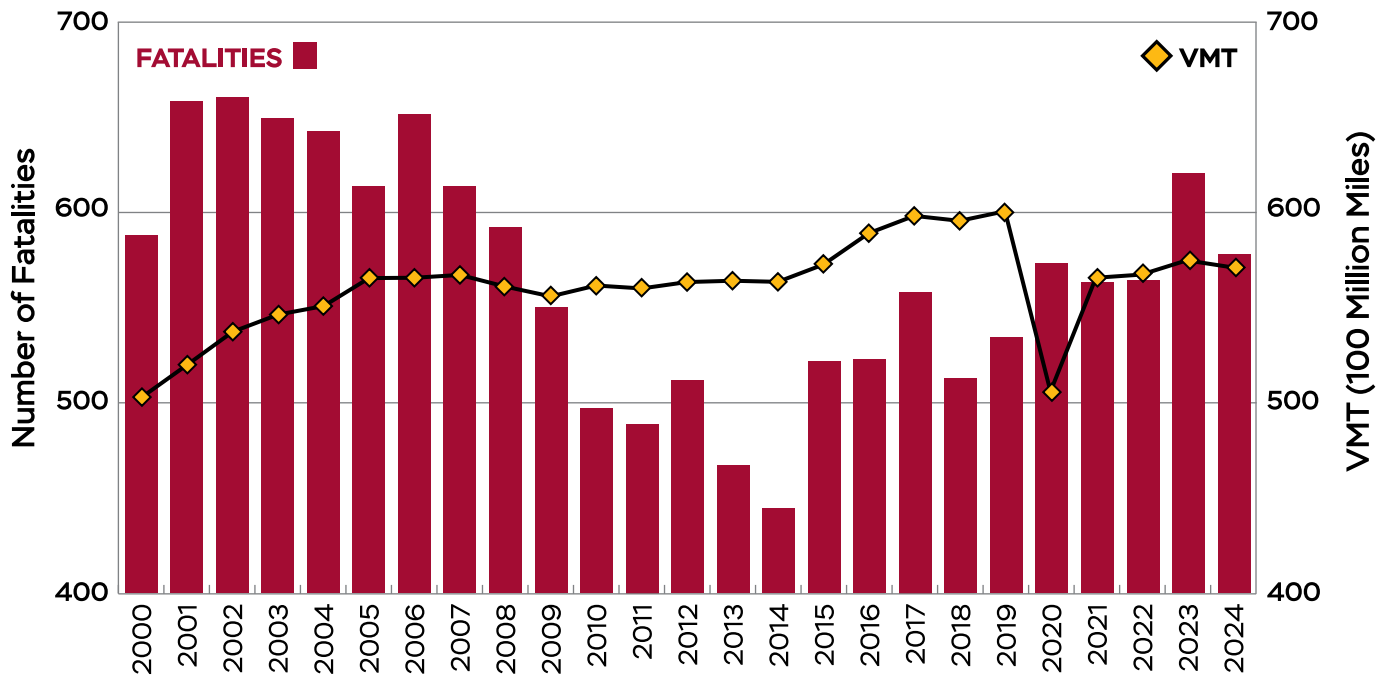
³ Source: eMAARS and ACRS

⁴ Source: NHTSA, Fatality Analysis Reporting (FARS)

usage patterns. One key factor is the amount of driving on Maryland roadways, measured by vehicle miles traveled (VMT). In Maryland, VMT increased from 57.3 billion miles in 2015 to 60.1 billion miles in 2019. The COVID-19 pandemic significantly disrupted these patterns. In 2020,

statewide shutdowns led to a sharp decline in travel, reducing VMT to 50.6 billion miles. Despite that drop in VMT, the rate of fatalities per VMT was the highest over the past decade, driven by more severe crashes linked to higher speeds and risky driving behaviors on less congested roads.

Maryland VMT and Traffic Fatality Trends for State and Local Roadways



In 2023, VMT rebounded to 57.2 billion miles—returning to near pre-pandemic levels—but fatality numbers have remained elevated, underscoring the complex relationship between traffic volume and roadway safety.

Maryland’s fatality rate per VMT has consistently remained below the national average and has shown a slight decrease over the past five years. Ongoing analysis of crash data remains essential to evaluating progress and identifying priority areas for targeted safety interventions.

2.2 Maryland Traffic Records and Information Systems

Data—a Cornerstone of Safety

Maryland’s approach to transportation safety is grounded in the consistent evaluation and improvement of roadway data systems. Data functions as a cross-cutting enabler of the entire SHSP and is critical to every EA.

High-quality data are essential to identifying safety issues, prioritizing investments, and measuring results. Maryland's Traffic Records Coordinating Committee (TRCC) oversees the traffic records system, which includes:

- ▶ Crash report data
- ▶ Roadway inventory
- ▶ Licensing and vehicle registration
- ▶ Citation and adjudication records
- ▶ Injury surveillance data

Data systems are evaluated against six data quality metrics:

- ▶ **Availability:** The extent to which data can be retrieved and used by entities outside the system owner
- ▶ **Accuracy:** The reliability of data and how well the data reflects actual events
- ▶ **Completeness:** The availability of relevant data variables and inclusion of all applicable records
- ▶ **Integration:** The extent to which various systems (e.g., roadway inventory, licensing, EMS) can be connected or linked

- ▶ **Timeliness:** The speed with which an event is entered into a system
- ▶ **Uniformity:** The consistency and adherence to accepted standards in how data are coded and recorded

Together, infrastructure and data systems provide the framework necessary to support Maryland's Safe System Approach—enabling the design, delivery, and evaluation of strategies aimed at eliminating roadway deaths and serious injuries.



3

Emphasis Areas and the Use of Effective Strategies

The Maryland SHSP is implemented by a coordinated network of safety professionals from across state and local government and private industry, including the Executive Council, EA Chairpersons, and EA teams. The 2026–2030 SHSP includes a set of EAs and associated strategies developed to reduce fatalities and serious injuries on all public roadways. These strategies are supported through federal safety programs such as the HSP, CVSP, and HSIP, as well as through state-level safety initiatives.

This SHSP is grounded in Maryland’s commitment to Vision Zero, a long-term, systems-based direction to

eliminate roadway fatalities and serious injuries. The Executive Council carefully considered recent crash trends, federal guidance, state legislation, and expert input when identifying the EAs and strategies that will be most effective in reaching this vision.

In collaboration with the four Es of transportation safety—Education, Emergency Medical Services, Enforcement, and Engineering—the EA teams developed a strategic framework to address both behavioral and roadway-based challenges. Though the EAs function as distinct entities, each is intended to be mutually reinforcing.

The six EAs for Maryland's 2026–2030 SHSP are:



Distracted Driving



Impaired Driving



Infrastructure



Occupant Protection



Pedestrians and Bicyclists



Speed and Aggressive Driving

Each EA focuses on the prevention of traffic-related deaths and serious injuries while supporting a coordinated system of safe, multimodal transportation. The EA teams structured its work around five core strategies:



Data

Collect, analyze, and evaluate traffic data to identify issues, support planning, and improve quality across six metrics: availability, accuracy, completeness, integration, timeliness, and uniformity.



Enforcement

Strengthen enforcement of laws related to the EA to promote safer behavior.



Legislation

Encourage changes in laws and judicial processes to reduce crash risk.



Outreach & Engagement

Promote safety culture through education, training, and communication campaigns.



Connected & Automated Vehicles

Support the advancement of the use of emerging technologies to support crash prevention and EA strategies.

Each EA team developed an action plan outlining strategy-specific steps to help move Maryland closer to zero traffic deaths. These action plans were created collaboratively, reflecting the insight of multidisciplinary safety partners. They include information on implementation roles, evaluation methods, and opportunities for expanded collaboration. The action plans are designed to be living documents that will be regularly reviewed and updated throughout the SHSP's five-year lifespan. Annually, the emphasis area teams will evaluate the extent to which the EA strategies and action plan are implemented and outputs are produced. This includes the extent to which each action step has been addressed and/or fulfilled.



3.1 Distracted Driving

Between 2020 and 2024, Maryland experienced an annual average of 177 fatalities and 1,071 serious injuries resulting from crashes where distraction was noted as a contributing factor. A distracted driving crash typically occurs when a driver shifts focus from the roadway to secondary activities—such as adjusting dashboard controls, engaging with passengers, or using a mobile device.

While distracted driving is not a new concern, its prominence has grown significantly in the past decade due to the rise in mobile technology. Research has shown that even hands-free or voice-controlled systems can divert a driver’s attention for extended periods. One AAA Foundation study found drivers using in-vehicle systems to program navigation were distracted for more than 40 seconds—a considerable amount of time while operating a vehicle.*

Despite this growing concern, crashes involving distracted driving are often difficult to track accurately. Distraction-related elements are frequently underreported or hard to

verify, since crash reports depend on an investigating officer’s assessment based on statements, physical evidence, and scene observations.

To address this challenge, the Distracted Driving EA team coordinates the efforts of Maryland transportation agencies, law enforcement, safety stakeholders, and traffic analysts. Their goal is to reduce deaths and serious injuries associated with distracted driving through proven and coordinated safety strategies.

3.1.1 Performance Measures

The EA team will work with the SHSP Executive Council to drive measurable reductions in distracted driving-related fatalities and serious injuries. These measures reflect Maryland’s long-term direction and data-informed approach to roadway safety. Historical crash records will serve as a benchmark for evaluating progress through the 2026–2030 SHSP cycle.


*AAA Oregon/Idaho. “AAA: Vehicle Infotainment Systems Create More Distractions for Drivers.” AAA Oregon/Idaho. Accessed September 29, 2025. info.oregon.aaa.com/aaa-vehicle-infotainment-systems-create-more-distractions-for-drivers/.








3.1.2 Strategies to Reduce Distracted Driving Crashes

The following strategies reflect a Safe System Approach and draw on the four Es of safety—Education, Emergency Medical Services, Enforcement, and Engineering. These strategies are designed to reduce behavioral factors contributing to distracted driving crashes.

 **Data:** Strengthen analysis and monitoring of distraction-related crash trends across all road types, and enhance data quality in terms of availability, accuracy, completeness, integration, timeliness, and uniformity.

 **Enforcement:** Support enforcement of distracted driving laws and promote initiatives that encourage safe behavior behind the wheel.

 **Legislation:** Recommend legal and adjudication strategies to discourage distraction and support consistent enforcement.

 **Outreach & Engagement:** Expand public education and training programs aimed at building a statewide culture that rejects distracted driving.

 **Connected & Automated Vehicles:** Support the development and deployment of vehicle technologies that minimize distraction risk and support driver awareness.

These strategies are supported by an action plan created by the EA team in collaboration with safety partners. The plan outlines step-by-step actions, coordinating agencies, performance benchmarks, and opportunities for stakeholder engagement to support sustained reductions in distracted driving-related harm across Maryland's roadways.





3.2 Impaired Driving

Impairment due to alcohol or drugs remains a well-established factor contributing to roadway fatalities and serious injuries. These substances impair reaction time, coordination, and judgment—all of which are critical to safe driving. In Maryland, 26% of traffic-related fatalities between 2020 and 2024 involved alcohol and/or drugs (impaired driving), compared to 6.4% of traffic-related injuries. On average, 151 people died and 398 were seriously injured each year due to impaired driving during this period.

Impaired driving crashes often occur during late-night hours, particularly between midnight and 2:59 a.m. Saturdays remain the day with the highest frequency of fatalities from impaired driving crashes, accounting for approximately 22% of these crashes.

The Impaired Driving EA team, which addresses both alcohol and drug impairment, leads collaborative efforts among Maryland transportation agencies, safety stakeholders, and law enforcement. Their shared objective is to reduce impaired driving-related fatalities and serious injuries through comprehensive, multi-faceted strategies.



3.2.1 Performance Measures

Maryland's crash reporting system includes observations of driver condition, blood alcohol concentration (BAC) when available, and other indicators of substance use. However, the determination of an alcohol-impaired driving crash in Maryland is not limited to a BAC threshold. It is based on the investigating officer's assessment of impairment, which may include behavioral indicators or confirmed presence of substances.

The NHTSA, by contrast, defines alcohol impairment based solely on a BAC of 0.08 grams per deciliter or higher. As such, Maryland's SHSP tracks both state-defined and federally defined performance measures to maintain consistency with prior planning efforts and to support alignment with multiple safety programs.

The EA team, in cooperation with the SHSP Executive Council, will assess year-over-year reductions in impaired driving fatalities and serious injuries based on both definitions. Progress will be measured through state and federal data systems, with regular review to support strategy refinement and resource prioritization.

Maryland's legalization of adult-use cannabis in July 2023 has added a new dimension to impaired driving prevention efforts. Measuring the potential impact on crash trends is challenging due to several factors: tetrahydrocannabinol (THC) can remain detectable in the body for days or even weeks without indicating current impairment; not all crash-involved drivers are tested for drugs; and polydrug use can make it difficult to isolate the effects of cannabis alone. To strengthen coordination and policy development, House Bill 46 (2025 Regular Session) adds the MVA Administrator or appointee to the Cannabis Public Health Advisory Council, ensuring that traffic safety perspectives are included in statewide cannabis monitoring and public health strategies.





3.2.2 Strategies to Reduce Impaired Driving

In alignment with the goals of the 2026–2030 SHSP, the Impaired Driving EA team will implement a coordinated set of strategies to reduce fatalities and serious injuries resulting from alcohol- and drug-impaired driving across Maryland. These strategies address behavioral challenges and are guided by the Safe System Approach and Maryland’s commitment to a reliable and effective multimodal transportation system.

The strategies include the following:



Data: Enhance the collection, analysis, and evaluation of crash-related data to identify impaired driving trends, at-risk groups, and geographic areas of concern. Improve the quality of impaired driving data with attention to availability, accuracy, completeness, integration, timeliness, and uniformity.



Enforcement: Support the enforcement of impaired driving laws and invest in enforcement initiatives that promote safe behavior and deter substance-impaired operation.



Legislation: Advance and support legislative and adjudication efforts aimed at reducing impaired driving.



Outreach & Engagement: Promote education, training, and public awareness campaigns to foster a safety culture that rejects impaired driving behavior.



Connected & Automated Vehicles: Encourage and support emerging technologies and in-vehicle safety systems that can assist in preventing impaired driving crashes.

Each of these strategies is supported by a detailed action plan created in collaboration with safety stakeholders. The plan outlines specific actions to improve data systems, strengthen enforcement, advance policy, and increase public engagement. The action plan is a living document, intended to guide implementation and evolve over the five-year SHSP cycle.

3.3 Infrastructure

Infrastructure is recognized as a critical emphasis area because roadway design, traffic control devices, and physical conditions significantly influence crash risk and severity. In alignment with the SHSP's long range goals, Maryland has developed a coordinated approach to implement engineering-based solutions and infrastructure planning across both State and local systems. These strategies follow the Safe System Approach and are designed to improve outcomes for all users across Maryland's multimodal transportation network.

3.3.1 Performance Measures

The Infrastructure EA team will monitor statewide data to assess progress toward reducing deaths and serious injuries. In addition, per 23 CFR 490.211(c)(2), every year FHWA would

assess safety performance in each State, and determine if it has met or made significant progress toward meeting its safety performance targets. At least four of the five safety performance targets established under 23 CFR 490.207(a) must have been met or the actual outcome is better than the baseline performance for the year prior to the establishment of the target. The five safety performance measures are:

- ▶ Number of fatalities,
- ▶ Rate of fatalities,
- ▶ Number of serious injuries,
- ▶ Rate of serious injuries, and
- ▶ Number of non-motorized fatalities & serious injuries.

FHWA shares the Maryland Safety Performance Target Assessment with Maryland Department of Transportation State Highway Administration (MDOT SHA) each year. If it is determined that Maryland did not meet or make significant progress, SHA should develop and submit an HSIP Implementation Plan to FHWA and use obligation authority only for HSIP projects in the federally-required amount in the next fiscal year.



3.3.2 Strategies to Reduce Speed and Aggressive Driving Fatalities and Serious Injuries

The Infrastructure Emphasis Area is centered on systematically reducing severe and fatal crashes in Maryland by designing safer roads, upgrading infrastructure, and deploying countermeasures targeted to the key areas for infrastructure improvement: roadway departure, intersection, and work zone.

Roadway Departure

A roadway departure crash occurs when a vehicle strikes a fixed object and leaves the road, or where the location of the crash was reported as off-road or in the median. These crashes often result from loss of control, overcorrection, or driver error, and they tend to be severe—especially when striking roadside hazards or embankments. In Maryland, a significant proportion of fatal crashes involve roadway departure incidents. For example, approximately 29% of fatal crashes statewide involve vehicles leaving the roadway. Potential engineering strategies to reduce roadway departure crashes and mitigate severity include, but are not limited to, rumble strips, raised pavement markings (RPM), guardrails, edge and centerline treatments, improved delineation, high-friction surface treatments (HFST), shoulder upgrades, clear zones, geometric realignments, curve modifications, and speed management.

Intersection

An intersection crash is one where the first harmful event occurs at or very near an intersection (or on approach or exit), involving interacting movements of vehicles (turning, crossing, merging) and pedestrians or cyclists. It may include angle crashes, left-turn, right-angle, rear-end at signals, or conflicts between turning and through traffic. In Maryland, about 26% of fatal crashes occur at or near intersections. Potential engineering strategies to reduce intersection crashes and mitigate severity include, but are not limited to, geometric improvements (turn lanes, sight distance, medians, refuge islands, etc.), traffic signal and other traffic control device (TCD) enhancement, VRU safety treatments, roundabouts, innovative intersections, speed management, improvement on visibility and lighting.

Work Zone

A work zone crash is one in which the first harmful event occurs within the boundaries of a construction, maintenance, or utility work zone (or on the approach/exit of the zone) and is related to traffic control or movement of road users through or around the site. The presence of altered geometry, narrowed lanes, shifting alignments, modified access, and temporary signage increases the risk in work zones. Between 2020 and 2024, Maryland experienced over 16,800 work zone crashes statewide, resulting in 2,359 injuries and 50 fatalities, including the tragic work zone crash that occurred on March 22, 2023 with six workers killed in one crash on I-695 in Baltimore County. Potential engineering strategies to reduce work zone crashes and mitigate severity include, but are not limited to, traffic control device improvements, smart signage and detection systems, strengthen temporary geometry and taper designs, advanced warning technologies, coordination with planning, and speed management.

These strategies are documented in the HSIP action plan and informed by analysis of State crash data. Data screening will focus on crash types that include intersection, roadway departure, work zone, and pedestrian or bicyclist involvement. The plan includes screening of Candidate Safety Improvement Locations (CSILs) for spot safety enhancements. In addition, a systemic approach shall be taken to improve traffic safety area wide in a proactive manner with cost-benefit-efficient countermeasures that can be quickly installed. Progress will be measured via both infrastructure outputs (miles treated, number of intersections or ramps upgraded, detection systems deployed) and crash outcomes (fatalities, serious injuries, crash rates).



Along with engineering strategies, within the broader Safe System Approach, the following strategies would address both behavioral and infrastructure-related challenges:



Data: Strengthen analysis and monitoring of infrastructure-related crash trends across all road types, and enhance data quality in terms of availability, accuracy, completeness, integration, timeliness, and uniformity. Provide better access to crash summary, diagram and report for traffic engineers to identify crash patterns and corresponding safety countermeasures, at both specific locations and in a systemic manner. Proactively improve traffic safety with surrogate safety data, which use observable traffic behaviors, like near-misses, hard braking, or unsafe gaps, to assess risk before crashes occur with technologies such as video-based tools and connected vehicle data. Utilize findings from Road Safety Audits to identify countermeasure recommendations for systemic improvements.



Enforcement: support enforcement of laws related to speeding, red-light running, and other compliance to traffic control. Deploy automated enforcement tools at high-risk locations identified with crash, speed and other related data.



Legislation: Advance policy initiatives that improve traffic safety for both motorists and VRUs. These include, but are not limited to, speed management, VRU protection, and infrastructure funding support.



Outreach & Engagement: Efficiently and accurately communicate with our customers about safety on Maryland's highway system. Keep the public informed with timely and accurate information about highway projects, traffic and roadway conditions, special programs, and agency policies and achievements.



Connected & Automated Vehicles: Encourage the integration of information exchange systems for freight vehicles, work zones, and roadway closure. Provide more charging stations along major highways for electric vehicles, especially trucks.

These strategies are implemented through a five-year action plan, developed and reviewed by a multi-disciplinary team. The action plan will be updated with new policies and guidelines over the five-year SHSP cycle.



3.4 Occupant Protection

Occupant restraints remain one of the most effective methods for preventing death and serious injury in the event of a crash. Despite ongoing advancements in vehicle safety technologies, seat belts continue to be the most available and proven intervention to mitigate crash-related harm.

Research shows that if all front-seat occupants in Maryland wore seat belts, the risk of fatal injury would decrease by approximately 45% in passenger cars and 60% in light trucks.* Similarly, the risk of moderate to serious injury would also be substantially reduced.

In the past five years, Maryland's overall seat belt usage rate has ranged from 90.6% to 92.7%. While encouraging, this still leaves a significant portion of the population unrestrained at any given time. Data indicate that approximately 18% of fatal and 15% of seriously injured occupants in Maryland were unrestrained.

The Occupant Protection EA team works collaboratively with transportation agencies, safety stakeholders, and law enforcement to promote consistent restraint use and reduce unrestrained occupant fatalities and serious injuries across the State.

*United State Department of Transportation, NHTSA, Seat Belts, www.nhtsa.gov/risky-driving/seat-belts



Belted vs. Unbelted in Maryland

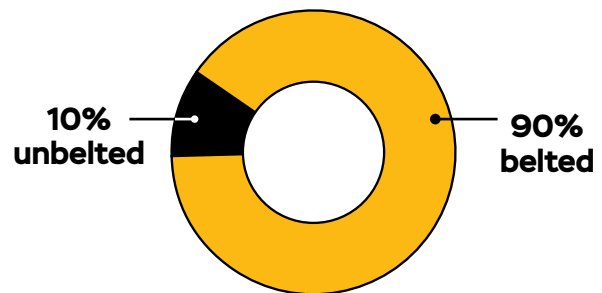


Figure 3. Approximately 10% of passenger vehicle occupants in Maryland ride unbelted. In 2024, 106 of these unbelted passengers died in a crash.

Data as of May 7, 2025



3.4.1 Performance Measures

The EA team and the SHSP Executive Council will monitor progress toward reducing fatalities and serious injuries involving unrestrained occupants. Maryland's performance goals are based on five-year average crash data and serve as benchmarks for evaluating effectiveness.

In October 2022, Maryland's child passenger safety law was updated to require children under age two to ride in rear-facing car seats—unless the child exceeded the seat's height or weight limits—bringing the State in line with best practices for infant and toddler

protection. Prior to this change, over the previous five years, the State averaged approximately 12 fatalities and more than 3,000 injuries in motor vehicle crashes involving passengers under age 13; of these, nine fatalities and around 581 injuries involved children under age two. This legislative update is expected to enhance protection for the most vulnerable passengers and support SHSP goals by reducing child passenger-related fatalities and injuries.

Performance will be assessed using statewide crash data reported through Maryland's integrated traffic records system.



3.4.2 Strategies to Reduce Occupant Protection-Related Fatalities and Serious Injuries

In support of Maryland's SHSP, the Occupant Protection EA team has developed a comprehensive strategy to improve restraint use and reduce related fatalities and serious injuries across all public roads. These efforts incorporate the principles of the Safe System Approach and address behavioral and infrastructural influences through education, emergency medical services, enforcement, and engineering.

The following strategies reflect a multi-disciplinary commitment to advancing occupant protection for all age groups:



Data: Enhance the collection, evaluation, and analysis of data to identify occupant protection trends, key demographics, and high-risk locations. Improve data quality in the areas of availability, accuracy, completeness, integration, timeliness, and uniformity.



Enforcement: Support increased enforcement of seat belt and child restraint laws and promote initiatives that encourage compliance and safe behaviors.



Legislation: Advocate for policies that support universal restraint use, including age-appropriate child passenger safety laws and primary enforcement authority.



Outreach & Engagement: Promote a culture of safety through statewide education, training, and communication campaigns focused on the life-saving importance of occupant restraints.



Connected & Automated Vehicles: Support the integration and promotion of vehicle-based technologies that enhance occupant safety through engineering innovation.

Each of these strategies is supported by an EA action plan that outlines specific implementation steps. The plan guides Maryland's efforts to reduce crash-related harm through improved data systems, targeted education and enforcement, and expanded deployment of evidence-based countermeasures.

3.5 Pedestrians and Bicyclists

Pedestrians and bicyclists remain among Maryland’s most vulnerable road users, with minimal protection in the event of a crash. As multimodal commuting increases—particularly in transit corridors—these users are more frequently exposed to high-speed vehicle traffic. Between 2010 and 2020, pedestrian fatalities in Maryland increased by 35%, while bicyclist fatalities rose by 76%, according to the Maryland Pedestrian Safety Action Plan (PSAP).

Today, pedestrians and bicyclists account for approximately 25% of all traffic-related deaths in Maryland, up from 20% just a decade ago.

The Pedestrians and Bicyclists EA team works with State agencies, law enforcement, and local jurisdictions to reduce this trend. Maryland’s PSAP, developed by SHA, identifies high-risk corridors based on crash data, public input, community factors, land use context, proximity to transit, and short-trip opportunities areas. The plan applies the Context Driven Toolkit to match countermeasures from specific community needs and addresses safety for all vulnerable road users, including those traveling by e-bike and scooter.



3.5.1 Performance Trends

On average, between 2020 and 2024, crashes involving pedestrians and bicyclists resulted in 131 fatalities and 454 serious injuries. These fatalities accounted for 23% of all traffic-related fatalities in Maryland.

Additional crash characteristics from the PSAP include:

- ▶ Over 70% of fatal pedestrian crashes occurred on roads posted with a speed limit of 30 mph or greater
- ▶ 58% of pedestrian fatalities occurred on roads posted with a speed limit of 40 mph or higher, which represent only 15% of total pedestrian crashes
- ▶ 87% of pedestrian fatalities occurred on State-maintained roadways, while just 13% occurred on locally maintained roads

- ▶ Crashes most commonly occurred during evening hours, particularly in fall months, and near transit stops, schools, and areas with limited walking infrastructure

In response to these challenges, and in accordance with the IIJA, the SHA completed a VRU Safety Assessment in 2023. This statewide analysis, appended to this document, identified high-risk corridors for pedestrians, bicyclists, and other non-motorists using a data-driven approach. SHA is now advancing VRU safety improvement projects on those

corridors through the PSAP—efforts that also align with the broader goals of the HSIP.

These findings underscore the importance of continued investment in effective countermeasures and targeted countermeasures to improve safety outcomes for Maryland’s most vulnerable road users. The VRU Safety Assessment is now being updated concurrently with the Maryland SHSP to ensure alignment of findings, priorities, and strategies.



3.5.2 Strategies to Reduce Pedestrian and Bicyclist Fatalities and Serious Injuries

In support of the SHSP, the Pedestrians and Bicyclists EA team will implement a suite of strategies designed to reduce fatal and serious injury crashes involving those who walk, bicycle, or use micromobility devices such as e-bikes, e-scooters, and other small personal transport modes. These strategies are structured within a Safe System Approach and emphasize shared responsibility, human error tolerance, and proactive risk mitigation.

The following strategic pillars guide the development and execution of the EA’s action plan:



Data: Improve the quality and application of crash data to include near misses and analysis of micromobility crash data, newly connected since 2024. Analyze crash patterns, land use, multimodal trip volumes, multimodal travel behavior, and high injury locations for all nonmotorists. Incorporate demographic overlays to identify and prioritize disproportionately impacted areas.





Enforcement: Provide training for law enforcement about motorist behaviors that endanger vulnerable roadway users and the latest multimodal updates in vehicle code and roadway designs. Strengthen enforcement of laws related to motor vehicles yielding, crosswalk compliance, and overtaking behaviors. Focus efforts in areas with elevated pedestrian and bicyclist activity. Deploy automated enforcement tools to address high-risk behaviors in areas with demonstrated safety concerns.



Legislation: Advance policy initiatives that improve the safety of people walking, biking, or using micromobility devices. These include speed management authority, daylighting requirements, crossing enhancements, and consistent operating guidelines for new travel modes.



Outreach & Engagement: Promote public education initiatives that increase awareness of safe behavior, right-of-way laws, and shared responsibility. Tailor outreach by geography, audience, and language to improve community understanding and engagement. This includes support for Safe Routes to School (SRTS), a national strategy to increase safety for children walking or biking to school through infrastructure improvements and educational programming.



Connected & Automated Vehicles: Encourage integration of pedestrian- and cyclist-detection technologies, automatic braking systems, and vehicle-based alerts. Support the adoption of safety technologies in public fleets and explore opportunities for data-sharing and performance tracking from private fleets and micromobility services.

These strategies support a coordinated five-year action plan that is multidisciplinary, adaptable, and responsive to emerging transportation trends and safety risks.





3.6 Speed and Aggressive Driving

Excessive speed and aggressive driving continue to be significant contributors to fatal and serious injury crashes in Maryland. Between 2020 and 2024, crashes involving a speeding driver resulted in an average of 153 fatalities and 401 serious injuries per year—approximately 26% of all motor vehicle deaths during that period.


Aggressive driving, defined by Maryland law as a combination of multiple moving violations that endanger others, often includes speeding, tailgating, and unsafe passing. These behaviors not only increase the likelihood of crashes but also elevate crash severity.

In 2024, speeding violations accounted for approximately 17% of the 640,000 moving violations issued in Maryland (not including citations issued through automated enforcement). To address high-risk behaviors, the Maryland General Assembly authorized the expansion of automated speed enforcement in school zones and work zones. Legislation also established a tiered fine structure for work zone speed violations and increased penalties for excessive speeding, particularly when workers are present.

These measures, along with the broader deployment of work zone cameras, strengthen deterrence and enhance safety for both motorists and roadway workers.

The Governor’s Work Zone Safety Work Group—announced in April 2023 and chaired by the Lieutenant Governor—brings together law enforcement officers, labor leaders, traffic engineers, highway safety experts, and roadway workers with direct field experience.





On any given day in Maryland, an average of 1,000 roadway workers are improving the State’s transportation infrastructure at more than 300 active work sites, often alongside law enforcement personnel. The Work Group meets regularly to identify strategies that improve work zone safety for roadway workers, law enforcement, and motorists. To support this effort, several sub-work groups examined enforcement, engineering, education, and technology solutions. The resulting recommendations, informed by feedback from more than 2,000 members of the public, include increasing enforcement presence in work zones, expanding safety education in schools, updating the Maryland driver manual, and securing dedicated funding for public awareness campaigns.

Additionally, school bus stop-arm camera provisions allow for enforcement against drivers who illegally pass school buses when students are boarding or disembarking—a critical safety issue for children.

The Speed and Aggressive Driving EA team collaborates with transportation agencies, law enforcement, and safety partners to implement comprehensive, data-driven strategies that reflect Maryland’s Safe System Approach. These include lowering operating speeds, supporting effective enforcement, and encouraging safer roadway behavior through infrastructure and education. The *Sergeant Patrick Kepp Act* (House Bill 744/Senate Bill 590, 2025) strengthens these efforts by enhancing penalties for excessive speeding and aggressive driving offenses that result in serious injury or death to others, reinforcing the State’s commitment to protecting all road users from dangerous driving behaviors.

3.6.1 Performance Measures

The EA team will monitor statewide data to assess progress toward reducing deaths and serious injuries. Both traditional and automated enforcement data will be used to track trends and evaluate countermeasures.



3.6.2 Strategies to Reduce Speed and Aggressive Driving Fatalities and Serious Injuries

In alignment with the 2026–2030 SHSP, the Speed and Aggressive Driving EA team will implement a comprehensive set of strategies aimed at reducing fatalities and serious injuries across Maryland’s roadways. These strategies reflect a Safe System Approach integrating data, enforcement, policy, public awareness, and technology.

The following strategy areas guide the EA’s coordinated action plan:



Data: Continue to advance the collection, analysis, and application of crash and citation data to identify locations with recurring speed-related or aggressive-driving behavior. Focus areas will be prioritized using metrics for availability, accuracy, completeness, integration, timeliness, and uniformity.



Enforcement: Strengthen enforcement initiatives focused on speeding and aggressive behavior. Expand the use of automated enforcement, including speed cameras in school zones and work zones, and enforce penalties for illegal school bus passing using stop-arm camera systems.



Legislation: Support State policy and adjudication improvements that enhance automated enforcement authority, protect VRUs, and strengthen penalties for aggressive violations, particularly in school bus and work zone contexts.



Outreach & Engagement: Promote responsible road use through education and media campaigns. Messaging will focus on speed awareness, consequences of aggressive behavior, and safe conduct in school and work zones.



Connected & Automated Vehicles: Encourage the integration of in-vehicle systems that detect unsafe speeds, apply emergency braking, and support driver awareness, particularly in high-risk areas.

These strategies are implemented through a five-year action plan, developed and reviewed by a multi-disciplinary team. The plan is intended to adapt as new challenges emerge and as the data guide new intervention points.

4

FHWA Standardized Performance and Survey Measures

The Maryland SHSP incorporates the five federally required Safety Performance Measures established by the FHWA. These measures serve as national benchmarks and support Maryland's long-term, data-informed safety planning. As a Vision Zero state, Maryland is committed to the ultimate goal of zero vehicle-related deaths and serious injuries. In pursuit of that goal, and in conjunction with the FHWA's requirement for data-supported goals, the 2026–2030 Maryland SHSP aims for the ambitious but realistic goal of a 30% reduction by 2030.

To compute each of the five performance measures we use five-year rolling averages. The 2030 goal for this SHSP is calculated using 2022 (average of years 2020–2024, the most recent data available) as the baseline and estimating a 30% reduction by 2030 (average of

years 2028–2032) using a linear trend. Interim goals are calculated for each intervening year based on that linear trend. These goals and interim goals are not intended to be acceptable thresholds but rather milestones on the path to zero traffic-related deaths and serious injuries.

To strengthen accountability, Maryland will also develop a clear process for tracking SHSP action steps. This process will include documenting progress, identifying when action steps have been completed, and retiring those items from the plan. As the framework matures, reporting will be used to transparently communicate progress, identify gaps, and realign resources as needed to support effective execution. This approach ensures that the SHSP remains a dynamic, living document that evolves with conditions and maintains focus on reducing fatalities and serious injuries.

The five FHWA performance measures are:

- ▶ Number of Fatalities
- ▶ Rate of Fatalities per 100 Million VMT
- ▶ Number of Serious Injuries
- ▶ Rate of Serious Injuries per 100 Million VMT
- ▶ Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries

To complement these core measures, Maryland is also exploring additional system-level indicators. These may include the percentage of high-speed corridors with speed management treatments, the prevalence of safe crossings near schools, or the degree to which Safe System Approach design principles are embedded in project development. These indicators offer further insight into infrastructure readiness and proactive safety improvements.

The Maryland SHSP establishes the following reduction goals through **December 31, 2030**, for all Maryland roads.

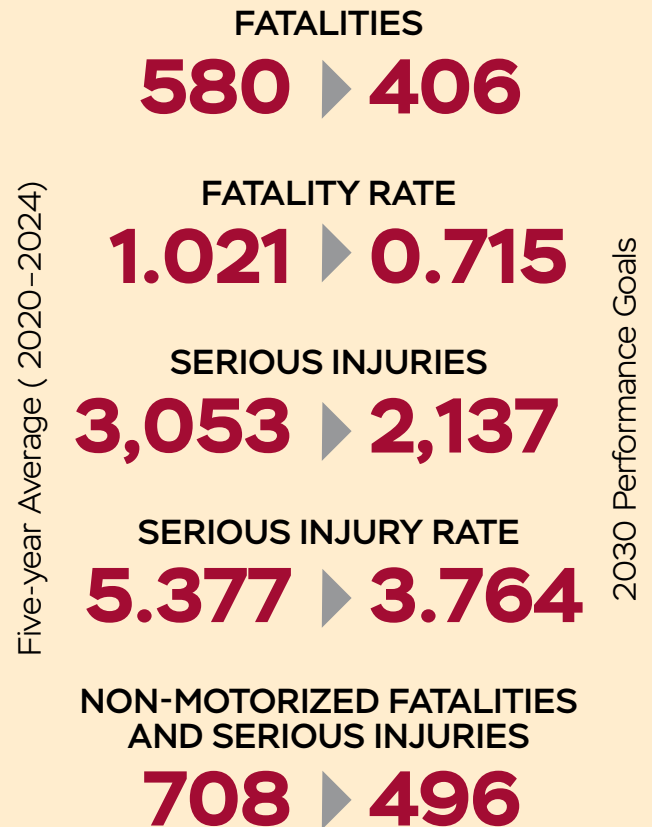
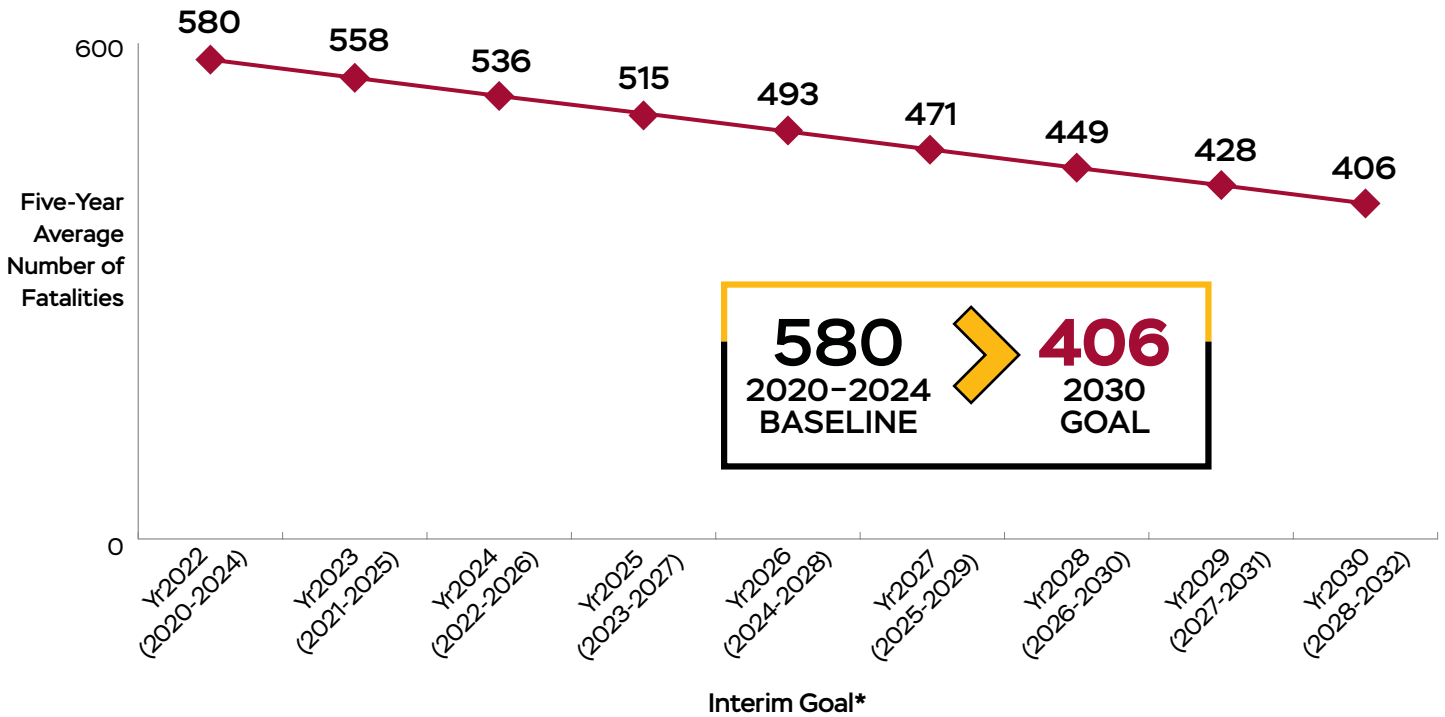


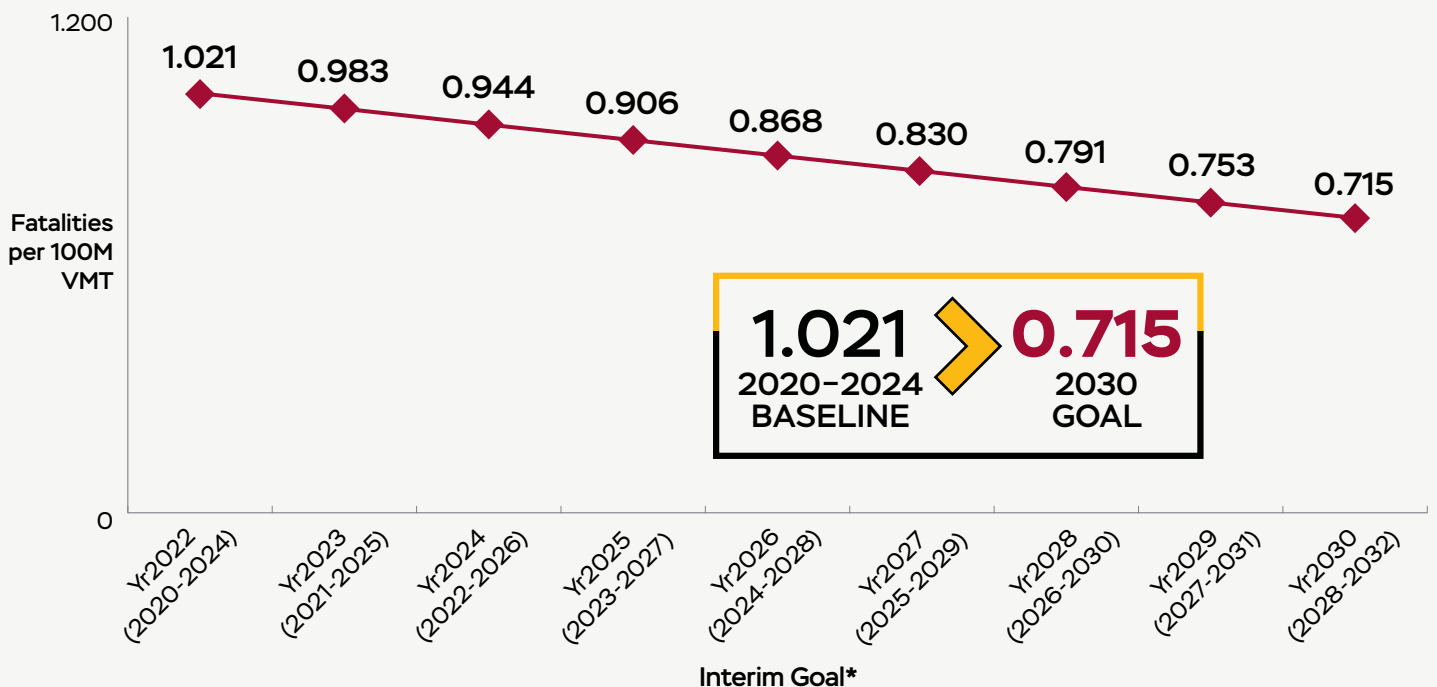
Figure 4. Five-year Average and 2030 Performance Goals

Interim Goals for Total Fatalities in Maryland



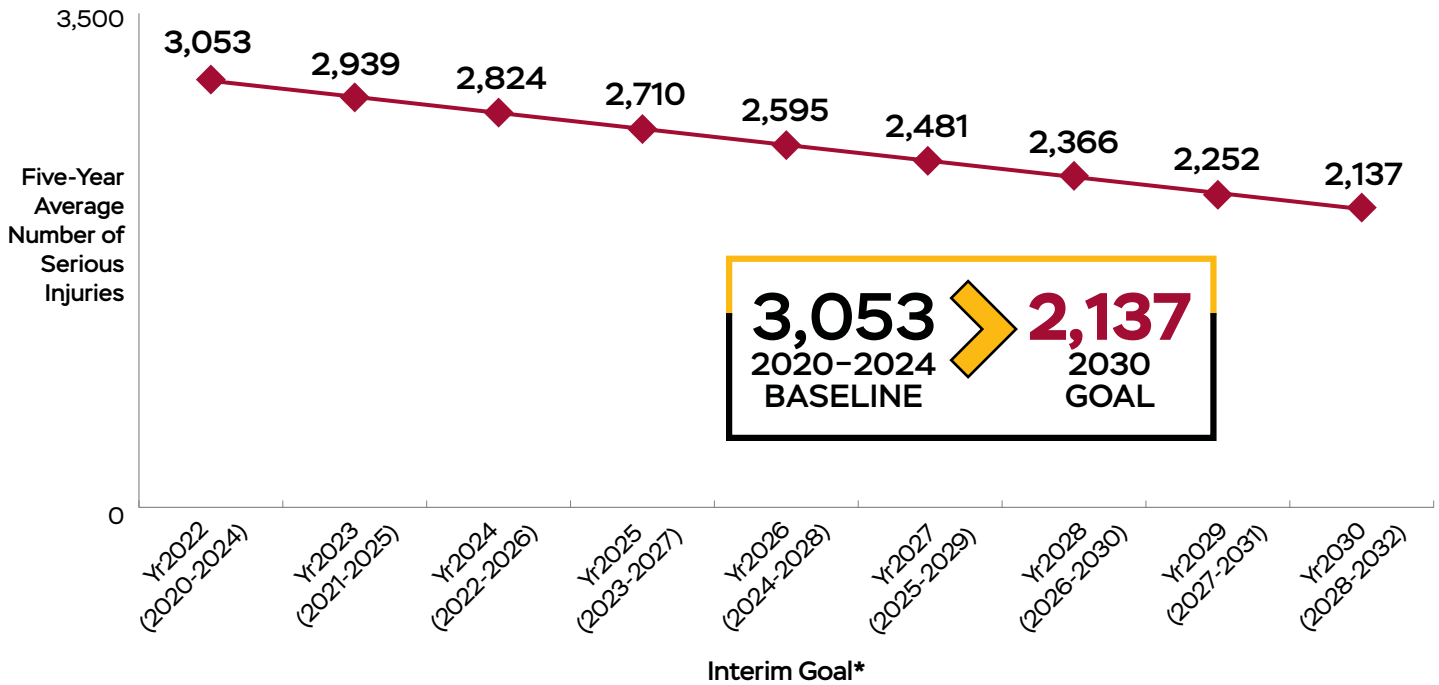
*Note: The annual interim goal represents the mid-year of the five-year average. For example, the 2022 interim goal is the five-year annual average from 2020-2024.

Interim Goals for Fatality Rate per 100 Million Vehicles Miles Traveled (VMT) in Maryland



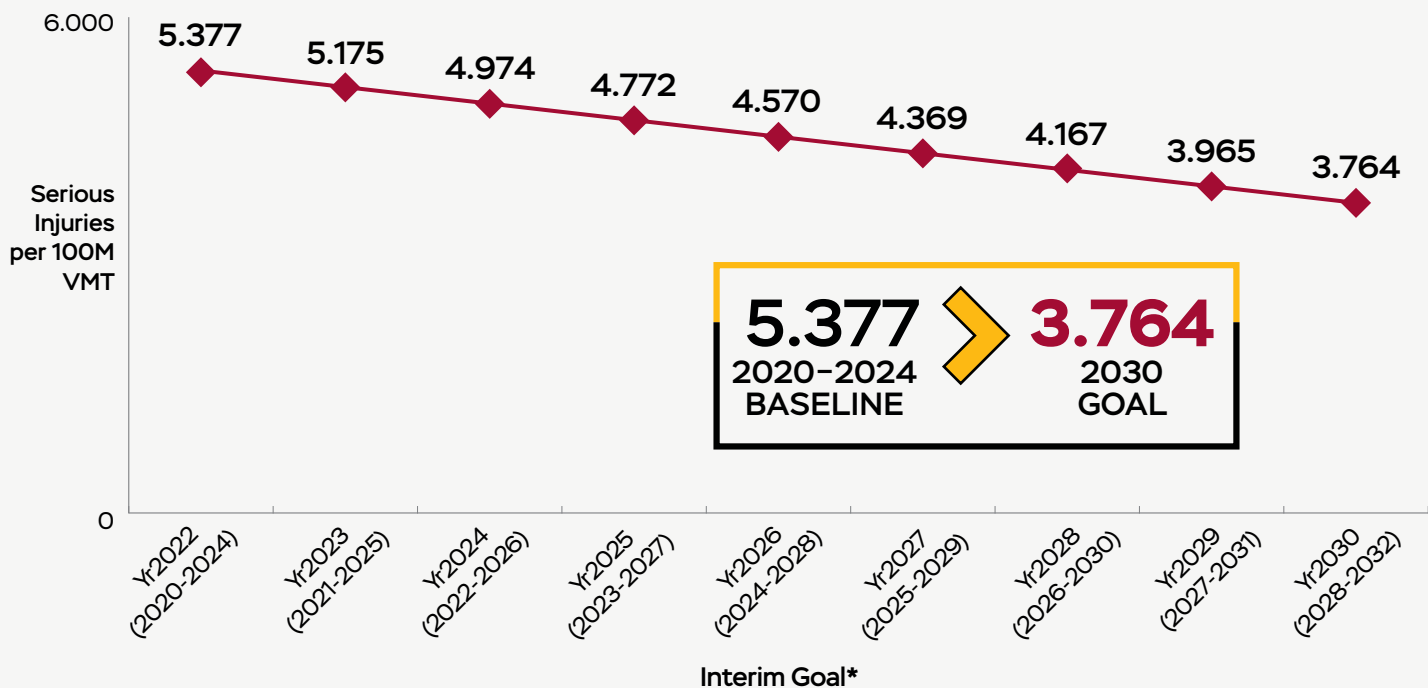
*Note: The annual interim goal represents the mid-year of the five-year average. For example, the 2022 interim goal is the five-year annual average from 2020-2024.

Interim Goals for Total Serious Injuries in Maryland



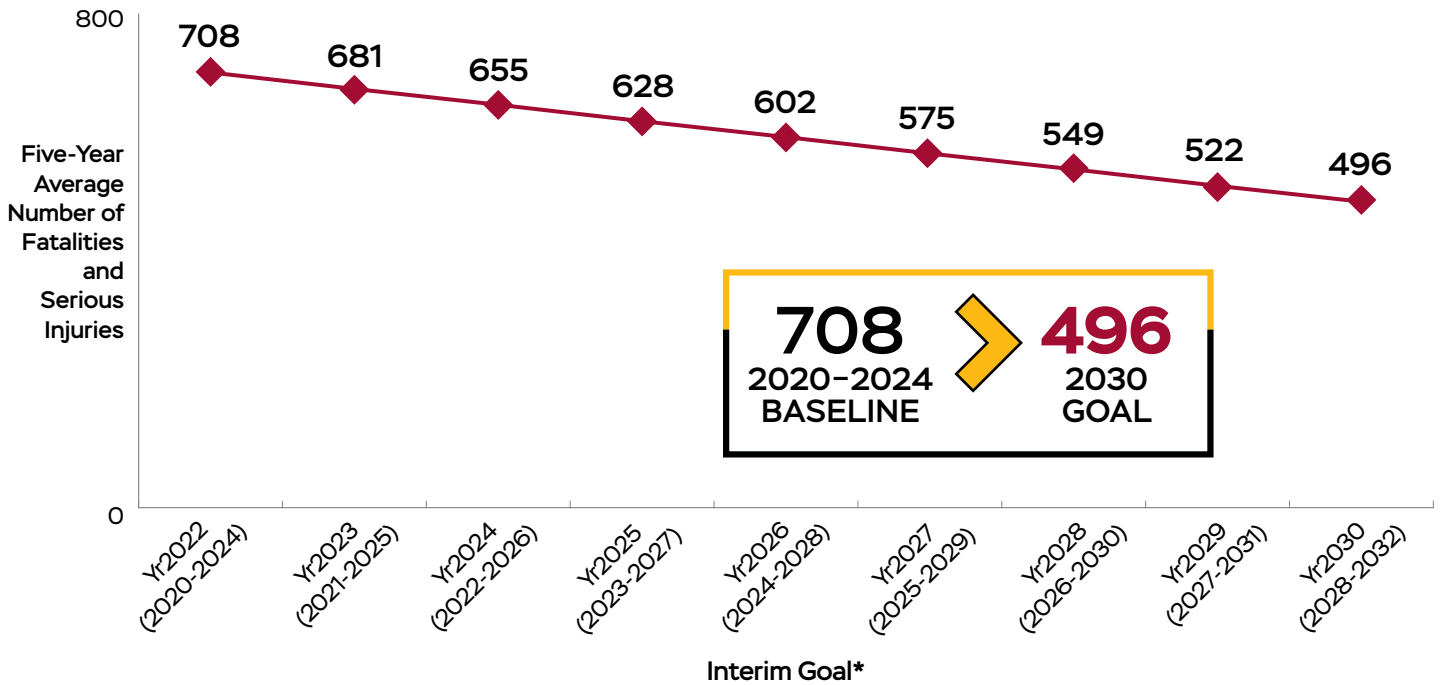
*Note: The annual interim goal represents the mid-year of the five-year average. For example, the 2022 interim goal is the five-year annual average from 2020-2024.

Interim Goals for Serious Injuries Rate per 100 Million Vehicle Miles Traveled (VMT) in Maryland



*Note: The annual interim goal represents the mid-year of the five-year average. For example, the 2022 interim goal is the five-year annual average from 2020-2024.

Interim Goals for Total Non-Motorized Fatalities and Serious Injuries in Maryland



*Note: The annual interim goal represents the mid-year of the five-year average. For example, the 2022 interim goal is the five-year annual average from 2020-2024.



5

Special Vehicles and Roadway Environments

In addition to Maryland's EAs, the SHSP addresses various vehicle types and environments that present heightened risk and demand unique safety strategies. These areas intersect with multiple EAs and contribute significantly to statewide safety goals under Maryland's Vision Zero law. The SHSP also supports the use of telematics and EMS technology data—collected through GPS-enabled systems and applications such as HAAS Alert that monitor vehicle location, speed, acceleration, braking, and other performance metrics—to better understand driver behavior, identify high-risk patterns, and inform targeted safety interventions. By integrating telematics insights into education, emergency medical services, enforcement, and engineering strategies, Maryland can enhance proactive safety measures and reduce the likelihood of crashes across all roadway environments.

Advanced Driver Assistance Systems and Automated Vehicles

Maryland's CAV Working Group supports development and deployment of CAV technologies. These systems hold promise in reducing crashes caused by human error, and strategies include improving roadway markings, sharing real-time traffic data, and enhancing enforcement and planning in mixed-vehicle environments.

Commercial Motor Vehicles (CMVs)

From 2020 to 2024, CMVs were involved in 3.9% of all traffic crashes in Maryland and 9.7% of all fatal crashes. Notably, 28% of large truck occupants killed were not wearing seat belts and 23% of fatal work zone crashes involved a CMV.



The SHSP also emphasizes the broader context of freight movement. Maryland is pursuing strategies to improve truck parking availability to reduce fatigue-related incidents, strengthen commercial driver education manuals and licensing requirements, and align CMV safety actions with the State Freight Plan to ensure consistency in planning and enforcement. These efforts, together with targeted outreach to the motor carrier industry, reinforce the SHSP's commitment to safe freight operations as an essential component of roadway safety.

Work Zones

On average, 9 fatalities and 38 serious injuries occurred in work zones annually from 2020–2024. Strategies include enforcement of Maryland's "Move Over" law, automated enforcement in work zones, and public outreach targeting speed and distraction risks. In 2024, Maryland passed the Work Zone Road Worker Protection Act, which expands automated enforcement authority, strengthens penalties for violations, and enhances protections for workers across designated zones. These actions build on the recommendations of the Governor's Work Zone Safety Task Force,

which brings together law enforcement, labor leaders, traffic engineers, highway safety experts, and roadway workers to identify and advance strategies that improve safety for workers, motorists, and law enforcement personnel in active work zones. This legislation reinforces the SHSP's commitment to safeguarding those who build and maintain Maryland's transportation system.

Traffic Incident Management (TIM)

A traffic incident is a non-recurring event (e.g., crash, breakdown, or special event) that disrupts normal traffic flow. These incidents pose safety risks and cause major congestion. Maryland has been a national leader in Traffic Incident Management (TIM), with programs like Coordinated Highways Action Response Team (CHART) and partnerships between MDOT and MDSP. The MDSP TIM Unit enhances response times, communication, and safety during major incidents. For example, they played key roles during the 2023 US 15 gasoline tanker crash and I-695 work zone tragedy. Regional efforts like the Traffic Incident Management for the Baltimore Region (TIMBR) Committee further promote coordination. MDOT continues investing in TIM tools, training, and public awareness.

Motorcycles

Between 2020 and 2024, Maryland averaged 80 motorcyclist fatalities and 343 serious injuries per year. Motorcycles were involved in just 1.3% of crashes but accounted for 14% of all fatal crashes. The SHSP addresses this through rider training, awareness campaigns, and roadway design improvements.

Highway-Rail Grade Crossings

Maryland continues safety improvements through signage, gates and safety infrastructure. Strategies for preventing these crashes also address driver inattentiveness and speed as contributing factors.

Rural Communities and Farm Equipment

Rural road users face unique risks, often due to mixed traffic involving farm equipment or horse-drawn vehicles. From 2020–2024, rural crashes and outcomes in Maryland were strongly linked to high speeds, alcohol, and unrestrained occupants. Maryland’s approach includes targeted outreach, visibility enhancements, and roadway maintenance.

School Buses and Bus Stops

Between 2020 and 2024, 6,201 crashes involved school buses in Maryland, with 4 fatalities. All of the fatalities were school bus drivers or passengers. Maryland promotes stop-arm camera

enforcement and education campaigns to address illegal passing and improve safety near school bus stops.

Transit Buses and Bus Stops

Transit safety is addressed through coordination with the MDOT Maryland Transit Administration (MDOT MTA) and FHWA, focusing on safe stop design, enforcement, and infrastructure improvements.

Micromobility (E-bikes and Scooters)

The use of e-bikes, e-scooters, and similar micromobility devices has grown significantly. Users of these devices are often vulnerable due to direct exposure and the environments shared with both vehicles and pedestrians. Maryland’s strategies include updating crash reporting practices, enhancing infrastructure design to include micromobility lanes, and public education on safe use practices and local regulations.



6

SHSP Implementation

The implementation of the 2026–2030 SHSP requires the continued cross-disciplinary collaboration of Maryland’s transportation safety professionals. This includes experts from engineering and roadway operations, public education, law enforcement, emergency medical services, and planning. Each partner plays an essential role in designing strategies and executing actions that reduce crash frequency and severity on Maryland roads.

With Maryland’s Vision Zero law enacted in 2019, this SHSP is supported by legislation that formalizes the State’s approach to eliminating roadway fatalities and serious injuries. The law mandates an annual review process, a designated coordinator within MDOT, and interagency collaboration to ensure safety progress is tracked and sustained. It also prioritizes identification and correction of safety-related barriers in existing policies and infrastructure.

The following outlines the SHSP’s core implementation structure:

Governor’s Highway Safety Representative

The Governor of Maryland has designated the Administrator of the MVA as the official Highway Safety Representative. This role oversees the coordination of efforts with NHTSA, MDOT, Maryland Department of State Police (MDSP), Maryland Department of Health (DOH), Maryland Institute for Emergency Medical Services Systems (MIEMSS), and other State agencies.

SHSP Executive Council

This high-level body includes leaders from key safety-related agencies responsible for the oversight, implementation, and strategic direction of the SHSP. Membership includes:

- ▶ Maryland Motor Vehicle Administration (MVA)

- ▶ Maryland Department of State Police (MDSP)
- ▶ Maryland Department of Transportation (MDOT)
- ▶ State Highway Administration (SHA)
- ▶ Maryland Transportation Authority (MDTA)
- ▶ Maryland Department of Health (MDOH)
- ▶ Maryland Highway Safety Office (MHSO)
- ▶ Maryland Institute for Emergency Medical Services Systems (MIEMSS)
- ▶ Federal Highway Administration (FHWA)
- ▶ National Highway Traffic Safety Administration (NHTSA)

In accordance with Senate Bill 345 (2024), the Council’s work aligns with the quarterly Vision Zero meetings led by the Vision Zero Coordinator. These meetings bring together senior leadership from MDOT business units and partner agencies to review fatal crash data, assess infrastructure-related safety issues, and recommend strategies for improvement.

This group ensures alignment with Vision Zero goals and coordinates integration of safety policies across planning, enforcement, and infrastructure systems.

The Council’s work is reinforced by MVA’s Complete Streets Implementation Plan, which embeds safety principles directly into driver education, licensing, enforcement coordination, and data analysis. Through initiatives such as incorporating new roadway treatments into driving school curricula, aligning behavioral data collection with infrastructure planning, and coordinating safety performance functions with SHA, the MVA ensures that SHSP priorities are operationalized across Maryland’s transportation system.

EA Team

The EA teams consist of safety partners from all aspects of the SHSP: planners, engineers, medical, behavioral, public health, law, advocacy, and other professionals. Using a framework of strategies to improve safety in Maryland, the EAs consider all aspects of transportation safety and are well equipped to confront the traffic safety issues facing Maryland today.



The EA teams plan, collaborate, and follow through with implementation and evaluation of relevant action steps. These strategies and action steps are enumerated in an action plan, which lays out short term, long term, or possibly ongoing activities. The EA teams meet at least quarterly and update these action plans as needed.

Key Bridge Collapse: A Model of Cross-Agency Collaboration

On March 26, 2024, the Francis Scott Key Bridge in Baltimore collapsed after being struck by the cargo ship Dali. The tragic incident claimed six lives and severed a vital transportation and shipping corridor to the Port of Baltimore. The scale of the loss was staggering. The disruption was immediate. But the response—coordinated, confident, and deeply unified—stood out as a national model for what true partnership can accomplish.

Maryland’s response drew immediate national attention not only for its speed, but for its precision. Agencies including the MDOT, FHWA, U.S. Coast Guard, U.S. Army Corps of Engineers, National Oceanic and Atmospheric Administration (NOAA), City of Baltimore, Baltimore County, and Maryland Transportation Authority (MDTA) Police worked side by side. Real-time GIS integration, emergency channel management, environmental

coordination, and logistical deployment enabled the full reopening of the federal shipping channel to reopen, and the Port of Baltimore’s recovery to begin, in just 76 days after the collapse.

This success was rooted in years of deliberate internal and external collaboration. Within MDTA, Police personnel operate daily in coordination with Operations, Finance, Office of Information Technology (OIT), Communications, and Engineering. This cross-division collaboration is supported by consistent policies, unified training standards, and routine communication that ensures familiarity, trust, and clarity across roles. Initiatives like Leadership Roundtable, Supervisory Training, MDTA Day, and planning for public events like the Bay Bridge Run cultivate institutional alignment well before emergencies occur.



Externally, MDTA Police maintain formal agreements, participate in joint task forces, and attend cross-agency training events with local, county, state, and federal partners. Groups like the Maryland Tactical Operation Group, Maryland Tactical Advisors, and the Maryland Chiefs of Police Association serve as vital forums for proactive partnership-building.

As MDTA leaders have noted, these internal and external relationships are what make incident management more effective. When large-scale critical events like the Key Bridge collapse occur, teams are not meeting for the first time; instead, longstanding partnerships are activated. Roles are known. Expectations are clear. Resources are mobilized without hesitation.

The Key Bridge response embodied the SHSP's core principles: eliminate silos, establish trust, and empower unified action. It demonstrated how Maryland's culture of collaboration—built over years through daily coordination and shared mission—can rise to meet extraordinary challenges with strength and speed.

Local SHSPs: Empowering Safety from the Ground Up

Maryland's leadership includes a partnership with Baltimore's metropolitan planning organization and provides structural support to help jurisdictions thrive. Since 2018, MHSO has funded a staff member at the Baltimore Metropolitan Council to support local planning across the region. That role—focused on the Baltimore Regional Transportation Board (BRTB) and its member counties and cities—has been essential in advancing plan development, sharing lessons learned, and connecting local efforts with statewide priorities.



As part of Maryland's broader commitment to roadway safety, local engagement has become a defining feature of SHSP implementation. Recognizing that a significant share of crashes occur on locally maintained roadways, Maryland began encouraging each of its 24 jurisdictions to adopt individual strategic highway safety plans. Former Maryland Secretary of Transportation Pete K. Rahn initiated this push during the 2016–2020 SHSP cycle, sending letters to jurisdictional leaders in 2017 to highlight the importance of local ownership in the pursuit of zero deaths.

Since then, momentum has grown. Harford County led the way with its first local SHSP covering 2011–2015. With support from the MHSO and a wide range of federal, state, and local partners, more than half of Maryland jurisdictions have now developed and begun implementing jurisdiction-specific plans. Montgomery County stands out with a dedicated Vision Zero Program Coordinator embedded in the County Executive's Office—demonstrating how localized leadership can accelerate implementation and accountability.

The local planning landscape is intentionally flexible. Jurisdictions are not required to follow a specific framework—whether Vision Zero, Toward Zero Deaths, or the State SHSP itself.

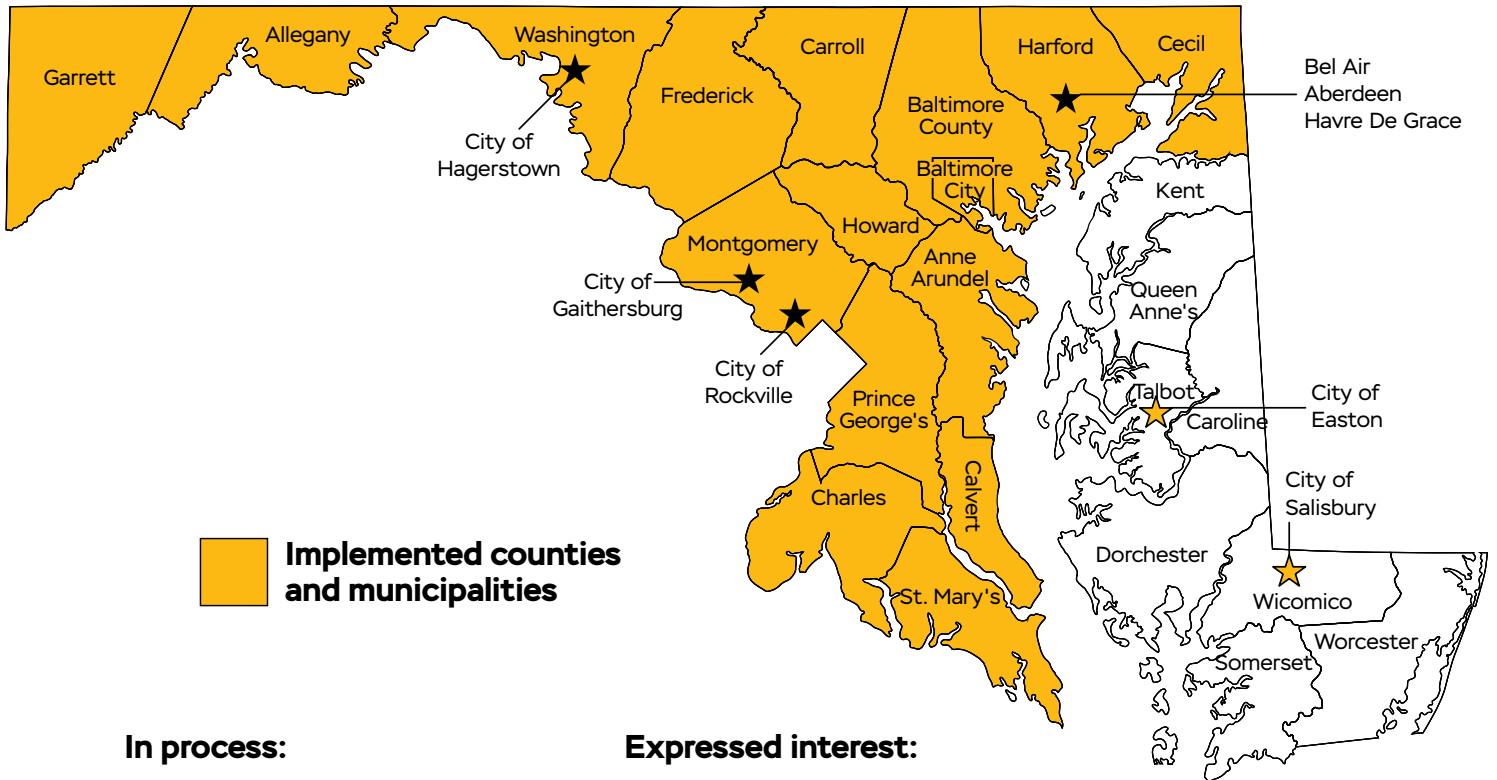


Instead, each locality is encouraged to develop a plan that reflects its unique needs, priorities, and capabilities. The only formal requirement is that a plan must be in place to receive HSIP funds for local projects.

This locally-driven model has been further energized by the federal Safe Streets and Roads for All (SS4A) grant program under the IIJA. Many jurisdictions have used SS4A funding to conduct demonstration projects, develop new plans, or implement action items identified through existing strategies.

The result is a dynamic, evolving network of local safety teams committed to making Maryland's roads safer—one community at a time. With strong partnerships and flexible support, Maryland is building a local SHSP model that reflects the power of grassroots collaboration and tailored implementation.

Progress of Maryland's Local Strategic Highway Safety Plans



7

SHSP Evaluation and Plan Update

The Maryland SHSP Executive Council is responsible for conducting an annual review of the SHSP to evaluate implementation progress, adjust priorities as needed, and ensure the plan remains aligned with Maryland's traffic safety objectives and Vision Zero principles. This includes reviewing and confirming the quality of the traffic records system, emphasizing accuracy, timeliness, completeness, uniformity, integration, and availability of safety data.

The SHSP evaluation process supports monitoring of the federally required Safety Performance Measures set by FHWA, which include the total number of fatalities, fatality rate per 100 million VMT, total number of serious injuries, serious injury rate per 100 million VMT, and total number of non-motorized fatalities and serious injuries.

The MHSO serves as the Steering Committee and provides oversight between the EA teams and the Executive Council. The MHSO regularly reviews EA strategy implementation, performance progress, and updates to action plans. If performance metrics fall short, the MHSO recommends appropriate adjustments.

Each EA team, with support from its chairpersons and guidance from the MHSO, follows an established process for evaluation that includes clear performance measures, defined roles and responsibilities, and consistent progress tracking. Each strategy in the SHSP is supported by a series of action steps that will be evaluated annually, with progress toward completion tracked over time. As actions are completed, new ones will be added as applicable to ensure strategies remain active and responsive to emerging safety challenges.

EA teams report annually on:

- ▶ **Output Measures:** The extent to which SHSP strategies and actions are executed.
- ▶ **Outcome Measures:** The extent to which these efforts lead to reduced fatalities and serious injuries and improved user safety.

The SHSP team reports results to stakeholders and uses them to inform strategy refinements. When progress is insufficient, the Executive Council works with EA leaders to reassess the action plans. Maryland's evaluation framework enables data-driven decision-making and helps allocate resources toward the most impactful strategies.

The following elements from this evaluation process guide EA leadership in the ongoing development, integration and evaluation of the SHSP:

- ▶ Determine data requirements and resources for action plans
- ▶ Document measureable objectives and performance measures

- ▶ Implement progress tracking
- ▶ Integrate with other transportation safety plans
- ▶ Conduct a comprehensive program evaluation to assess the SHSP's process and performance
- ▶ Share evaluation results to engage SHSP partnerships, take strategic action, and sustain momentum

This SHSP covers January 1, 2026 through December 31, 2030. Planning for the next update will begin in late 2029, with input from EA teams and Maryland safety partners.



GLOSSARY

5-year Rolling Average: The average of five individual, consecutive annual points of data.

Aggressive Driving: Maryland law states that a person is guilty of aggressive driving if the person commits two or more of the following offenses at the same time or during a single and continuous period of driving in violation of:

- ▶ failure to obey traffic lights with steady indication
- ▶ overtaking and passing vehicles
- ▶ passing on right
- ▶ failing to obey traffic control device
- ▶ following too closely
- ▶ failure to yield right-of-way
- ▶ exceeding a maximum speed limit or posted maximum speed limit

Aggressive Driving-Related Crash:

A crash in which a driver had any indication of two or more of these attributes assigned with no ranking or hierarchy:

- ▶ failed to yield right of way
- ▶ failed to obey stop sign
- ▶ failed to obey traffic signal
- ▶ failed to obey other traffic control device

- ▶ failed to keep right of center
- ▶ failed to stop for school bus
- ▶ too fast for conditions
- ▶ followed too closely
- ▶ improper lane change
- ▶ improper passing
- ▶ failure to obey traffic signs, signals, or officer
- ▶ disregarded other road markings
- ▶ other improper action
- ▶ operated motor vehicle in erratic/reckless manner

Autonomous/Automated Vehicle:

A vehicle that is capable of sensing its environment and moving safely with little or no human input.

Bicyclist: A person on any type of pedal cycle, including bicycles, e-bikes, tricycles, unicycles, and any trailers or sidecars attached to these cycles.

Citation and Adjudication Data: From the Maryland District Court, these data provide information about citations, arrests, and dispositions for all motor vehicle violations.

Commercial Motor Vehicle (CMV):

Any self-propelled or towed motor vehicle used on a highway in interstate commerce to transport passengers or property when the vehicle:

- ▶ Has a gross vehicle weight rating or gross combination weight rating, or gross vehicle weight or gross combination weight, of 4,536 kg (10,001 pounds) or more, whichever is greater; or
- ▶ Is designed or used to transport more than eight passengers (including the driver) for compensation; or
- ▶ Is designed or used to transport more than 15 passengers, including the driver, and is not used to transport passengers for compensation; or
- ▶ Is used in transporting hazardous material

Commercial Vehicle Safety Plan (CVSP):

Outlines the State's CMV safety objectives, strategies, activities and performance measures.

Complete Streets: Complete Streets are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.

Contributing Factor: Conditions of the environment (such as lighting, weather), vehicle (brakes, lights), road (debris, obstructions), or driver behavior (inattentiveness, driving under the influence of alcohol or drugs) that contribute to the occurrence of a crash or its severity.

Crash: A set of events that results in injury or property damage due to the collision of at least one motorized vehicle and may involve collision with another motorized vehicle, a bicyclist, a pedestrian, or a fixed object.

Distracted Driving-Related Crash: A crash where at least one driver in the crash was reported to be distracted, having any of the following values in the driver distracted by field: looked but did not see; other electronic device (tablet, GPS, MP3 player, etc.); by other occupants; by moving object in vehicle; talking or listening on cellular phone; dialing cellular phone; adjusting audio and/or climate controls; using other device controls integral to vehicle; using device/object brought into vehicle (non-electronic); distracted by outside person, object, or event; eating or drinking; smoking-related; other cellular phone related; lost in thought; or texting from a cellular phone.

Driver: Operator of a motor vehicle.

Driver Licensing Data: Collected and administered by the Maryland Motor Vehicle Administration.

Emphasis Area: An area that has been identified as a safety concern for which resources within the jurisdictions and the State are allocated to develop and implement action plans forming a Strategic Highway Safety Plan.

Emphasis Area Strategy: A strategy intended to reduce the crash frequency or severity, or both, at a specific site or for several similar locations.

Executive Council (of SHSP): Maryland's SHSP Executive Council governs the SHSP and is comprised of the Deputy Secretary of the MDOT, the MDOT MVA Administrator, the MDOT SHA Administrator, the Secretary of the Maryland Department of State Police (Superintendent), the Executive Director of the Maryland Institute for EMS Systems, the Chief of Police of the Maryland Transportation Authority, and the Deputy Secretary of Maryland's Department of Health.

Farm Equipment: Equipment used in agricultural operations.

Federal Motor Carrier Safety

Administration (FMCSA): Lead federal government agency responsible for regulating and providing safety oversight of commercial motor vehicles (CMVs); FMCSA's mission is to reduce crashes, injuries, and fatalities involving large trucks and buses.

Federal Highway Administration (FHWA):

An agency within the U.S. Department of Transportation that supports State and local governments in the design, construction, and maintenance of the Nation's highway system (Federal Aid Highway Program) and various federally and tribal owned lands (Federal Lands Highway Program).

Four Es: Education, emergency medical services, enforcement, and engineering. Generally, the four Es of transportation safety define the broad stakeholder communities who address safety issues and are responsible for making the roads safe for all users:

- ▶ Education: for example, driver education, citizen groups, educators, prevention specialists, etc.
- ▶ Emergency Medical Services: first responders, paramedics, fire and rescue, etc.
- ▶ Enforcement: State and local law enforcement agencies
- ▶ Engineering: highway design, traffic, maintenance, operations, planning, etc.

High Risk Rural Roads: These roads are defined in 23 USC 148(a)(1) as “any roadway functionally classified as a rural major or minor collector or a rural local road with significant safety risks, as defined by a State in accordance with an updated State strategic highway safety plan.”

Highway Infrastructure-Related Crash:

The MD definition of a highway infrastructure related crash uses a combination of data elements from the crash data report including but not limited to: road surface, road type, road environment (weather, visibility), work zone, road segments (curves, grade, tunnels, number of lanes, shoulder condition, width of lanes), junction type (gradient, length, sight distance, conflict points), junctions.

Highway Safety Improvement Program (HSIP):

The purpose of the HSIP is to achieve a significant reduction in traffic fatalities and serious injuries on public roads. To obligate “core” safety funds MDOT SHA must have in effect an HSIP under which the State: 1) develops and implements a Strategic Highway Safety Plan (SHSP) that identifies and analyzes highway safety problems and opportunities to reduce fatalities and serious injuries, 2) produces a program of projects or strategies to reduce identified safety problems, 3) evaluates the plan on a regular basis to ensure the accuracy of the data and priority of proposed improvements, 4) submits an annual report to the FHWA Division.

Highway Safety Plan (HSP): A state document, coordinated with the State strategic highway safety plan as defined in 23 U.S.C. 148(a), that the State submits each fiscal year as its application for highway safety grants, which describes the strategies and projects that State plans to implement and the resources from all sources it plans to use to achieve its highway safety performance targets. Reference 23 CFR 1200. Subpart B.

HSIP Annual Report: A yearly report submitted by the Maryland Department of Transportation State Highway Administration (SHA) to the Federal Highway Administration (FHWA) under 23 CFR 924.15. It documents how Highway Safety Improvement Program (HSIP) funds were used in the prior calendar year, shows progress toward safety performance targets, and demonstrates consistency with the Maryland SHSP.

HSIP Implementation Plan: A yearly plan developed by SHA describing how HSIP funds will be invested to reduce fatalities and serious injuries. Required under 23 U.S.C. 148(i) and 23 CFR 490.211 for any State that does not meet or make significant progress toward its safety performance targets. It identifies priority crash types, systemic risk factors, and emphasis areas consistent with the SHSP.

Impaired Driving-Related Crash: The Maryland definition of an impaired driving crash is: At least one driver in the crash is determined to be impaired by the investigating officer as indicated through the driver condition, blood alcohol content, substance use detected, and contributing factor fields on the Maryland crash report:

- ▶ person condition of “had been drinking,” “using drugs,” or “influenced by medications and/or drugs and/or alcohol” or
- ▶ blood alcohol concentration (BAC) between 0.08 and 0.50 or
- ▶ substance use of “alcohol contributed,” “illegal drugs contributed,” “medication contributed,” or
- ▶ “combination contributed” or
- ▶ contributing circumstance of “under the influence of drugs,” “under the influence of alcohol,” “under the influence of medication,” or
- ▶ “under combined influence.”

Note: This definition includes drug impairment as well as alcohol impairment, and will not match alcohol-impaired fatality figures provided by NHTSA’s Fatal Accident Reporting System (FARS), which measures only drivers with a recorded Blood Alcohol Content (BAC) greater than 0.08. Objectives for both State and federally defined impaired driving are included to maintain continuity with previous Maryland SHSP and HSPs, and to maintain a link with other State plans that exclusively use State crash data as the source for problem identification and program evaluation.

Injury Categories: Injuries reported by the investigating officer on the Maryland crash report are categorized by the injury severity code according to federal guidelines. The categories are:

- ▶ **Fatal Injury:** Any injury that results in death within 30 days after the motor vehicle crash in which the injury occurred. If the person did not die at the scene but died within 30 days of the motor vehicle crash in which the injury occurred, the injury classification is changed from the attribute previously assigned to the attribute “fatal injury.”
- ▶ **Suspected Serious Injury:** A suspected serious injury is any injury other than fatal which results in one or more of the following:
 - Severe laceration resulting in exposure of
 - underlying tissues/muscle/organs or resulting in significant loss of blood
 - Broken or distorted extremity (arm or leg)
 - Crush injuries
 - Suspected skull, chest or abdominal injury other than bruises or minor lacerations
 - Significant burns (second and third degree burns over 10% or more of the body)
 - Unconsciousness when taken from the crash scene
 - Paralysis

- ▶ **Suspected Minor Injury:** A minor injury is any injury that is evident at the scene of the crash, other than fatal or serious injuries. Examples include lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue/muscle).
- ▶ **Possible Injury:** Any injury reported or claimed which is not a fatal, suspected serious, or suspected minor injury. Examples include momentary loss of consciousness, claim of injury, limping, or complaint of pain or nausea. Possible injuries are those that are reported by the person or are indicated by his/her behavior, but no wounds or injuries are readily evident.
- ▶ **No Apparent Injury:** A situation where there is no reason to believe that the person received any bodily harm from the motor vehicle crash. There is no physical evidence of injury and the person does not report any change in normal function.

Injury Surveillance System: The injury surveillance system tracks the frequency, severity, and nature of injuries sustained in motor vehicle crashes. The system includes: pre-hospital emergency medical services (EMS), trauma registry, emergency department, hospital discharge, and mortality data.

Intersection: The general area where two or more roadways or highways meet, including the roadway, and roadside facilities for pedestrian and bicycle movements within the area.

Intersection Crash: A crash that occurs within the limits of an intersection.

Intersection-Related Crash: Crashes reported as occurring in an intersection or being intersection-related.

“Intersection-related” is not a location type but a judgment about the effects of intersections and their traffic controls upon traffic and crash causation.

If the crash is deemed to have occurred as a result of backed-up traffic from an intersection (presumably at a non-intersection location) the junction relationship is “intersection-related.”

Long-Range Transportation Plan:

A 20-year planning horizon vision document that reflects the application of programmatic transportation goals to project prioritization.

Maryland Highway Safety Office

(MHSO): The MDOT MVA’s Highway Safety Office is dedicated to saving lives and preventing injuries by reducing motor vehicle crashes through the administration of a comprehensive network of traffic safety programs. The MVA’s Highway Safety Office endeavors to provide expert highway safety leadership through quality programs, ethical grants management, professional and accountable staff, and exemplary customer service.

Metropolitan Planning Organization (MPO): A federally mandated and federally funded transportation policymaking organization that is made up of representatives from local government and governmental transportation authorities. MPOs conduct planning and programming for federal transportation funds within a “3C” process (continuing, comprehensive, and cooperative).

Micromobility Device: A small, lightweight vehicle designed for personal transportation, typically operating at lower speeds and often powered by electricity, such as e-bikes, e-scooters, and similar devices.

Motor Carrier: A vehicle that transports passengers or property for compensation.

Motorcycle Crash: A crash involving at least one motorcycle, defined as a “motorcycle” body type.

Motorcyclist: Driver and/or passenger of a motorcycle.

Motorist: Driver or passenger of a vehicle.

National Highway Traffic Safety Administration (NHTSA): An agency of the U.S. DOT whose mission is to promote safer vehicles and safer driving practices to reduce deaths, injuries, medical costs and other economic losses resulting from motor vehicle crashes.

Older Driver: A driver between the ages of 65 and 110.

Pedestrian: A person involved in a motor vehicle crash who is not an occupant and meets the following inclusion criteria:

- ▶ Person on foot
- ▶ Person walking, running, jogging, hiking, sitting, or lying within the trafficway or on private property, etc.
- ▶ Persons in buildings
- ▶ Person on personal conveyance
- ▶ A person ejected from a transport vehicle who has come to rest in the trafficway during a prior unstabilized situation and struck in a second or subsequent unstabilized situation.

Pedestrian Crash: A crash where at least one involved person is reported as a pedestrian.

Performance Interim Goals: Measurable benchmarks within each SHSP Emphasis Area that track progress toward the long-term goal of reducing fatalities and serious injuries.

Performance Measures: Indicators that enable decisionmakers and other stakeholders to monitor changes in road system condition and performance against established visions, goals, and objectives.

Police Crash Report Data: Reported, collected and administered by the Maryland State Police.

Road System: All of the roads (local and/or highway) that are under the jurisdiction of a single agency (such as state, county, or municipality).

Roadway: The portion of a highway, including shoulders, for vehicular use.

Roadway Departure Crash: A crash where any sequence of events was recorded as “striking a fixed object” or “running off the road” or the location of the crash was reported as “off-road” or “in the median.”

Safe System Approach: Under the Safe System Approach, road safety is a shared responsibility among everyone, including those that design, build, operate and use the road system. It takes a holistic view of the road transport system and the interactions among roads and roadsides, travel speeds, vehicles and road users.

Safety Culture: “The implicit shared values and beliefs that determine the way in which the society organizes and acts” in matters that affect safety (AAA Foundation for Traffic Safety, 2007).

Sign: An official traffic control device placed or erected by authority of a public body or official having jurisdiction for the purpose of regulating, warning, or guiding traffic.

Speed-Related Crash: A crash where at least one driver in the crash was reported to be speeding, defined by having a value of “too fast for conditions” in the contributing circumstance field.

State Highway Administration (SHA):

The State transportation business unit responsible for maintaining Maryland’s numbered highways outside Baltimore City.

Strategic Transportation Improvement

Plan (STIP): A four-year, fiscally constrained, and prioritized set of transportation projects, compiled from statewide, local, and regional plans.

Strategic Highway Safety Plan

(SHSP): A data-driven, comprehensive, multidisciplinary plan integrating the four Es of transportation safety—education, emergency medical services, enforcement, and engineering. It establishes statewide performance measures, goals, objectives, and Emphasis Areas and describes a program of strategies to reduce or eliminate safety hazards. It is developed by the State Department of Transportation (DOT) in consultation with federal, State, local, and tribal safety stakeholders, in accordance with 23 U.S.C. § 148.

Traffic Records Coordinating Committee

(TRCC): A committee whose purpose is to continually review and assess the status of Maryland’s Traffic Safety Information System and its components. It is responsible for updates to the Traffic Records Strategic Plan (TRSP); learning about technologies to improve the information system; promote, support and assist in the coordination and implementation of desired system improvements; and provide a forum for the exchange of information.

Traffic Records Strategic Plan (TRSP): A plan that incorporates all traffic records system components as identified in NHTSA’s Traffic Records Program Assessment Advisory and identifies and prioritizes performance measures as the focus to help Maryland use a systems approach to proactively identify the resources needed (legislative, organizational, or budgetary) to efficiently and effectively reach these goals.

Unrestrained Occupant: A passenger-vehicle (automobile, station wagon, van, SUV, pickup truck) occupant who is: less than eight years of age recorded as not using a “child/youth restraint,” eight years of age or older recorded as not using a “lap and shoulder belt” or “air bag and belt,” or where restraint use was recorded as using “none” or “air bag only.”

Vehicle: A device in, upon, or by which a person or property is or may be transported upon a highway, except devices moved by human power or used exclusively on stationary rails or tracks.

Vehicle Registration Data: Collected and administered by the Maryland Motor Vehicle Administration. The registration data are an inventory of data that enables the titling and registration of each vehicle under the State’s jurisdiction to ensure that a descriptive record is maintained and made available for each vehicle and vehicle owner operating on public roadways.

Vulnerable Road Users: Someone who is walking, cycling, or rolling—including individuals who use devices such as rollerblades, roller skates, or e-scooters.

Work-Zone Crash: Crashes occurring in a construction/maintenance zone.

Young Driver: Drivers aged 16–20.



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