Maryland
Annual Grant Application
Federal Fiscal Year 2024

Contents

Executive Summary

I am pleased to present Maryland's first Annual Grant Application (AGA) for Federal Fiscal Year (FFY) 2024. This plan outlines the upcoming strategies, activities, and priority areas for the Maryland Highway Safety Office (MHSO), which is housed within Maryland Department of Transportation's Motor Vehicle Administration (MVA), under the guidance of the MVA Administrator, Ms. Christine Nizer, who also serves as Maryland's Governor's Representative for Highway Safety.

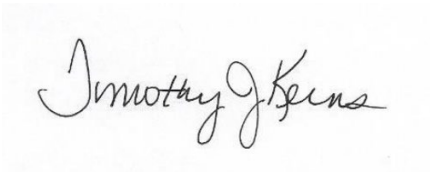
In 2022, the risky driving behaviors observed during the previous two years continued. Despite a rebound in vehicle-miles traveled (VMT) to pre-pandemic levels, increases in speed, impairment, and distracted driving continued. As a result, 564 people died in traffic-related crashes on Maryland's roads. Unfortunately, this represented no change from the previous year. Additionally, pedestrian and bicycle fatalities continued to comprise one quarter of the state's roadway deaths and much work remains to reverse a recent national increase in roadway deaths.

The past year saw the state's highway safety programs adapt to the changes in procedures and activities resulting from the pandemic and begin preparing to meet the requirements of the new Bipartisan Infrastructure Law (BIL). Still following the strategies and action steps in Maryland's Strategic Highway Safety Plan (SHSP) the MHSO continued its focus on core emphasis areas such as impaired driving, speeding, occupant protection, distracted driving, and pedestrian and bicycle safety as well as new areas of focus such as autonomous vehicles. MHSO supported the development of more than 13 local highway safety plans, the state's seatbelt use rate rose back above 92 percent, and outreach activities resumed in the schools and communities. Maryland's SHSP provides the Safe System framework to support the collaborative efforts between MDOT business units and allied agencies. The SHSP continues to use a data-driven approach to set safety targets, to guide our investments, and to maximize the use of our resources to improve highway safety in the state.

The new triennial Highway Safety Plan (3HSP) will serve as a guiding document for this AGA. Both documents have been formulated through a close analysis of data along with the collaboration of diverse partners across the state. Strategies and projects outlined in this document have been selected for their ability to make the biggest impact toward accomplishing the goals set forth in the 3HSP and the SHSP.

Maryland's network of highway safety partners is committed to raising the awareness of traffic safety issues and building a comprehensive and effective traffic safety program. I look forward to the implementation of the projects outlined in this AGA and continuing our work until there are zero deaths on Maryland roadways.

Sincerely,



Timothy J. Kerns, PhD

Highway Safety Strategies and Projects

The MHSO awards grants to projects that address priority areas in Maryland's SHSP, along with target groups identified within those areas. These projects must demonstrate the greatest potential to succeed and ultimately help Maryland eliminate crash-related deaths and injuries. Grants must be compatible with the MHSO's mission, program directives, and eligibility criteria. Final awardees reflect agencies deemed most capable of addressing the strategies and projects that aid Maryland in achieving its targets and objectives.

The following sections contain descriptions of the MHSO's grant-funded programs. Each section provides:

- detailed and program-specific problem identification,
- a tie-in of the program's objectives and their relation to the Maryland SHSP,
- identified countermeasures,
- enforcement data (where applicable),
- details on national mobilizations and High Visibility Enforcement (HVE) campaigns (where applicable),
- details concerning program area grants (where applicable), and
- other relevant program area information.

Four categories of proven countermeasures are to be utilized, including those in:

- NHTSA's Uniform Guidelines for State Highway Safety Programs
- U.S. DOT, NHTSA (2020). Countermeasures that Work, Tenth Edition, DOT HS 813 097 (referred to in the HSP as Countermeasures that Work) (rated three Stars and above)
- Published evidence-based research that substantiates the proposed project or intervention
- Recommendations from NHTSA program assessments conducted in Maryland

Maryland's Evidence-Based Traffic Enforcement Program

The MHSO has developed policies and procedures to ensure that enforcement resources are used efficiently and effectively, with the greatest impact, to support the targets of the state's highway safety program as outlined in the SHSP. Maryland incorporates an evidence-based approach in its statewide enforcement program and all grants.

BIL requires that Maryland participate in at least three HVE campaigns that support national priorities. Although the MHSO implements more than three HVE campaigns, those that are officially a part of national priority areas are the May Click it or Ticket mobilization, the August impaired driving prevention mobilization, and a dual effort in November that supports a second Click it or Ticket wave and impaired driving prevention.

Data-Driven Problem Identification

Maryland's evidence-based traffic safety enforcement methodology uses an integrated enforcement approach utilizing checkpoint inspections and saturation patrols, each as outlined in NHTSA's Countermeasures that Work guiding document. The data-driven, HVE methodology includes enforcement of traffic laws pertaining to impairment, speeding, occupant restraint usage, and other safety issues, coupled with enforcement patrols that saturate specific areas, which are well-documented in local media and describe the effort as an impaired-driving or other appropriate campaign.

Such an effort typically includes uniformed law enforcement officers saturating a high-risk crash or incidence area and engaging the driving public by stopping as many violators as possible to serve as a deterrent to improper and dangerous driving. This highly visible approach provides a public perception of risk that driving without following the law can and will result in a traffic stop, resulting in a citation or an arrest in the case of impaired driving. This comprehensive statistical and partner-based approach, often in concurrence with associated national crackdowns or campaigns and mobilizations, helps Maryland provide continuous Specific and General Deterrence of improper and unsafe driving from the causal factors outlined above.

Implementation of Evidence-Based Strategies

Maryland's evidence-based traffic safety enforcement methodology uses an integrated enforcement approach utilizing checkpoint inspections and saturation patrols, each as outlined in NHTSA's Countermeasures that Work guiding document. The data-driven, HVE methodology includes enforcement of traffic laws pertaining to impairment, speeding, occupant restraint usage, and other safety issues, coupled with enforcement patrols that saturate specific areas, which are well-documented in local media and describe the effort as an impaired-driving or other appropriate campaign.

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In-depth, comprehensive enforcement efforts, combined with background and evidence provided on grant applications, guide Maryland's efforts to allocate funds to law enforcement agencies to conduct priority area-specific overtime enforcement services based on specific problem identification and recent statistical results.

The MHSO uses several sources of data to determine funding allocations. The state's 24 jurisdictions are divided into three groups based on average population over the most recent three-year period for which data is available. The most populous jurisdictions make up the top group and the least populated make up the third group. Within each group, crashes (serious injury and fatal) and citations (DUI, speed and unbelted) per vehicle miles traveled are calculated by jurisdiction.

Average ranks per jurisdiction are computed across crash and citation fields and applied to the previous year's funding allocations to determine revised funding proportions. Crash and enforcement data are used initially to determine the proper percentage of funding to be disbursed to jurisdictions within the groups. Subjective measures such as demographics, enforcement and outreach capacity, geographical considerations, seasonal fluctuations in traffic, and past performance are then used to refine the figures. From that process, each jurisdiction receives a total allocation of funding to be used in the next fiscal year. The MHSO continues to work with its data consultants to ensure that funding allocations are based on the most recent data available and that formulas are accurate, reasonable, and achievable. This methodology ensures that enforcement funding is allocated to the areas in greatest need and to the agencies that are most capable of implementing the appropriate countermeasures.

The MHSO uses both quantitative and qualitative criteria to measure the desired outcomes of the MHSO's law enforcement grant programs that utilize overtime enforcement funds, including those in the aggressive driving, distracted driving, impaired driving, occupant protection, and pedestrian safety program areas. The MHSO employs a monitoring system for law enforcement reporting data that engages law enforcement partners, grant managers and MHSO team members. In addition to the productivity of officers working overtime enforcement grants, an analysis of crashes, crash fatalities, and serious injuries is utilized by MHSO staff throughout the grant monitoring process. The MHSO's four LELs provide more direct contact with individual agencies across the state. By developing relationships with law enforcement managers and traffic supervisors, the LELs monitor project success closely and efficiently provide information, training, and outreach materials.

Through this comprehensive approach, the MHSO and its law enforcement partners continually follow up, evaluate, and adjust enforcement plans accordingly. This approach improves effectiveness, enhances understanding and support of programs, and utilizes highway safety resources as efficiently as possible.

Continuous Monitoring

To ensure law enforcement projects remain adaptable to any situation, various tracking mechanisms are utilized to enable MHSO program managers and law enforcement managers throughout Maryland to gain quick insights into the progress of each project. Monthly progress reports are required from each agency receiving grant funding to ensure an understanding of the goals and outcomes measuring outputs of each project. These reports must include data on the activities conducted, such as the times worked, the numbers of vehicle contacts, and the numbers of citations issued. This type of continuous monitoring allows for small or large adjustments as needed within each jurisdiction in enough time to provide for the most efficient use of resources.

Quarterly output evaluation and continuous feedback is maintained throughout the enforcement program between the MHSO and each law enforcement agency. This ensures continuous communication during the planning, implementation, monitoring, and evaluation phases of the project. The MHSO achieves this continuity by assigning an LEL to each law enforcement agency as their project manager. The Law Enforcement Services Section Manager, working in conjunction with the MHSO Director, develops, maintains, and cultivates professional relationships with top law enforcement executives across the state to build the required top-down support for traffic enforcement efforts.

Non-Federal Funding Sources

Federal requirements dictate that Maryland show the use of other (non-federal) sources of funding dedicated to traffic safety programs. The following is a brief outline of the various funding sources used in support of Maryland's statewide efforts, along with descriptions of the involvement and specific activities of many of Maryland's public, private, and not-for-profit partner organizations:

Agency	Funding Source	Activities Funded
AAA	Private funds	Offers school and community-based programs such as School Safety Patrol and other traffic safety programs. Lobbies for highway safety legislation.
AARP	Private, non-Profit	AARP Smart Driver Training and other mature driver training programs.
Department of Health, Alcohol and Drug Abuse Administration (ADAA)	State funds and other solicited/awarded federal funding sources	Support to the Maryland Strategic Prevention Framework and continued maintenance of the treatment and pharmacy data through the Statewide Automated Record Tracking system, the Prescription Drug Monitoring Program, and the Controlled Dangerous Substance Integration Unit.
Department of Public Safety and Correctional Services (DPSCS)	State funds	Responsible for the Criminal Justice Information (CJI) System for the Maryland criminal justice community, including the courts; local, state, and federal law enforcement agencies; local detention centers; state prisons; state's attorneys; and parole and probation officers. The CJI System provides official records on persons arrested and convicted in Maryland. Agency also houses the MPCTC, which oversee the certification of enforcement officers for the state.
District Court of Maryland (DCM) and Judicial Information Systems (JIS)	State funds	Responsible for formatting and printing Maryland Uniform Complaint and Citation forms, setting pre-payable fine amounts, adjudicating traffic cases, and maintaining disposition data.
Governor's Office of Crime Prevention, Youth, and Victim Services	State and federal funds	Responsible for improving public safety and administration of justice, and reducing/preventing crime, violence, delinquency, and substance abuse. To these ends, it helps draft legislation, policies, plans, programs, and budgets. Administers enforcement and community safety grants. Publishes race-based traffic stop data analysis and race-based traffic stops data dashboard annually.
Health Services Cost Review Commission	State funds	Responsible for the regulation of hospital rates. Provides support and maintenance of the statewide integration system for all hospitals.
Local jurisdiction, and municipal Public Works and Transportation Departments	Jurisdiction-specific, local and municipal funds	Support and maintenance of the collection of roadway data such as roadway maintenance, design, and other infrastructure information.
Maryland Chiefs of Police Association (MCPA)	Member dues, fees	Provides training and promotes professional standards for local enforcement officials.

Agency	Funding Source	Activities Funded
		Association includes executive law enforcement officers, prosecutors, police legal advisers, members of the State Police Training Commission, private security directors, and interested citizens.
Maryland Department of Health– Kids in Safety Seats (KISS)	State funds	Administrative, technical and programmatic support for the KISS program, educational efforts aimed at the correct use of seat belts and child safety seats. These partners provide the training and certification of CPS technicians and instructors, and the promotion of child safety seat fitting stations.
Maryland Department of Health, Office of the Chief Medical Examiner	State funds	Support and continued maintenance of the collection of data on drivers involved in fatal crashes, and data provision to the Maryland State Police.
Maryland Department of Information and Technology (DoIT)	State funds	The designated state entity responsible for information technology across state agencies. Provides coordination for the purchase and management of all telecommunications devices and systems utilized by state agencies.
Maryland Department of Transportation Motor Vehicle Administration's Maryland Highway Safety Office (General Funds)	State funds	State funds pay salary and benefits for the following MHSO positions: Director, Deputy Director, Finance Section Manager, two finance managers, and the Data Processing and Quality Assurance Specialist.
Maryland Department of Transportation Motor Vehicle Administration (MDOT MVA)	State funds	MDOT MVA manages the State Ignition Interlock Program; monitors Maryland graduated drivers licensing laws; manages Medical Advisory Board and Motorcycle Safety Program; and supports systems for driver records, vehicle registrations and violations.
Maryland State Police, Maryland Transportation Authority Police, local jurisdiction, and municipal law enforcement agencies – Enforcement Mobilization Projects	State, local and municipal funds	Maryland State Police, Maryland Transportation Authority Police, local jurisdictions, and municipal funding for regular duty pay/benefits, office space, supplies and equipment, court overtime, vehicles, and vehicle use on state, local and municipal roadways. In addition, these partners provide support to Child Passenger Safety fitting stations throughout the state by training and certifying CPS Technicians and by conducting child safety seat inspections. They also support and maintain systems tracking traffic citations and arrests, used in project evaluation and analysis.
Maryland State's Attorneys' Association	Member dues, fees	Coordination of statewide efforts to improve prosecution and adjudication of DUI cases.
MDOT Maryland Transit Administration (MDOT MTA)	State and federal funds	Provides and supports accessible statewide public transportation networks and services that are customer-focused, safe, appealing, reliable, and efficient. Provides

Agency	Funding Source	Activities Funded
		security and law-enforcement services, is a key provider of traffic safety information, and uses traffic records to determine day of week and hour of day for best customer service and safety enforcement opportunities. Engages in research, development, and implementation of roadside data-capture technology to expedite the flow and safety of mass transit customers.
Mothers Against Drunk Driving (MADD)	Private, non-Profit	School and community-based traffic safety information programs.
Office of Administrative Hearings (OAH) and courts in local jurisdictions	Jurisdiction, local and municipal funds	Support and maintenance of hearings for the opt-in option under a points assignment associated with mandates for repeat offenders.
Regional Integrated Transportation Information System, Center for Advanced Transportation Technology Laboratory, University of Maryland	State and federal funding	Support and maintenance of automated data sharing, dissemination, and archiving system to communicate information among agencies and to the public.
University of Maryland School of Pharmacy	State funds and other solicited/awarded federal funding sources such as Substance Abuse and Mental Health Services Administration	Support and continued maintenance of Maryland Statewide Epidemiologic Outcomes Workgroup (SEOW) and the Maryland Strategic Prevention Framework (MSPF) in 24 jurisdictions across the State.
Washington College	Private institution funds; other solicited/awarded federal funding sources	Direct support to highway safety programs incorporating geo-located traffic safety data.
Washington Regional Alcohol Program (WRAP)	Private, non-profit	School and community-based traffic safety information programs.

Maryland Safety Program Areas – Action Plan

Impaired Driving Program

Action Plan

The impaired driving projects funded for FFY 2024 are representative of evidence-based countermeasures and address the impaired driving issue using a multifaceted approach.

Project Agency: Calvert Alliance Against Substance Abuse, Inc.	
Agency Type: Non-profit	**Agency Location:** Calvert County
Program Area: Impaired Driving	**Project Number:** GN 24-235
Project Funds / Type: $4,220.00 / BIL 402	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	5.2 Mass Media Campaigns
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	High
Time:	Medium
Performance Target:	C-5 (Appendix C)
Explanation:	Most States use some form of alcohol-impaired-driving mass media campaign every year. These are essential to many deterrence and prevention countermeasures that depend on public knowledge to be effective.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on the concerns of the impaired driving Emphasis Area.

Project Description: The Calvert Alliance Against Substance Abuse, Inc. (CAASA) will conduct a local DUI public awareness effort during 3D month with the state and county law enforcement agencies. This funding will pay for a breakfast or luncheon to recognize local law enforcement officers for their efforts and plaques to be awarded to those officers.

In addition, CAASA will partner with Calvert County Public Schools, local law enforcement agencies, local businesses, and community agencies to provide education outreach to students regarding the dangers of underage drinking and impaired driving. Grant funding will support the rental of DUI driving simulators for up to four high schools. This outreach will allow students to drive in a simulated impaired mode. It demonstrates the dangerous effects of DUI/DWI driving, such as delayed response to controls and narrowing the effective field of view.

Project Agency: Cecil County DES	
Agency Type: County EMS Agency	**Agency Location:** Cecil County
Program Area: Impaired Driving	**Project Number:** GN 24-240
Project Funds / Type: $375.00 / BIL 405d AL	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	5.2 Mass Media Campaigns
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	High
Time:	Medium
Performance Target:	C-5 (Appendix C)
Explanation:	Most States use some form of alcohol-impaired-driving mass media campaign every year. These are essential to many deterrence and prevention countermeasures that depend on public knowledge to be effective.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on the concerns of the impaired driving Emphasis Area.

Project Description: This grant will allow the Department of Emergency Services to purchase impaired simulation goggles for use during community events to provide education on the dangers of impaired driving.

Project Agency: Garrett County Liquor Control Board	
Agency Type: County Liquor Board	**Agency Location:** Garrett County
Program Area: Impaired Driving	**Project Number:** GN 24-257
Project Funds / Type: $11,230.00 / BIL 402	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	6.3 Alcohol Vendor Compliance Checks
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$
Use:	Unknown
Time:	Short
Performance Target:	C-5 (Appendix C)
Explanation:	Twenty-two States and the District of Columbia prohibit all alcohol purchase by underage youth. Another 24 States prohibit purchase other than for law enforcement purposes such as merchant compliance checks (APIS, 2018a). Although many jurisdictions conduct compliance checks of alcohol retailers at least occasionally, few jurisdictions do so frequently or regularly. One national survey conducted in 2010-2011 found that only 35% of all local LEAs reported conducting compliance checks, and only 55% of these agencies reported checking all establishments that sold alcohol (Erickson et al., 2014). Less than 1 in 4 of these agencies conducted checks more than twice a year. Seventy-six percent of State agencies reported conducting compliance checks; 59% of these reported checks at all establishments. Twenty-one percent of State agencies conducted checks more than twice a year.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on the concerns of the impaired driving Emphasis Area.

Project Description: This project will allow the Garrett County Liquor Control Board to conduct TIPS for Concessions training opportunities for alcohol licensed non-profit organizations and volunteers throughout the year. It will also fund alcohol compliance checks of local businesses, education for licensees and staff on updated compliance and alcohol laws intended to reduce impaired driving and eliminate underage alcohol sales.

Project Agency: Mothers Against Drunk Driving	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Impaired Driving	**Project Number:** GN 24-048
Project Funds / Type: $7,675.32 / BIL 405d AL; $55,990.00 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $697.76 / BIL 405d AL; %5,90.00 / BIL 402

Countermeasures:

Countermeasure:	5.2 Mass Media Campaigns
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	High
Time:	Medium
Performance Target:	C-5 (Appendix C)
Explanation:	Most States use some form of alcohol-impaired-driving mass media campaign every year. These are essential to many deterrence and prevention countermeasures that depend on public knowledge to be effective.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.
- Support legislation and adjudication efforts to advance the goals of the impaired driving Emphasis Area.
- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on the concerns of the impaired driving Emphasis Area.

Project Description: This project will provide ongoing opportunities to fulfill MADD's mission to stop drunk driving and prevent underage drinking by educating and equipping youth to talk with each other about alcohol. During the grant year MADD will work with schools, community groups, and local area partners to talk to teens and teach them why it is important to say no to alcohol. MADD's Power of Youth program will be presented to students in middle and high school. Funding will also support the Power of Youth booklets.

Project Agency: Maryland Sheriffs' Association, Inc.	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Impaired Driving	**Project Number:** GN 24-058
Project Funds / Type: $19,250.00 / BIL 405d AL (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $1,750.00 / BIL 405d AL

Countermeasures:

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-5 (Appendix C)
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description: The Maryland Sheriff's Association will sponsor the University of Maryland's DUI Institute and DUI Conference. The registrations and awards offered by the MCPA allow patrol officers from across the state who excel in DUI enforcement to be trained in all aspects of the issues surrounding DUI enforcement and recognized for their efforts. This training is not designed to teach officers how to find, test, and apprehend suspected impaired drivers, but is designed to look at the bigger picture and issues surrounding DUI arrest.

Project Agency: Maryland State's Attorneys' Association	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Impaired Driving	**Project Number:** GN 24-015
Project Funds / Type: $26,546.85 / BIL 402; $161,775.30 / BIL 405d AL (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $2,413.35 / BIL 402; $14,706.80 / BIL 405d AL
Countermeasures:	
Countermeasure:	7.1 Enforcement of Drug-Impaired Driving
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$
Use:	Unknown
Time:	Short
Performance Target:	C-5 (Appendix C)
Explanation:	As of August 2014, all 50 States and the District of Columbia had drug evaluation and classification (DEC) programs, which are designed to train officers to become DREs (GHSA, 2015). As of December 2019, these programs have prepared more than 1,700 instructors and trained more than 9,800 officers (IACP, 2020a). During 2019 there were over 36,000 drug enforcement evaluations conducted by DREs as part of enforcement. This suggests drug-impaired driving arrests are not as common in comparison to arrests for alcohol-impaired driving. However, it should be noted that the number of drug-impaired-driving arrests cannot be known as many States only record “impaired-driving” arrests, and do not separate alcohol from drug arrests. Additionally, it is suspected, many arrests are a combination of drugs and alcohol. In DRE enforcement evaluations in 2019, cannabis was the most frequently identified drug category, followed by CNS stimulants, narcotic analgesics (opioids), and CNS depressants (IACP, 2020). Porath-Waller and Beirness (2014) investigated the validity of using SFSTs in detecting drug impairment among suspected drug-impaired drivers. Results of their study indicate CNS stimulants, CNS depressants, narcotic analgesics, and cannabis are significantly associated with impairment using SFST. Specifically, users of all drug types were significantly more likely to sway while balancing and use their arms to maintain balance on the one-leg-stand. Users of CNS depressants, CNS stimulants, and narcotic analgesics were significantly less likely to keep their balance while listening to test instructions on the walk-and-turn test. Finally, users of CNS depressants were significantly more likely to experience lack of smooth pursuit and distinct nystagmus at maximum deviation on the horizontal gaze nystagmus test.
Allocated Funding Type:	402; 405d AL

Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)
Countermeasure:	4.2 Alcohol Ignition Interlocks
Effectiveness:	★★★★★
Additional Supportive Research:	N/A
Cost:	$$
Use:	Medium
Time:	Medium
Performance Target:	C-5 (Appendix C)
Explanation:	All 50 States and the District of Columbia allow interlocks to be used for some DWI offenders (NHTSA, 2013a). In 30 States, the District of Columbia, and 4 California counties interlocks are mandatory for all convicted offenders, including first offenders (IIHS, 2017). Indiana, Montana, North Dakota, and South Dakota have no mandatory interlock requirements. Despite widespread laws, a relatively small percentage of eligible offenders have an interlock installed. However, interlock use has increased substantially over the past 10 years, from 146,000 in 2008 to 348,476 in 2017 (based on information supplied by interlock manufacturers; Robertson et al., 2018). Given the roughly 1.4 million arrests in the United States each year for DWI, the ratio of installed interlocks to arrests is approximately 1 in 5. Use of interlocks is substantially higher when they are required as a prerequisite to license reinstatement. For example, among DWI offenders in Florida who were subject to the State's interlock requirement, 93% installed interlocks once they qualified for reinstatement (Voas, Tippetts, Fisher, & Grosz, 2010). Similarly, an examination of effects of the incremental expansion of interlock laws in Washington State to cover all DUI offences found corresponding improvements in installation rates and recidivism with the implementation of each legislative change (McCartt et al., 2018). Use of interlocks is also higher when interlocks are offered as alternatives to home confinement via electronic monitoring (Roth et al., 2009). Through a combination of these measures, New Mexico installed interlocks in the vehicles of half of all convicted DWI offenders in 2007 – the highest level of penetration of any State (Marques et al., 2010). Finally, use of interlocks in a pilot program in California was higher in the four pilot counties that required interlocks for DWI offenders (42.4%) than in non-pilot counties (4.3%) (Chapman et al., 2015). The authors concluded that the main reason for this significant increase was due to the fact that interlock installation was mandatory in pilot counties, while interlock installation was optional in non-pilot counties.
Allocated Funding Type:	402; 405d AL

Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)
Countermeasure:	3.2 Limits on Diversion and Plea Agreements
Effectiveness:	★★★★
Additional Supportive Research:	N/A
Cost:	$
Use:	As of 2006 there were 33 States that provided for diversion programs in State law or statewide practice. Local courts and judges in some additional States also offer diversion programs (NHTSA, 2006c). The Century Council (2008) documented diversion programs restrictions in several States. As of December 2014, there were 22 States that had laws limiting plea agreements in certain cases (NHTSA, 2016a).
Time:	Short
Performance Target:	C-5 (Appendix C)
Explanation:	Reducing plea agreements and alternative sentencing will increase the use of ignition interlock devices and other sanctions shown to reduce impaired driving behavior.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description:

This project supports Maryland's TSRP Program. The TSRP Program consists of a full-time attorney who provides statewide training, education, and technical support to traffic crimes prosecutors and law enforcement agencies. The project also includes funds for prosecutors to attend the DUI Institute for Prosecutors at the University of Maryland, a program developed in collaboration with the MSAA, and the MHSO. The TSRP also works with the State toxicologist, breath tech operators, DREs, crash reconstructionists and other specialists involved in the field of highway safety.

Project Agency: Maryland State's Attorney's Association	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Impaired Driving	**Project Number:** GN 24-015
Project Funds / Type: $26,546.85 BIL 402; / $201,375.30 BIL 405d AL (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $2,413.35 / BIL 402; $18,306.80 / BIL 405d AL

Countermeasures:	
Countermeasure:	Judicial and Court Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 7
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-5 (Appendix C)
Explanation:	Each State should have a comprehensive judicial services program as part of its overall highway safety program. Such judicial services programs should support courts in the competent and effective adjudication of both administrative and statutory law cases. Judicial services programs should, consistent with ethical and professional requirements, promote judicial outreach activity to reduce traffic crashes and resultant fatalities and injuries.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(iii)

SHSP Strategy:

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on the concerns of the impaired driving Emphasis Area.

Project Description: This project supports Maryland's TSRP Program. The TSRP Program consists of a full-time attorney who provides statewide training, education, and technical support to traffic crimes prosecutors and law enforcement agencies. The project also includes funds for prosecutors to attend the DUI Institute for Prosecutors at the University of Maryland, a program developed in collaboration with the MSAA and the MHSO. The TSRP serves on the Crash Reconstruction and Traffic Safety committees.

Project Agency: State Judicial Outreach Liaison	
Agency Type: Higher Education Institute	**Agency Location:** Statewide
Program Area: Impaired Driving	**Project Number:** *Will be provided in amendment*
Project Funds / Type: *Will be provided in amendment*	**Indirect Costs / Type:** *Will be provided in amendment*

Countermeasures:	
Countermeasure:	Judicial and Court Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 7
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-5 (Appendix C)
Explanation:	Each State should have a comprehensive judicial services program as part of its overall highway safety program. Such judicial services programs should support courts in the competent and effective adjudication of both administrative and statutory law cases. Judicial services programs should, consistent with ethical and professional requirements, promote judicial outreach activity to reduce traffic crashes and resultant fatalities and injuries.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(iii)

SHSP Strategy:

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on the concerns of the impaired driving Emphasis Area.

Project Description: Judges are responsible for sentencing impaired drivers, and therefore, are in a unique position to have an impact on offenders who are arrested for impaired driving and other illegal driving practices. This project will fund a State Judicial Outreach Liaison (SJOL) position to bring the latest research to judges on the front line. This position will also function as teacher, writer, and consultant, to share the latest research and best practices on addressing impaired driving offenders with the judges in Maryland. The SJOL will, upon request, also provide important insight to policymakers attempting to improve impaired driving traffic safety.

Project Agency: Maryland State Police - DRE	
Agency Type: State Law Enforcement Agency	**Agency Location:** Statewide
Program Area: Impaired Driving	**Project Number:** GN 24-162
Project Funds / Type: $224,478.88 / BIL 402; $156,000.00 / BIL 405d AL	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-5 (Appendix C)
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402 / 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description: This grant will fund the statewide DRE Coordinator and the statewide efforts to train, retrain, and certify drug recognition experts and drug recognition expert instructors. Three DRE classes will be conducted in order to train new DREs at a rate faster than current DREs exit the program. The funds will also help recertify drug recognition experts and drug recognition expert instructors every two years. The addition of the acting lead Toxicologist to the State Laboratory's Toxicology unit will increase the ability of the lab to certify new instruments and testing methods to confirm additional substances. Funding will be allocated to support this position in the Forensic Sciences Division. ARIDE and DRE manuals will be funded as well as items needed for DREs to conduct roadside evaluations.

Project Agency: Restaurant Association of Maryland	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Impaired Driving	**Project Number:** GN 24-082
Project Funds / Type: $47,106.96 / BIL 405d AL (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $4,282.36 / BIL 405d AL

Countermeasures:

Countermeasure:	5.2 Mass Media Campaigns
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	High
Time:	Medium
Performance Target:	C-5 (Appendix B)
Explanation:	Most States use some form of alcohol-impaired-driving mass media campaign every year. These are essential to many deterrence and prevention countermeasures that depend on public knowledge to be effective.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on the concerns of the impaired driving Emphasis Area.

Project Description: This grant will allow the Restaurant Association of Maryland (RAM) to host two Responsible Alcohol Service events; one in Ocean City, Maryland and one in Towson, Maryland. Each event will host 200 service staff from surrounding businesses free of charge to participants. RAM will partner with organizations such as the Maryland State Police and local law enforcement, local colleges and universities, the Ocean City Hotel, Motel, Restaurant Association, existing trainers of Maryland with approved responsible alcohol certification programs and other organizations with shared goals. The goal is to achieve a reduction in impaired driving injuries and fatalities, as well as increasing pedestrian safety.

Project Agency: St. Mary's County Health Department	
Agency Type: County Health Department	**Agency Location:** St. Mary's County
Program Area: Impaired Driving	**Project Number:** GN 24-230
Project Funds / Type: $14,500.00 / BIL 405d AL	**Indirect Costs / Type:**

Countermeasures:	
Countermeasure:	V. Communications Program
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 4
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-5 (Appendix B)
Explanation:	Per NHTSA's Uniform Guidelines, NHTSA recommends that states should develop and implement communication strategies directed at supporting policy and program elements, specifically in collaboration and cooperation with driver education and training and highway safety partners, and should consider a statewide communications plan and campaign that: 1) Informs the public, especially parents, about State GDL laws; 2) Identifies audiences at particular risk and develops appropriate messages; 3) Provides culturally competent materials; 4) Informs parents/guardians and young drivers about the role of supervised driving and the State's GDL law; 5) Informs novice drivers about underage drinking and zero tolerance laws (in effect in all 50 States and the District of Columbia), such as including information in manuals for new drivers and including a question about the topic on the written test for a learner's permit; 6) Informs the public on the role of parental monitoring/involvement; and 7) Informs the public about State guidelines and regulation of driver education.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(B)(i)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on the concerns of the impaired driving Emphasis Area.

Project Description: This project supports St. Mary's County high schools during Project Graduation in the form of driving simulators. Utilizing the Drive Square company, two simulators at each of the four county high schools will be utilized for students. In addition to a virtual impaired driving experience testing their skills and giving them an understanding of how driving under the influence can impact driving skills, four educational sessions will be provided as a complement to the simulators. St. Mary's Project Graduation event serves the County's three public high schools and two private high schools over four nights. Graduates and guests are required to commit to remaining alcohol and drug-free during the event.

Project Agency: Worcester County Health Department	
Agency Type: County Health Department	**Agency Location:** Worcester County
Program Area: Impaired Driving	**Project Number:** GN 24-001
Project Funds / Type: $27,891.84 / BIL 405d AL	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	6.3 Alcohol Vendor Compliance Checks
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$
Use:	Unknown
Time:	Short
Performance Target:	C-5 (Appendix C)
Explanation:	Twenty-two States and the District of Columbia prohibit all alcohol purchase by underage youth. Another 24 States prohibit purchase other than for law enforcement purposes such as merchant compliance checks (APIS, 2018a). Although many jurisdictions conduct compliance checks of alcohol retailers at least occasionally, few jurisdictions do so frequently or regularly. One national survey conducted in 2010-2011 found that only 35% of all local LEAs reported conducting compliance checks, and only 55% of these agencies reported checking all establishments that sold alcohol (Erickson et al., 2014). Less than 1 in 4 of these agencies conducted checks more than twice a year. Seventy-six percent of State agencies reported conducting compliance checks; 59% of these reported checks at all establishments. Twenty-one percent of State agencies conducted checks more than twice a year.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description: This project supports a minimum of 200 compliance checks that are conducted by the Worcester County Sheriff's Office and Ocean City Police Department, many of them in the Ocean City resort area. Funding also supports partial payment of a part-time coordinator who works with the police departments conducting the checks, handles all grant functions, and coordinates a recognition event for totally compliant alcohol licensees.

Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on the concerns of the impaired driving Emphasis Area.

Project Agency: Washington Regional Alcohol Program	
Agency Type: Non-Profit	**Agency Location:** Charles, Montgomery and Prince George's County
Program Area: Impaired Driving	**Project Number:** GN 24-032
Project Funds / Type: $239,079.87 / BIL 405d AL (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $36,971.81 / BIL 405d AL
Countermeasures:	
Countermeasure:	5.2 Mass Media Campaigns
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	High
Time:	Medium
Performance Target:	C-5 (Appendix C)
Explanation:	Most States use some form of alcohol-impaired-driving mass media campaign every year. These are essential to many deterrence and prevention countermeasures that depend on public knowledge to be effective.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)
Countermeasure:	5.4 Alternative Transportation
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$
Use:	Unknown
Time:	Short
Performance Target:	C-5 (Appendix C)
Explanation:	As of April 2019, the National Directory of Designated Driver Services website listed 1,042 participating transportation providers in 787 different Counties in 41 States. In a Traffic Injury Research Foundation multi-year survey of randomly selected American drivers 21 and older, 44% to 47%[1] said they were familiar with safe ride home programs (Vanlaar, Hing, Powell, & Robertson, 2017). Of these, 5% to 8% reported they always used such programs, and 4% said they sometimes used them. On the other hand, 87% to 91% of respondents stated they had never used safe rides programs. In the second round of data collection, 19% of respondents stated that they had used a for-profit ride share service such as Lyft or Uber after drinking. Women

	were more likely to rely on designated drivers than ride share services or public transportation than men. Safe-ride-home programs were used more by younger drivers than older drivers and more in urban areas than rural. Ride service programs vary considerably by region; and some in operation in North America are outlined in Barrett et al. (2017). Additional information is available on the NHTSA Buzzed Driving campaign page at www.nhtsa.gov/campaign/buzzed-driving.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.
- Support legislation and adjudication efforts to advance the goals of the impaired driving Emphasis Area.
- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on the concerns of the impaired driving Emphasis Area.

Project Description: WRAP's individual programs include youth, parental, and adult outreach as well as law enforcement recognition, the SoberRide campaign, and the "Maryland Remembers" memorial event. WRAP is an active member of Maryland's SHSP Team. Additionally, WRAP's President co-chairs the SHSP Impaired Driving EAT. Funding also supports the contractual services for research and publication of WRAP's How Safe Are Our Roads annual data report.

For all the enforcement-related grants listed below, the following information applies:

Project Agency: Various (see below)	
Agency Type: State and Local Law Enforcement Agencies	**Agency Location:** Statewide
Program Area: Impaired Driving	**Project Number:** Various (see below)
Project Funds / Type: $1,453,062.90 / 405d AL	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-5 (Appendix C)
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402 / 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description: HVE for impaired driving prevention.

Agency	Project Number	Program Area	Obligated Amount
Aberdeen Police Department	LE 24-170	Impaired Driving	$1,004.80
Allegany County Sheriff's Office	LE 24-206	Impaired Driving	$6,500.00
Anne Arundel County Police Department	LE 24-173	Impaired Driving	$25,000.00
Baltimore City Police Department	LE 24-259	Impaired Driving	$3,500.00
Baltimore County Police Department	LE 24-019	Impaired Driving	$150,000.00
Bel Air Police Department	LE 24-150	Impaired Driving	$3,000.00
Berlin Police Department	LE 24-117	Impaired Driving	$3,000.00
Calvert County Sheriff's Office	LE 24-244	Impaired Driving	$13,000.00
Carroll County Sheriff's Office	LE 24-043	Impaired Driving	$20,000.00
Cecil County Sheriff's Office	LE 24-157	Impaired Driving	$3,000.00
Charles County Sheriff's Office	LE 24-062	Impaired Driving	$31,000.00

Agency	Project Number	Program Area	Obligated Amount
Chestertown Police Department	LE 24-216	Impaired Driving	$990.00
City of Bowie	LE 24-130	Impaired Driving	$4,000.00
City of Hyattsville Police Department	LE 24-185	Impaired Driving	$4,000.00
Cumberland Police Department	LE 24-012	Impaired Driving	$2,000.00
Easton Police Department	LE 24-145	Impaired Driving	$9,744.00
Edmonston Police Department	LE 24-256	Impaired Driving	$1,320.00
Elkton Police Department	LE 24-010	Impaired Driving	$2,480.00
Frederick Police Department	LE 24-052	Impaired Driving	$18,000.00
Frostburg City Police Department	LE 24-194	Impaired Driving	$1,000.00
Fruitland Police Department	LE 24-114	Impaired Driving	$3,996.00
Gaithersburg Police Department	LE 24-034	Impaired Driving	$9,960.00
Garrett County Sheriff's Office	LE 24-024	Impaired Driving	$4,000.00
Greenbelt Police Department	LE 24-137	Impaired Driving	$3,700.00
Hampstead Police Department	LE 24-211	Impaired Driving	$2,500.00
Harford County Sheriff's Office	LE 24-192	Impaired Driving	$60,000.00
Havre de Grace Police Department	LE 24-200	Impaired Driving	$1,500.00
Howard County Department of Police	LE 24-068	Impaired Driving	$34,000.00
Kent County Sheriff’s Office	LE 24-174	Impaired Driving	$1,000.00
Laurel Police Department	LE 24-002	Impaired Driving	$4,980.00
Manchester Police Department	LE 24-006	Impaired Driving	$2,000.00
Maryland State Police - Mobile Unit	LE 24-161	Impaired Driving	$16,450.00
Maryland State Police - SPIDRE	LE 24-213	Impaired Driving	$400,000.00
Maryland State Police - Statewide	LE 24-143	Impaired Driving	$290,000.00
Maryland Transportation Authority Police	LE 24-078	Impaired Driving	$35,000.00
Montgomery County Maryland	LE 24-210	Impaired Driving	$95,000.00
Montgomery County Sheriff's Office	LE 24-138	Impaired Driving	$8,000.00
Mount Airy Police Department	LE 24-098	Impaired Driving	$2,000.00
Ocean City Police Department	LE 24-016	Impaired Driving	$19,980.00
Prince George's County Police Department	LE 24-252	Impaired Driving	$80,000.00
Princess Anne Police Department	LE 24-038	Impaired Driving	$2,997.10
Queen Anne's County Sheriff's Office	LE 24-027	Impaired Driving	$12,996.00
Riverdale Park Police Department	LE 24-096	Impaired Driving	$3,000.00
Rockville Police Department	LE 24-237	Impaired Driving	$4,000.00
Salisbury Police Department	LE 24-102	Impaired Driving	$4,000.00
Somerset County Sheriff's Office	LE 24-223	Impaired Driving	$4,000.00
St. Mary's County Sheriff's Office	LE 24-081	Impaired Driving	$12,000.00
Sykesville Police Department	LE 24-036	Impaired Driving	$2,000.00
Takoma Park Police Department	LE 24-073	Impaired Driving	$1,485.00
Talbot County Sheriff's Office	LE 24-111	Impaired Driving	$4,000.00
University of Maryland Department of Public Safety	LE 24-189	Impaired Driving	$9,000.00
Washington County Sheriff's Office	LE 24-166	Impaired Driving	$10,000.00
Wicomico County Sheriff's Office	LE 24-178	Impaired Driving	$4,980.00
Worcester County Sheriff's Office	LE 24-196	Impaired Driving	$2,000.00

Occupant Protection Program

Occupant Protection Plan

Problem Identification

In Maryland during 2021, over 2,150 unbelted occupants of passenger vehicles or light trucks were injured or killed in crashes. Despite increases in observed belt use rates in Maryland and across the nation, 25 percent of all Marylanders killed in motor vehicle crashes were not wearing seat belts. Research has shown that seat belts, when used properly, reduce the risk of fatal injury to front-seat passengers by 45 percent and reduce the risk of moderate to critical injury by 50 percent.

In 2021, Maryland law enforcement agencies issued a total of 14,994 citations for seat belt use violations (which includes 1,938 child safety seat violations), reflecting decreases of 11 percent and 3 percent, respectively, since 2020. There were 16,833 belt use citations issued in 2020 (1,991 of which were for child safety seat violations) and 29,653 issued in 2019 (3,786 for child safety seat violations). The increase in the fine had been cited as a possible cause for fewer citations being written in previous years, or the issuance of a warning in lieu of a moving violation. Also cited had been the "Ferguson effect" where the tense climate of public interactions with, and increased scrutiny of, law enforcement may be affecting the number of vehicle stops. The MHSO will continue to analyze these data trends and work with its law enforcement partners to understand the changes seen in law enforcement interventions for traffic violations.

Frequency of Unrestrained Occupant Crashes

In 2021, there were 139 unrestrained occupants killed in crashes, and 384 unrestrained seriously injured occupants. These unbelted motor vehicle occupants represented 41 percent of all vehicle occupants fatally injured in crashes statewide and 25 percent of all statewide traffic fatalities. The seriously injured unbelted motor vehicle occupants represented 19 percent of all vehicle occupants seriously injured in crashes statewide and 13 percent of all seriously injured in the State in a traffic-related crash.

Maryland crashes involving unrestrained occupants have occurred rather consistently on average throughout the year. Over 55 percent of all crashes involving unrestrained occupants occurred in the six-month period from April through September, corresponding to typically warm weather driving periods.

Crashes with unrestrained occupants occurred consistently throughout the week but were more frequent on Friday and Saturday (one out of three). Thirty-nine percent of all fatal crashes with at least one unrestrained occupant occurred on Saturday or Sunday. Two-thirds of all unrestrained injury crashes happened between noon and midnight. Although 34 percent of all crashes with unrestrained occupants occurred between 7 p.m. and 6 a.m., 54 percent of all fatal crashes involving unrestrained occupants occurred during that time, which indicates that serious crashes involving unrestrained occupants are more likely to occur at nighttime.

More than 80 percent of all crashes involving unrestrained occupants occurred in nine jurisdictions – Anne Arundel, Baltimore, Cecil, Charles, Harford, Howard, Montgomery, Prince George's counties, and Baltimore City. These same locations accounted for 79 percent of all injury crashes involving unrestrained occupants, and 78 percent of fatal crashes involving unrestrained occupants.

Typical Profile of Unrestrained Occupants

Between 2017-2021, more than one half of all unrestrained occupants were male (58 percent), including those injured (56 percent), seriously injured (65 percent) and those who were killed (74 percent). The mean age for injured occupants was 27 and was 39 for fatally injured occupants. Among all unrestrained drivers,

67 percent were male, and the mean age was 37. Among all unrestrained passengers, 51 percent were male, and the mean age was 14.

Child Passenger Safety Results

Analysis of child passenger safety results for motor vehicle occupants under age eight indicated that, in 2021 in Maryland, 8213 children were involved in crashes, with 81.5 percent of those riding in the back seat and 45 percent were documented by law enforcement as either not using a child passenger safety seat (32 percent) or unknown if child passenger safety seat was used (13 percent). If children are reported as using any restraint other than an appropriate child safety seat, they are considered improperly restrained or unrestrained. Of the unrestrained and unknown if restrained, 83 percent were uninjured, and 17 percent were injured, with one child fatality of age seven or younger. Similarly, 83 percent of restrained children were uninjured, 17 percent were injured, and four were killed.

By age, restraint use was more common among younger children of child seat age (at least 67 percent up to age 4, and 46 percent at age five), while restraint use dropped among booster seat age children (33 percent at age six, and 24 percent at age seven).

Safety initiatives that have been effective in the past for other age groups, including education/awareness/training and enforcement efforts, are necessary for child passengers and should be considered for enhancement.

Observational Occupant Protection Survey Results

The 2022 front seat belt observational survey in Maryland was conducted following a revised sampling of the state roadways, resulting in 14 jurisdictions that will follow the NHTSA data collection protocol between 2022 and 2026. Based on data sampled in these jurisdictions, the overall observed seat belt usage rate for drivers and right front seat passengers in the State of Maryland in 2022, after weighting by probability of roadway selection and jurisdictional roadway specific vehicle miles traveled (VMT), was 92.7%. The 2022 usage rate represented a 1.3 percentage point increase over the previous year. The Statewide standard error of 0.6% was well below the NHTSA threshold of 2.5%, yielding a 95% confidence interval of 91.5% to 93.9% for the combined usage rate. These rates were based on observation of 33,674 vehicles and 42,203 occupants, representing decreases of 15.5% and 14.7% in the number of vehicles and occupants observed, respectively, in the 2021 survey.

Belt use was highest among passenger cars and SUVs relative to pick-up trucks (93.4% vs. 88.0%, respectively). Seat belt usage was also highest among all front seat occupants traveling on Primary roads relative to Secondary and Local roads (95.2% vs. 91.8% and 85.2%). Since 2021, the rates represented increases across the board for passenger cars/SUVs, pick-up trucks, and all three types of roadways.

Prince George's County (98.1%) had the highest usage rate among Maryland's 14 NHTSA jurisdictions, followed by Montgomery (96.3%), and Carroll (94.8%) counties. There were nine jurisdictions with rates of at least 90%; Baltimore City (85.3%), Washington County (84.6%) and Charles County (80.6%) experienced the lowest rates. Overall, five of the 14 jurisdictions experienced an increase in combined usage rates over the past year. The large decrease in rates over the past year for Baltimore City may be partially due to the 2022 random sample of roadways. For occupants of passenger cars or SUVs, 10 jurisdictions had usage rates of at least 90%. Among occupants of pick-up trucks, three jurisdictions had a usage rate above 90% (Prince George's, Montgomery, and Carroll Counties), and two jurisdictions (Washington and Charles Counties)

experienced rates below 80%. Unweighted analysis indicated that drivers had a slightly lower Statewide usage rate (92.8%) than front seat passengers (93.7%).

Seat belt usage could not be ascertained for 3.7% of all drivers and passengers. Unknown belt use was more prevalent in pick-up trucks (6.4%) than in passenger cars (3.2%), higher for drivers (4.6%) than for passengers (0.3%), and slightly higher on Local roads (5.5%) compared to Primary roads (3.0%) and Secondary roads (4.3%).

Approximately 93.4% of all drivers and right front-seat passengers traveling in the 10 non-NHTSA jurisdictions were belted, representing a 3.2 percentage point increase over the past year (unweighted analysis). A slightly lower proportion of drivers (93.0%) than passengers (96.3%) were observed to be belted. In addition, higher usage rates were found in passenger cars or SUVs (94.8%) than in pick-up trucks (89.5%), and on Primary as opposed to Secondary or Local roadways. Eight of the non-NHTSA jurisdictions had a usage rate above 90%. For passenger cars or SUVs, usage rates were also at least 90% in eight jurisdictions, while usage rates among occupants of trucks were above 90% in six non-NHTSA jurisdictions. Kent County experienced the lowest rate among all vehicles. Seat belt usage could not be ascertained for 3.0% of all front-seat occupants.

Examination of individual record-level data, for the instance in which both a driver and passenger were observed in the front seat, indicated that 95.5% of passengers were belted when the driver was belted. However, if the driver was unbelted, only 41.5% of passengers were observed to wear their belt. This large difference in passenger belt use occurred in cars and SUVs (95.8% for belted drivers vs. 43.2% for unbelted drivers) as well as in trucks (93.0% for belted drivers vs. 34.0% for unbelted drivers). There was also an association with roadway classification, with the Secondary or Local roadways corresponding to a larger difference in passenger belt use between belted and unbelted drivers than the discrepancy seen on Primary roads. Data on cell phone usage by drivers were not presented, as only 169 drivers (0.5%) were observed using a hand-held cell phone.

An additional analysis was carried out to compare rural vs. urban jurisdictions and roadways among the 14 NHTSA jurisdictions. In 2022, the unweighted percent seat belt usage was higher in rural compared to urban jurisdictions for all vehicle types, whereas the 2021 rates were higher in the urban jurisdictions. When comparing the 2022 restraint use findings on roadways classified as being either rural or urban, rates in cars remained slightly higher on rural roads while rates in trucks were slightly higher on urban roads.

While Maryland has not conducted a rear seat evaluation in a few years, based on the most recent observation as well as statewide and national surveys, rear seat passengers are at high risk and are not buckling up at the same rate as front seat occupants. Unbelted backseat occupants had a 3.4 times greater risk of sustaining a severe or fatal injury than those reported to be belted. 41% of backseat fatalities with known belt use were unbelted.

The last year a rear seat observation was conducted (2019), among all vehicles with a single back seat occupant, analysis of known belt use indicated that 78.3% were belted, with a best-case scenario of only 79.5% (i.e., if all unknowns represented belted occupants). When two individuals were seated in the rear, however, seat belt usage was found to be somewhat lower. Analysis of known cases demonstrated that both rear occupants were belted only 70.9% of the time, increasing to 72.3% in the best possible case. Therefore, further analysis was conducted to determine if there was a disproportion in rates according to passenger type (i.e., adult or child) and driver belt use.

The majority (93.5%) of drivers was belted, so ample sample sizes were available in this group to determine differences in belt use rates of adult and child back seat passengers. Among occupants with known belt use, 78.9% were belted, which differed for adults (58.5%) versus children (92.5%). Among vehicles with a single back seat occupant, analysis of known belt use indicated the adult passenger was much less likely to be belted than the child passenger (56.4% adult vs. 92.9% child), with the best possible scenario increasing rates to 60.5% for the adult and 93.1% for the child. Thus, despite the use of a seat belt by the driver, adult occupants of the back seat were far less likely to wear their seat belt. Children, however, experienced a higher usage rate.

Analysis of vehicles with an unbelted driver revealed similar differences in rates between adults and children. In addition, it was apparent that, although sample sizes were small, occupants were much less likely to wear their seat belts if the driver was not belted. Analysis of occupants with known belt use indicated that only 56.6% were belted, with a large difference in belt usage found for adults (20.0%) when compared with children (80.9%). For single occupants, usage rates dipped to 18.2% for the adult vs. 86.4% for the child and fell even further for double occupancy (0% for both adults and 54.5% for both children).

Jurisdiction	Seat Belt Rates
Allegany	94.7%
Anne Arundel	92.4%
Baltimore	91.4%
Calvert	95.4%
Caroline	89.9%
Carroll	94.8%
Cecil	87.7%
Charles	80.6%
Dorchester	93.8%
Frederick	92.8%
Garrett	90.1%
Harford	93.6%
Howard	92.9%
Kent	73.4%
Montgomery	96.3%
Prince George's	98.1%
Queen Anne's	86.8%
St. Mary's	90.7%
Somerset	98.9%
Talbot	97.1%
Washington	84.6%
Wicomico	97.2%
Worcester	98.8%
Baltimore City	85.3%

The perceived importance of and reported seat belt use among Maryland drivers appears to be widespread, but not universal. About two-thirds of MHSO's Road Safety Attitude and Behaviors Survey respondents said they always wear a seat belt while riding in the back seat of a vehicle. Exposure to unbelted occupants increases the risk of injury or death to others in the vehicle by 40% as they can become projectiles in the event of a crash.

- That percentage increases to eight percent when the driver was traveling within five miles or ten minutes of home.

While the 8% figure is a seemingly low percentage of survey respondents, short, routine trips can be some of the most dangerous. Most crash-related deaths happen within 25 miles from home and at speeds of less than 40 mph.

Priority Ranking

Program Area	Priority Jurisdictions (Injuries/Fatalities)	Priority Zip Codes (Fatalities)	Town Name (Fatalities)	Priority Zip Codes (Injuries)	Town Name (Injuries)	Priority Zip Codes (Traffic Stops - Offender Home)	Town Name (Stops - Home)	Priority Zip Codes (Traffic Stops - Stop Location)	Town Name (Stops - Location)
Unrestrained Occupants	Baltimore City	21205	Baltimore	21217	Druid	21206	Raspeburg	21225	Brooklyn
		21223	Franklin	21223	Franklin	21215	Arlington	21206	Raspeburg
		21215	Arlington	21202	Baltimore	21229	Carroll	21224	Highlandtown
		21217	Druid	21215	Arlington	21224	Highlandtown	21215	Arlington
		21229	Carroll	21218	Baltimore	21225	Brooklyn	21239	Northwood
	Baltimore County	21207	Gwynn Oak	21207	Gwynn Oak	21222	Dundalk	21237	Rosedale
		21220	Middle River	21222	Dundalk	21221	Essex	21208	Pikesville
		21222	Dundalk	21237	Rosedale	21220	Middle River	21207	Gwynn Oak
		21237	Rosedale	21234	Parkville	21234	Parkville	21221	Essex
		21221	Essex	21227	Halethorpe	21207	Gwynn Oak	21093	Lutherville Timonium
	Wicomico County	21801	Salisbury	21801	Salisbury	21804	Salisbury	21801	Salisbury
		21837	Mardela Springs	21804	Salisbury	21801	Salisbury	21804	Salisbury
		21850	Pittsville	21850	Pittsville	21826	Fruitland	21830	Hebron
		21804	Salisbury	21875	Delmar	21875	Delmar	21850	Pittsville
		21830	Hebron	21837	Mardela Springs	21850	Pittsville	21849	Parsonsburg
	Kent County	21651	Millington	21620	Chestertown	21620	Chestertown	21620	Chestertown
		21620	Chestertown	21651	Millington	21661	Rock Hall	21651	Millington
				21635	Galena	21651	Millington	21635	Galena
				21661	Rock Hall	21678	Worton	21661	Rock Hall
				21678	Worton	21635	Galena	21678	Worton
	Somerset County	21822	Eden	21853	Princess Anne	21853	Princess Anne	21853	Princess Anne
		21838	Marion Station	21838	Marion Station	21817	Crisfield	21822	Eden
				21871	Westover	21822	Eden	21871	Westover
				21817	Crisfield	21871	Westover	21817	Crisfield
				21822	Eden	21838	Marion Station	21838	Marion Station
	Dorchester County	21631	East New Market	21613	Cambridge	21613	Cambridge	21613	Cambridge
		21643	Hurlock	21643	Hurlock	21643	Hurlock	21869	Vienna
				21631	East New Market	21631	East New Market	21631	East New Market
				21869	Vienna	21869	Vienna	21643	Hurlock
				21622	Church Creek	21659	Rhodesdale	21659	Rhodesdale
	Garrett County	21550	Oakland	21550	Oakland	21550	Oakland	21550	Oakland
		21520	Accident	21531	Friendsville	21536	Grantsville	21536	Grantsville
		21531	Friendsville	21536	Grantsville	21561	Swanton	21541	McHenry
		21536	Grantsville	21520	Accident	21531	Friendsville	21531	Friendsville
		21561	Swanton	21538	Kitzmiller	21520	Accident	21561	Swanton

Solution

During the past decade, national fatality numbers and rates have been generally decreasing due to a combination of factors including improved education and awareness, driver training, and law enforcement activities, and perhaps most important, the improvement of vehicle designs to better protect passengers in

crashes. These safer vehicle designs, featuring sophisticated air bag systems, anti-lock brakes, crush-proof structural designs, proximity warnings, and other measures, can only work most effectively if drivers and passengers are using approved restraints, such as seat belts and child safety seats that help occupants stay in the vehicle during crashes.

Chances of crash survival plummet when vehicle occupants are ejected during crashes, but chances of survival and injury reduction are greatly increased if restraints are used properly. Hence, Maryland will continue to vigorously support national and state policies on occupant protection, specifically the consistent use of proper restraints. The MHSO will continue to utilize the Be the Driver campaign, and occupant protection subtheme of Be the BUCKLED UP Driver to encourage motorists to buckle up, every seat, every ride. In addition to the general creative for the campaign, the MHSO will utilize the "Bad Excuse" creative to specifically debunk four common reasons heard by law enforcement partners for motorists not wearing seat belts: "I'm only driving a couple of miles," "I drive a truck. I'm protected," "It rubs my neck. It's uncomfortable," and "My vehicle has airbags. I'm protected." Characters in the Be the Driver campaign were developed to be representative of the State of Maryland's diversity.

Maryland solicits input on occupant protection and child passenger safety issues through the state's Occupant Protection EAT. This feedback then is used to develop and coordinate the state's enforcement and education activity. Refer to the PPCE plan for additional details. Data-driven projects are developed under SHSP strategies and include education and media activities such as Click It or Ticket and additional enforcement of Maryland's seat belt laws.

Child Passenger Safety (CPS) efforts also form a key component of Maryland's Occupant Protection Program as the state continues to certify and support trained CPS technicians and instructors at fitting stations throughout the state, focusing on urban and rural jurisdictions and at-risk groups. Child safety seats are distributed through CPS partners and local health departments. Virtual car seat events also are available where in-person activities are limited.

Outreach is coordinated with hospitals and other CPS partners that continue to promote child passenger safety (both best practices and Maryland law) to care providers of children from birth to age eight. Since October 1, 2022, Maryland law requires a person transporting a child under age two in a motor vehicle to secure the child in a rear-facing child safety seat that complies with applicable federal regulations until the child reaches the manufacturer's weight or height limit for the child safety seat. The MHSO will continue to educate Marylanders about the new law and best practices by engaging in conversation and responding to questions from across the state on social media and will continue promotion of finding the right seat for the children they are transporting.

Countermeasure Strategies

The below countermeasure strategies will be used in the upcoming FFYs to address Occupant Protection. The following countermeasures are pulled from *Countermeasures that work: A highway safety countermeasures guide for State Highway Safety Offices, 10th edition, 2020*:

Countermeasure:	6.2 Strategies for Child Restraint and Booster Seat Use
Effectiveness:	★★★

Additional Supportive Research:	N/A
Cost:	Varies
Use:	Unknown
Time:	Medium
Performance Target:	C-4 (Appendix C)
Explanation:	Communications and outreach campaigns directed at booster-seat-age children are likely common, but no summary is available.
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(ii)

Countermeasure:	7.2 Inspection Stations
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$
Use:	High
Time:	Short
Performance Target:	C-4 (Appendix C)
Explanation:	Child restraint inspection stations have become common components of State and local child passenger safety programs. As of 2018 more than 10,000 inspection stations were registered with NHTSA (see www.nhtsa.gov/equipment/car-seats-and-booster-seats#installation-help-inspection for locations).
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(ii)

Countermeasure:	3.1 Supporting Enforcement
Effectiveness:	★★★★★
Additional Supportive Research:	N/A
Cost:	Varies
Use:	Medium
Time:	Medium
Performance Target:	C-4 (Appendix C)
Explanation:	All HVE programs include communications and outreach strategies that use some combination of earned media (news stories, social media) and paid

	advertising. Communications and outreach can be conducted at local, State, regional, or national levels.
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(ii)

Countermeasure:	1.1 State Primary Enforcement Seat Belt Use Laws
Effectiveness:	★★★★★
Additional Supportive Research:	N/A
Cost:	$
Use:	Medium
Time:	Short
Performance Target:	C-4; B-1 (Appendix C)
Explanation:	As of June 2019, there were 34 States and the District of Columbia that had primary belt use laws and 15 States had secondary enforcement laws. Only New Hampshire had no belt use law applicable to adults (GHSA, 2019a; IIHS, 2019a). However, some States only have primary enforcement for certain occupants (for instance drivers or people older than a specified age) and secondary enforcement for other occupants (for example, North Carolina's seat belt law is primary for drivers and front seat passengers 16 and older but secondary for rear seat passengers 16 and older). Twenty States do not have laws requiring the use of seat belts in the rear seat (GHSA, 2019a). More information on the effect of having no rear seat belt requirement is included in the "Other Issues" section below.
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(ii)

Countermeasure:	VI. Outreach Program
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 20
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-4 (Appendix C)
Explanation:	For Occupant Protection (Guideline 20), this project provides culturally relevant material and resources necessary to conduct occupant protection

	education programs, especially directed toward young people, in local school settings.
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(ii)

Countermeasure:	4.1 Strengthening Child/Youth Occupant Restraint Laws
Effectiveness:	★★★★★
Additional Supportive Research:	N/A
Cost:	$
Use:	High
Time:	Short
Performance Target:	C-4 (Appendix C)
Explanation:	As of November 2018, all but one State had enacted child restraint laws covering children through at least age 5 (South Dakota's law only covers children 4 and younger) (IIHS, 2019a, 2019b). However, a wide variation in age, height, and weight requirements exists among the laws of the States (GHSA, 2019b; IIHS, 2019a, 2019b).
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(ii)

Occupant Protection Emphasis Area Team Contact List

Please refer to Appendix F for the Occupant Protection Emphasis Area Team Contact List

Participation in Click-it-or-Ticket

Under BIL, states must continue to support Click It or Ticket (CIOT), a nationwide seat belt enforcement and awareness mobilization effort. CIOT has been a successful seat belt enforcement campaign since the early 2000s, helping to increase Maryland's seat belt usage through a combination of media, grassroots education programs and targeted enforcement.

In FFY 2022 the following agencies participated in CIOT enforcement and are expected to participate in FFY 2023.

- Anne Arundel County Police Department
- Baltimore City Police Department
- Baltimore County Police Department
- Bel Air Police Department
- Berlin Police Department
- Calvert County Sheriff's Office
- Maryland State Police
- Maryland Transportation Authority Police
- Maryland Capitol Police
- Maryland Department of Natural Resources Police
- Mount Airy Police Department

- Carroll County Sheriff's Office
- Cecil County Police Department
- Charles County Sheriff's Office
- Cumberland Police Department
- Dorchester County Sheriff's Office
- Easton Police Department
- Frederick Police Department
- Fruitland Police Department
- Hampstead Police Department
- Harford County Police Department
- Howard County Police Department
- Hyattsville Police Department
- La Plata Police Department
- Ocean City Police Department
- Prince George's County Police Department
- Princess Anne Police Department
- Riverdale Police Department
- Rockville Police Department
- Salisbury Police Department
- Salisbury University Police Department
- St. Mary's Sheriff's Office
- Sykesville Police Department
- Talbot County Police Department
- Taneytown Police Department
- Washington County Sheriff's Office
- Westminster Police Department
- Wicomico County Sheriff's Office

Maryland's plan to support CIOT annually is as follows:

Anticipated Dates	Activity
December – April	Campaign pre-planning for May CIOT effort
May 6 – June 13	Paid and earned media efforts based on dates outlined in NHTSA's communication calendar
May 20 – June 2	Enforcement period based on MHSO's annual HVE calendar
June	Seat belt observation survey conducted
September	Annual seat belt use rate announced
November	Secondary CIOT wave around Thanksgiving

Child Restraint Inspection Stations and Child Passenger Safety Technicians

BIL continues the requirement that states have "an active network of child restraint inspection stations" throughout the state and requires that "the total number of inspection stations and/or inspection events service rural and urban areas and at-risk populations (e.g., low income, minority)." In FFY 2024, the MHSO will use a variety of data sources to determine the need for child restraint inspection stations including, but not limited to: the national census data (currently 2020), Equitable Transportation Community, and Maryland crash data.

In April 2023, a group of data experts including the National Study Center for Trauma and EMS, Washington College, and MHSO representatives formalized a model for determining underserved and low-income areas throughout the state. The methodology for determining these communities included two sets of disadvantaged populations – socioeconomic disadvantaged and transportation safety disadvantaged. Variables within socioeconomic disadvantaged include Risk (alcohol retailers and cannabis dispensaries), Poverty, and Race (non-white). Variables within transportation safety disadvantaged include Violations

(home location), Under 18/Over 65, and Crashes (location where occurred). This tool will be utilized in FFY 2025 and beyond to identify where child passenger safety efforts should be focused.

According to 2020 Census Data, more than five million people live in the Baltimore and Washington metropolitan regions of Maryland, representing more than 82 percent of Maryland's population. These metropolitan regions include:

- Anne Arundel County
- Baltimore City
- Baltimore County
- Carroll County
- Frederick County
- Harford County
- Howard County
- Montgomery County
- Prince George's County

Maryland coordinates regular fitting stations in each of these jurisdictions. In addition to the stations in the Baltimore/Washington metropolitan regions, regular fitting and inspection stations are established in some counties of Southern Maryland and the Eastern Shore. Most locations host monthly events, and inspections also are scheduled by appointment across the state. Virtual car seat events are available statewide. Refer to the PPCE plan for determining future fitting station locations.

Current public access information, locations, and hours of operation for these child passenger safety seat inspection stations can be found on the following websites:

- NHTSA – https://www.nhtsa.gov/equipment/car-seats-and-booster-seats#installation-help-inspection
- SAFE KIDS – http://www.safekids.org/in-your-area/coalitions/maryland-state.html
- Kids in Safety Seats (KISS) – KISS is taking appointments for virtual services and in person appointments: https://phpa.health.maryland.gov/oehfp/kiss/Pages/Home.aspx

1.Total number of planned inspection stations and/or events in the State – 50

2.Total number of planned inspection stations and/or events in the State serving each of the following population categories: urban, rural, and at-risk:

- Populations served – urban: 9
- Populations served – rural: 14
- Populations served – at risk: 9

CERTIFICATION: The inspection stations/events are staffed with at least one current nationally Certified Child Passenger Safety Technician.

CERTIFICATION: Estimate of the total number of classes and the estimated total number of technicians to be trained in the upcoming fiscal year to ensure coverage of child passenger safety inspection stations and inspection events by nationally Certified Child Passenger Safety Technicians.

- Estimated total number of classes: 6

- Estimated total number of technicians: 60

Child Passenger Safety Classes

The BIL continues to require the state to specify the number of CPS classes to be held, the location of those classes, and estimated number of students that will attend.

Recruitment, retention, and training of the state's CPS technicians are coordinated through a grant with the Maryland Department of Health's Kids in Safety Seats (KISS) program. As a component of this effort, KISS annually coordinates:

- Scheduling or assistance with six national child passenger safety certification courses throughout Maryland,
- Scheduling one CEU training,
- Scheduling one annual Renewal Course (dependent on interest from CPST),
- Scheduling one statewide instructor update,
- Scheduling one Special Needs Training,
- Scheduling 100 video car seat assistance appoints throughout the state,
- Maintaining technician re-certification, with a goal of retaining more than 50 percent among those eligible to re-certify, and
- Enabling technicians to enter sign-offs/CEU information at events.

Action Plan

The occupant protection projects funded for FFY 2024 are representative of evidence-based countermeasures and address the occupant protection issue using a multifaceted approach.

Project Agency: Cecil County DES	
Agency Type: County EMS Department	**Agency Location:** Cecil County
Program Area: Occupant Protection	**Project Number:** GN 24-155
Project Funds / Type: $1,268.00 / BIL 402	**Indirect Costs / Type:**
Countermeasures:	
Countermeasure:	5.2 Mass Media Campaigns
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	High
Time:	Medium
Performance Target:	C-4 (Appendix C)
Explanation:	Most States use some form of alcohol-impaired-driving mass media campaign every year. These are essential to many deterrence and prevention countermeasures that depend on public knowledge to be effective.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- Support the improved enforcement of occupant protection laws, as well as support enforcement initiatives that promote safe roadway behaviors.

Project Description: This project will provide for the purchase of pediatric restraint devices approved for use on ambulances.

Project Agency: Maryland Department of Health	
Agency Type: State Health Department	**Agency Location:** Statewide
Program Area: Occupant Protection	**Project Number:** GN 24-077
Project Funds / Type: $18,242.13 / BIL 402; $308,227.78 / BIL 405b OP (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $1,658.38 / BIL 402; $28,020.71 / BIL 405b OP

Countermeasures:	
Countermeasure:	6.2 Strategies for Child Restraint and Booster Seat Use
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	Varies
Use:	Unknown
Time:	Medium
Performance Target:	C-4 (Appendix C)
Explanation:	Communications and outreach campaigns directed at booster-seat-age children are likely common, but no summary is available.
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(ii)
Countermeasure:	7.2 Inspection Stations
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$
Use:	High
Time:	Short
Performance Target:	C-4 (Appendix C)
Explanation:	Child restraint inspection stations have become common components of State and local child passenger safety programs. As of 2018 more than 10,000 inspection stations were registered with NHTSA (see www.nhtsa.gov/equipment/car-seats-and-booster-seats#installation-help-inspection for locations).
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(ii)

SHSP Strategy:

- Support the improved enforcement of occupant protection laws, as well as support enforcement initiatives that promote safe roadway behaviors.

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on adult and child occupant protection.

Project Description: To address the plethora of needs across the state, Kids In Safety Seats proposes a multiprong approach to ensure the program works as effectively and efficiently as possible. This grant includes child safety seat outreach, training, certification of technicians and instructors, and a comprehensive program to educate parents and caregivers. Virtual seat events are also offered, enabling residents in every county of the state to receive car seat installation assistance.

Project Agency: Maryland Institute for EMS Systems	
Agency Type: State EMS Agency	**Agency Location:** Statewide
Program Area: Occupant Protection	**Project Number:** GN 24-090
Project Funds / Type: $93,354.68 / BIL 402	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	3.1 Supporting Enforcement
Effectiveness:	★★★★★
Additional Supportive Research:	N/A
Cost:	Varies
Use:	Medium
Time:	Medium
Performance Target:	C-4 (Appendix C)
Explanation:	All HVE programs include communications and outreach strategies that use some combination of earned media (news stories, social media) and paid advertising. Communications and outreach can be conducted at local, State, regional, or national levels.
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(ii)
Countermeasure:	6.2 Strategies for Child Restraint and Booster Seat Use
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	Varies
Use:	Unknown
Time:	Medium
Performance Target:	C-4 (Appendix C)
Explanation:	Communications and outreach campaigns directed at booster-seat-age children are likely common, but no summary is available.
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(ii)

SHSP Strategy:

- Support the improved enforcement of occupant protection laws, as well as support enforcement initiatives that promote safe roadway behaviors.

- Use the collection, analysis, and evaluation of data on all roads in Maryland to identify occupant protection safety issues, key audiences and locations of concern, as well as support the improvement of the data quality (accessibility, accuracy, completeness, integration, timeliness, uniformity).

- Support legislation and adjudication efforts to advance occupant protection for all ages.

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on adult and child occupant protection.

Project Description: This project seeks to reduce the incidence of injuries and deaths in Maryland due to vehicle crashes through a variety of occupant protection (OP) interventions. This project will promote proper and consistent use of car safety seats among children, seatbelt use among youth and caregivers, and occupant protection measures taken by healthcare and EMS personnel to keep themselves and their patients as safe as possible. In addition, the project will disseminate up-to-date and culturally relevant OP and CPS information. Data and research on OP will inform the planning of interventions, and evaluation will refine the process.

Project Agency: University of Maryland Baltimore, NSC	
Agency Type: Higher Education Institute	**Agency Location:** Statewide
Program Area: Occupant Protection	**Project Number:** GN 24-055
Project Funds / Type: $194,504.43 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $40,135.83 / BIL 402

Countermeasures:

Countermeasure:	1.1 State Primary Enforcement Seat Belt Use Laws
Effectiveness:	★★★★★
Additional Supportive Research:	N/A
Cost:	$
Use:	Medium
Time:	Short
Performance Target:	C-4; B-1 (Appendix C)
Explanation:	As of June 2019, there were 34 States and the District of Columbia that had primary belt use laws and 15 States had secondary enforcement laws. Only New Hampshire had no belt use law applicable to adults (GHSA, 2019a; IIHS, 2019a). However, some States only have primary enforcement for certain occupants (for instance drivers or people older than a specified age) and secondary enforcement for other occupants (for example, North Carolina's seat belt law is primary for drivers and front seat passengers 16 and older but secondary for rear seat passengers 16 and older). Twenty States do not have laws requiring the use of seat belts in the rear seat (GHSA, 2019a). More information on the effect of having no rear seat belt requirement is included in the "Other Issues" section below.
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(ii)

SHSP Strategy:

- Support the improved enforcement of occupant protection laws, as well as support enforcement initiatives that promote safe roadway behaviors.

- Use the collection, analysis, and evaluation of data on all roads in Maryland to identify occupant protection safety issues, key audiences and locations of concern, as well as support the improvement of the data quality (accessibility, accuracy, completeness, integration, timeliness, uniformity).

Project Description: The NSC will conduct the entire front occupant seat belt observational survey for the State of Maryland including administration of the collection of observational survey, compiling, analyzing, and interpreting the observational seat belt survey data, and providing the final report to MHSO and NHTSA.

Project Agency: Crash Center for Research and Education (CORE)	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Occupant Protection	**Project Number:** GN 24-151
Project Funds / Type: $31,683.49 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $6,193.96 / BIL 402

Countermeasures:

Countermeasure:	VII. Public Information and Education
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 11
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	Appendix B – Distracted Driving
Explanation:	The MHSO has coordinated multiple internal program assessments over the past three years, including those for Occupant Protection and Pedestrian/Bicyclist Safety. In those assessments, recommendations were made to continue outreach to the general public regarding traffic safety issues and this program seeks to educate the public about how dangerous driving behaviors affect first responders and their safety. In the NHTSA Uniform Guidelines, Number 11, it states that public awareness and education about the EMS system are essential to a high-quality system. Each State should implement a public information and education (PI&E) plan to address. In addition, per the NHTSA Uniform Guidelines Number 11, each State should ensure that its EMS system has essential trained persons to perform required tasks. These personnel include: first responders (e.g., police and fire), prehospital providers (e.g., emergency medical technicians and paramedics), communications specialists, physicians, nurses, hospital administrators, and planners. This grant would seek to increase the training level of EMS clinicians and first responders in evaluating crash scenes, including accurate identification of seat belt use, and proper data documentation.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(vi)

SHSP Strategy:

- Support the improved enforcement of occupant protection laws, as well as support enforcement initiatives that promote safe roadway behaviors.

- Use the collection, analysis, and evaluation of data on all roads in Maryland to identify occupant protection safety issues, key audiences and locations of concern, as well as support the improvement of the data quality (accessibility, accuracy, completeness, integration, timeliness, uniformity).

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on adult and child occupant protection.

Project Description: In partnership with the Maryland Institute for Emergency Medical Services Systems (MIEMSS) Crash Core proposes to develop and deliver crash science training for emergency clinicians/first responders. The training will include instruction on the implications of a crash scene (what happened and how), occupant ramifications based on crash damage (front, side, rear, rollover), identification of the use/non-use of a restraint/car seat, and patient/occupant location, how these factors contribute to injury, and how/why to improve accuracy in data documentation. Emergency clinicians would benefit from an enhanced anticipation of injuries (based on what they observe at the scene), an improved emergency treatment plan and transport decision-making, and an improvement in accurately documenting a crash to decrease the rate of unknown or missing safety equipment use, cause of injury and location of the patient.

For all the enforcement-related grants listed below, the following information applies:

Project Agency: Various (see below)	
Agency Type: State and Local Law Enforcement Agencies	**Agency Location:** Statewide
Program Area: Occupant Protection	**Project Number:** Various (see below)
Project Funds / Type: $53,234.05/ 402 BIL	**Indirect Costs / Type:**
Countermeasures:	

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-4; B-1 (Appendix C)
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the improved enforcement of occupant protection laws, as well as support enforcement initiatives that promote safe roadway behaviors.

Project Description: HVE for occupant protection.

Agency	Project Number	Program Area	Obligated Amount
Allegany County Sheriff's Office	LE 24-205	Occupant Protection	$3,000.00
Berlin Police Department	LE 24-120	Occupant Protection	$1,500.00
Carroll County Sheriff's Office	LE 24-044	Occupant Protection	$7,500.00
Chestertown Police Department	LE 24-218	Occupant Protection	$495.00
Cumberland Police Department	LE 24-013	Occupant Protection	$1,000.00
Easton Police Department	LE 24-147	Occupant Protection	$1,856.00
Frederick Police Department	LE 24-053	Occupant Protection	$5,000.00
Frostburg City Police Department	LE 24-191	Occupant Protection	$1,000.00
Fruitland Police Department	LE 24-118	Occupant Protection	$999.00

Agency	Project Number	Program Area	Obligated Amount
Hampstead Police Department	LE 24-212	Occupant Protection	$1,000.00
Kent County Sheriff's Office	LE 24-176	Occupant Protection	$1,000.00
Manchester Police Department	LE 24-008	Occupant Protection	$1,500.00
Mount Airy Police Department	LE 24-100	Occupant Protection	$1,000.00
Ocean City Police Department	LE 24-083	Occupant Protection	$1,890.00
Princess Anne Police Department	LE 24-040	Occupant Protection	$1,498.55
Queen Anne's County Sheriff's Office	LE 24-028	Occupant Protection	$4,018.50
Salisbury Police Department	LE 24-104	Occupant Protection	$2,000.00
Salisbury University Police Department	LE 24-168	Occupant Protection	$1,997.00
Somerset County Sheriff's Office	LE 24-225	Occupant Protection	$1,500.00
Sykesville Police Department	LE 24-035	Occupant Protection	$1,500.00
Talbot County Sheriff's Office	LE 24-112	Occupant Protection	$2,000.00
Taneytown Police Department	LE 24-046	Occupant Protection	$1,000.00
Washington County Sheriff's Office	LE 24-167	Occupant Protection	$5,000.00
Wicomico County Sheriff's Office	LE 24-180	Occupant Protection	$1,980.00
Worcester County Sheriff's Office	LE 24-193	Occupant Protection	$2,000.00

Distracted Driving Program

Action Plan

The distracted driving projects funded for FFY 2024 are representative of evidence-based countermeasures and address the distracted driving issue using a multifaceted approach.

Project Agency: Chesapeake Region Safety Council	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Distracted Driving	**Project Number:** GN 24-239
Project Funds / Type: $7,040.00 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $640.00 / BIL 402
Countermeasures:	
Countermeasure:	4.1 Communications and Outreach Supporting Enforcement
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	Varies
Use:	Medium
Time:	Medium
Performance Target:	Distracted Driving Fatalities and Serious Injuries (Appendix C)
Explanation:	Most aggressive driving and speed enforcement programs have a communications and outreach component. At least half the States have a named public awareness campaign (Sprattler, 2012)
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(i)

SHSP Strategy:

- Support the improved enforcement of distracted driving laws, as well as support enforcement initiatives that promote safe behaviors.
- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.
- Support the improved enforcement of occupant protection laws, as well as support enforcement initiatives that promote safe roadway behaviors.

Project Description: Chesapeake Region Safety Council will plan and execute fully developed, realistic crash scenes, with first responder arrival, extrication, treatment, arrest, and victim removal for local high schools. Each scene will focus on a risk-taking behavior, with each crash having a different level of severity, agreed upon with school leadership. Immediately following the crash scene, a question-and-answer session between attendees and first responders will occur with the option to include court-related sentencing program later. Formal presentations from highway safety partners such as the insurance industry, Fire, EMS, Law Enforcement, at-fault drivers, and victim community will follow each program.

For all the enforcement-related grants listed below, the following information applies:

Project Agency: Various (see below)	
Agency Type: State and Local Law Enforcement Agencies	**Agency Location:** Statewide
Program Area: Distracted Driving	**Project Number:** Various (see below)
Project Funds / Type: $252,534.60 / 402 BIL	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	Distracted Driving Fatalities and Serious Injuries (Appendix C)
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the improved enforcement of distracted driving laws, as well as support enforcement initiatives that promote safe behaviors.

Project Description: HVE for distracted driving prevention.

Agency	Project Number	Program Area	Obligated Amount
Aberdeen Police Department	LE 24-226	Distracted Driving	$2,009.60
Anne Arundel County Police Department	LE 24-091	Distracted Driving	$27,995.00
Baltimore City Police Department	LE 24-260	Distracted Driving	$1,500.00
Baltimore County Police Department	LE 24-018	Distracted Driving	$35,000.00
Bel Air Police Department	LE 24-097	Distracted Driving	$2,000.00
Calvert County Sheriff's Office	LE 24-026	Distracted Driving	$4,000.00
Cecil County Sheriff's Office	LE 24-158	Distracted Driving	$3,000.00
Charles County Sheriff's Office	LE 24-061	Distracted Driving	$5,000.00
City of Bowie	LE 24-128	Distracted Driving	$1,000.00
City of Hyattsville Police Department	LE 24-183	Distracted Driving	$1,000.00
Edmonston Police Department	LE 24-255	Distracted Driving	$550.00

Agency	Project Number	Program Area	Obligated Amount
Elkton Police Department	LE 24-009	Distracted Driving	$2,500.00
Harford County Sheriff's Office	LE 24-154	Distracted Driving	$18,000.00
Havre de Grace Police Department	LE 24-199	Distracted Driving	$1,000.00
Howard County Department of Police	LE 24-066	Distracted Driving	$12,000.00
Maryland Capitol Police	LE 24-072	Distracted Driving	$1,500.00
Maryland State Police - Statewide	LE 24-119	Distracted Driving	$57,000.00
Maryland Transportation Authority Police	LE 24-076	Distracted Driving	$18,000.00
Montgomery County Maryland	LE 24-209	Distracted Driving	$20,000.00
Prince George's County Police Department	LE 24-250	Distracted Driving	$30,000.00
Riverdale Park Police Department	LE 24-095	Distracted Driving	$2,000.00
Rockville Police Department	LE 24-234	Distracted Driving	$1,000.00
St. Mary's County Sheriff's Office	LE 24-080	Distracted Driving	$3,000.00
Takoma Park Police Department	LE 24-071	Distracted Driving	$1,980.00
University of Maryland Department of Public Safety	LE 24-188	Distracted Driving	$1,500.00

Speeding and Aggressive Driving Program

Action Plan

Speeding/Aggressive driving prevention projects funded for FFY 2023 are representative of evidence-based countermeasures and address speeding- and aggressive driving-related issues primarily relying on HVE efforts.

Project Agency: Crash Center for Research and Education (CORE)	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Aggressive Driving	**Project Number:** GN 24-171
Project Funds / Type: $77,929.30 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $15,234.77 / BIL 402

Countermeasures:

Countermeasure:	2.1 Automated Enforcement
Effectiveness:	★★★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	Medium
Time:	Medium
Performance Target:	C-6 (Appendix B)
Explanation:	Red light camera systems are used extensively in other industrialized countries and were first employed in the United Sates in 1993 (National Campaign to Stop Red Light Running, 2002). As of September 2019, red light camera systems were being used in 341 communities in 22 States and the District of Columbia (GHSA, 2019; IIHS, 2019b). As of 2018 speed cameras were being used in approximately 137 jurisdictions in 14 States and the District of Columbia (GHSA, 2019; IIHS, 2019c). Speed cameras also are used extensively in other countries (Speed Camera Database, 2019; WHO, 2004).
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(i)

SHSP Strategy:

- Support the improved enforcement of speed and aggressive driving laws, as well as support enforcement initiatives that promote safe behaviors.

- Use the collection, analysis, and evaluation of data on all roads in Maryland to identify speed and aggressive driving related issues, key audiences and locations of concern, as well as support the improvement of the data quality (accessibility, accuracy, completeness, integration, timeliness, uniformity).

• Improve roadway environments to reduce speed and aggressive driving behaviors by supporting the implementation of system-wide countermeasures, engineering treatments, and land-use planning.
Project Description: This project study will evaluate and identify the types of roadways and locations where speed cameras have the greatest impact and further examine factors that modify the effect of speed cameras. Roadway, economic and demographic factors will be considered. In addition to the randomly selected comparison roadways, using the HERE dataset will also select upstream and downstream roadways as comparison roadways to identify the impact of cameras on nearby sections of roadway. Thus, the evaluation will consider three types of comparison roadways: random selection, upstream, and downstream and identify the types of roadways and locations where speed cameras have the greatest impact

Project Agency: Maryland Soybean Board	
Program Area: Special Projects	**Project Number:** GN 24-207
Project Funds / Type: $66,743.92 / BIL 402; $138,698.85 / SBIL 402	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	4.1 Communications and Outreach Supporting Enforcement
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	Varies
Use:	Medium
Time:	Medium
Performance Target:	C-6 (Appendix C)
Explanation:	Most aggressive driving and speed enforcement programs have a communications and outreach component. At least half the States have a named public awareness campaign (Sprattler, 2012)
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(i)

SHSP Strategy:

- Support the improved enforcement of speed and aggressive driving laws, as well as support enforcement initiatives that promote safe behaviors.

- Promote a systemic safety culture through the support/solicitation of outreach initiatives including public awareness, education, training, and media campaigns focused on reducing speed and aggressive driving behaviors.

Project Description: To address the growth of dangerous encounters between motorists and drivers of slow-moving vehicles on public roads, the Maryland Soybean Board (MSB) is expanding the “Find Me Driving” road safety campaign to call attention to the unique measures required to drive safely near farm equipment and similar slow-moving vehicles. A variety of methods will be used for education including video commercials, social media posts, billboards, outreach, and a virtual driving exhibit.

For all the enforcement-related grants listed below, the following information applies:

Project Agency: Various (see below)	
Agency Type: State and Local Law Enforcement Agencies	**Agency Location:** Statewide
Program Area: Speeding and Aggressive Driving	**Project Number:** Various (see below)
Project Funds / Type: $418,219.65 / 402 BIL	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-6 (Appendix C)
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the improved enforcement of speed and aggressive driving laws, as well as support enforcement initiatives that promote safe behaviors.

Project Description: HVE for speeding and aggressive driving prevention.

Agency	Project Number	Program Area	Obligated Amount
Aberdeen Police Department	LE 24-169	Speed Enforcement	$753.60
Allegany County Sheriff's Office	LE 24-067	Speed Enforcement	$3,000.00
Anne Arundel County Police Department	LE 24-094	Speed Enforcement	$20,000.00
Baltimore City Police Department	LE 24-258	Speed Enforcement	$5,000.00
Baltimore County Police Department	LE 24-021	Speed Enforcement	$37,060.00
Bel Air Police Department	LE 24-195	Speed Enforcement	$1,000.00
Berlin Police Department	LE 24-122	Speed Enforcement	$1,500.00
Calvert County Sheriff's Office	LE 24-242	Speed Enforcement	$9,000.00
Carroll County Sheriff's Office	LE 24-045	Speed Enforcement	$7,500.00
Cecil County Sheriff's Office	LE 24-156	Speed Enforcement	$3,000.00
Charles County Sheriff's Office	LE 24-064	Speed Enforcement	$13,000.00

Agency	Project Number	Program Area	Obligated Amount
Chestertown Police Department	LE 24-217	Speed Enforcement	$1,485.00
City of Bowie	LE 24-132	Speed Enforcement	$2,000.00
City of Hyattsville Police Department	LE 24-187	Speed Enforcement	$1,500.00
Easton Police Department	LE 24-149	Speed Enforcement	$4,640.00
Elkton Police Department	LE 24-011	Speed Enforcement	$2,000.00
Frederick Police Department	LE 24-054	Speed Enforcement	$12,000.00
Frostburg City Police Department	LE 24-197	Speed Enforcement	$800.00
Fruitland Police Department	LE 24-116	Speed Enforcement	$999.00
Hampstead Police Department	LE 24-214	Speed Enforcement	$1,000.00
Harford County Sheriff's Office	LE 24-160	Speed Enforcement	$18,000.00
Havre de Grace Police Department	LE 24-201	Speed Enforcement	$1,000.00
Howard County Department of Police	LE 24-065	Speed Enforcement	$15,000.00
Kent County Sheriff’s Office	LE 24-175	Speed Enforcement	$1,000.00
Laurel Police Department	LE 24-004	Speed Enforcement	$1,500.00
Manchester Police Department	LE 24-007	Speed Enforcement	$1,500.00
Maryland State Police - Statewide	LE 24-139	Speed Enforcement	$115,000.00
Maryland Transportation Authority Police	LE 24-075	Speed Enforcement	$20,000.00
Montgomery County Maryland	LE 24-208	Speed Enforcement	$30,000.00
Mount Airy Police Department	LE 24-099	Speed Enforcement	$1,000.00
Ocean City Police Department	LE 24-084	Speed Enforcement	$3,000.00
Prince George's County Police Department	LE 24-249	Speed Enforcement	$40,000.00
Princess Anne Police Department	LE 24-039	Speed Enforcement	$1,498.55
Queen Anne's County Sheriff's Office	LE 24-025	Speed Enforcement	$13,024.50
Riverdale Park Police Department	LE 24-050	Speed Enforcement	$2,000.00
Rockville Police Department	LE 24-236	Speed Enforcement	$1,000.00
Salisbury Police Department	LE 24-103	Speed Enforcement	$2,000.00
Somerset County Sheriff's Office	LE 24-224	Speed Enforcement	$2,500.00
St. Mary's County Sheriff's Office	LE 24-079	Speed Enforcement	$4,500.00
Sykesville Police Department	LE 24-037	Speed Enforcement	$1,500.00
Talbot County Sheriff's Office	LE 24-123	Speed Enforcement	$2,000.00
Taneytown Police Department	LE 24-047	Speed Enforcement	$1,000.00
University of Maryland Department of Public Safety	LE 24-051	Speed Enforcement	$2,500.00
Washington County Sheriff's Office	LE 24-165	Speed Enforcement	$2,999.00
Wicomico County Sheriff's Office	LE 24-181	Speed Enforcement	$5,460.00
Worcester County Sheriff's Office	LE 24-198	Speed Enforcement	$2,000.00

Motorcycle Safety Program

Problem Identification

Compared to the previous year, motorcycle-involved crashes in 2021 increased by 4 percent, though there were four fewer fatal crashes and three fewer fatalities during the same period. Between 2017 and 2021, an average of 1,322 motorcycle-involved crashes occurred on Maryland roads each year.

From 2017 through 2021 in Maryland, motorcycle-involved crashes accounted for two percent of injuries and 14 percent of fatalities. Thus, motorcycles are significantly over-represented in fatal crashes.

While a relatively low six percent of motorcycle crashes result in a fatality, the fact that 14 percent of all statewide fatalities involve a motorcycle is cause for concern among traffic safety experts. This significant involvement of motorcycles in fatal crashes and their effects on overall traffic fatalities in Maryland indicate the need for greater motorcycle safety efforts such as awareness, education, training, and enforcement.

MHSO and grantees will use raw number ranking to determine the jurisdictions where additional education to motorists and motorcyclist is necessary.

Frequency of Motorcycle Crashes

Warmer weather is conducive to motorcycle riding, so it is not surprising that higher proportions of motorcycle-involved crashes occurred during the warm-weather months of May through September. Crashes were significantly more common during the weekend days, with more than half (55 percent) occurring Friday through Sunday. Motorcycle-involved crashes were most common between 2:00 and 8:59 p.m. (55 percent).

Crash data in recent years have shown that more than one in three of fatal motorcycle crashes involved only the motorcycle. Inattention and speed are frequent causal factors in motorcycle crashes, with alcohol impairment a higher occurrence in fatal motorcycle crashes.

To identify high-risk jurisdictions for motorcycle-involved crashes, an analysis of crash rates per licensed motorcyclist (endorsement) was assessed.

2019-2021 Maryland Crash Rates

Jurisdiction	Motorcycle Total Crashes	Licensed Motorcyclists	Rate
Prince George's	191	25,481	75
Baltimore	184	34,102	54
Anne Arundel	134	32,264	41.4
Baltimore City	122	9,726	125.8
Montgomery	114	27,693	41.3
Frederick	73	18,795	39
Harford	59	17,720	33.3
Washington	53	11,243	47.1
Charles	51	10,815	47.2

Howard	43	12,567	34.2
Cecil	41	8,074	51.2
Wicomico	38	5,285	72.5
Carroll	36	15,097	23.8
St. Mary's	35	1,276	276.9
Worcester	34	4,226	79.7
Calvert	21	7,716	27.2
Allegany	17	5,389	30.9
Queen Anne's	12	4,142	29.8
Garrett	10	2,883	33.5
Dorchester	9	2,094	44.6
Caroline	5	3,049	17.5
Talbot	5	2,329	21.5
Somerset	4	8,497	4.3
Kent	3	1,323	20.2
Statewide	**1,295**	**271,786**	**47.65**

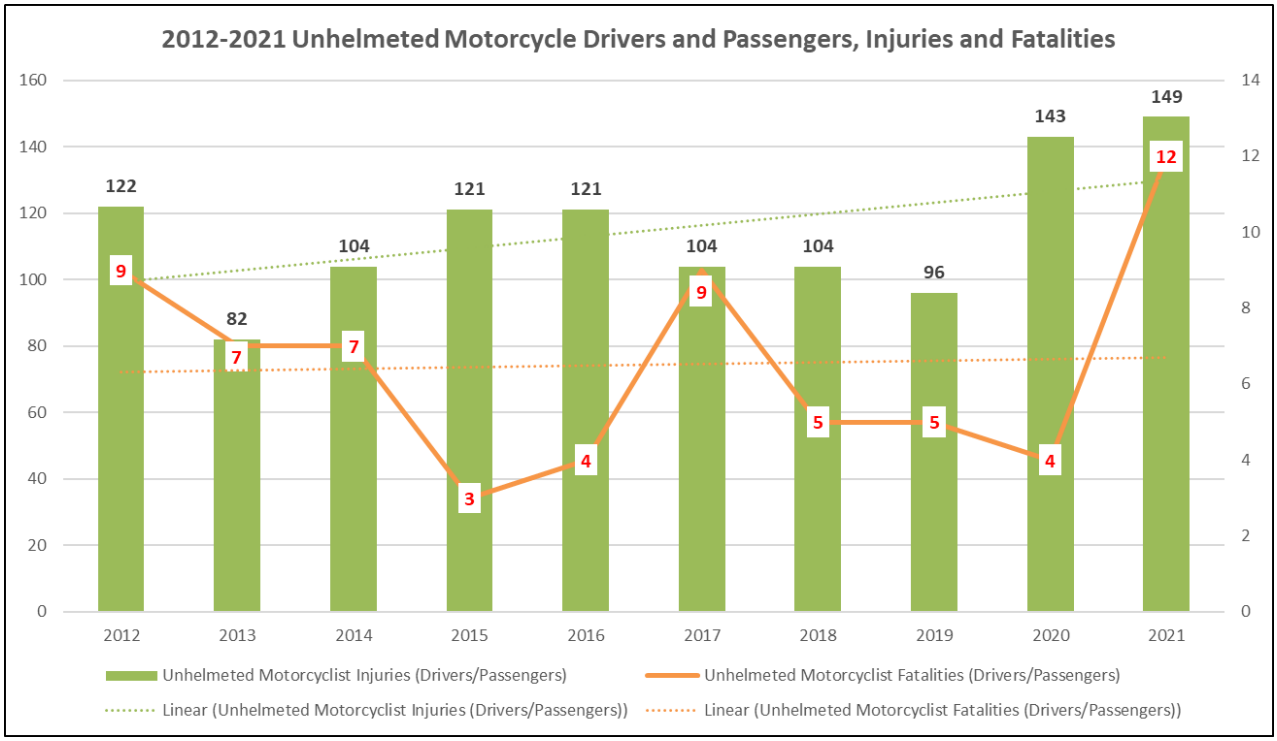
Typical Profile of Motorcycle Operator in Crashes

Crash data suggested the typical profile of Maryland motorcycle operators involved in a crash as male, ages 21 to 39 (44 percent), with more than two in every three wearing a safety helmet (71 percent). Most motorcycle crashes occurred in Baltimore and Prince George's Counties, mainly urban areas.

Helmet Law Violations in Maryland

Maryland has had a comprehensive mandatory helmet law for decades, but the accurate capturing of helmet use on the crash report may present some data challenges, particularly if the helmet was DOT-compliant. Crash data for 2021 indicated that 15 percent of injured motorcycle operators in a crash were known to not be wearing a helmet and 15 percent of operator fatalities were unhelmeted, illustrating a concerning trend in recent years for unhelmeted motorcyclists in Maryland (and shown in the chart below).

In any crash involving a motorcycle, the motorcycle rider is at most risk for injury or death. For example, in 2017-2021, there was an average of 1,322 motorcycle-involved crashes each year in Maryland. With 2,224 total drivers involved (motorcyclists and other drivers), with 1,365 motorcycle drivers (61%). Of the 1,001 injured total drivers, 941 (94%) were the motorcycle driver.


2012-2021 Unhelmeted Motorcycle Drivers and Passengers, Injuries and Fatalities
160
140
120
100
80
60
40
20
0
14
12
10
8
6
4
2
0
122
82
104
121
121
104
104
96
143
149
9
7
7
3
4
9
5
5
4
12
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
Unhelmeted Motorcyclist Injuries (Drivers/Passengers)
Unhelmeted Motorcyclist Fatalities (Drivers/Passengers)
Linear (Unhelmeted Motorcyclist Injuries (Drivers/Passengers))
Linear (Unhelmeted Motorcyclist Fatalities (Drivers/Passengers))

Priority Ranking

Program Area	Priority Jurisdictions (Injury/Fatal)	Priority Zip Codes (Fatalities)	Town Name (Fatalities)	Priority Zip Codes (Injuries)	Town Name (Injuries)	Priority Zip Codes (Traffic Stops - Offender Home)	Town Name (Stops - Home)	Priority Zip Codes (Traffic Stops - Stop Location)	Town Name (Stops - Location)
Motorcycle	Worcester County	21842	Ocean City	21842	Ocean City	21811	Berlin	21842	Ocean City
		21863	Snow Hill	21811	Berlin	21842	Ocean City	21811	Berlin
				21851	Pocomoke City	21863	Snow Hill	21872	Whaleyville
				21863	Snow Hill	21841	Newark	21863	Snow Hill
				21813	Bishopville	21851	Pocomoke City	21813	Bishopville
	Wicomico County	21804	Salisbury	21801	Salisbury	21804	Salisbury	21801	Salisbury
		21849	Parsonsburg	21804	Salisbury	21801	Salisbury	21804	Salisbury
		21801	Salisbury	21830	Hebron	21850	Pittsville	21830	Hebron
		21830	Hebron	21875	Delmar	21849	Parsonsburg	21850	Pittsville
		21874	Willards	21849	Parsonsburg	21826	Fruitland	21826	Fruitland
	St. Mary's County	20653	Lexington Park	20659	Mechanicsville	20659	Mechanicsville	20659	Mechanicsville
		20650	Leonardtown	20653	Lexington Park	20653	Lexington Park	20636	Hollywood
		20659	Mechanicsville	20619	California	20619	California	20653	Lexington Park
				20650	Leonardtown	20636	Hollywood	20619	California
				20636	Hollywood	20650	Leonardtown	20650	Leonardtown
	Charles County	20601	Waldorf	20603	Waldorf	20602	Waldorf	20601	Waldorf
		20646	La Plata	20646	La Plata	20603	Waldorf	20646	La Plata
		20603	Waldorf	20601	Waldorf	20601	Waldorf	20602	Waldorf
		20602	Waldorf	20602	Waldorf	20646	La Plata	20603	Waldorf
		20612	Benedict	20695	White Plains	20640	Indian Head	20695	White Plains
	Baltimore City	21202	Baltimore	21224	Highlandtown	21225	Brooklyn	21201	Baltimore
		21213	Clifton	21225	Brooklyn	21206	Raspeburg	21225	Brooklyn
		21215	Arlington	21215	Arlington	21224	Highlandtown	21224	Highlandtown
		21230	Morrell Park	21201	Baltimore	21229	Carroll	21230	Morrell Park
		21217	Druid	21230	Morrell Park	21216	Baltimore	21215	Arlington
	Cecil County	21921	Elkton	21921	Elkton	21921	Elkton	21901	North East
		21904	Port Deposit	21901	North East	21901	North East	21921	Elkton
		21901	North East	21911	Rising Sun	21911	Rising Sun	21904	Port Deposit
		21911	Rising Sun	21918	Conowingo	21903	Perryville	21903	Perryville
		21918	Conowingo	21904	Port Deposit	21918	Conowingo	21911	Rising Sun
	Calvert County	20657	Lusby	20678	Prince Frederick	20657	Lusby	20657	Lusby
		20676	Port Republic	20657	Lusby	20678	Prince Frederick	20736	Owings
		20685	Saint Leonard	20639	Huntingtown	20639	Huntingtown	20685	Saint Leonard
		20732	Chesapeake Beach	20736	Owings	20685	Saint Leonard	20678	Prince Frederick
		20736	Owings	20732	Chesapeake Beach	20736	Owings	20639	Huntingtown
	Carroll County	21158	Westminster	21157	Westminster	21157	Westminster	21157	Westminster
		21074	Hampstead	21158	Westminster	21784	Sykesville	21784	Sykesville
		21102	Manchester	21784	Sykesville	21158	Westminster	21048	Finksburg
		21157	Westminster	21074	Hampstead	21074	Hampstead	21158	Westminster
		21787	Taneytown	21102	Manchester	21048	Finksburg	21074	Hampstead
	Dorchester County	21869	Vienna	21613	Cambridge	21613	Cambridge	21613	Cambridge
		21622	Church Creek	21869	Vienna	21643	Hurlock	21643	Hurlock
		21643	Hurlock	21643	Hurlock	21631	East New Market	21631	East New Market
				21835	Linkwood	21869	Vienna	21869	Vienna
				21622	Church Creek	21648	Madison	21835	Linkwood
	Washington County	21740	Hagerstown	21742	Hagerstown	21740	Hagerstown	21740	Hagerstown
		21713	Boonsboro	21713	Boonsboro	21742	Hagerstown	21742	Hagerstown
		21750	Hancock	21783	Smithsburg	21795	Williamsport	21713	Boonsboro
		21742	Hagerstown	21750	Hancock	21713	Boonsboro	21783	Smithsburg
		21756	Keedysville	21782	Sharpsburg	21722	Clear Spring	21795	Williamsport
	Frederick County	21702	Frederick	21771	Mount Airy	21701	Frederick	21701	Frederick
		21771	Mount Airy	21702	Frederick	21702	Frederick	21702	Frederick
		21701	Frederick	21703	Frederick	21703	Frederick	21704	Frederick
		21703	Frederick	21704	Frederick	21771	Mount Airy	21703	Frederick
		21704	Frederick	21788	Thurmont	21769	Middletown	21771	Mount Airy
	Allegany County	21502	Cumberland	21502	Cumberland	21502	Cumberland	21502	Cumberland
		21521	Barton	21532	Frostburg	21532	Frostburg	21532	Frostburg
		21530	Flintstone	21521	Barton	21557	Rawlings	21557	Rawlings
				21539	Lonaconing	21530	Flintstone	21530	Flintstone
				21766	Little Orleans	21521	Barton	21562	Westernport
	Harford County	21009	Abingdon	21001	Aberdeen	21040	Edgewood	21014	Bel Air
		21014	Bel Air	21085	Joppa	21001	Aberdeen	21085	Joppa
		21017	Belcamp	21014	Bel Air	21009	Abingdon	21001	Aberdeen
		21001	Aberdeen	21047	Fallston	21085	Joppa	21015	Bel Air
		21015	Bel Air	21009	Abingdon	21014	Bel Air	21040	Edgewood
	Anne Arundel County	21061	Glen Burnie	21060	Glen Burnie	21122	Pasadena	21122	Pasadena
		21054	Gambrills	20711	Lothian	21061	Glen Burnie	21061	Glen Burnie
		21122	Pasadena	21054	Gambrills	21144	Severn	21401	Annapolis
		21401	Annapolis	21090	Linthicum Heights	21060	Glen Burnie	21037	Edgewater
		21076	Hanover	21076	Hanover	21401	Annapolis	21108	Millersville

Solution

Funded projects will help address motorcycle safety issues through partnerships among government agencies and stakeholder groups such as motorcycle dealers and motorcycle clubs. These partnerships involve scheduled outreach activities geared toward reducing motorcycle-involved crashes in areas where crash rates are highest.

A component of the Motorcycle Safety emphasis area is the Be the LOOK TWICE Driver subtheme of the MHSO's Be the Driver campaign. Media campaigns will be coordinated to increase awareness of motorcycle safety issues and will use a variety of communications techniques to reach targeted audiences. In addition to public information and education, adequate rider training and licensure are major components of Maryland's efforts to decrease motorcycle-involved crashes, in addition to improved enforcement of the state's traffic safety laws.

Numerous rider courses are offered through the Maryland Motorcycle Safety Program. The state's goals are to improve rider skill and to increase awareness levels and "share the road" among motorcyclists and other vehicle drivers. In FFY 2022, the MHSO assumed majority of the motorcycle rider outreach formerly conducted by the MDOT MVA, including other items that are used for training and outreach activities throughout the year. In addition, MD MOTORS (Motor Officers Training Other Riders Safety), a new motorcycle course developed by the Maryland State Police Motor Unit, in conjunction with motorcyclist input, launched in FFY 2022 with 11 initial classes and will be continued in the upcoming FFYs. The program continues to evolve and address additional request from the motorcyclist community, including new locations and accommodations for those with disabilities.

Countermeasure Strategies

The below countermeasure strategies will be used in the upcoming FFYs to address Motorcycle Safety.

Countermeasure:	IV. Motorcycle Rider Education and Training
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 3
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-7; C-8 (Appendix C)
Explanation:	Each comprehensive State motorcycle safety program should address the use of helmets (meeting Federal Motor Vehicle Safety Standard 218) and other protective gear, proper licensing, impaired riding, rider training, conspicuity, and motorist awareness. MD MOTORS focuses on a variety of rider training aspects, including proper riding techniques, communication, proper riding gear, and the use of helmets. Per Item IV under NHTSA's Uniform Guidelines for Motorcyclist Safety, a rider training program should encompass the following:

	1)A source of program funding; 2) A State organization to administer the program; 3) A mandate to use the State-approved curriculum; 40 Reasonable availability of rider education courses for all interested residents of legal riding age and varying levels of riding experience; 5) A documented policy for instructor training and certification; 6) Incentives for successful course completion such as licensing test exemption; 7) A plan to address the backlog of training, if applicable; 8) State guidelines for conduct and quality control of the program; and 9) A program evaluation plan. MD MOTORS is a vital part of the MHSO's activities to provide active and effective rider training, communicating about safe riding, and education on proper riding gear. In addition, the program includes an evaluation component regarding program effectiveness and the knowledge gained by participants.
Allocated Funding Type:	402; 405b
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iv)

Evaluation

The MHSO evaluates traffic safety programs through output and outcome measures. Outcome measures include crash data (fatality and serious injury). Projects funded through the MHSO are required to have an effective evaluation component. Depending on the level of grant funds obligated and the scope of the project, impact or output measures are reported and evaluated throughout the grant cycle. A new survey will be conducted in FFY 2024. Impact evaluation will be an ongoing process using information collected through community engagement and activities.

Outcome Measures

			BASE YEARS (Historical Data)				
	PERFORMANCE PLAN CHART – FFY2024-2026 Highway Safety Plan		**2017** **2013-2017**	**2018** **2014-2018**	**2019** **2015-2019**	**2020** **2016-2020**	**2021** **2017-2021**
C-7	Motorcyclist Fatalities	State	82	57	75	78	76

	Reduce motorcyclist fatalities 11 percent from 73.6 (2017-2021) to 65.3 (2024-2028 target) by December 31, 2026.	5-Year Rolling Avg.	70.2	69.4	71.2	72.8	73.6
C-8	Unhelmeted Motorcyclist Fatalities	State	17	9	7	6	15
	Reduce unhelmeted motorcyclist fatalities 13 percent from 10.8 (2017-2021) to 9.4 (2024-2028 target) by December 31, 2026.	5-Year Rolling Avg.	11.0	11.9	10.0	9.4	10.8
(Appendix B)	Motorcyclist Serious Injuries	State	320	398	277	314	329
	Reduce motorcyclist serious injuries 22 percent from 307.6 (2017-2021) to 238.8 (2024-2028 target) by December 31, 2026.	5-Year Rolling Avg.	275.0	285.0	286.6	301.4	307.6

FY 2023					
Performance Measure	**Target Period**	**Target Year(s)**	**Target Value FFY23 HSP**	**Data Source/ FFY23 Progress Results**	**On Track to Meet FFY23 Target Y/N/In-Progress**
C-7) Motorcyclist Fatalities (State)	5 year	2019-2023	66.9	2017-2021 State 73.6	N
C-8) Unhelmeted Motorcyclist Fatalities (State)	5 year	2019-2023	10.0	2017-2021 State 10.8	Y
Motorcyclist Serious Injuries (State)	5 year	2019-2023	252.1	2017-2021 State 307.6	N

Action Plan

Project Agency: Crash Center for Research and Education (CORE)	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Motorcycle	**Project Number:** GN 24-140
Project Funds / Type: $58,697.38 / SBIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $11,475.03 / SBIL 402
Countermeasures:	
Countermeasure:	IV. Motorcycle Rider Education and Training
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 3
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-7; C-8 (Appendix C)
Explanation:	Each comprehensive State motorcycle safety program should address the use of helmets (meeting Federal Motor Vehicle Safety Standard 218) and other protective gear, proper licensing, impaired riding, rider training, conspicuity, and motorist awareness. MD MOTORS focuses on a variety of rider training aspects, including proper riding techniques, communication, proper riding gear, and the use of helmets. Per Item IV under NHTSA's Uniform Guidelines for Motorcyclist Safety, a rider training program should encompass the following: 1)A source of program funding; 2) A State organization to administer the program; 3) A mandate to use the State-approved curriculum; 40 Reasonable availability of rider education courses for all interested residents of legal riding age and varying levels of riding experience; 5) A documented policy for instructor training and certification; 6) Incentives for successful course completion such as licensing test exemption; 7) A plan to address the backlog of training, if applicable; 8) State guidelines for conduct and quality control of the program; and 9) A program evaluation plan. MD MOTORS is a vital part of the MHSO's activities to provide active and effective rider training, communicating about safe riding, and education on proper riding gear. In addition, the program includes an evaluation component regarding program effectiveness and the knowledge gained by participants.
Allocated Funding Type:	402; 405b

Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iv)

SHSP Strategy:

- Strategies to drive down motorcycle-related fatalities and injuries include public outreach, motorist education and awareness campaigns, and enhanced motorcycle safety training.

Project Description:

Crash Core will continue to carry out the designed pre-/post-program evaluation comparing the participants' knowledge with that of a control group. The objectives of the study and evaluation are to determine if the program was implemented as intended; support expansion and replication efforts; evaluate the effectiveness of the program on improved knowledge and awareness; and evaluate the effectiveness of the program on improved riding skills. This project will also allow for Crash Core to complete administration and coordination of the MD MOTORS program.

Nonmotorist (Pedestrian/Bicyclist) Safety Programs

Action Plan

Project Agency: Bicycle Advocates for Annapolis & Anne Arundel County	
Agency Type: Non-profit	**Agency Location:** Anne Arundel County
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-121
Project Funds / Type: $7,300 / SMDF	**Indirect Costs / Type:**
Countermeasures:	
Countermeasure:	3.1 Active Lighting and Rider Conspicuity
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$
Use:	High
Time:	Varies
Performance Target:	C-11 (Appendix C)
Explanation:	Most States have laws requiring use of active lights and reflectors on bikes ridden at night. There are no data on how frequently active lighting is used among those who bicycle after dark, but bicyclists involved in collisions at night appear to use lights infrequently. Use of bicycle reflectors is thought to be higher since they come pre-attached to bicycles at purchase, but these may be removed, or broken, after purchase, so use is not guaranteed. Nearly three-fourths of U.S. survey respondents who reported having ridden in the dark reported they took some measures, either using a bike headlight or reflective/fluorescent gear or clothing, to make themselves more visible (Schroeder & Wilbur, 2013). Most, if not all, athletic shoes contain some retroreflective material. Some athletic clothing also has retroreflective material. Bicycle helmets may have retroreflective elements. Some bicyclists may be seen wearing additional retroreflective materials, such as vests, jackets, arm bands, or rear-mounted reflective triangles located under their bicycle seats.
Allocated Funding Type:	402; 405h; SMDF; Bikeways

SHSP Strategy:

- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.

Project Description: This grant will allow BIKEAAA to identify bicyclists within Anne Arundel County who are lacking equipment and offer local bicyclists safety-enhancing equipment. Where possible, BikeAAA volunteers will personally fit an appropriately sized helmet to each child. This provides an opportunity to educate children and caregivers on proper helmet use.

The organization aims to develop a bike safety park near an underserved population center in Annapolis which will be used to host bike rodeos. BikeAAA would like to utilize events held at the bike safety park as an opportunity to provide helmets to those in need.

They strive to ensure that every bike and helmet donation is accompanied by a simple instruction card. One side covers quick bike check ABCs (Air, Brakes, Chain), the other illustrates and describes proper helmet fitting. BIKEAAA intends to begin providing a Spanish language version based on community requests. The cards will accompany donations as well as be available at the BikeAAA tent at 4-6 community events per year.

Project Agency: Bikemore	
Agency Type: Non-profit	**Agency Location:** Baltimore City
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-146
Project Funds / Type: $49,806.76 / BIL 402	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	2.2 Bicycle Safety Education for Adult Cyclists
Effectiveness:	★
Additional Supportive Research:	NHTSA Pedestrian and Bicyclist Technical Assessment - recommendation from the Pedestrian and Bicyclist Technical Assessment states: "Evaluate the effectiveness of pedestrian and bicyclist safety improvements that have been implemented in Maryland and develop Maryland-specific Crash Modification Factors (CMFs) for these types of improvements." This study would show the preferred method of infrastructure treatments.
Cost:	$$
Use:	Low
Time:	Medium
Performance Target:	C-11 (Appendix C)
Explanation:	The goal of bicycle safety education for adult bicycle commuters is to improve knowledge of laws, risks, and cycling best practices, and to lead to safer cycling behaviors, including riding predictably and use of safety materials such as reflective clothing and helmets. This countermeasure can include educational material, tip sheets, and a pledge program for local agencies to adopt and disseminate.
Allocated Funding Type:	402; 405h; SMDF; Bikeways
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(C)

SHSP Strategy:

- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.

Project Description: Bikemore seeks to develop and execute community engagement events to expand bicycle repair and skill sharing services to Greater Mondawmin residents and facilitate continued community engagement and support for safe streets along Auchentoroly Terrace and Druid Hill Park. They will expand their free Mobile Bike Shop program targeting underserved areas within Baltimore City to increase access to bicycle maintenance and knowledge.

The Mobile Bike Shop, transported entirely by cargo bicycle, consists of a Bikemore staffer and a team of seasonally hired bike mechanics that travel to various neighborhoods getting kids and adults rolling again. They demonstrate that biking and bike repair is for everyone, regardless of what neighborhood you live in. Bikemore encourages visitors to help with the fix, teaching them the skills and language associated with bike repair.

They will host in-person pop-up events at existing community events like block parties, Mondawmin Mall, and at the Druid Hill Farmers Market and will hire a local video producer to document and elevate the stories and safe streets visions of residents. Videos will be published via social and online media as a series of three two-minute videos documenting the engagement process and highlighting neighborhood stories.

Project Agency: Free Bikes 4 Kidz Maryland	
Agency Type: Non-profit	**Agency Location:** Howard County
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-215
Project Funds / Type: $7,650.00 / Bikeways	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	VI. Communications Program
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 14
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-10; C-11 (Appendix B)
Explanation:	The NHTSA Highway Safety Program Guideline No. 14 for Pedestrian and Bicycle Safety includes sections on Communications and Outreach. Specifically, both sections dictate that SHSOs are encouraged to integrate culturally relevant pedestrian and bicycle safety programs into local traffic safety injury prevention initiatives and local transportation plans, to provide culturally relevant materials and resources to promote pedestrian and bicycle safety education programs and ensure that State and community pedestrian and bicycle programs contain a comprehensive communication component to support program and policy efforts.
Allocated Funding Type:	402; 405h; SMDF; Bikeways
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(C)

SHSP Strategy:

- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.
- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.

Project Description: This grant will allow Free Bikes 4 Kidz Maryland to purchase bicycle helmets and inner tubes to enhance their efforts with Howard County's existing bicycle safety education program and their own bicycle and helmet giveaway program for underserved youth within Howard County.

Free Bikes 4 Kidz, together with their partners (Bike HoCo and Howard County Public Schools) will give elementary school children thorough bicycle safety training and, with parental permission, a helmet for those children who do not own one. Donated bicycles will be refurbished and used with elementary school students during the educational trainings.

Project Agency: Maryland Institute for EMS Systems	
Agency Type: State EMS Department	**Agency Location:** Statewide
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-030
Project Funds / Type: $29,298.00 / Bikeways	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	VI. Communications Program
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 14
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-10; C-11 (Appendix B)
Explanation:	The NHTSA Highway Safety Program Guideline No. 14 for Pedestrian and Bicycle Safety includes sections on Communications and Outreach. Specifically, both sections dictate that SHSOs are encouraged to integrate culturally relevant pedestrian and bicycle safety programs into local traffic safety injury prevention initiatives and local transportation plans, to provide culturally relevant materials and resources to promote pedestrian and bicycle safety education programs and ensure that State and community pedestrian and bicycle programs contain a comprehensive communication component to support program and policy efforts.
Allocated Funding Type:	402; 405h; SMDF; Bikeways
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(C)

SHSP Strategy:

- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.
- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.

Project Description: This project seeks to reduce the incidence of significant head injury and death in Maryland due to bicycle crashes through coordination of the production of educational materials, frequent social media communications, development of new partnerships and maintaining existing ones, and distribution of bike helmets through Safe Kids partnerships in Maryland. Bicycle safety education and helmet distribution will be provided to high-risk areas of the state to support existing local experts.

Project Agency: Neighborhood Design Center	
Agency Type: Non-profit	**Agency Location:** Baltimore City and Prince George's County
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-164
Project Funds / Type: $85,291.23 / SMDF	**Indirect Costs / Type:**
Countermeasures:	
Countermeasure:	4.1 Pedestrian Safety Zones
Effectiveness:	★★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	Low
Time:	Medium
Performance Target:	C-10 (Appendix C)
Explanation:	Pedestrian zone programs are known to have been implemented in only a handful of cities. Properly designed and implemented pedestrian zone programs have been shown effective in reducing crashes and injuries for older pedestrians (Blomberg & Cleven, 1998), for impaired pedestrians (Blomberg & Cleven, 2000), and for child and adult pedestrian crashes in Miami-Dade County (Zegeer, Blomberg, et al., 2008; Zegeer, Henderson, et al., 2008) and in decreasing pedestrian fatalities (Dunckel et al., 2014).
Allocated Funding Type:	402; 405h; SMDF; Bikeways
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(C)
Countermeasure:	2.2 Safe Routes to School
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$
Use:	High
Time:	Short
Performance Target:	C-10 (Appendix C)
Explanation:	SRTS efforts include a 3E approach to pedestrian and bicycle safety addressing engineering, education, and enforcement (programs can also include encouragement, evaluation, environment, engagement, and equity considerations). SRTS programs including education and training can be effective in teaching children and their parents how to evaluate and choose the safest routes for walking or bicycling to and from school, what safe behaviors are associated with walking and biking, and instilling the need to practice and model safe behaviors when walking, biking or driving around children walking/biking to school, how to use common engineering treatments to enhance their safety (sidewalks, crosswalks), the need to

	adhere to crossing guard direction, and to abide by traffic laws, especially in and around school zones.
Allocated Funding Type:	402; 405h; SMDF; Bikeways
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(C)

SHSP Strategy:

- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.
- Improve roadway environments related to pedestrians and bicyclists by influencing the implementation of system-wide countermeasures, engineering treatments, and land-use planning.
- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.

Project Description: The Neighborhood Design Center (NDC) will support Maryland's highway safety goals in 2023-2024 by building upon the successes and learnings of the Made You Look toolkit during the past five years. Th toolkit is a step-by-step guide to help communities through the process of securing funding, community listening and more to create Art in the Right of Way projects in their neighborhoods – with a goal of traffic calming and safer spaces for pedestrians and bicyclists. The NDC will train staff on the implementation of the Made You Look toolkit, to expand and adapt the toolkit to other areas of Maryland, starting in Prince George's County.

Project Agency: Baltimore Metropolitan Council	
Agency Type: Metropolitan Planning Organization	**Agency Location:** Anne Arundel, Baltimore, Carroll, Harford, Howard, Queen Anne's Counties, and Baltimore City
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-179
Project Funds / Type: $450,000.00 / BIL 405h NM	**Indirect Costs / Type:**

Countermeasures:	
Countermeasure:	4.4 Enforcement Strategies
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$
Use:	Low
Time:	Short
Performance Target:	C-10; C-11 (Appendix C)
Explanation:	Enforcement is largely a local option, and often is integrated into other police duties, so special enforcement efforts are difficult to isolate and track. However, the use of targeted pedestrian safety enforcement is on the rise. Several localities (including Chicago, Detroit, Miami, Pinellas County, Florida and Raleigh/Durham, North Carolina) and States such as New Jersey and New Mexico have, in the past few years, implemented training for LEOs and conducted targeted enforcement efforts for pedestrian safety. The Watch for Me NC campaign and another Florida enforcement program in Gainesville have been evaluated and are described below.
Allocated Funding Type:	402; 405h; SMDF; Bikeways
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(C)

SHSP Strategy:

- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.
- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.

Project Description: This project supports and expands the Baltimore Metropolitan Region's Look Alive pedestrian and bicycle safety education and media campaign. This campaign, featuring "Signal Woman" aims to provide educational outreach for pedestrians, bicyclists, and drivers to raise awareness of the rules that protect the most vulnerable road users. The FY 2024 campaign will help educate drivers, pedestrians and cyclists and bring down the number of crashes, injuries, and fatalities.

Project Agency: BYKE Collective	
Agency Type: Non-profit	**Agency Location:** Baltimore City
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-163
Project Funds / Type: $48,740.41 / SMDF (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $4,430.95 / SMDF

Countermeasures:

Countermeasure:	3.1 Active Lighting and Rider Conspicuity
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$
Use:	High
Time:	Varies
Performance Target:	C-11 (Appendix C)
Explanation:	Most States have laws requiring use of active lights and reflectors on bikes ridden at night. There are no data on how frequently active lighting is used among those who bicycle after dark, but bicyclists involved in collisions at night appear to use lights infrequently. Use of bicycle reflectors is thought to be higher since they come pre-attached to bicycles at purchase, but these may be removed, or broken, after purchase, so use is not guaranteed. Nearly three-fourths of U.S. survey respondents who reported having ridden in the dark reported they took some measures, either using a bike headlight or reflective/fluorescent gear or clothing, to make themselves more visible (Schroeder & Wilbur, 2013). Most, if not all, athletic shoes contain some retroreflective material. Some athletic clothing also has retroreflective material. Bicycle helmets may have retroreflective elements. Some bicyclists may be seen wearing additional retroreflective materials, such as vests, jackets, arm bands, or rear-mounted reflective triangles located under their bicycle seats.
Allocated Funding Type:	402; 405h; SMDF; Bikeways
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(C)

SHSP Strategy:

- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.

Project Description: This project will increase accessibility to resources and practices about bike safety risk reduction tactics for people of color in Baltimore City between the ages of 8-24 years. By providing resources and education about pedestrian rights and awareness, BYKE Collective will equip youth residents to become more aware of their safety. This project will be shared with four youth-center bike organizations, which primarily serve people of color populations (approximately 80 percent Black/ African American and 20

percent Latinx) between 13-24 years of age, with direct services in five city council districts (10, 11, 12, 23, 14) and expanding services in five other city council districts (2, 3, 6, 7, 9). BYKE Collective will host several education events as well as youth-led bike rides. To ensure the authenticity and community buy-in, BYKE collective will hire youth ambassadors from each partner organization to lead these activities. Youth ambassadors will be tasked with learning about pedestrian and bike safety practices, importance of reflective apparel, and will host night bikes rides throughout Baltimore City.

Project Agency: Children's Safety Village	
Agency Type: Non-profit	**Agency Location:** Washington County
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-222
Project Funds / Type: $4,950.00 / SMDF	**Indirect Costs / Type:**
Countermeasures:	

Countermeasure:	2.1 Elementary-Age Child Pedestrian Training
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$
Use:	Unknown
Time:	Short
Performance Target:	C-10 (Appendix C)
Explanation:	Elementary school pedestrian training equips school-age children with knowledge and practice to enable them to walk safely in environments with traffic and other safety hazards.
Allocated Funding Type:	SMDF
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(C)

SHSP Strategy:

- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.

Project Description: This grant will provide for the purchase of one mini-car to aid in the Children's Safety Village's ongoing youth traffic safety programming efforts, providing bike, car, pedestrian and personal safety lessons to approximately 2,500 second grade students per year.

Project Agency: Metropolitan Washington Council of Governments	
Agency Type: Metropolitan Planning Organization	**Agency Location:** Charles, Montgomery, and Prince George's County
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-089
Project Funds / Type: $37,719.77 / BIL 402; $162,594.30 / BIL 405h NM; $49,685.93 / SBIL 405h NM	**Indirect Costs / Type:**

Countermeasures:	
Countermeasure:	4.4 Enforcement Strategies
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$
Use:	Low
Time:	Short
Performance Target:	C-10; C-11 (Appendix C)
Explanation:	Enforcement is largely a local option, and often is integrated into other police duties, so special enforcement efforts are difficult to isolate and track. However, the use of targeted pedestrian safety enforcement is on the rise. Several localities (including Chicago, Detroit, Miami, Pinellas County, Florida and Raleigh/Durham, North Carolina) and States such as New Jersey and New Mexico have, in the past few years, implemented training for LEOs and conducted targeted enforcement efforts for pedestrian safety. The Watch for Me NC campaign and another Florida enforcement program in Gainesville have been evaluated and are described below.
Allocated Funding Type:	402; 405h; SMDF; Bikeways
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(C)

SHSP Strategy:

- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.
- Support policy, legislation, and adjudication efforts to advance pedestrian and bicycle safety.
- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.

Project Description: This project supports the Washington Metropolitan Region's Shattered Lives pedestrian and bicycle safety education and media campaign by providing advertising, public relations support, and other tools to its member jurisdictions. Jurisdictions then carry out the necessary engineering and enforcement elements.

Project Agency: Morgan State University	
Agency Type: Higher Education Institute (HBCU)	**Agency Location:** Baltimore City / Statewide
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-238
Project Funds / Type: $81,038.00 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $17,238 / BIL 402

Countermeasures:

Countermeasure:	2.2 Bicycle Safety Education for Adult Cyclists
Effectiveness:	★
Additional Supportive Research:	NHTSA Pedestrian and Bicyclist Technical Assessment - recommendation from the Pedestrian and Bicyclist Technical Assessment states: "Evaluate the effectiveness of pedestrian and bicyclist safety improvements that have been implemented in Maryland and develop Maryland-specific Crash Modification Factors (CMFs) for these types of improvements." This study would show the preferred method of infrastructure treatments.
Cost:	$$
Use:	Low
Time:	Medium
Performance Target:	C-11 (Appendix C)
Explanation:	The goal of bicycle safety education for adult bicycle commuters is to improve knowledge of laws, risks, and cycling best practices, and to lead to safer cycling behaviors, including riding predictably and use of safety materials such as reflective clothing and helmets. This countermeasure can include educational material, tip sheets, and a pledge program for local agencies to adopt and disseminate.
Allocated Funding Type:	402; 405h; SMDF; Bikeways
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(C)

SHSP Strategy:

- Use the collection, analysis, and evaluation of data on all roads in Maryland to identify pedestrian and bicycle safety issues, key audiences and locations of concern, as well as support the improvement of the data quality (accessibility, accuracy, completeness, integration, timeliness, uniformity).
- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.
- Improve roadway environments related to pedestrians and bicyclists by influencing the implementation of system-wide countermeasures, engineering treatments, and land-use planning.
- Support policy, legislation, and adjudication efforts to advance pedestrian and bicycle safety.
- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.

Project Description:

This project aims to reduce the number of crashes involving pedestrians and bicyclists and to improve their safety in Baltimore City by exploring the effect of various protective features on crashes, investigating bike lane types, as well as educating the public about the advantages of bicycling.

Evaluation of bike lane types will be investigated using data collected through an online questionnaire as well as in-person at the Morgan State bike simulator lab.

Investigation of potential reasons behind crashes involving pedestrians and bicyclists will include the effect of the neighborhood's walk score, the existence of bike lanes, the neighborhood's average household incomes, neighborhood residents' major race, neighborhoods bicycle and pedestrian crashes and high-risk locations, etc.

Project Agency: Washington Area Bicyclist Association	
Agency Type: Non-profit	**Agency Location:** Prince George's County
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-233
Project Funds / Type: $109,436.25 / SMDF (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $9,948.75 / SMDF

Countermeasures:

Countermeasure:	State of Maryland Assessment for Pedestrian and Bicyclist Safety
Effectiveness:	N/A
Additional Supportive Research:	State of Maryland Assessment for Pedestrian and Bicyclist Safety conducted in Spring 2022.
Cost:	$$
Use:	Low
Time:	Medium
Performance Target:	C-11 (Appendix C)
Explanation:	The goal of bicycle safety education for adult bicycle commuters is to improve knowledge of laws, risks, and cycling best practices, and to lead to safer cycling behaviors, including riding predictably and use of safety materials such as reflective clothing and helmets. This countermeasure can include educational material, tip sheets, and a pledge program for local agencies to adopt and disseminate.
Allocated Funding Type:	402; 405h; SMDF; Bikeways
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(C)

SHSP Strategy:

- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.
- Support policy, legislation, and adjudication efforts to advance pedestrian and bicycle safety.
- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.

Project Description: The project will center youth leaders as they conduct outreach to school leaders in Prince George's County. With support from Zero Deaths Maryland, under the umbrella of the 'Vision Zero Youth Leadership Institute', WABA will select a team of four youth (age 14-18) Vision Zero Leaders who live in Prince George's County to work with WABA staff to design and implement a community engagement plan introducing youth involved traffic crash data to school leaders in Prince George's County. The team of youth Vision Zero leaders will host a youth town-hall with over 100 students (age 14-18) in attendance. During the town-hall, the leaders will explain how to report traffic crashes, discuss the importance of driving safety, and introduce a how-to toolkit to give the students instructions on how to become Vision Zero Leaders at their school. After the town-hall, the toolkit will be uploaded to WABA's website for any youth to use. Youth leaders will be active in a variety of professional development sessions and will receive mentorship that will allow them to grow their professional skills in transportation advocacy.

Project Agency: Emergency Responder Safety Institute	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Pedestrian/Bicycle	**Project Number:** GN 24-177
Project Funds / Type: $11,689.12 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $556.62 / BIL 402

Countermeasures:

Countermeasure:	VII. Public Information and Education
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 11
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	Appendix B – Distracted Driving
Explanation:	The MHSO has coordinated multiple internal program assessments over the past three years, including those for Occupant Protection and Pedestrian/Bicyclist Safety. In those assessments, recommendations were made to continue outreach to the general public regarding traffic safety issues and this program seeks to educate the public about how dangerous driving behaviors affect first responders and their safety. In the NHTSA Uniform Guidelines, Number 11, it states that public awareness and education about the EMS system are essential to a high-quality system. Each State should implement a public information and education (PI&E) plan to address. In addition, per the NHTSA Uniform Guidelines Number 11, each State should ensure that its EMS system has essential trained persons to perform required tasks. These personnel include: first responders (e.g., police and fire), prehospital providers (e.g., emergency medical technicians and paramedics), communications specialists, physicians, nurses, hospital administrators, and planners. This grant would seek to increase the training level of EMS clinicians and first responders in evaluating crash scenes, including accurate identification of seat belt use, and proper data documentation.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(vi)

SHSP Strategy:

- Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.

• Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicycle safety.
Project Description: This grant will allow the Emergency Responder Safety Institute to continue cooperative agreements with MD Visitor Centers, Rest Stops and other venues within the state where they regularly meet with drivers and their families and provide materials about the dangers associated with distracted driving and the need to Slow Down and Move Over when approaching emergency scenes. Static displays with literature are made available when a physical presence cannot be made.

For all the enforcement-related grants listed below, the following information applies:

Project Agency: Various (see below)	
Agency Type: State and Local Law Enforcement Agencies	**Agency Location:** Statewide
Program Area: Pedestrian Safety	**Project Number:** Various (see below)
Project Funds / Type: 132,981.77 / SMDF	**Indirect Costs / Type:**
Countermeasures:	

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-10; C-11 (Appendix C)
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	SMDF
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy: • Support the improved enforcement of pedestrian- and bicycle-related laws, as well as support enforcement initiatives that promote safe behaviors.
Project Description: HVE for pedestrian safety

Agency	Project Number	Program Area	Obligated Amount
Aberdeen Police Department	LE 24-227	Pedestrian/Bicycle	$1,004.80
Anne Arundel County Police Department	LE 24-093	Pedestrian/Bicycle	$10,000.00

Agency	Project Number	Program Area	Obligated Amount
Baltimore City Police Department	LE 24-261	Pedestrian/Bicycle	$1,500.00
Baltimore County Police Department	LE 24-020	Pedestrian/Bicycle	$34,000.00
Bel Air Police Department	LE 24-203	Pedestrian/Bicycle	$2,000.00
Calvert County Sheriff's Office	LE 24-243	Pedestrian/Bicycle	$3,000.00
Carroll County Sheriff's Office	LE 24-042	Pedestrian/Bicycle	$2,500.00
Cecil County Sheriff's Office	LE 24-159	Pedestrian/Bicycle	$2,000.00
Charles County Sheriff's Office	LE 24-063	Pedestrian/Bicycle	$10,000.00
City of Bowie	LE 24-131	Pedestrian/Bicycle	$2,000.00
City of Hyattsville Police Department	LE 24-186	Pedestrian/Bicycle	$1,000.00
Cumberland Police Department	LE 24-014	Pedestrian/Bicycle	$1,000.00
Greenbelt Police Department	LE 24-141	Pedestrian/Bicycle	$1,000.00
Havre de Grace Police Department	LE 24-204	Pedestrian/Bicycle	$1,500.00
Howard County Department of Police	LE 24-228	Pedestrian/Bicycle	$5,000.00
Maryland Capitol Police	LE 24-070	Pedestrian/Bicycle	$1,500.00
Maryland State Police - Statewide	LE 24-115	Pedestrian/Bicycle	$12,000.00
Mount Airy Police Department	LE 24-101	Pedestrian/Bicycle	$1,000.00
Ocean City Police Department	LE 24-086	Pedestrian/Bicycle	$14,985.00
Prince George's County Police Department	LE 24-251	Pedestrian/Bicycle	$20,000.00
Princess Anne Police Department	LE 24-041	Pedestrian/Bicycle	$1,991.97
Riverdale Park Police Department	LE 24-127	Pedestrian/Bicycle	$1,000.00
University of Maryland Department of Public Safety	LE 24-190	Pedestrian/Bicycle	$3,000.00

Traffic Safety Information System Improvement Program

Action Plan

NHTSA defines Traffic Records performance measures as tools for measuring data quality and establishing goals for data improvement. NHTSA has established the following six characteristics of quality traffic records: Timeliness, Accuracy, Completeness, Uniformity, Integration, and Accessibility. The Maryland Highway Safety Office uses a data-driven process to determine funding allocations that help to improve data quality.

Project Agency: University of Maryland Baltimore, NSC	
Agency Type: Higher Education Institute	**Agency Location:** Statewide
Program Area: Traffic Records	**Project Number:** GN 24-056
Project Funds / Type: $349,390.55 / BIL 405c TR Data; $683.16 / SBIL 405c TR Data (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $72,096.47 / BIL 405c TR Data; $140.97 / SBIL 405c TR Data
Countermeasures:	
Countermeasure:	Traffic Records
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 10

Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	All performance targets
Explanation:	Each State, in cooperation with its political subdivisions and tribal governments, should implement a traffic records system (TRS) to support highway and traffic safety decision-making and long-range transportation planning. A complete TRS is necessary for identifying the locations and causes of crashes, for planning and implementing countermeasures, for operational management and control, and for evaluating highway safety programs and improvements.
Allocated Funding Type:	405c TR
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(D)

SHSP Strategy:

- Use the collection, analysis and evaluation of data on all roads in Maryland to identify impaired driving related issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration).

Project Description: This project supports data analysis for the MHSO and statewide partners and administrative support for MHSO's Traffic Records Program. In conjunction with Washington College, this project will assist the MHSO in developing dashboards on Qlik systems, managed by MDOT using MSCAN data.

Project Agency: Washington College	
Agency Type: Higher Education Institute	**Agency Location:** Statewide
Program Area: Traffic Records	**Project Number:** GN 24-241
Project Funds / Type: $518,410.15 / BIL 405c TR Data (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $90,264.94 / BIL 405c TR Data

Countermeasures:

Countermeasure:	Traffic Records
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 10
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	All performance targets
Explanation:	Each State, in cooperation with its political subdivisions and tribal governments, should implement a traffic records system (TRS) to support highway and traffic safety decision-making and long-range transportation planning. A complete TRS is necessary for identifying the locations and causes of crashes, for planning and implementing countermeasures, for operational management and control, and for evaluating highway safety programs and improvements.
Allocated Funding Type:	405c TR
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(D)

SHSP Strategy:

- Use the collection, analysis and evaluation of data on all roads in Maryland to identify impaired driving related issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration).

Project Description: This project will focus on strategies that will improve the ability to use data-driven analysis to reduce crashes and deaths on Maryland roads. This project also includes attendance at conferences to promote highway safety projects and practices in Maryland and provides training sessions, presentations, webinars, and technical support to MHSO staff, LEA partners, EA teams, etc. on all products/services provided by Washington College, in addition to GIS techniques and processes for traffic safety related datasets. The web application Traffic Safety Portal will be maintained, updated, and expanded to promote RAVEN. This project, in conjunction with the University of Maryland Baltimore, NSC, will provide administrative support for MHSO's Traffic Records Program.

Project Agency: Crash Center for Research and Education (CORE)	
Program Area: Special Projects	**Project Number:** GN 24-126
Project Funds / Type: $53,296.07 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $10,419.10 / BIL 402

Countermeasures:

Countermeasure:	Traffic Records
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 10
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	All performance measures
Explanation:	Each State, in cooperation with its political subdivisions and tribal governments, should implement a traffic records system (TRS) to support highway and traffic safety decision-making and long-range transportation planning. A complete TRS is necessary for identifying the locations and causes of crashes, for planning and implementing countermeasures, for operational management and control, and for evaluating highway safety programs and improvements.
Allocated Funding Type:	405c TR
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(D)

SHSP Strategy:

- Use the collection, analysis and evaluation of data on all roads in Maryland to identify impaired driving related issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration).

Project Description: This study offers a sophisticated data analysis resource to quantify the impact of changes in roadway usage, behavioral interventions and enforcement on serious and fatal crash involvement in the context of other changing factors by Maryland jurisdiction over time. This information will be useful for MHSO understanding and may support outreach and communications with stakeholders in the state.

Police Traffic Service Program

Action Plan

Police traffic services projects funded for FFY 2024 are listed below:

Project Agency: Maryland Chiefs of Police	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Impaired Driving	**Project Number:** GN 24-059
Project Funds / Type: $142,850.00 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $10,350.00 / BIL 402

Countermeasures:

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-5 (Appendix C)
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description: The MCPA will sponsor the University of Maryland's DUI Institute and DUI Conference. The registrations and awards offered by the MCPA allow patrol officers from across the state who excel in DUI enforcement, to be trained in all aspects of the issues surrounding DUI enforcement and recognized for their efforts. This training is not designed to teach officers how to find, test and apprehend suspected impaired drivers, but is designed to look at the bigger picture and issues surrounding DUI arrest.

Project Agency: Maryland Chiefs of Police	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Special Projects	**Project Number:** GN 24-060
Project Funds / Type: $95,850.00 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $7,350.00 / BIL 402

Countermeasures:

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	All performance targets
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description: The Maryland Chiefs of Police Annual Training Conference held in September 2024, is the start of bridging the gap of training needs. The top-level executives are offered a verity of educational sessions, including information on the state's Vision Zero goal. Training sessions are planned to help educate the executives on traffic safety issues, new and emerging trends, countermeasures, and the goals of the SHSP. Leading Effective Traffic Enforcement Programs (LETEP) training is also scheduled to take place in November 2023 and March 2024. This grant also supports Maryland's Traffic Safety Specialist Program, Annual Governor's Highway Safety Association Conference attendance, Highway Safety Training for Patrol Supervisors, the annual DUI Conference, and DRE Conference.

Project Agency: Baltimore County Police Dept - Crash Recon	
Agency Type: County Law Enforcement Agency	**Agency Location:** Statewide
Program Area: Special Projects	**Project Number:** GN 24-172
Project Funds / Type: $58,000.00 / BIL 402	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	All performance targets
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description: This project supports training to Maryland's Crash Reconstructionist personnel throughout the state by Maryland's Crash Reconstruction Committee. The program provides students with updates in this technology-driven field of crash reconstructions and ensures courses are highly specialized and effective.

Project Agency: Chesapeake Region Safety Council	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Special Projects	**Project Number:** GN 24-106
Project Funds / Type: $347,005.24 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $31,545.93 / BIL 402

Countermeasures:

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	All performance targets
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402 / 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description: This project will support the Maryland Highway Safety Office's Law Enforcement Services Section. The section coordinates directly with the office's largest group of grantees, law enforcement. This project will support the four Law Enforcement Liaisons (LELs). The LELs will ensure active engagement and collaboration between the MHSO and the local law enforcement community. They will oversee the MHSO's law enforcement grants (approx. 90 grants) and projects, promote and coordinate participation in the MHSO's high visibility enforcement waves, recruit, coordinate, and deliver training. LELs will also engage with the community and ensure alignment of law enforcement priorities within Maryland's Strategic Highway Safety Plan.

Project Agency: Maryland Sheriffs' Association, Inc.	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Special Projects	**Project Number:** GN 24-057
Project Funds / Type: $3,300.00 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $300.00 / BIL 402

Countermeasures:

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	All performance targets
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402 / 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description: The grant will support traffic records training for law enforcement officers to enhance enforcement efforts by attending the Traffic Records Forum event. Attendees can participate in sessions for the latest safety data collection methods and best practices and learn how to: improve the accuracy of traffic records and highway safety data, apply performance goals/measures in traffic records system improvements, implement a model traffic records system, organize and operate a successful traffic records committee, recognize the importance of standards and guidelines for traffic records systems, become acquainted with new technologies and ideas, network with a variety of transportation and highway safety professionals, and discover how better data can help save lives. The Maryland Sheriffs Association will hold an annual training meeting at Rocky Gap Conference Center Western Maryland to educate executive Law Enforcement leaders in traffic safety initiatives and engagements.

Project Agency: Wor-Wic Community College	
Agency Type: Higher Education Institute	**Agency Location:** Eastern Shore
Program Area: Special Projects	**Project Number:** GN 24-182
Project Funds / Type: $7,600.00 / BIL 402	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	All performance targets
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402 / 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description: This project provides law enforcement training (ARIDE, Radar Speed Measurement, NHTSA Instructor Development, and Collision Reconstruction) for law enforcement officials on the Eastern Shore who are unable to travel to trainings offered elsewhere.

Program Support

Action Plan

Program support projects funded for FFY 2024 are listed below:

Project Agency: MML PEA Committee 2023/2024	
Agency Type: Non-Profit	**Agency Location:** Statewide
Program Area: Special Projects	**Project Number:** GN 24-124
Project Funds / Type: $7,000.00 / BIL 402	**Indirect Costs / Type:**
Countermeasures:	
Countermeasure:	Traffic Enforcement Services
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 15
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	All performance targets
Explanation:	The highway safety program should include a traffic enforcement services program designed to enforce traffic laws and regulations; reduce traffic-crashes and resulting fatalities and injuries; provide aid and comfort to the injured; investigate and report specific details and causes of traffic crashes; supervise traffic crash and highway incident clean-up; and maintain safe and orderly movement of traffic along the highway system.
Allocated Funding Type:	402 / 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Support the enforcement of laws pertaining to the impaired driving Emphasis Area, as well as support enforcement initiatives that promote safe behaviors.

Project Description: The Maryland Municipal League Police Executive Association Training Conference held in April is the start of bridging the gap of these training needs. The top-level executives are offered a variety of educational sessions. MML-PEA has partnered with MHSO to promote the states' goal of "Zero Deaths." One 90-minute plenary training session along with a lunch speaker is planned to help educate the executives on new and emerging traffic safety issues, countermeasures, and the goals of the " Zero Deaths" campaign.

Project Agency: Baltimore Metropolitan Council	
Agency Type: Metropolitan Planning Organization	**Agency Location:** Anne Arundel, Baltimore, Carroll, Harford, Howard, Queen Anne's Counties, and Baltimore City
Program Area: Special Projects	**Project Number:** GN 24-029
Project Funds / Type: $133,329.64 / SMDF	**Indirect Costs / Type:**
Countermeasures:	

Countermeasure:	The Importance of Developing a Local Road Safety Plan
Effectiveness:	N/A
Additional Supportive Research:	Supported by U.S. DOT's Federal Highway Administration
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	All performance targets
Explanation:	The purpose of an SHSP is to identify the State's key safety needs and guide investment decisions to achieve significant reductions in highway fatalities and serious injuries on all public roads. Very often a State's SHSP will include local and or rural roads as a specific emphasis area for safety improvements. An LRSP can also be valuable for improving roadway safety. Local road practitioners across the country play a critical role in addressing crash risks at the local level and may be able to identify the specific or unique conditions that contribute to crashes within their jurisdictions. The LRSP offers a foundation for consensus and focus. It defines key emphasis areas and strategies that impact local rural roads and provides a framework to accomplish safety enhancements at the local level, whereas the SHSP prioritizes safety needs and investments at the State level. However, the State SHSP may provide inputs to the LRSP. Likewise, the LRSP can feed the SHSP process to identify local road specific safety issues. Altogether, the LRSP is a coordinated effort that assists local agencies in taking a proactive stance in reducing and preventing local road fatalities and injuries.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)

SHSP Strategy:

- This grant supports multiple SHSP strategies.

Project Description:

Strategic planning is a proven effective process when all partners are engaged throughout the planning, implementation, and evaluation phases. In the Baltimore region, each jurisdiction has agency and/or executive support for developing a Strategic Highway Safety Plan (SHSP); however, administrative support and expert guidance is a clear need expressed by all jurisdictions.

To support each phase of strategic planning in each jurisdiction, this proposal will support a full-time position at the Baltimore Metropolitan Council (BMC) to provide expert guidance, logistical support, and enhanced connections to the statewide SHSP. In FY 2024, this will include implementation and interim evaluations for Anne Arundel, Baltimore, Carroll, Harford, and Howard County and Baltimore City plans, comprehensive evaluation of the previous plan in Harford County (if not completed in FY 2023), and continued development and implementation of a plan in Queen Anne's County.

Project Agency: DRIVE SMART Virginia	
Agency Type: Non-profit	**Agency Location:** Statewide
Program Area: Special Projects	**Project Number:** GN 24-219
Project Funds / Type: $77,953.56 / BIL 402 (Note: Total includes Indirect Cost)	**Indirect Costs / Type:** $7,086.69 / BIL 402

Countermeasures:

Countermeasure:	Program Management
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 20
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	All performance targets
Explanation:	Each State, in cooperation with its political subdivisions, tribal governments, and other parties as appropriate, should develop and implement a comprehensive highway safety program, reflective of State demographics, to achieve a significant reduction in traffic crashes, fatalities, and injuries on public roads. The State Highway Safety Office should provide leadership, training and technical assistance to other State agencies and local occupant protection programs and projects.
Allocated Funding Type:	402
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(vii)

SHSP Strategy:

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on multiple emphasis areas.

Project Description: DRIVE SMART Virginia will assist the Maryland Highway Safety office in planning for the 2024 Maryland Highway Safety Summit. DRIVE SMART will invite expert speakers from across the country to bring their knowledge to Maryland for breakout sessions. The track topics will be discussed with Maryland and focus on the topics MDOT feels is most important. DRIVE SMART will secure and contract with the Summit property, research, invite, and coordinate speakers, manage the event app, and plan for conference A/V needs and logistics through the property contract.

Project Agency: Garrett County Commissioners	
Agency Type: County Board of Commissioners	**Agency Location:** Garrett County
Program Area: Special Projects	**Project Number:** GN 24-144
Project Funds / Type: $40,000.00 / SMDF	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	V. Communications Program
Effectiveness:	N/A
Additional Supportive Research:	Uniform Guidelines for State Highway Safety Programs, Highway Safety Program Guideline No. 4
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-5 (Appendix B)
Explanation:	Per NHTSA's Uniform Guidelines, NHTSA recommends that states should develop and implement communication strategies directed at supporting policy and program elements, specifically in collaboration and cooperation with driver education and training and highway safety partners, and should consider a statewide communications plan and campaign that: 1) Informs the public, especially parents, about State GDL laws; 2) Identifies audiences at particular risk and develops appropriate messages; 3) Provides culturally competent materials; 4) Informs parents/guardians and young drivers about the role of supervised driving and the State's GDL law; 5) Informs novice drivers about underage drinking and zero tolerance laws (in effect in all 50 States and the District of Columbia), such as including information in manuals for new drivers and including a question about the topic on the written test for a learner's permit; 6) Informs the public on the role of parental monitoring/involvement; and 7) Informs the public about State guidelines and regulation of driver education.
Allocated Funding Type:	402; 405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(B)(i)

SHSP Strategy:

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on multiple emphasis areas.

Project Description:

Garrett County will procure the professional services of a planner/planning firm to prepare two local SHSPs (Garrett and Allegany counties), through Garrett County's sealed competitive proposal process.

The consultant will attend and organize a project kick-off meeting to discuss the goals, objectives, tasks,

timeline, the Counties' expectations and MDOT’s grant requirements. Each County is responsible for creating a steering committee comprised of representatives from stakeholder. The consultant shall produce an inventory of opportunity areas to facilitate safety improvements and complete an in-depth examination of crash statistics. The consultant shall recommend specific mitigations for high crash locations/those in need of specific detailed analysis and determine interim county targets for the Emphasis Areas that will warrant eventual interventions using the 4 E's of Highway Safety.

The consultant shall circulate and/or present the Draft Plans to identified stakeholders, respond to all comments, and incorporate feedback received. The Final LSHSP will be presented to the applicable county officials for approval.

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: MHSO Staffing 1	**Project Number:** GN 24-129
Project Funds / Type: $1,034,077.40/ BIL 402 / $44,973.55 / BIL 405b OP / $42,851.28 / SBIL 405b OP / $148,589.09 / BIL 405c TR Data	**Indirect Costs / Type:**
Countermeasures: MHSO Staffing grants support a wide variety of traffic safety countermeasures.	
SHSP Strategy: • MHSO Staffing grants support a wide variety of statewide SHSP strategies.	
Project Description: This grant provides the mechanism to pay the salaries and benefits of the MHSO staff and be reimbursed by NHTSA for federal expenditures.	

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: MHSO Staffing 2	**Project Number:** GN 24-133
Project Funds / Type: $81,412.59 / BIL 405d AL/ $46,920.00 / SBIL 405d AL / $426,601.78 / BIL 402 / $61,862.67 / BIL 405h NM	**Indirect Costs / Type:**
Countermeasures: MHSO Staffing grants support a wide variety of traffic safety countermeasures.	
SHSP Strategy: • MHSO Staffing grants support a wide variety of statewide SHSP strategies.	
Project Description: This grant provides the mechanism to pay the salaries and benefits of the MHSO staff and be reimbursed by NHTSA for federal expenditures.	

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: MHSO Staffing 3	**Project Number:** GN 24-134
Project Funds / Type: $231,950.55/ SMDF / $406,802.00 / STATE	**Indirect Costs / Type:**
Countermeasures: MHSO Staffing grants support a wide variety of traffic safety countermeasures.	
SHSP Strategy: • MHSO Staffing grants support a wide variety of statewide SHSP strategies.	
Project Description: This grant provides the mechanism to pay the salaries and benefits of the MHSO staff and be reimbursed by NHTSA for federal expenditures.	

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: Planning & Administration	**Project Number:** GN 24-135
Project Funds / Type: $80,607.87 / BIL 402	**Indirect Costs / Type:**
Countermeasures: MHSO Planning & Administration grants support a wide variety of traffic safety countermeasures.	
SHSP Strategy: • MHSO Planning & Administration grants support a wide variety of statewide SHSP strategies.	
Project Description: This grant provides a mechanism to track payments for everyday Planning and Administration costs such as travel, printing and supplies. By tracking these expenses in this grant, these funds are captured for MHSO reporting purposes with our other federal funds.	

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: Communications (Distracted, Occupant Protection, Speeding, Motorcycle)	**Project Number:** GN 24-108
Project Funds / Type: $1,643,904.30 / BIL 402 / $81,095.70 / BIL 405f MC	**Indirect Costs / Type:**
Countermeasures:	
Countermeasure:	5.2 Mass Media Campaigns
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	High
Time:	Medium
Performance Target:	C-4; C-6; C-7, C-8, Distracted Driving Fatalities, and Injuries (Appendix C)
Explanation:	Most states use some form of alcohol-impaired-driving mass media campaign every year. These are essential to many deterrence and prevention countermeasures that depend on public knowledge to be effective. Motorcycle Awareness campaigns will be focused on educating driver's on looking twice for motorcyclists on the roadways through the Be the LOOK TWICE Driver campaign.
Allocated Funding Type:	401 /405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)
SHSP Strategy: • Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on adult and child occupant protection, motorcycle safety, speeding, and distracted driving.	

Project Description: This grant will support and facilitate projects within the Maryland Highway Safety Office's Communications Section to support new and ongoing campaigns, including distracted driving prevention, occupant protection, speeding prevention, and motorcycle safety.

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: Communications (Impaired)	**Project Number:** GN 24-109
Project Funds / Type: $930,000.00 / BIL 405d AL / $237,000.00 / BIL 402	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	5.2 Mass Media Campaigns
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	High
Time:	Medium
Performance Target:	C-5 (Appendix C)
Explanation:	Most States use some form of alcohol-impaired-driving mass media campaign every year. These are essential to many deterrence and prevention countermeasures that depend on public knowledge to be effective.
Allocated Funding Type:	401 /405d AL
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on the concerns of the impaired driving Emphasis Area.

Project Description: This grant will support and facilitate projects within the Maryland Highway Safety Office's Communications Section to support new and ongoing campaigns, including impaired driving prevention and impaired rider prevention.

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: Communications (Pedestrian and Bicycle)	**Project Number:** GN 24-110
Project Funds / Type: $28,852.00 / Bikeways / $276,148.00 / SMDF	**Indirect Costs / Type:**

Countermeasures:

Countermeasure:	5.2 Mass Media Campaigns
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	High
Time:	Medium
Performance Target:	C-10; C-11 (Appendix C)
Explanation:	Most states use some form of alcohol-impaired-driving mass media campaign every year. These are essential to many deterrence and prevention countermeasures that depend on public knowledge to be effective.
Allocated Funding Type:	Bikeways / SMDF
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- Promote a systemic safety culture through the support of outreach initiatives including public awareness, education, training, and media campaigns focused on pedestrian and bicyclist safety.

Project Description: This grant will support and facilitate projects within the Maryland Highway Safety Office's Communications Section to support new and ongoing campaigns, including impaired driving prevention and impaired rider prevention.

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: Grant Management System (GPS)	**Project Number:** GN 24-125
Project Funds / Type: $232,308.80/ BIL 402	**Indirect Costs / Type:**

Countermeasures: The Highway Safety Act of 1978, which amended Section 402(b)(1)(a) of Title 23, United States Code.

SHSP Strategy: N/A

Project Description: This grant will allow the Maryland Highway Safety office to track payments on the contract with 4NP Inc. for the application developers to continue to work on building out and doing the maintenance and support on the grants management system. This includes design, programming, testing, implementation, and troubleshooting.

Preventing Roadside Deaths

Plan for Implementation

Problem Identification

Preventing roadside deaths is related to Maryland's Move Over Laws, with the first law protecting emergency responders such as police, fire, and ambulance in effect starting October 1, 2010; then expanded to include tow trucks starting October 1, 2014; and finally expanded to any stopped, standing, or parked vehicle displaying warning signals since October 1, 2022.

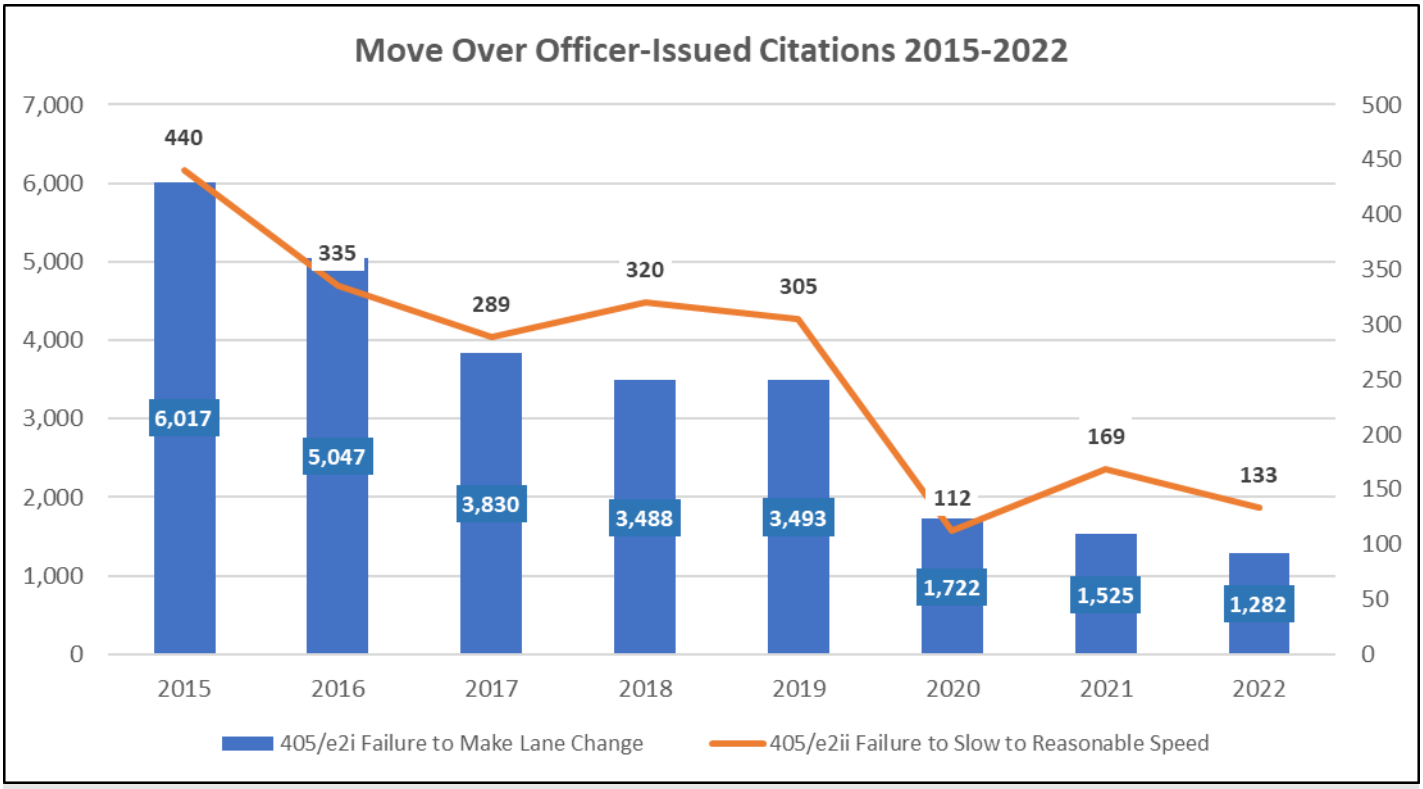
Performance Measures and Targets

Examining this issue through traffic records data has proven to be a challenge for several reasons. Firstly, the Maryland Department of the State Police (MDSP) Automated Crash Reporting System (ACRS) has limited fields and variables by which to analyze crashes involving a vehicle, including the vehicle's occupants, often standing outside the vehicle due to an emergency situation, stopped or standing on the side of the road. Also, some attributes in a crash data field are open for interpretation, therefore some selected attributes would induce some assumptions without intensive additional analysis. An in-depth study of each individual crash report, with analysis to include the narrative, would be resource-intensive, as demonstrated through a recent sampling of reports using this methodology resulted in analysis that was no better or worse than MHSO's initial methodology.

To that end, currently there is no standard definition for a 'move over-related crash,' however, MHSO has developed a query of the crash data that may approximate (some of) the circumstances of such an incident, which includes looking at any vehicle on the shoulder (lane field) with the first or second harmful event equal to a parked vehicle. (There are no attributes for a vehicle to indicate whether warning signals are in use.) A previous query, before the October 2022 law expansion, included only emergency response vehicles.

With this limited query of the data, trends between 2017-2021 indicate there are on average 605 move over-related crashes each year in Maryland, with 3 fatalities and 106 injuries. Given the limitations of the crash data report, this is most likely an undercounting of this issue on Maryland roadways. MHSO will continue to work with MDSP to determine more refined ways to analyze the data and encourage updates to the crash report that will make such analysis easier, for example, a planned upgrade to ACRS in 2024 is expected to include more discernible attributes for non-motorists involved in these incidents (e.g., separate code for emergency responder in the non-motorist field). Additionally, working directly with law enforcement to understand how they are trained to investigate such incidents and what their limitations are will provide additional insight into what can be gleaned from the crash data.

Secondly, while MHSO has access to citation data and can aggregate, summarize, and analyze the issuance of traffic violations related to the Move Over Laws, a deeper understanding of the trends has proven to be a challenge. Overall, in Maryland, all traffic enforcement and subsequent traffic violations have been on a precipitous decline for several years, particularly during the years with the advent of the Move Over laws. Declines in Move Over citations (as shown in the table below) track with similar trends for all moving violations in Maryland. Additionally, the Move Over traffic violations are very difficult for law enforcement to enforce consistently and safely, and require significant resources to implement (for example, requiring several officers to act as spotters and multiple personnel, including coordination with state highway personnel, to safely set up an intervention). Trends in issuance of citations may be related to improved driver behavior (motorists understanding and obeying the law) or may be affected by law enforcement resources and other related challenges, or both.



The citation references are to Maryland's transportation articles:

- 21 405 e2i Failure of driver to make lane change to available lane not immediately adjacent to stopped, standing, or parked vehicle on highway displaying (visual signals, hazard lights, road flares or other caution signals) which carries a fine of 110.00 and one point. If the violation contributed to a crash, the fine is 150.00 and three points. If the violation contributes to a death or serious injury, the fine is 750.00 and three points.

- 21 405 e2ii Failure of driver to slow to a reasonable and prudent speed while passing stopped, standing, or parked vehicle on highway displaying (visual signals, hazard lights, road flares or other caution signals) which carries a fine of 110.00 and one point. If the violation contributed to a crash, the fine is 150.00 and three points. If the violation contributes to a death or serious injury, the fine is 750.00 and three points.

Some additional, though limited, insights can be gained from the citation data. For each traffic violation, there is a selection for whether it contributed to a crash, for example, in 2021, in all 1,525 issuances for failure to make a lane change, 13 (less than 1%) contributed to a crash, and in 2022, 22 violations (less than 2%) contributed to a crash.

A separate query of the ETIX data system shows that despite the declines in traffic violations issued to drivers for these offenses, officers were consistently issuing warnings. (Note: Totals for citations will not match the above table due to different sources – Maryland Judiciary vs. MDSP ETIX – and the inclusion of paper citations in Judiciary data.)

Year	Citations (e2i) Move Over	Citations (e2ii) Slow Down	Total Citations	Warnings (e2i) Move Over	Warnings (e2ii) Slow Down	Total Warnings
2020	1191	35	1226	4154	116	4270
2021	840	46	886	3902	128	4030
2022	772	37	809	4265	141	4406
Totals	2,803	118	2,921	12,321	385	12,706

MDSP has historically not widely released warning data (other than as required by law for race-based stops), but through a partnership with MHSO more of this information is being shared and subsequently analyzed, providing greater insight into traffic stops and traffic safety issues. While a warning has less consequence than a citation, it is a safety intervention and is an opportunity to educate the public about this critical issue in traffic safety.

A study was conducted from December 7-29, 2021, using an online panel sample. While it was conducted before the October 2022 expansion and the promotion of that expansion gaining traction in the public, one can assume some modest improvement in awareness that have not yet been measured, the findings from the 2021 study are still insightful and provide some baseline information to measure successful increases in awareness through program planning.

The research suggests that Maryland drivers lack true knowledge of Maryland's Move Over laws. The drivers surveyed were told that Maryland has several Move Over laws that govern when vehicles should move over or slow down for vehicles parked on the shoulder. When presented with a list of seven types of vehicles and asked to identify which the Move Over laws apply to, only 1% of the drivers surveyed chose the four correct answers and no others: Emergency vehicles (ambulance, fire truck, police), Tow trucks, Department of Public Works (DPW) vehicles (e.g., sanitation trucks, snowplows), and Utility trucks.

A higher proportion of residents (42%) did choose all the correct answers, but they also chose some that were incorrect.

- Emergency vehicles was the most frequently selected correct answer (90%).
- Vehicles that were in a crash was the most frequently selected incorrect answer (71%).

Once the Move Over laws were explained, the drivers surveyed were asked to what speed they would slow down if the speed limit was 55 mph, and they were in a situation where the Move Over laws would apply. More than two-thirds (69%) indicated they would slow down to a speed of 45 mph (24%), 40 mph (25%) or 35 mph (20%).

More than seven in ten Maryland drivers surveyed (72%) believe it is very or somewhat likely that they would be ticketed if they committed a violation of the Move Over Law. Drivers from Western/Eastern/Southern Maryland (84%) are especially likely to assume they would be ticketed.

Worth noting is that MHSO and its partners within MDOT met twice over the past couple of years with analysts from the Government Accountability Office (GAO) who continue to study this as a national issue. Through these discussions and subsequent reporting from the GAO, it is clear Maryland is not unique in its challenges in both analyzing this safety issue and educating the public to be more cognizant and change their behavior.

According to a recent survey conducted by the Associated General Contractors of America and software firm HCSS found that 55 percent of highway contractors said that motor vehicles had crashed into their construction work zones during the past year. The association polled over 900 highway construction firms for its 2023 work zone safety study.

According to the survey results, motorists are in greater danger from highway work zone crashes than construction workers. While 28 percent of contractors participating in the survey experienced crashes that resulted in injury to construction workers, more than twice as many firms – 59 percent – reported experiencing a crash in which drivers or passengers were injured.

Work zone crashes also are twice as likely to result in fatalities to drivers or passengers as construction workers. While eight percent of contractors in the survey report that construction workers were killed in work zone crashes, some 16 percent of respondents said drivers or passengers were killed in those crashes.

Ninety-seven percent of contractors reported in the survey that highway work zones are either as dangerous, or more dangerous, than they were a year ago.

Countermeasures and Strategies

Since this is a new grant opportunity, there are currently no specific *Countermeasures That Work* for Preventing Roadside Deaths, however the below proven effective countermeasures are applicable to this program area and will be used during the initial phase of 405(h) planning and implementation. MHSO is utilizing Performance Target C-10 (Pedestrians) for these projects at this time because there is currently no accurate data collection method that would identify a crash that involved persons alongside the road due to a breakdown, previous crash, work zone activity, or emergency response without reading the narrative of each crash report.

Countermeasure:	5.2 Mass Media Campaigns
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	High
Time:	Medium
Performance Target:	C-10(Appendix B)
Explanation:	Most States use some form of alcohol-impaired-driving mass media campaign every year. These are essential to many deterrence and prevention countermeasures that depend on public knowledge to be effective.
Allocated Funding Type:	402/ 405H

Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

Countermeasure:	4.4 Enforcement Strategies
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$
Use:	Low
Time:	Short
Performance Target:	C-10(Appendix B)
Explanation:	The purpose of enforcement strategies is to increase compliance with the pedestrian and motorist traffic laws that are most likely to enhance the safety of pedestrians in areas where crashes are happening or most likely to happen due to increased pedestrian and motorist exposure.
Allocated Funding Type:	405h
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)

Countermeasure:	Innovative Countermeasure – Digital Alerting
Effectiveness:	N/A
Additional Supportive Research:	Digital alerting has been found to be an effective countermeasure at reducing motorist speed and hard braking events near roadside incidents through research conducted by Purdue University. Additional research from the University of Michigan found advance warning systems like digital alerting reduced the likelihood of collision by 90% compared to traditional lights and sirens alone.
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-10(Appendix B)
Explanation:	Equipping emergency vehicles that operate roadside with digital alerting technology provides early warning to drivers operating vehicles within the vehicle. Digital alerting technology differs from all past methods utilized to notify a driver of an approaching hazard by bringing the alert to within the vehicle to gain the driver's attention.
Allocated Funding Type:	405h
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.

Countermeasure Informed:	23 U.S.C. 402(a)(2)

Countermeasure:	Quality Traffic Records
Effectiveness:	N/A
Additional Supportive Research:	NHTSA defines Traffic Records performance measures as tools for measuring data quality and establishing goals for data improvement.
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	C-10(Appendix B)
Explanation:	NHTSA has established the following six characteristics of quality traffic records: Timeliness, Accuracy, Completeness, Uniformity, Integration, and Accessibility. The Maryland Highway Safety Office uses a data-driven process to determine funding allocations that help to improve data quality.
Allocated Funding Type:	402 / 405c / 1906
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(b)(1)(F)(iv)

Action Plan

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: Preventing Roadside Deaths	**Project Number:** *Will be provided in amendment*
Project Funds / Type: $1,200,000 **/** BIL 405h / *Will be provided in amendment*	**Indirect Costs / Type:** *Will be provided in amendment*
Countermeasures:	
Countermeasure:	5.2 Mass Media Campaigns
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$$
Use:	High
Time:	Medium
Performance Target:	C-5 (Appendix B)
Explanation:	Most States use some form of alcohol-impaired-driving mass media campaign every year. These are essential to many deterrence and prevention countermeasures that depend on public knowledge to be effective.
Allocated Funding Type:	402; 405d AL

Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)(A)(iii)

SHSP Strategy:

- The grant will support multiple SHSP strategies.

Project Description: MHSO will continue to expand and promote two roadside safety campaigns – 'What to do during a roadside emergency' and Be the MOVE OVER Driver through multiple tactics including TV and radio advertising, social media ads, billboards, and sport partnerships. In addition to the two current campaigns developed, MHSO will develop a new Work Zone Safety campaign that encourages Marylanders to slow down and pay attention while driving through work zones.

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: Preventing Roadside Deaths	**Project Number:** *Will be provided in amendment*
Project Funds / Type: BIL 405h / *Will be provided in amendment*	**Indirect Costs / Type:** *Will be provided in amendment*

Countermeasures:

Countermeasure:	4.4 Enforcement Strategies
Effectiveness:	★★★
Additional Supportive Research:	N/A
Cost:	$$
Use:	Low
Time:	Short
Performance Target:	N/A
Explanation:	The purpose of enforcement strategies is to increase compliance with the pedestrian and motorist traffic laws that are most likely to enhance the safety of pedestrians in areas where crashes are happening or most likely to happen due to increased pedestrian and motorist exposure.
Allocated Funding Type:	405h
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)

SHSP Strategy:

- The grant will support multiple SHSP strategies.

Project Description: These funds will be used to educate the public regarding the safety of vehicles and individuals stopped at the roadside through high visibility enforcement conducted by law enforcement agencies across the state. Law enforcement partners will help MHSO spread the message about what to do during a roadside emergency and will enforce Maryland's expanded Move Over or Slow Down law.

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide

Program Area: Preventing Roadside Deaths	**Project Number:** *Will be provided in amendment*
Project Funds / Type: BIL 405h / *Will be provided in amendment*	**Indirect Costs / Type:** *Will be provided in amendment*

Countermeasures:

Countermeasure:	Quality Traffic Records
Effectiveness:	N/A
Additional Supportive Research:	NHTSA defines Traffic Records performance measures as tools for measuring data quality and establishing goals for data improvement.
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	N/A
Explanation:	NHTSA has established the following six characteristics of quality traffic records: Timeliness, Accuracy, Completeness, Uniformity, Integration, and Accessibility. The Maryland Highway Safety Office uses a data-driven process to determine funding allocations that help to improve data quality.
Allocated Funding Type:	402 / 405c / 1906
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(b)(1)(F)(iv)

SHSP Strategy:

- The grant will support multiple SHSP strategies.

Project Description: These funds will be used to improve the crash data collected regarding the safety of vehicles and individuals stopped at the roadside. As mentioned previously, there is currently no set performance measure to accurately track preventing roadside deaths.

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: Preventing Roadside Deaths	**Project Number:** *Will be provided in amendment*
Project Funds / Type: BIL 405h / *Will be provided in amendment*	**Indirect Costs / Type:** *Will be provided in amendment*

Countermeasures:

Countermeasure:	Innovative Countermeasure – Digital Alerting
Effectiveness:	N/A
Additional Supportive Research:	Digital alerting has been found to be an effective countermeasure at reducing motorist speed and hard braking events near roadside incidents through research conducted by Purdue University. Additional research from the University of Michigan found advance warning systems like digital alerting reduced the likelihood of collision by 90% compared to traditional lights and sirens alone.
Cost:	N/A
Use:	N/A
Time:	N/A
Performance Target:	N/A

Explanation:	Equipping emergency vehicles that operate roadside with digital alerting technology provides early warning to drivers operating vehicles within the vehicle. Digital alerting technology differs from all past methods utilized to notify a driver of an approaching hazard by bringing the alert to within the vehicle to gain the driver's attention.
Allocated Funding Type:	405h
Grant Type:	Projects will be funded that incorporate public engagement, traffic safety data, affected communities, impacted locations, solicitation of proposals and that utilize this countermeasure.
Countermeasure Informed:	23 U.S.C. 402(a)(2)

SHSP Strategy:

- The grant will support multiple SHSP strategies.

Project Description: Maryland will deploy digital alerting technology as a software service to first responders. Equipping first responders' vehicles with the ability to send digital alerts to approaching vehicles will provide the advance notice necessary to reduce roadside pedestrian deaths by achieving slow down, move over compliance. Programmatic monitoring will be captured in monthly electronic reports demonstrating key performance indicators including the total number of drivers that were alerted and incidents responded to.

Project Agency: Maryland Highway Safety Office	
Agency Type: State Department of Transportation	**Agency Location:** Statewide
Program Area: Preventing Roadside Deaths	**Project Number:** *Will be provided in amendment*
Project Funds / Type: BIL 405h / *Will be provided in amendment*	**Indirect Costs / Type:** *Will be provided in amendment*

Countermeasures: There are no current countermeasures published by NHTSA for this new tactic in preventing roadside deaths.

SHSP Strategy:

- The grant will support multiple SHSP strategies.

Project Description: These funds will be used to pilot measures that incentivize motorists to increase the visibility of their stopped and disabled vehicles. This includes optical visibility measures and potentially the acquisition of roadside emergency kits that include items suggested by MHSO and MSP (including reflective triangles, a flashing warning light, flashlight, jumper cables, temporary flat tire repair, a blanket, water and a reflective vest.)

Driver and Officer Safety Education

Plan for Implementation

Maryland's Rookie Driver Manual is currently under revision to include enhanced information regarding the roles and responsibilities of the driver and officer during the traffic stop. The new manual will incorporate the five required components as described in the regulations. The expected release date of the new manual is October 1, 2023.

Appendices and Attachments

Appendix A: Certifications and Assurances Part A

Appendix B: Certifications and Assurances Part B

Appendix C: NHTSA Core Performance Report

FY 2023					
Performance Measure	**Target Period**	**Target Year(s)**	**Target Value FFY23 HSP**	**Data Source/ FFY23 Progress Results**	**On Track to Meet FFY23 Target Y/N/In-Progress**
C-1) Total Traffic Fatalities (FARS)	5 year	2019-2023	499.8	2017-2021 FARS ARF 547.8	N
C-2) Serious Injuries in Traffic Crashes (State)	5 year	2019-2023	2,249.6	2017-2021 State 3,094.8	N
C-3) Fatalities/VMT (FARS)	5 year	2019-2023	0.835	2017-2021 FARS ARF 0.960	N
Serious Injury Rate (State)	5 year	2019-2023	3.777	2017-2021 State 5.394	N
Non-motorized Fatalities and Serious Injuries (FARS + State)	5 year	2019-2023	605.8	2017-2021 FARS/State 656.8	N
C-4) Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions (State)	5 year	2019-2023	91.6	2017-2021 State 124.8	N
C-5) Impaired (Alcohol and/or Drugs) Driving Fatalities (State)	5 year	2019-2023	145.8	2017-2021 State 168.6	N
C-6) Speeding-Related Fatalities (State)	5 year	2019-2023	59.3	2016-2020 State 93.0	N
C-7) Motorcyclist Fatalities (State)	5 year	2019-2023	66.9	2017-2021 State 73.6	N
C-8) Unhelmeted Motorcyclist Fatalities (State)	5 year	2019-2023	10.0	2017-2021 State 10.8	Y
C-9) Drivers Ages 20 or Younger Involved in Fatal Crashes (State)	5 year	2019-2023	34.0	2017-2021 State 54.2	N
C-10) Pedestrian Fatalities (State)	5 year	2019-2023	114.7	2017-2021 State 124.4	N
C-11) Bicyclist Fatalities (State)	5 year	2019-2023	8.9	2017-2021 State 9.6	Y

B-1) Observed Seat Belt Use for Passenger Vehicles, Front Seat Outboard Occupants (State Survey)	Annual	2023	93.6%	2022 92.7	Y
Aggressive Driving Fatalities (State)	5 year	2019-2023	30.7	2017-2021 State 44.0	N
Aggressive Driving Serious Injuries (State)	5 year	2019-2023	100.7	2017-2021 State 173.4	N
Distracted Driving Fatalities (State)	5 year	2019-2023	140.9	2017-2021 State 208.6	N
Distracted Driving Serious Injuries (State)	5 year	2019-2023	940.1	2017-2021 State 1,458.0	N
Impaired (Alcohol and/or Drugs) Driving Serious Injuries (State)	5 year	2019-2023	315.8	2017-2021 State 471.4	N
Unrestrained Serious Injuries (State)	5 year	2019-2023	311.9	2017-2021 State 430.8	N
Pedestrian (01) Serious Injuries (State)	5 year	2019-2023	394.8	2017-2021 State 428.0	N
Speed-Related Serious Injuries (State)	5 year	2019-2023	177.7	2017-2021 State 339.2	N
Bicyclist Serious Injuries (State)	5 year	2019-2023	65.4	2017-2021 State 74.2	N
Motorcyclist Serious Injuries (State)	5 year	2019-2023	252.1	2017-2021 State 307.6	N
Mature Driver-Involved Fatalities (State)	5 year	2019-2023	83.4	2017-2021 State 90.4	Y
Mature Driver-Involved Serious Injuries (State)	5 year	2019-2023	385.1	2017-2021 State 469.6	N
Young Driver-Involved Serious Injuries (State)	5 year	2019-2023	217.0	2017-2021 State 387.6	N
Infrastructure Fatalities (State)	5 year	2019-2023	295.9	2017-2021 State 326.4	N

Infrastructure Serious Injuries (State)	5 year	2019-2023	1,399.4	2017-2021 State 1,880.8	N
Run-off-the-Road Fatalities (State)	5 year	2019-2023	138.6	2017-2021 State 172.4	N
Run-off-the-Road Serious Injuries (State)	5 year	2019-2023	506.6	2017-2021 State 739.4	N
Intersection Fatalities (State)	5 year	2019-2023	141.7	2017-2021 State 153.6	N
Intersection Serious Injuries (State)	5 year	2019-2023	836.0	2017-2021 State 1,144.8	N
Construction/Work Zone Fatalities (State)	5 year	2019-2023	8.5	2017-2021 State 9.2	Y
Construction/Work Zone Serious Injuries (State)	5 year	2019-2023	29.1	2017-2021 State 45.4	N

Notes:

- 2019-2023 Target Years: From the 2021-2025 SHSP Methodology, 2021-2025 Target (2023 mid-point).
- B-1: The proposed seat belt use rate targets estimate a reduction in the number of observed unbelted motor vehicle occupants by at least 25 in each of the observation counties for each successive year. Targets were set based on the 89.9% belt used rate in 2020. (This has been updated from the previous HSP reporting which set the baseline at 92% from 2014. Since Maryland went below the baseline, a new baseline was set with new targets.)

MARYLAND DEPARTMENT OF TRANSPORTATION
MOTOR VEHICLE ADMINISTRATION

Wes Moore
Governor
Aruna Miller
Lieutenant Governor
Paul J. Wiedefeld
Secretary
Christine Nizer
Administrator

July 30, 2023

Mrs. Stephanie Hancock
Regional Administrator
National Highway Traffic Safety Administration – Mid-Atlantic Region
George H. Fallon Federal Building
31 Hopkins Plaza, Rm 902
Baltimore MD 21201

Re: Highway Safety Programs Match for NHTSA Federal Funds

Dear Stephanie,

The Maryland Department of Transportation Motor Vehicle Administration (MVA) is committed to one long-term goal of zero fatalities on Maryland roadways. As the primary organization responsible for managing Maryland's traffic safety grants program, the MVA provides funding to assist our partners in developing and implementing highway safety programs designed to reduce traffic crashes, deaths, injuries, and property damage.

In Federal Fiscal Year 2024, the MVA will obligate roughly $22.3 million toward highway safety programs and will be responsible for providing roughly $18.3 million of in-kind services as matching funds. The MVA's Central Operations and Safety Programs will designate the match solely for federal highway safety grants and will not be used to match other federal grant programs. Please refer to Attachment 1 for the breakdown of matching funds.

The MVA maintains the highest commitment to safety, driver services, and the effective management of our highway safety grants. If you have any additional questions or concerns, please contact me at 410-768-7830 or cnizer@mdot.maryland.gov.

Sincerely,

Christine Nizer, Administrator
Maryland Motor Vehicle Administration
Governor's Highway Safety Representative

cc: Dr. Timothy Kerns, Director, MHSO

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
20000	COSP DEPUTY ADMINISTRATIO	0300	0101	SALARIES-REGULAR EARNINGS	147,274.00	118,008.45
20000	COSP DEPUTY ADMINISTRATIO	0300	0151	FICA REGULAR	9,774.00	8,508.05
20000	COSP DEPUTY ADMINISTRATIO	0300	0152	HOSPITAL INSURANCE	9,624.00	16,768.35
20000	COSP DEPUTY ADMINISTRATIO	0300	0154	HEALTH INSURANCE RETIRED	5,149.00	10,841.89
20000	COSP DEPUTY ADMINISTRATIO	0300	0162	PENSION	28,443.00	25,277.03
20000	COSP DEPUTY ADMINISTRATIO	0300	0174	UNEMPLOYMENT	373.00	311.37
20000	COSP DEPUTY ADMINISTRATIO	0300	0175	WORKERS COMPENSATION	276,257.00	
20000	COSP DEPUTY ADMINISTRATIO	0300	0189	TURN OVER EXPECTANCY	(8,588.00)	
20000	COSP DEPUTY ADMINISTRATIO	0300	0846	COPIER LEASE	5,941.00	1,394.70
20000 Total				474,247.00	181,109.84	
21000	MEDICAL ADVISORY BOARD	0300	0101	SALARIES-REGULAR EARNINGS	369,210.00	373,413.94
21000	MEDICAL ADVISORY BOARD	0300	0151	FICA REGULAR	18,639.00	20,016.85
21000	MEDICAL ADVISORY BOARD	0300	0152	HOSPITAL INSURANCE	28,872.00	36,596.26
21000	MEDICAL ADVISORY BOARD	0300	0154	HEALTH INSURANCE RETIRED	15,447.00	23,656.35
21000	MEDICAL ADVISORY BOARD	0300	0162	PENSION	71,305.00	78,744.83

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
21000	MEDICAL ADVISORY BOARD	0300	0174	UNEMPLOYMENT	935.00	1,013.36
21000	MEDICAL ADVISORY BOARD	0300	0189	TURN OVER EXPECTANCY	(21,235.00)	
21000	MEDICAL ADVISORY BOARD	0300	0403	TRAVEL OUT ST-ROUT OPERAT		790.65
21000	MEDICAL ADVISORY BOARD	0300	0825	DOCTOR FEES/MEDICAL ADVIS	18,410.00	51,500.00
21000	MEDICAL ADVISORY BOARD	0300	0827	TRASH REMOVAL		-
21000	MEDICAL ADVISORY BOARD	0300	0846	COPIER LEASE	1,696.00	145.78
21000	MEDICAL ADVISORY BOARD	0300	0926	PERSONAL COMPUTER SUPPLIE	85.00	
21000	MEDICAL ADVISORY BOARD	0300	1304	SUBSCRIPTIONS		85.00
21000 Total				503,364.00	585,963.02	
22000	DRIVER SAFETY DIVISION	0300	0101	SALARIES-REGULAR EARNINGS		4,565.65
22000	DRIVER SAFETY DIVISION		0151	FICA REGULAR		328.46
22000	DRIVER SAFETY DIVISION		0152	HOSPITAL INSURANCE		540.49
22000	DRIVER SAFETY DIVISION		0154	HEALTH INSURANCE RETIRED		349.55
22000	DRIVER SAFETY DIVISION		0162	PENSION		977.90
22000	DRIVER SAFETY DIVISION		0174	UNEMPLOYMENT		12.02

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
22000	DRIVER SAFETY DIVISION		0401	TRVL-IN-ST-ROUT OPERATION		1,447.53
22000 Total				-	8,221.60	
23000	DVPP PROJECT MANAGEMENT	0300	0101	SALARIES-REGULAR EARNINGS	582,894.00	401,849.33
23000	DVPP PROJECT MANAGEMENT	0300	0151	FICA REGULAR	38,684.00	29,238.07
23000	DVPP PROJECT MANAGEMENT	0300	0152	HOSPITAL INSURANCE	57,744.00	61,969.04
23000	DVPP PROJECT MANAGEMENT	0300	0154	HEALTH INSURANCE RETIRED	30,894.00	40,069.66
23000	DVPP PROJECT MANAGEMENT	0300	0162	PENSION	112,573.00	85,961.26
23000	DVPP PROJECT MANAGEMENT	0300	0174	UNEMPLOYMENT	1,476.00	1,070.17
23000	DVPP PROJECT MANAGEMENT	0300	0189	TURN OVER EXPECTANCY	(33,987.00)	
23000	DVPP PROJECT MANAGEMENT	0300	0401	TRVL-IN-ST-ROUT OPERATION	82.00	45.00
23000 Total				790,360.00	620,202.53	
24000	LEGISLATIVE COMPLIANCE	0300	0402	IN STATE CONFERENCES/SEMI		774.88
24000	LEGISLATIVE COMPLIANCE	0300	1304	SUBSCRIPTIONS		79.96
24000 Total				-	854.84	
25000	EXTERNAL AFFAIRS	0300	0101	SALARIES-REGULAR EARNINGS	477,299.00	422,409.73

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
25000	EXTERNAL AFFAIRS	0300	0102	SALARIES-STUDENTS	39,607.00	9,337.72
25000	EXTERNAL AFFAIRS	0300	0151	FICA REGULAR	31,676.00	31,924.28
25000	EXTERNAL AFFAIRS	0300	0152	HOSPITAL INSURANCE	67,368.00	56,870.32
25000	EXTERNAL AFFAIRS	0300	0154	HEALTH INSURANCE RETIRED	36,043.00	36,765.83
25000	EXTERNAL AFFAIRS	0300	0162	PENSION	92,181.00	90,633.91
25000	EXTERNAL AFFAIRS	0300	0174	UNEMPLOYMENT	1,208.00	1,168.46
25000	EXTERNAL AFFAIRS	0300	0189	TURN OVER EXPECTANCY	(27,832.00)	
25000	EXTERNAL AFFAIRS	0300	0401	TRVL-IN-ST-ROUT OPERATION		2,975.40
25000	EXTERNAL AFFAIRS	0300	0402	IN STATE CONFERENCES/SEMI	138.00	(244.53)
25000	EXTERNAL AFFAIRS	0300	0801	ADVERTISING	14,600.00	(3,733.62)
25000	EXTERNAL AFFAIRS	0300	0802	FORMS TRANSLATION	10,842.00	519.12
25000	EXTERNAL AFFAIRS	0300	0804	PRINTING/REPRODUCTION	29,826.00	84,024.79
25000	EXTERNAL AFFAIRS	0300	0821	CONSULTANTS	1,812.00	0.00
25000	EXTERNAL AFFAIRS	0300	0846	COPIER LEASE	2,299.00	
25000	EXTERNAL AFFAIRS	0300	0874	MEETING EXPENSES	629.00	

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
25000	EXTERNAL AFFAIRS	0300	0899	OTHER CONTRACTUAL SERV		15.14
25000	EXTERNAL AFFAIRS	0300	0902	OFFICE SUPPLIES	1,381.00	1,898.99
25000	EXTERNAL AFFAIRS	0300	0904	MAINT BLDG SUPPLIES	501.00	
25000	EXTERNAL AFFAIRS	0300	0909	MEDICAL SUPPLIES		48.62
25000	EXTERNAL AFFAIRS	0300	0926	PERSONAL COMPUTER SUPPLIE	685.00	1,849.45
25000	EXTERNAL AFFAIRS	0300	0935	JANITORIAL SUPPLIES		124.96
25000	EXTERNAL AFFAIRS	0300	0993	PRINTSHOP SUPPLIES	7,455.00	25,323.59
25000	EXTERNAL AFFAIRS	0300	1304	SUBSCRIPTIONS	6,285.00	649.52
25000 Total				794,003.00	762,561.68	
14000	CUSTOMER ENGAGEMENT OFFIC	0300	0801	ADVERTISING		57,844.80
14000	CUSTOMER ENGAGEMENT OFFIC	0300	0809	OFFICE EQUIPMENT REPAIRS		4,836.50
14000	CUSTOMER ENGAGEMENT OFFIC	0300	0821	CONSULTANTS		25,859.44
14000	CUSTOMER ENGAGEMENT OFFIC	0300	0902	OFFICE SUPPLIES		196.15
14000	CUSTOMER ENGAGEMENT OFFIC	0300	0993	PRINTSHOP SUPPLIES		4,529.66
14000	CUSTOMER ENGAGEMENT OFFIC	0300	1304	SUBSCRIPTIONS		19.96

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
14000 Total				0	93,286.51	
26000	DRIVER PROGRAM	0300	0101	SALARIES-REGULAR EARNINGS		68,529.17
26000	DRIVER PROGRAM	0300	0151	FICA REGULAR		5,093.64
26000	DRIVER PROGRAM	0300	0152	HOSPITAL INSURANCE		6,964.88
26000	DRIVER PROGRAM	0300	0154	HEALTH INSURANCE RETIRED		4,503.19
26000	DRIVER PROGRAM	0300	0162	PENSION		14,678.68
26000	DRIVER PROGRAM	0300	0174	UNEMPLOYMENT		186.50
26000 Total				-	99,956.06	
26100	PC:DEL:ADMIN ADJUDICATION	0300	0101	SALARIES-REGULAR EARNINGS	3,164,768.00	1,672,866.75
26100	PC:DEL:ADMIN ADJUDICATION	0300	0102	SALARIES-STUDENTS	14,185.00	53,937.78
26100	PC:DEL:ADMIN ADJUDICATION	0300	0104	SALARIES-OVERTIME	28,451.00	12,354.84
26100	PC:DEL:ADMIN ADJUDICATION	0300	0151	FICA REGULAR	210,034.00	126,287.40
26100	PC:DEL:ADMIN ADJUDICATION	0300	0152	HOSPITAL INSURANCE	615,936.00	356,661.67
26100	PC:DEL:ADMIN ADJUDICATION	0300	0154	HEALTH INSURANCE RETIRED	329,536.00	230,603.36
26100	PC:DEL:ADMIN ADJUDICATION	0300	0162	PENSION	611,207.00	360,982.72

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
26100	PC:DEL:ADMIN ADJUDICATION	0300	0174	UNEMPLOYMENT	8,009.00	4,621.97
26100	PC:DEL:ADMIN ADJUDICATION	0300	0189	TURN OVER EXPECTANCY	(184,537.00)	
26100	PC:DEL:ADMIN ADJUDICATION	0300	0213	FICA-CONTRACTUAL	6,795.00	
26100	PC:DEL:ADMIN ADJUDICATION	0300	0214	UNEMPLOYMENT-CONTRACTUAL	249.00	
26100	PC:DEL:ADMIN ADJUDICATION	0300	0220	CONTRACTUAL EMPLOYEES SAL	88,826.00	
26100	PC:DEL:ADMIN ADJUDICATION	0300	0291	CONTRACTUAL TURNOVER	(8,830.00)	
26100	PC:DEL:ADMIN ADJUDICATION	0300	0806	SCANNING / MICROFILMING	59,509.00	
26100	PC:DEL:ADMIN ADJUDICATION	0300	0817	LEGAL SERVICES/TRANSCRIPT	19,984.00	11,865.70
26100	PC:DEL:ADMIN ADJUDICATION	0300	0831	OFFICE OF ADMINISTRATIVE	2,480,626.00	2,480,626.00
26100	PC:DEL:ADMIN ADJUDICATION	0300	0846	COPIER LEASE	7,016.00	
26100	PC:DEL:ADMIN ADJUDICATION	0300	0902	OFFICE SUPPLIES	2,196.00	3,127.87
26100	PC:DEL:ADMIN ADJUDICATION	0300	0903	AUDIO VISUAL		87.44
26100	PC:DEL:ADMIN ADJUDICATION	0300	0904	MAINT BLDG SUPPLIES		22.48
26100	PC:DEL:ADMIN ADJUDICATION	0300	0909	MEDICAL SUPPLIES	79.00	20.83
26100	PC:DEL:ADMIN ADJUDICATION	0300	0914	INSTRUCTIONAL SUPPLIES		(30.00)

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
26100	PC:DEL:ADMIN ADJUDICATION	0300	0926	PERSONAL COMPUTER SUPPLIE	22,427.00	3,951.27
26100	PC:DEL:ADMIN ADJUDICATION	0300	0935	JANITORIAL SUPPLIES	262.00	192.32
26100	PC:DEL:ADMIN ADJUDICATION	0300	0993	PRINTSHOP SUPPLIES	8,423.00	1,876.69
26100	PC:DEL:ADMIN ADJUDICATION	0300	1046	REPLACEMENT OFFICE FURNIT		2,124.00
26100 Total				7,485,151.00	5,322,181.09	
26200	DRIVER WELLNESS & SAFETY	0300	0101	SALARIES-REGULAR EARNINGS	2,893,263.00	3,257,444.86
26200	DRIVER WELLNESS & SAFETY	0300	0102	SALARIES-STUDENTS	31,530.00	8,351.34
26200	DRIVER WELLNESS & SAFETY	0300	0104	SALARIES-OVERTIME	8,772.00	8,084.94
26200	DRIVER WELLNESS & SAFETY	0300	0151	FICA REGULAR	192,013.00	237,663.88
26200	DRIVER WELLNESS & SAFETY	0300	0152	HOSPITAL INSURANCE	490,824.00	637,685.66
26200	DRIVER WELLNESS & SAFETY	0300	0154	HEALTH INSURANCE RETIRED	262,599.00	412,298.94
26200	DRIVER WELLNESS & SAFETY	0300	0162	PENSION	558,770.00	699,487.28
26200	DRIVER WELLNESS & SAFETY	0300	0174	UNEMPLOYMENT	7,325.00	8,697.21
26200	DRIVER WELLNESS & SAFETY	0300	0189	TURN OVER EXPECTANCY	(168,704.00)	
26200	DRIVER WELLNESS & SAFETY	0300	0806	SCANNING / MICROFILMING	38,481.00	23,810.45

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
26200	DRIVER WELLNESS & SAFETY	0300	0821	CONSULTANTS	33,000.00	
26200	DRIVER WELLNESS & SAFETY	0300	0846	COPIER LEASE	2,452.00	1,370.38
26200	DRIVER WELLNESS & SAFETY	0300	0902	OFFICE SUPPLIES	1,139.00	1,034.37
26200	DRIVER WELLNESS & SAFETY	0300	0926	PERSONAL COMPUTER SUPPLIE	17,408.00	5,678.67
26200	DRIVER WELLNESS & SAFETY	0300	0935	JANITORIAL SUPPLIES	161.00	24.82
26200	DRIVER WELLNESS & SAFETY	0300	0993	PRINTSHOP SUPPLIES	5,024.00	2,252.32
26200 Total				4,374,057.00	5,303,885.12	
26300	DRIVER PROGRAMS	0300	0101	SALARIES-REGULAR EARNINGS	3,052,789.00	1,489,146.46
26300	DRIVER PROGRAMS	0300	0102	SALARIES-STUDENTS	44,037.00	(158.02)
26300	DRIVER PROGRAMS	0300	0104	SALARIES-OVERTIME	54,983.00	55,622.15
26300	DRIVER PROGRAMS	0300	0151	FICA REGULAR	202,599.00	112,946.31
26300	DRIVER PROGRAMS	0300	0152	HOSPITAL INSURANCE	538,944.00	286,694.34
26300	DRIVER PROGRAMS	0300	0154	HEALTH INSURANCE RETIRED	288,344.00	185,369.44
26300	DRIVER PROGRAMS	0300	0162	PENSION	582,680.00	306,487.93
26300	DRIVER PROGRAMS	0300	0174	UNEMPLOYMENT	7,730.00	4,133.94

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
26300	DRIVER PROGRAMS	0300	0189	TURN OVER EXPECTANCY	(177,661.00)	
26300	DRIVER PROGRAMS	0300	0304	MISCELLANEOUS COMMUNICATI	48,954.00	35,417.44
26300	DRIVER PROGRAMS	0300	0401	TRVL-IN-ST-ROUT OPERATION	547.00	8,435.28
26300	DRIVER PROGRAMS	0300	0703	MTR VEH-MAINT & REPAIR		29.95
26300	DRIVER PROGRAMS	0300	0804	PRINTING/REPRODUCTION	120,748.00	412,010.75
26300	DRIVER PROGRAMS	0300	0806	SCANNING / MICROFILMING	7,050.00	29,515.30
26300	DRIVER PROGRAMS	0300	0815	LAUNDRY	162.00	390.00
26300	DRIVER PROGRAMS	0300	0846	COPIER LEASE	12,052.00	5,475.61
26300	DRIVER PROGRAMS	0300	0885	IN STATE SERVICES - OTHER	157.00	121.80
26300	DRIVER PROGRAMS	0300	0902	OFFICE SUPPLIES	4,720.00	1,524.04
26300	DRIVER PROGRAMS	0300	0904	MAINT BLDG SUPPLIES		133.52
26300	DRIVER PROGRAMS	0300	0909	MEDICAL SUPPLIES		27.96
26300	DRIVER PROGRAMS	0300	0925	DP PRINTER RIBBONS	136.00	
26300	DRIVER PROGRAMS	0300	0926	PERSONAL COMPUTER SUPPLIE	21,057.00	6,101.58
26300	DRIVER PROGRAMS	0300	0935	JANITORIAL SUPPLIES	179.00	38.34

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
26300	DRIVER PROGRAMS	0300	0993	PRINTSHOP SUPPLIES	6,666.00	2,813.46
26300	DRIVER PROGRAMS	0300	1304	SUBSCRIPTIONS	10,675.00	65,462.84
26300 Total				4,827,548.00	3,007,740.42	
26500	PC:DEL:DRIVER INSTRUTIONA	0300	0101	SALARIES-REGULAR EARNINGS	-	2,387.54
26500	PC:DEL:DRIVER INSTRUTIONA	0300	0151	FICA REGULAR	-	225.02
26500	PC:DEL:DRIVER INSTRUTIONA	0300	0152	HOSPITAL INSURANCE	-	954.51
26500	PC:DEL:DRIVER INSTRUTIONA	0300	0154	HEALTH INSURANCE RETIRED	-	616.49
26500	PC:DEL:DRIVER INSTRUTIONA	0300	0162	PENSION	-	1,009.99
26500	PC:DEL:DRIVER INSTRUTIONA	0300	0174	UNEMPLOYMENT	-	8.23
26500	PC:DEL:DRIVER INSTRUTIONA	0300	0189	TURN OVER EXPECTANCY	-	
26500	PC:DEL:DRIVER INSTRUTIONA	0300	0401	TRVL-IN-ST-ROUT OPERATION		143.14
26500 Total				-	5,344.92	
26510	PC:DEL:MOTORCYCLE SAFETY	0300	0101	SALARIES-REGULAR EARNINGS	70,039.00	
26510	PC:DEL:MOTORCYCLE SAFETY	0300	0151	FICA REGULAR	5,141.00	
26510	PC:DEL:MOTORCYCLE SAFETY	0300	0152	HOSPITAL INSURANCE	9,624.00	

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
26510	PC:DEL:MOTORCYCLE SAFETY	0300	0154	HEALTH INSURANCE RETIRED	5,149.00	
26510	PC:DEL:MOTORCYCLE SAFETY	0300	0162	PENSION	14,960.00	
26510	PC:DEL:MOTORCYCLE SAFETY	0300	0174	UNEMPLOYMENT	196.00	
26510	PC:DEL:MOTORCYCLE SAFETY	0300	0175	WORKERS COMPENSATION	1,765.00	
26510	PC:DEL:MOTORCYCLE SAFETY	0300	0189	TURN OVER EXPECTANCY	(4,517.00)	
26510	PC:DEL:MOTORCYCLE SAFETY	0300	0401	TRVL-IN-ST-ROUT OPERATION		773.45
26510	PC:DEL:MOTORCYCLE SAFETY	0300	1305	ASSOCIATION DUES		1,200.00
26510 Total				102,357.00	1,973.45	
26520	PC:DEL:DRIVER EDUCATION P	0300	0101	SALARIES-REGULAR EARNINGS	-	507,540.86
26520	PC:DEL:DRIVER EDUCATION P	0300	0102	SALARIES-STUDENTS		7,659.93
26520	PC:DEL:DRIVER EDUCATION P	0300	0151	FICA REGULAR	-	37,568.56
26520	PC:DEL:DRIVER EDUCATION P	0300	0152	HOSPITAL INSURANCE	-	87,760.96
26520	PC:DEL:DRIVER EDUCATION P	0300	0154	HEALTH INSURANCE RETIRED	-	56,742.20
26520	PC:DEL:DRIVER EDUCATION P	0300	0162	PENSION	-	88,964.26
26520	PC:DEL:DRIVER EDUCATION P	0300	0174	UNEMPLOYMENT	-	1,375.02

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
26520	PC:DEL:DRIVER EDUCATION P	0300	0189	TURN OVER EXPECTANCY	-	
26520	PC:DEL:DRIVER EDUCATION P	0300	0304	MISCELLANEOUS COMMUNICATI	-	
26520	PC:DEL:DRIVER EDUCATION P	0300	0401	TRVL-IN-ST-ROUT OPERATION	-	
26520 Total				-	787,611.79	
28000	MARYLAND HIGHWAY SAFETY	0300	0101	SALARIES-REGULAR EARNINGS	937,592.00	(735,001.68)
28000	MARYLAND HIGHWAY SAFETY	0300	0151	FICA REGULAR	64,521.00	(53,210.92)
28000	MARYLAND HIGHWAY SAFETY	0300	0152	HOSPITAL INSURANCE	109,281.00	(140,870.96)
28000	MARYLAND HIGHWAY SAFETY	0300	0154	HEALTH INSURANCE RETIRED	51,417.00	(81,129.79)
28000	MARYLAND HIGHWAY SAFETY	0300	0162	PENSION	187,759.00	(142,742.77)
28000	MARYLAND HIGHWAY SAFETY	0300	0174	UNEMPLOYMENT	2,462.00	(1,947.73)
28000	MARYLAND HIGHWAY SAFETY	0300	0189	TURN OVER EXPECTANCY	(56,688.00)	
28000	MARYLAND HIGHWAY SAFETY	0300	0401	TRVL-IN-ST-ROUT OPERATION	4,488.00	834.67
28000	MARYLAND HIGHWAY SAFETY	0300	0403	TRAVEL OUT ST-ROUT OPERAT	7,715.00	1,685.95
28000	MARYLAND HIGHWAY SAFETY	0300	0801	ADVERTISING	8,235.00	8,234.85
28000	MARYLAND HIGHWAY SAFETY	0300	0804	PRINTING/REPRODUCTION	1,255.00	

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
28000	MARYLAND HIGHWAY SAFETY	0300	0808	OFFICE EQUIPMENT RENTAL	1,000.00	
28000	MARYLAND HIGHWAY SAFETY	0300	0818	REGISTRATION FEES - CONF	650.00	1,075.00
28000	MARYLAND HIGHWAY SAFETY	0300	0821	CONSULTANTS	423,697.00	339,462.36
28000	MARYLAND HIGHWAY SAFETY	0300	0846	COPIER LEASE		-
28000	MARYLAND HIGHWAY SAFETY	0300	0902	OFFICE SUPPLIES	1,000.00	
28000	MARYLAND HIGHWAY SAFETY	0300	0914	INSTRUCTIONAL SUPPLIES	2,702.00	-
28000	MARYLAND HIGHWAY SAFETY	0300	1202	PAYMENT TO POLITICAL SUBD	1,279,154.00	212,510.95
28000 Total				3,026,240.00	(591,100.07)	
28009	MARYLAND HIGHWAY SAFETY (	0300	0101	SALARIES-REGULAR EARNINGS		1,444,124.74
28009	MARYLAND HIGHWAY SAFETY (	0300	0151	FICA REGULAR		105,576.93
28009	MARYLAND HIGHWAY SAFETY (	0300	0152	HOSPITAL INSURANCE		218,095.69
28009	MARYLAND HIGHWAY SAFETY (	0300	0154	HEALTH INSURANCE RETIRED		141,025.30
28009	MARYLAND HIGHWAY SAFETY (	0300	0162	PENSION		292,044.73
28009	MARYLAND HIGHWAY SAFETY (	0300	0174	UNEMPLOYMENT		3,864.37
28009 Total				-	2,204,731.76	

Index	Index Title	Fund	Aobj	Aobj Description	Budget	Expenditure
Grand Total				22,377,327.00	18,394,524.56	

Traffic Records Strategic Plan 2021–2025

5/31/2023

MARYLAND TRCC

MDOT MARYLAND DEPARTMENT OF TRANSPORTATION

MOTOR VEHICLE ADMINISTRATION

Maryland Highway Safety Office

Contents

Traffic Records Coordinating Council Overview

Maryland has a clear mission to prevent deaths and injuries on our streets and highways. Many steps have been taken toward meeting this goal, but many challenges remain. Reaching our goal of zero deaths and injuries will require a diverse group of stakeholders—state and local agency partners, nongovernmental organizations, as well as the public—to work collaboratively on issues of common concern.

The Maryland Traffic Records Coordinating Committee (TRCC) is an interagency effort that is based on a model from the United States Department of Transportation (USDOT). The TRCC is a working group of data owners, managers, and users representing six traffic records system components (crash, roadway, citation/adjudication, driver, vehicle, and injury surveillance) and uses six data quality performance measures (timeliness, completeness, accuracy, accessibility, integration, uniformity) to evaluate progress. For nearly two decades, the Maryland TRCC has served as a central point of coordination for the traffic safety community in achieving the vision of zero traffic-related deaths. The TRCC Charter describes the Vision and Mission Statement, as well as the purpose and duties of the Committee.

VISION

Safe Maryland roads free of traffic fatalities and injuries.

MISSION

To use effective management principles and emerging technologies to improve the quality, timeliness, and availability of traffic records data and systems to enable the Maryland traffic safety community to identify and resolve traffic safety issues thereby achieving Maryland's goal of zero traffic-related deaths.

PURPOSE

The Maryland Traffic Records Coordinating Committee is responsible for reviewing and assessing the status of Maryland's Traffic Safety Information System Improvement Program and its components. The TRCC will:

- oversee the development and update of a strategic plan that serves the public and private sector needs for traffic safety information;
- learn about technologies and other advancements necessary to improve the traffic safety information system;
- promote, support, and assist in the coordination and implementation of needed or desired system improvements; and
- provide a forum for the exchange of information regarding safety data among the traffic safety community.

DUTIES

Maryland's TRCC shall:

- ideally have authority to review any of the State's highway safety data and traffic records system components and any changes to such systems before the changes are implemented;
- consider and coordinate the views of organizations in the State that are involved in the collection, administration, and use of highway safety data and traffic records system components, and represent those views to outside organizations;
- review and evaluate new technologies to keep the highway safety data and traffic records system current; and
- approve annually the membership of the TRCC, any change to the State's multi-year Strategic Plan, and performance measures to be used to demonstrate quantitative progress in the

accuracy, completeness, timeliness, uniformity, accessibility, or integration of a core highway safety database.

The TRCC's vision and strategies comprises the strategic plan. The outlined strategic plan determines the Maryland Traffic Records community's direction over the next five years—where it intends to go, how it is going to get there, and evaluative measures to determine its level of success.

TRCC Structure

The TRCC is an interagency, intergovernmental working group focused solely on Maryland's traffic records system. Maryland's TRCC includes an Executive Council, Technical Council, and special committees that serve on an as-needed basis.

The **Executive Council** is an assembly of agency leaders or senior officials designated by the agency leader from member organizations that are custodians of Maryland's traffic records system components, formally invited by the Governor's Highway Safety Representative. The Executive Council supports the Traffic Records vision, mission, and five-year Traffic Records Strategic Plan (TRSP), assisting in advisory, policy, and/or economic capacities. The identified members meet as designated in the charter twice-annually to direct Maryland's efforts.

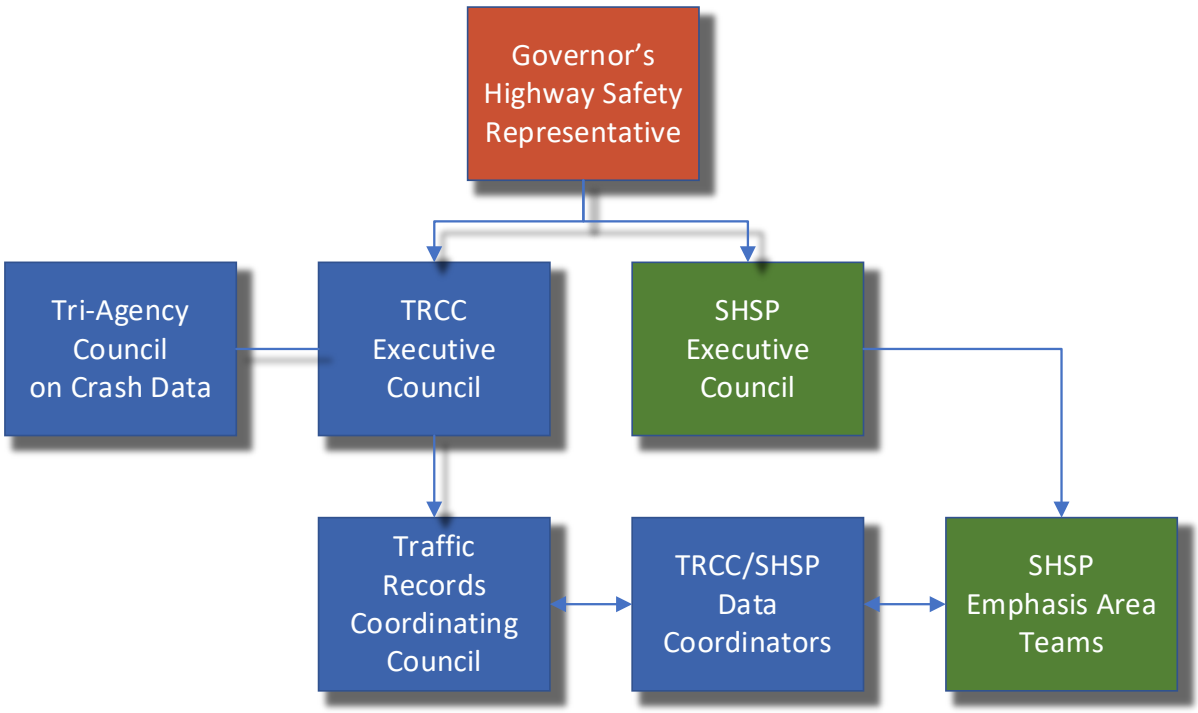
Currently, the Administrator of the Maryland Department of Transportation (MDOT) Motor Vehicle Administration (MVA) is designated as Maryland's Governor's Highway Safety Representative and, in that role, also serves as the chairperson of the TRCC. The MDOT MVA Highway Safety Office (MHSO) is responsible for the day-to-day leadership and coordination of the TRCC as designated through the TRCC Charter. MHSO is dedicated to saving lives and preventing injuries by reducing motor vehicle crashes through the implementation of the Strategic Highway Safety Plan (SHSP). Maryland's TRCC fills a critical role in the SHSP by providing the data necessary to create a comprehensive data-driven plan. Maryland is firmly committed to upholding the federal mandate outlined in the Comprehensive Statewide Safety Data Planning Process indicating that "all decisions will be based upon data."

Technical Council members are composed of subject matter experts from the data custodial agencies who are familiar with and have access to their agency's traffic records system database. Technical Council members are appointed by their respective Executive Council member and serve at the discretion of their agency. This group meets bi-monthly throughout the year. This Council also includes other traffic safety stakeholders, such as research organizations, academic institutions, and federal and local partners and data users.

TRCC special committees are identified and formed as necessary to carry out the work of the TRCC. Such committees have included a GIS Subcommittee, a crash data task force, and the Maryland Traffic Records Forum committee.

Additionally, Maryland's Technical Council includes SHSP Data Coordinators who serve as members of each of the SHSP Emphasis Area Teams to ensure that all data needs are appropriately met. They are invited to all Technical Council meetings and encouraged to provide SHSP updates and share information with the Emphasis Area Teams, serving as liaisons and a bridge across the two major traffic safety plans in Maryland, the SHSP and TRSP.

Figure 1: Maryland's TRCC Structure



Members of Maryland's TRCC represent the six data systems and subsystems critical to the collection, management, and analysis of traffic safety data. Outlined in Table 1 are the executive partners that oversee and represent Maryland's traffic records system components.

Table 1: Maryland's Traffic Records System and Executive Council Members

Data System	Icon	Agency(ies)
Crash		Maryland State Police MDOT State Highway Administration (SHA)
Citation/Adjudication		Maryland State Police (MSP) Maryland District Court
Driver		MDOT Motor Vehicle Administration (MVA)
Vehicle		MDOT Motor Vehicle Administration (MVA)
Roadway		MDOT State Highway Administration (SHA)
Injury Surveillance System • **pre-hospital emergency medical services (EMS)** • **trauma registry** • **emergency department**		Maryland Institute for Emergency Medical Services Systems (MIEMSS) Maryland Health Services Cost Review Commission (HSCRC) Maryland Department of Health (MDH)

• **hospital discharge** • **mortality data**		
Technical Systems (Overall Support)	Department of INFORMATION TECHNOLOGY	Maryland Department of Information Technology (DoIT)
Policy and Management (e.g., Data Governance)	MDOT MARYLAND DEPARTMENT OF TRANSPORTATION	Maryland Department of Transportation (MDOT) – The Secretary's Office (TSO)
TRCC Management	MDOT MARYLAND DEPARTMENT OF TRANSPORTATION MOTOR VEHICLE ADMINISTRATION Maryland Highway Safety Office	MDOT MVA Highway Safety Office (MHSO)

Background

State highway safety programs rely on accurate, accessible, complete, integrated, uniform, and timely traffic records data to guide and support their efforts to reduce highway crashes, injuries, and fatalities. In the Safe, Accountable, Flexible and Efficient Transportation Equity Act (SAFETEA) of 2005, Congress recognized this need and provided grant funding to help states establish and maintain comprehensive safety data improvement programs.

This funding is continued under the Fixing America's Surface Transportation Act of 2015 (FAST Act) in the State Traffic Safety Information System Improvements Grant program (23 CFR § 1300.22). To qualify for funding for traffic records system improvements under the FAST Act, each State's designated highway safety office must submit a Traffic Records Strategic Plan (TRSP) to the United States Department of Transportation, National Highway Traffic Safety Administration (NHTSA).

The MDOT MVA Highway Safety Office manages the state's traffic records program and is coordinator for the statewide Traffic Records Coordinating Committee (TRCC), which oversees the development and implementation of the TRSP.

The 2021–2025 TRSP addresses each of the traffic records system components identified in NHTSA's *Traffic Records Program Assessment Advisory*, and identifies critical actions, performance measures, and resources needed (legislative, organizational, or budgetary) to efficiently and effectively reach the plan's goals. Recommendations for improvements identified in Maryland's 2019 NHTSA Traffic Records Program Assessment are incorporated so that Maryland's traffic records system will meet or exceed national ideals.

This plan builds on the *2011–2015 Traffic Records Strategic Plan* and the *2016–2020 Traffic Records Strategic Plan*.

2011–2015 TRSP

To develop 2011–2015 plan, the State conducted reviews of existing systems and programs. The results of these reviews helped to identify strengths of Maryland's traffic records system as well as to develop priorities for improvements.

In 2010, Maryland completed a Traffic Records Program Assessment in partnership with NHTSA. The Traffic Records Program Assessment is a technical assistance tool offered by NHTSA to state highway safety offices that uses nationally recognized experts to compare the state's traffic records program with a set of performance standards established by NHTSA and the Governors Highway Safety Association (GHSA).

Also in 2010, Maryland completed a Federal Highway Administration (FHWA) Crash Data Improvement Program (CDIP), an intensive evaluation of the crash data system that evaluates methods and technologies for collection, management, sharing, and analysis of crash data. The recommendations from both the Traffic Records Program Assessment and CDIP Reports were used to develop the objectives for the 2011–2015 TRSP.

2016–2020 TRSP

To assess progress toward the State's goals and to prepare for the 2016–2020 TRSP, a follow-up Traffic Records Program Assessment was completed in December 2014. Under federal regulations for traffic records funding (§405(c)), states must include all recommendations from the most recent Traffic Records Program Assessment in the TRSP. The Assessment-generated recommendations are broad and allow states to further refine goals. All recommendations from the 2014 Assessment are included and highlighted in each section below and used as examples in the Appendix.

The 2016–2020 TRSP was developed to align with the new Maryland SHSP (2016–2020). The alignment of the two major traffic safety plans further strengthened the collaboration and coordination between Maryland's traffic records data and traffic safety program communities. The process of developing strategies in both the TRSP and the SHSP were similar, and each SHSP Emphasis Area Team developed strategies with a vision and understanding of the need for data to carry out action steps and evaluate strategies. In parallel, the TRSP strategies were written in consideration of the end users, such as the Emphasis Area Team members, who need traffic safety data to implement and evaluate the success of the implemented strategies.

2021–2025 TRSP

With the adoption of the new plan, the 2016–2020 Plan is concluded. To continue to assess progress toward the State's goals and determine the priorities for the 2021–2025 TRSP, a Traffic Records Program Assessment was completed in September 2019.

Congress has recognized the benefit of independent peer reviews for State traffic records data systems. These assessments help States identify areas of high performance and areas in need of improvement in addition to fostering greater collaboration among data systems. To encourage States to undertake such reviews regularly, the Fixing America's Surface Transportation Act (FAST ACT) legislation requires States to conduct or update an assessment of its highway safety data and traffic records system every five years to qualify for §405(c) grant funding. The State's Governor's Representative for Highway Safety must certify that an appropriate assessment has been completed within five years of the application deadline.

2019 Traffic Records Assessment Results Summary

The Traffic Records Program Assessment is built upon the assessment completed five years ago. Since the 2014 assessment, Maryland has worked diligently in all areas of the traffic records system and was commended by NHTSA for the strides made toward improving traffic data systems and the plans for continued future improvements. Maryland was specifically commended regarding our efforts in data integration. Maryland's Traffic Records Program *meets the Advisory ideal* in this regard and should serve as a model for other States seeking to meet the Advisory ideal in this module.

Out of 328 assessment questions, Maryland met the Advisory ideal for 190 questions (58%), partially met the Advisory ideal for 67 questions (20%) and did not meet the Advisory ideal for 71 questions (22%).

Within each assessment module, Maryland met the ideal outlined in the Traffic Records Program Assessment Advisory 88% of the time for Traffic Records Coordinating Committee Management, 27% of the time for Strategic Planning, 60% of the time for Crash, 56% of the time for Vehicle, 71% of the time for Driver, 50% of the time for Roadway, 34% of the time for Citation and Adjudication, 61% of the time for EMS/Injury Surveillance, and 100% of the time for Data Use and Integration.

TRCC Strategic Planning Process

A Traffic Records Strategic Plan Steering Committee was formed in November 2019 to guide the development of the 2021–2025 TRSP. Members were strategically identified to ensure all components of the Maryland Traffic Safety Information System Improvement Program and data owners were represented in the planning process.

Maryland's plan:

(i) specifies how existing challenges in the State's highway safety data and traffic records system were identified;
(ii) prioritizes, based on the identified highway safety data and traffic records system deficiencies, the highway safety data and traffic records system needs and goals of the State;
(iii) identifies performance-based measures to evaluate progress toward those goals;
(iv) specifies how the §405(c) grant funds and any other funds of the State will be used to address needs and goals identified in the multiyear plan; and
(v) includes a current report on the progress in implementing the multiyear plan that documents progress toward the specified goals.

The Traffic Records Strategic Plan Steering Committee used several different processes to develop the 2016–2020 TRSP to ensure the requirements defined by Congress and established by NHTSA were met. During the strategic development sessions, ground rules were established and an overarching review plan established. A formal consensus-building technique (Nominal Group Technique) was used by the steering committee to develop specific procedures for the review of each section of the system components. The technique included:

1. Generating ideas – Silent individual thought and notes.
2. Recording ideas – Round-robin sharing/brainstorming of ideas for recording without discussion or debate.
3. Discussing ideas – Open discussion to express understanding, logic, importance.
4. Voting on ideas – Individual voting of top five: most important ranking five, least important rank one.
5. Finalizing the list – Decide if additional rounds of voting were needed to expand or finalize the recommended list.

A set of constructs for each section of the plan were shared for discussion and consideration, including idealistic objectives, recommendations and considerations from Maryland's 2014 Traffic Records Program Assessment, and a set of objectives that had been included and were part of the most recent strategic plan.

The Steering Committee then shared a set of proposed strategies with the full Traffic Records Coordinating Committee membership. These members then reached consensus using the Delphi Technique where each member prioritized Maryland's strategies and submitted votes for tally. A final prioritized list was generated and the resulting sections were presented to both the Technical and Executive Councils for formal acceptance. The resulting work and formal components of the Traffic Safety Information System are outlined in the included sections: TRCC Management, Data Use and Integration, Crash, Vehicle, Driver, Roadway, Citation and Adjudication, and Injury Surveillance Systems.

TRSP Organization

Each section of the TRSP includes a description of the area, target audience, and a list of strategies prioritized by the members of Maryland's Traffic Records community.

The TRCC is responsible for implementing the plan and tracking progress toward these goals. The TRCC will:

- Prioritize traffic records improvement projects with TRCC members annually.
- Identify and leverage an annual minimum of one federal fund/assistance program.
- Identify and incorporate two strategies annually that address the timeliness, accuracy, completeness, uniformity, integration, or accessibility of the six core data systems.
- Prioritize the use of all funds to address efforts identified in the strategic plan to enhance state traffic records data improvement systems.
- Ensure federally allocated funds are spent in an efficient and effective manner.
- Develop a process to examine data and data systems to identify and document challenges.
- Identify, prioritize, and implement at least one annual training effort to improve the State traffic records data system and provide technical assistance as needed to partners.
- Identify and prioritize performance-based measures and corresponding metrics for the six core data systems annually.
- Identify and integrate state and local needs and assets through an annual survey.
- Identify and prioritize technological advancements to improve the State traffic records data systems.

Traffic Records Program Assessment—NHTSA Recommendations

To continue to assess progress toward the State's goals and determine the priorities for the 2021–2025 TRSP, a follow-up Traffic Records Program Assessment was completed in September 2019. Under federal regulations for traffic records funding (405(c)), states must include all recommendations from the most recent Traffic Records Program Assessment in the TRSP.

The Maryland 2021–2025 TRSP incorporates recommendations and considerations from the 2019 NHTSA Assessment, from FHWA's Maryland State Roadway Safety Data Capability Assessment Action Plan (January 2019), and from the TRCC Technical and Executive Councils, and the 2021-2025 TRSP must be ratified for submission to NHTSA by July 1, 2020.

TRCC Recommendation

- None.

Strategic Planning Recommendation

- None.

Crash Recommendations

- Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Vehicle Recommendations

- Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Driver Recommendations

- Improve the data quality control program for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Roadway Recommendations

- Improve the applicable guidelines for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Citation /Adjudication Recommendations

- Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the interfaces with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

EMS/Injury Surveillance Recommendations

- Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.

Federal Inclusion Criteria

Throughout the five-year plan, the TRCC Program Manager is expected to provide NHTSA with regular updates on the progress of the State's plan. NHTSA Regional Program Managers are to be included during the planning and implementation processes to satisfy their interest in assuring that States are collecting the best data possible that in turn allows them to make appropriately informed decisions at the federal level.

Additionally, paramount to Maryland's Traffic Records Strategic Plan during the five-year cycle is the consideration, support, and guidance from other federal partners (e.g., legislative, organizational, budgetary, or other) in improving the state safety data initiatives. The Appendix has additional detail on ways the State has and may continue to pursue the possibility of receiving federal safety program funds.

Monitoring and Updating the Strategic Plan

The Traffic Records Strategic Plan is developed with a five-year vision and goal-setting process. The plan will remain in place for five years before undergoing a complete re-evaluation and revision. However, progress for each strategy and Assessment recommendation will be monitored by the TRCC Technical Committee on a quarterly basis and evaluated on an annual basis to identify issues or note success. Once a strategy is complete, it will remain in the plan but effort and resources will be focused to another project in the plan as determined by the TRCC.

Traffic Records System Components and Strategies

The Advisory identifies three major sections of a state traffic records system:

1) Traffic Records System Management
   a) Traffic Records Coordinating Committee (TRCC)
   b) Strategic Planning

2) Data Use and Integration

3) Traffic Records System Components
   a) Crash Data
   b) Vehicle Data
   c) Driver Data
   d) Roadway Data
   e) Citation and Adjudication
   f) Injury Surveillance
      i) Pre-hospital (EMS)
      ii) Trauma Registry
      iii) Emergency Department
      iv) Hospital Inpatient
      v) Vital Records

Traffic Records System Management (TRCC and Strategic Planning)
Description
The Traffic Records Coordinating Committee coordinates all traffic records system components (crash, roadway, citation/adjudication, driver, vehicle, injury surveillance) using data quality performance measures (timeliness, completeness, accuracy, accessibility, integration, uniformity) to advance the Maryland traffic safety community in achieving the vision of no traffic-related deaths.

Target Customers
TRCC Council Chairs and Facilitator

Prioritized Strategies
1. Conduct and publish a complete traffic records system inventory with data definitions, flow diagrams for each component system, a brief description of each data system and set, to include who owns the data and contact information, any limitation on the use of the data, and for what the data system is best used.
2. Prioritize strategic plan responsibilities using annual timelines.
3. Catalog and publish data release policies and/or data sharing agreements from all partners with traffic records data, specifically identifying rules that allow intra- and inter-agency access, and public access.
4. Review and prioritize federal data element requirements—Model Minimum Uniform Crash Criteria Guideline (MMUCC), National Emergency Medical Services (EMS) Information System (NEMSIS), and Model Inventory of Roadway Elements (MIRE)—to enhance State traffic records data improvement systems.
5. Institutionalize the evaluation of TRCC responsibilities:
   a. Monitor annual progress of the TRCC strategic plan.

    b. Track agency policy decisions that impact the State's traffic records system.
    c. Document progress through Council Meeting agendas/minutes.
6. Improve performance measure monitoring and oversight at the TRCC. Assign responsibility to performance measure owners for reporting to the membership at each meeting.
7. Establish regular quality control reporting and enhance the review of technical and training needs of traffic records system end users, expanding to a wider range of stakeholders and end-user needs.
8. Ensure the annual addenda to the five-year plan are robust and detailed enough to meet the federal grant reporting requirements and provide the State with the necessary oversight and monitoring of its traffic records system progress.
9. Improve performance measures contained within the Strategic Plan by adding meaningful goals and baselines in addition to establishing quarterly monitoring at the TRCC.

Data Use and Integration

Description

Data integration refers to the establishment of connections between the six major traffic records system components (crash, vehicle, driver, roadway, citation and adjudication, and injury surveillance). Integrated datasets enable users to:

- conduct analyses and generate insights impossible to achieve if based solely on the contents of any singular data system;
- add detail to the understanding of each crash event, the roadway environment, and the people and vehicles involved; and
- efficiently expand the information available to decision-makers while avoiding the expense, delay, and redundancy associated with collecting the same information separately.

Benefits of Integrated Data

1. Lower costs to achieve a desired level of data content and availability.
2. Support for multiple perspectives in data analysis and decision-making.
3. Expanded opportunities for data quality validation and error correction.
4. Additional options for exposure data to form rates and ratio-based comparisons.
5. Enhanced accuracy and completeness of data describing crash events, the roadway environment, and the involved people and vehicles.
6. Increased relevance of information available for legislative and policy analysis.
7. Increased support for advanced methods of problem identification, countermeasure selection, and evaluation of program effectiveness.

Target Customers

Data analysts (end users), policymakers, and general public

Prioritized Strategies

1. Implement data governance guidelines for data release and availability.
2. Provide ongoing access to traffic records data and analytic resources for problem identification, priority setting, and program evaluation with analytical partner support.
3. Integrate data from traffic records system components to satisfy specific analytical inquiries.
4. Provide timely access to data analyses and interpretation upon request.
5. Make outputs from state data linkage systems available to state and local decision-makers to influence data-driven policy and reform.
6. Make outputs from state data linkage systems available to the general public.

7. Make integrated data outputs from data linkage systems available for research abiding by data security agreements.
8. Provide training sessions, presentations, webinars, and technical support to partners on all products and services provided by analysis resources (e.g., grant-funded university- or college-based analysts) in addition to GIS techniques and processes for traffic safety related datasets.

Crash Data

Description

The crash data system is the keystone of a state's traffic records system. The crash data not only hold the basic information critical to developing and deploying effective traffic safety countermeasures, but they also serve as the hub through which other systems are connected.

The crash file documents the characteristics of a motor vehicle crash and provides the following details about each incident:

- Who: Information about the drivers, occupants, and non-motorists involved in a crash (e.g., license status, age, sex).
- What: Information about the type of vehicle involved in a crash (e.g., make, model, body type, vehicle registration).
- When: Information detailing the time a crash occurred (e.g., time of day, day of week).
- Where: Information about the crash location (e.g., location name, lat/long coordinates, type, attributes).
- How: Information describing the sequence of events and circumstances related to a crash from the first harmful event through the end of a crash and its consequences (e.g., damage, injury).
- Why: Information about the interaction of various systems that may have contributed to the crash occurrence (e.g., weather, light conditions, driver actions, non-motorist actions) and/or the crash severity.

Through data linkages, the crash data assist in the identification of types of roadways, vehicles, and individuals involved in a crash. Crash data are also used to guide engineering and constructions projects, prioritize law enforcement activity, select/evaluate safety countermeasures, and to analyze emergency response and how to maximize the level of care, survivability, and analysis of related injuries.

Target Customers

Data users, owners, executives in traffic records-related agencies

Prioritized Strategies

1. Provide a narrative description of the process by which the Model Minimum Uniform Crash Criteria Guideline (MMUCC) was used to identify what crash data elements and attributes are included in the crash database and police crash report.
2. Develop and release documentation on changes made to the Automated Crash Reporting System (ACRS) and related databases based on the latest MMUCC recommendations, and MSP and TRCC input.
3. Convert reporting systems and reports to account for changes in fields, codes, and definitions in ACRS.
4. Develop and maintain a data dictionary that includes American National Standards Institute (ANSI) D-16 and ANSI D-20 definitions, which include rules of use, rules exceptions, and identify those data elements that are populated through linkages to other traffic records system components.

5. Develop and maintain a comprehensive data quality management protocol to monitor collection, submission, processing, posting, and maintenance of crash data.
6. Define and provide a list of data elements for property-damage-only (PDO) crash submission criteria for the statewide crash system and implement a short-form crash report for minor PDO crashes
7. Define and provide a list of data elements that are populated in the crash system through linkages to other traffic records system components (e.g., the driver file, the vehicle file, the roadway inventory, or Statewide mapping system). (MMUCC mapping).
8. Develop crash data system performance measures and monitor at least annually.
9. Provide feedback to law enforcement agencies regarding incomplete and inaccurate data submitted through ACRS.
10. Develop a comprehensive crash data reporting training program with an emphasis on crash data completeness and accuracy.
11. Improve the interface between the crash and roadway data systems, ensuring MSP and law enforcement agencies have the most up-to-date roadway files from MDOT SHA.
12. Establish policy and procedures for the timely submission of crash reports from local law enforcement agencies to MSP through the ACRS system.
13. Incorporate federal agency crash reports into the state system (e.g., National Park Police).
14. Link crash data with EMS records to help integrate crash with Trauma Registry, Hospital, and Vital Records.
15. Develop improved data visualization tools used to access the crash data.

Driver and Vehicle Data

Description

Driver: The driver data system ensures that each person licensed to drive has one identity, one license to drive, and one record. The driver file maintains information on all out-of-state or unlicensed drivers convicted of traffic violations within state boundaries.

Vehicle: The vehicle data system is an inventory of titling and registration data for each vehicle under the State's jurisdiction. The inventory ensures that a descriptive record is maintained and made accessible for each vehicle and vehicle owner operating on public roadways.

Target Customers

Law enforcement, driver and vehicle data managers/collectors, driver safety program managers and researchers, Commercial Driver License (CDL) employers, federal agencies, judicial system

Prioritized Strategies

1. Implement MDOT MVA Customer Connect system modernization to unify core MDOT MVA business systems to enable premier customer service, enhanced safety and security and improve driver and vehicle data quality.
    - Implement real-time National Motor Vehicle Title Information System (NMVTIS) checks for all vehicle titling transactions.
    - Capture novice drivers' training histories, drivers' traffic violations, driver improvement training histories, and original dates of issuance for all permits, licenses, and endorsements in the driver system.
2. Continue participation in the Performance and Registration Information Systems Management (PRISM) program.

3. Continue participation in the State-to-State verification service in all driver license transactions and develop performance measures to monitor system performance and compliance with program standards.
4. Evaluate the feasibility of including Blood Alcohol Concentration (BAC) information on the driving record either by interface with external data systems or by manual process, including resources required to implement this action in a reasonable timeframe.
5. Develop quality management systems that list performance measures for timeliness, accuracy, completeness, uniformity, accessibility, and integration.
6. Maintain an updated data dictionary for the driver and vehicle systems and provide updates to Maryland's traffic records inventory.
7. Develop performance measures to ensure that critical and essential administrative actions are being added to driving records accurately and within expected timeframes.
8. Maintain updated data processing flow diagrams for critical driver and vehicle transactions that detail data inputs, validation steps, interfaces with external data systems, and time necessary to complete each element of the transaction.
9. Enhance interfaces between the driver and vehicle systems with other components of the traffic records system.
10. Develop performance measures for vehicle systems and report regularly to the TRCC.
11. Develop and adopt a comprehensive data management program for the driver system that includes the development of performance standards for data accuracy, completeness, uniformity, accessibility, and integration.
12. Increase capability to monitor impaired driving offenders through driver system interfaces and integration with other data systems to ensure that offenders are properly identified and that subsequent license sanctions, conviction information, and follow-up activities are completed and recorded on the driver history.
13. Develop and provide driver and vehicle system data quality management reports to the TRCC for regular review and ensure driver and vehicle system managers participate in TRCC meetings.

Roadway Data

Description

The State's roadway data system comprises data collected by the State, such as State-maintained roadways and some local roadways, as well as data from local sources, such as county and municipal public works agencies and Metropolitan Planning Organizations (MPOs).

Target Customers

Traffic engineers, MDOT SHA – OHD (Office of Highway Design) (Highway Safety Manual - HSM) and DSED (Data Services Engineering Division), data users (reporting systems needing GPS info – MSP crash)

Prioritized Strategies

1. Maintain process flow diagrams and written narrative details that outline data submission, returning and resubmission requirements and local agency procedures, in the traffic records inventory.
2. Improve the data quality control program for the roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory and the Roadway Safety Data Capability Assessment (RSDC).

- Assist the roadway system custodian with developing quality management systems that list performance measures for timeliness, accuracy, completeness, uniformity, accessibility, and integration.
- Reduce the frequency of missing or blank data fields on State-maintained roadways in the inventory to less than 5%.
- Pursue high level of detail on all segments as well as either intersections or curves on State-maintained roadways.

3. Maintain a data dictionary for the roadway system, incorporating the Model Inventory of Roadway Elements (MIRE) elements and include this detail as part of the traffic records inventory.
4. Improve the State roadway system to meet federal guidelines itemized in All Roads Network of Linear-Referenced Data (ARNOLD).
    - Capture all public roadways using a compatible uniform location referencing system in the roadway system by collaborating with county partners) to eliminate redundancy.
    - Maintain an enterprise roadway information system.
    - Maintain interfaces between roadway information systems.
    - Expand the Model Inventory of Roadway Elements (MIRE) data elements collected to improve analyses to develop and track potential countermeasures and identification of safety problems.
5. Develop and maintain interfaces between the roadway information systems and the other components of the traffic records system.
6. Incorporate specific, quantifiable, and measurable improvements for the collection of MIRE fundamental data elements (FDE) to ensure access to a complete collection of the MIRE FDEs of all public roads by September 30, 2026.
    - Evaluate the status of MIRE FDE collection efforts, including fundamental data elements currently maintained or not maintained in the roadway inventory as well as the public roads for which the FDEs are collected.
    - Document the appropriate data collection methodology.
    - Coordinate with other Maryland agencies at the state and local level.
    - Develop prioritization criteria for collecting MIRE FDEs on all public roads.

Additional Strategies Based on Recommendations from FHWA's RSDC Assessment:

1. Continue with the One Maryland One Centerline (OMOC) project that facilitates the complete inventory for all roadway elements.
2. Continue with the ESRI Roads and Highways implementation.
3. Continue data collection efforts for the safety data items—Bicycle/Pedestrian, Lighting, Work Zone, Structural Maintenance Zone Classification, and Guard Rails.
4. Develop a standardized set of performance measures that are reported more frequently for data managers, collectors, and data users.
5. Reduce the amount of time required for submission of as-built plans and/or for updating the database to achieve a goal of 1-3 months from completion of the roadway change. Roadway segment, traffic volume, intersection, interchange, ramp data are all on annual cycles with a typical time lapse of one year.
6. Continue the development of the change management model to help with tracking changes to the State roadway file.
7. Continue the OMOC project to move closer to 100% accuracy in the inventory. The State currently maintains a high level of accuracy (upwards 90%).

8. Provide feedback to law enforcement agencies on crash reporting to allow the State to identify fields that require better validation edits which will help collect better data on input.
9. Adopt more reliable methods for network screening. Traditional methods are prone to error and require similar levels of data as the more reliable methods. The level of analytic capabilities required to adopt more reliable methods is higher than for traditional methods, but the payoff in improved validity leads to the identification of sites with more potential for safety improvement.
10. Attempt to obtain crash data from federal parks and military installations.
11. Continue to develop asset inventories of interest.
12. Ensure the data are accessible to all potential users (not siloed), from an asset management perspective.
13. Develop and implement Agile Assets or another similar inventory tool would be useful to support this need for all public roads.
14. Develop a complete inventory and safety-project tracking mechanism for all public roads.
15. Ensure that the needs of new/infrequent users are addressed by agency policies and procedures. The State iMap address most needs for data accessibility. However, there is an opportunity to allow for electronic exchanges to provide data to users on a regular interval.
16. Continue the development of data documentation with the OMOC project. The State does have data dictionaries available. This could be expanded to guidance on data quality (where applicable).
17. Incorporate user satisfaction surveys as a potential measure of accessibility.
18. Draft policies that address the challenges in the data management policy.
19. Empanel a data governance group (e.g., asset management committee) charged with developing data governance processes.
20. Develop a Data Business Plan for managing core data programs in each agency/division.
21. Publish a Data Governance manual/handbook.
22. Establish formal policies for approval of all new data management initiatives.
23. Review policies, standards, goals, and targets periodically to ensure that user' needs are addressed sufficiently and that the state's standards evolve in response to changing needs.
24. Identify new opportunities to integrate datasets, e.g., obtain the bicycle and scooter crash data from local agencies and continue to encourage use of integrated data in safety analysis.
25. Continue with the development of the OMOC project to move towards a fully integrated statewide enterprise system for safety analysis of all public roads.
26. Continue improvements to the automated assignment of crash data locations, e.g., consider making manual adjustments to crashes beyond fatal crash reports.
27. Continue to develop and complete initiatives to identify and address essential safety data gaps and periodically assess and refine data quality improvement processes.
28. Enhance coordination efforts for safety performance with MPOs and other stakeholders within the State by:
    - Apply the evidence-based approach across multiple planning cycles. Conduct periodic reviews and refine the process and targets as needed.
    - Develop practices to strengthen performance-based planning and programming decisions.
29. Continue to expand capabilities to predict the impact of planned and programmed Highway Safety Improvement (HSIP) projects on future safety performance.
30. Develop scenario analysis capability that supports testing of various project mixes and assumptions.

31. Expand the capability to access and review pertinent data on external factors likely to impact future safety performance, including but not limited to socioeconomic data (population, demographics, jobs, etc.), vehicle miles traveled (VMT), revenues.
32. Refine the capability to predict the impact of planned and all programmed TIP and/or TIP projects (other than those in the HSIP) on future safety performance.
33. Develop the advanced scenario analysis capability with the ability to estimate future safety performance for different sets of projects, program elements, and varying assumptions about external factors.

Citation and Adjudication Data

Description

For traffic records purposes, the goal of the citation and adjudication data systems is to collect all information relevant to traffic-related citations in a central, statewide repository (and linked to appropriate federal data systems) so the information can be analyzed by authorized users to improve and promote traffic safety.

Target Customers

Law enforcement, driver licensing system, Court system to include Drug and DUI Courts, MDOT SHA

Prioritized Strategies

1. Implement a citation tracking system (from issuance to disposition).
    - Include violations issued to commercial drivers/vehicles in the tracking system and make that information available to administrative stakeholders.
    - Support Federal Motor Carrier Safety Administration (FMCSA) requirements for recording, reporting and adjudicating of CDL violations and licensing status, to include medical certification and appropriate endorsements
    - Support the interfaces to connect needed data from the court system, driver licensing, crash, and large trucks/commercial vehicles with the other components of the traffic records system.
    - Include BAC results on the driver history.
2. Maintain and improve the data dictionaries for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
3. Maintain the abilities to track DUI citations, administrative driver penalties and sanctions, juvenile offenders, court payments and appearances, deferral and dismissal of citations, record purging, and data governance.
4. Develop quality management systems that list performance measures for timeliness, accuracy, completeness, uniformity, accessibility, and integration.
5. Establish an effective process to ensure paper citations are submitted to the District Court accurately and within expected timeframes by law enforcement.
6. Expand the use of the State's e-citation system to all eligible state law enforcement agencies and officers and to federal partners.
7. Maintain process flow diagrams and written narrative details that outline data submission, returning and resubmission requirements for the citation/adjudication system, including all levels of courts, and include in traffic records inventory.
8. Expand the deployment and functionality of electronic citation capabilities as the standard for the State.

9. Improve the accuracy and collection of vehicle make, model, and violation location on traffic citations.
10. Expand the functionality of Delta Plus through the development of additional modules for collection and analysis of the data by members of the traffic records community.
11. Increase automation of updates to driver records from court adjudication data.
12. Enhance interfaces between Court, Citation, Crash, Vehicle and Driver data systems.

Injury Surveillance Data

Description

The injury surveillance data system tracks the frequency, severity, and nature of injuries sustained in motor vehicle crashes; enables the integration of injury data with the crash data; and makes this information available for analysis that supports research, prevention, problem identification, policy-level decision-making, efficient resource allocation, and program evaluation.

This section incorporates:

- pre-hospital emergency medical services (EMS);
- trauma registry;
- emergency department;
- hospital discharge; and
- mortality data (e.g., death certificates, medical examiner reports).

Target Customers

Traffic records community, Injury Surveillance System managers, Emergency Medical Services community

Prioritized Strategies

1. Maintain process flow diagrams, written narrative details that outline data submission, returning and resubmission requirements for each of the core injury surveillance systems (EMS, Emergency Department, Hospital Discharge, Trauma Registry, Vital Records), and data dictionaries, and include these items in the traffic records inventory.
2. Ensure injury surveillance system data are available for analytical purposes.
3. Assist each of the injury surveillance system components with developing quality management systems that list performance measures for timeliness, accuracy, completeness, uniformity, accessibility, and integration.
4. Develop training, data collection manuals, and validation rules addressing high frequency errors in each injury surveillance data system component.
5. Document and ensure quality control processes are in place to assess completeness, accuracy, timeliness, integration, accessibility, and uniformity for each of the core injury surveillance systems (EMS, Emergency Department, Hospital Discharge, Trauma Registry, and Vital Records). Update records at least once every three years.
6. Track documented findings from quality control methods and lists regarding completeness, accuracy, timeliness, integration, accessibility, and uniformity.
7. Develop corresponding training, data collection manuals, and validation rules addressing high frequency errors for each performance area.
8. Assist partnering agencies with implementation of quality assurance and improvement procedures for collecting, editing, error checking, and submitting reports.

Benchmarking and Goal Setting

To follow Maryland's Traffic Records logic model, outputs (short-term and intermediate outcomes) for the six traffic records attributes (accessibility, accuracy, completeness, integration, uniformity, timeliness) will be established and tracked annually. These measures serve as benchmarks against which Maryland can track performance and current status of each system component.

Maryland strives to identify performance measures and performance attributes for each traffic records system component. Included measures will be assessed on a yearly basis using accepted best practice standards. A yearly summary of progress will be included as an addendum to this plan.

Prioritization Process

Projects overseen by the TRCC, especially those receiving federal grant funding, will be prioritized using a points system and Four Box Analysis process.

Points for each project are to be assigned using the following questions:

1. How difficult is the project in terms of infrastructure, territorial, and policy issues?
2. How significant will the project impact the traffic record system if successful?
3. How expensive will the project be? (a weighted cost x reliability of estimate maybe appropriate)
4. Are improvements to one system necessary in order to better another?

Table 2: Four Box Analysis

High Payoff – Low Risk or Cost Good Opportunity High Priority	High Payoff – High Risk or Cost Moderate Opportunity Middle Priority
Low Payoff – Low Risk or Cost Moderate Opportunity Middle Priority	Low Payoff – High Risk or Cost Poor Opportunity Low Priority

Projects will be monitored throughout the year and tracked accordingly.

Implementation Process

Strategies in the TRSP will be monitored during TRCC Technical Council meetings, TRCC Executive Committee Meetings, and annually in a progress performance report. Appropriate action steps and related projects will be tracked annually and reported in the Highway Safety Plan. Performance measures will be developed and tracked annually by the TRCC and included in the Highway Safety Plan.

Appendices

Appendix 1: Maryland Traffic Records Strategic Planning Steering Committee
Appendix 2: Federal Partners: Supporting Resources
Appendix 3: Update to 2014 Traffic Records Assessment Recommendations
Appendix 4: Update to 2019 Traffic Records Assessment Recommendations
Appendix 5: Performance Measures
Appendix 6: MIRE FDE
Appendix 7: Maryland's Traffic Safety Information System Improvement Program (FFY2024)
Appendix 8: Performance Measures Progress Calculations
Appendix 9: Emergency Medical Systems (EMS) and Trauma Registry Performance Measures
Appendix 10: Funding Sources

Appendix 1: Maryland Traffic Records Strategic Planning Steering Committee
A special thanks to the dedicated members of Maryland's Traffic Records Strategic Planning Steering Committee. With their commitment to the Maryland Traffic Records System, we are pleased to present the Maryland Strategic Plan.

David Balthis, Maryland Institute for Emergency Medical Services Systems
Brian Browne, District Court of Maryland
Jason Cantera, Maryland Institute for Emergency Medical Services Systems
First Sergeant Christopher Corea, Maryland State Police
Oscar Ibarra, Maryland Health Services Cost Review Commission
Dr. Timothy Kerns, MDOT MVA Highway Safety Office
Georgette Lavetsky, MHS, Maryland Department of Health (MDH)
Sean Lynn, Washington College GIS Program
Freemont Magee, Maryland Institute for Emergency Medical Services Systems
Carole Mays, Maryland Institute for Emergency Medical Services Systems
Peter Moe, MDOT Motor Vehicle Administration
John New, Maryland Institute for Emergency Medical Services Systems
Michel Sheffer, MDOT State Highway Administration
Monique Wilson, MDH Vital Statistics Administration

Steering Committee Facilitator
Kimberly Auman, University of Maryland Baltimore, National Study Center for Trauma & EMS

State Traffic Records Coordinator
Douglas Mowbray, MDOT MVA Highway Safety Office

Appendix 2: Federal Partners: Supporting Resources

Federal Partners: Supporting Resources			
Type of Assessment or Analysis	**Responsible Federal Partner**	**Description**	**Date Last Completed**
Traffic Records Assessment	National Highway Traffic Safety Administration	Peer evaluations of state traffic records system capabilities. A report out includes ratings, recommendations, and considerations that the state may consider in working to improve their traffic records system.	September 2019
Drivers Education Assessment	National Highway Traffic Safety Administration	Serves to guide all novice teen driver education and training programs in states striving to provide quality, consistent driver education and training.	August 2010
Impaired Driving Program Assessment	National Highway Traffic Safety Administration	A mechanism to assess the impaired-driving problem in the state, document the existing system, recommend improvements, and garner both political and public support to fund and implement improvements.	TIRF, Spring 2021; Spring/Summer 2023
Occupant Protection Program Assessment	National Highway Traffic Safety Administration	This assessment is to help states in a review of the occupant protection programs and to offer suggestions for improvement.	January 2020
Crash Data Improvement Program (CDIP)	Federal Highway Administration	CDIP is intended to provide states with a means to measure the quality of the information within their crash database. Originally, CDIP was established to help familiarize the collectors, processors, maintainers, and users with the concepts of data quality and how quality data helps to improve safety decisions.	July 2010
Roadway Data Improvement Program (RDIP)	Federal Highway Administration	RDIP is to help transportation agencies improve the quality of their roadway data to support safety initiatives. It provides traffic safety professionals a tool to assist them in identifying, defining, measuring, and ultimately improving the quality of the data within their roadway databases.	N/A
Roadway Safety Data Capability Assessment (RSDP)	Federal Highway Administration	RSDP is a collaborative effort between FHWA and states to develop robust, data-driven safety capabilities. RSDP includes a variety of projects aimed at improving the collection, analysis, management, and expansion of roadway data for use in safety programs and decision-making. FHWA uses information gathered from the states to identify common themes and	April 2012; January 2019

		critical gaps to develop a national gap analysis and action plan.	
Motor Carrier Safety Assistance Program	Federal Motor Carrier Safety Administration	Grants to improve the crash and inspection upload accuracy for Commercial Motor Vehicle Crashes in the State of Maryland in support of the Compliance Safety and Accountability (CSA) safety rating.	Ongoing (Consultant on staff with SHA Motor Carrier Division)
Highway Performance Monitoring System/All Roads Network of Linear Reference Data	Federal Highway Administration	Each state shall establish a safety data system covering all public roads, including non-State-owned public roads and roads on tribal land in the state in a geospatial manner. In other words, state highway agencies will have a geospatially enabled public roadway network or base map.	N/A
Go Teams	National Highway Traffic Safety Administration	Traffic Records GO Teams provide resources and assistance to state traffic records professionals as they work to better their traffic records data collection, management, and analysis capabilities. GO Teams are small groups of one to three subject matter experts designed to help states address traffic records issues.	Crash Data System Assistance, March-June 2021
Pedestrian and Bicycle Safety Program Assessment	National Highway Traffic Safety Administration	Examines significant components of a State's pedestrian safety program. Each State, in cooperation with its political subdivisions, should have a comprehensive pedestrian and bicycle program that educates and motivates its citizens to follow safe pedestrian and bicycle practices. A combination of legislation, regulations policy, enforcement, public information, education, incentives, and engineering is necessary to achieve significant, lasting improvements in pedestrian and bicycle crash rates, and to reduce resulting deaths and injuries.	April/May 2022

Appendix 3: Update to 2014 Traffic Records Assessment Recommendations

Note: Included for historical purposes. All recommendation updates will be based on the 2019 Assessment.

MARYLAND TRAFFIC RECORDS ASSESSMENT RECOMMENDATIONS DECEMBER 2014								
REC LABEL	**RECOMMENDATION**	**Not Addressed**	**No Progress**	**Pending Action**	**Some Progress**	**Significant Progress**	**Complete**	**Notes**
SP1	Strengthen the TRCC's abilities for strategic planning that reflect best practices identified in the Traffic Records Program Assessment Advisory.				✓			Incorporated TRA recommendations and considerations into TRSP. Some of the action items in the TRSP have been complete or are ongoing, but an inventory has not been complete.
Crash1	Improve the procedures/process flows for the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.				✓			Improvements were made to the ACRS supervisor screen, but the ACRS Task Force has been disbanded. MMUCC 5 was thoroughly reviewed and recommendations and improvements are under consideration by MSP.
Crash2	Improve the interfaces with the Crash data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.				✓			Informal discussions have happened to develop a crash and EMS interface, but logistics have not been finalized. The state roadway file is still being planned for incorporation into the crash data system.
Crash3	Improve the data quality control program for the Crash data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.				✓			Improvements were made to the ACRS supervisor screen, but the ACRS Task Force has been disbanded. MSP continues to train users on ACRS, but there is no formal program to track, train, and improve the crash data.
Vehicle1	Improve the applicable guidelines for the Vehicle data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.			✓				The MDOT MVA Customer Connect system modernization, set to deploy in 2020, incorporates many systems improvements related to vehicle transactions.

REC LABEL	RECOMMENDATION	Not Addressed	No Progress	Pending Action	Some Progress	Significant Progress	Complete	Notes
Vehicle2	Improve the data quality control program for the Vehicle data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.			✓				MDOT MVA has established an Office of Data Management to support initiatives to implement a comprehensive vehicle data quality monitoring system.
Driver1	Improve the description and contents of the Driver data system that reflect best practices identified in the Traffic Records Program Assessment Advisory.			✓				As a part of the driver data system element of the Customer Connect system modernization, new system documentation is being developed consistent with best practices.
Driver2	Improve the data quality control program for the Driver data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.			✓				MDOT MVA has established an Office of Data Management to support initiatives to implement a comprehensive driver data quality monitoring system.
Roadway1	Improve the procedures/process flows for the Roadway data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.					✓		As the Maryland Centerline project is finalized, documentation of the procedures and processes are being developed. Maryland completed a Roadway Safety Data Capability Assessment with high marks.
Roadway2	Improve the data quality control program for the Roadway data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.					✓		Through the Maryland Centerline project, quality control mechanisms are being implemented for all roadway data.

REC LABEL	RECOMMENDATION	Not Addressed	No Progress	Pending Action	Some Progress	Significant Progress	Complete	Notes
Citation1	Improve the data dictionary for the Citation and Adjudication systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.				✓			The court system is in the final phases of a comprehensive upgrade (Maryland Electronic Courts – MDEC) to bring all levels of court onto the same data platform.
Citation2	Improve the interfaces with the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.				✓			The court system is in the final phases of a comprehensive upgrade MDEC to bring all levels of court onto the same data platform.
ISS1	Improve the interfaces with the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.					✓		The EMS and Trauma Registry systems are interfacing using the ImageTrend Field Bridge.
ISS2	Improve the data quality control program for the Injury Surveillance systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.					✓		All 24 jurisdictions in Maryland are on the electronic Maryland EMS Data System (eMEDS)platform so all EMS data undergo the same quality control program within that software.

2014 Assessment Recommendations

	Number	%
Not addressed	0	0%
No progress	0	0%
Pending Action	4	29%
Some Progress	6	43%
Significant Progress	4	29%
Complete	0	0%
Total	14	100%

June 5, 2019 status

Appendix 4: Update to 2019 Traffic Records Assessment Recommendations (FFY2024 HSP Submission)

MARYLAND TRAFFIC RECORDS ASSESSMENT RECOMMENDATIONS September 2019								
REC LABEL	**RECOMMENDATION**	**Not Addressed**	**No Progress**	**Pending Action**	**Some Progress**	**Significant Progress**	**Complete**	**Notes**
Crash1	Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.					✓		MSP Central Records Division (CRD) continues to provide feedback to local law enforcement agencies on issues with reporting elements such as off-road and missing BAC. MSP plans to upgrade ACRS with recommendations from the TRCC and MMUCC 5. ACRS 2.0 is tentatively scheduled for launch in January 2024. Significant changes to fields and attributes will benefit the quality of the data. MSP and MDOT-SHA are working on a "feedback loop" to incorporate edits or suggested changes made by SHA analysts into the MSP Data Warehouse. The recent launch of a Fatal Crash Dashboard presented more opportunities for examining the quality of the crash data and developing recommendations for improvements. The inclusion of United States Park Police fatal crash records in the MSP Data Warehouse has been a significant QC-focused effort.
Crash2	Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.				✓			MSP and SHA continue to work together to update ACRS with the most recent roadway inventory information to have improved location information and the ability to integrate other roadway attributes into the crash database. The data will not interface (live) with the SHA roadway data, but rather be integrated

								into ACRS. No other interface initiatives are planned currently.
Vehicle1	Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.					✓		In October 2022, MDOT MVA initiated a data quality improvement effort to review and update critical data elements in its vehicle records. A comprehensive scan of all 13.6 million vehicle records identified 2,242,817 vehicles with incorrect or incomplete data for vehicle make, model, model year, and fuel type, based on VIN decode. In a scan for level of electric/hybrid level, 1,183,700 vehicle records were updated. These data quality improvement efforts were discussed at quarterly TRCC meetings. MDOT MVA has also developed a business intelligence solution to measure the transaction time for front-facing and back office vehicle transactions to identify opportunities for improving the flow of vehicle-related transactions
Vehicle2	Improve the interfaces with the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.					✓		MDOT MVA continues to refine and improve its unified enterprise system for driver and vehicle records, Customer Connect, including interface data exchanges with external partners through web services, with licensed dealers and other businesses via specific web portals, and public customers through enhancements to the MyMVA internet interface. Weekly change bulletins are distributed to all staff noting enhancements and changes to the internal and external interfaces. In the coming year, MDOT MVA will upgrade the enterprise to "Core 21" which will

								enable further enhancements to vehicle systems interfaces.
REC LABEL	**RECOMMENDATION**	**Not Addressed**	**No Progress**	**Pending Action**	**Some Progress**	**Significant Progress**	**Complete**	**Notes**
Driver1	Improve the data quality control program for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.					✓		MDOT MVA monitors data quality through AAMVA CDLIS and SPEX data quality reporting with specific performance standards for timeliness and accuracy. Updates on these performance measures are discussed during quarterly meetings of the TRCC Technical Committee. As part of the enterprise system upgrade, all driver-related records are stored within the same system, including impaired driving violations (both administrative and criminal), related sanctions and remediation/diversion programs such as ignition interlock, and the reinstatement of licenses revoked for alcohol violations.
Driver2	Improve the interfaces with the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.					✓		MDOT MVA continues to refine and improve its unified enterprise system for driver and vehicle records, Customer Connect, including interface data exchanges with external partners through web services, with businesses and medical professionals via specific web portals, and public customers through enhancements to the MyMVA internet interface. Weekly change bulletins are distributed to all staff noting enhancements and changes to the internal and external interfaces. In the coming year, MDOT MVA will upgrade the enterprise to "Core 21" which will

								enable further enhancements to vehicle systems interfaces.
Roadway1	Improve the applicable guidelines for the Roadway data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.					✓		MDOT SHA has developed an ArcGIS Hub Portal for distribution of roadway datasets, and is accessible here: https://data-maryland.opendata.arcgis.com/pages/mdot
Roadway2	Improve the data quality control program for the Roadway data system that reflects best practices identified in the Traffic Records Program Assessment Advisory.					✓		MDOT SHA continues to improve QC processes and is working to ensure the roadway files are accessible and useful.
REC LABEL	**RECOMMENDATION**	**Not Addressed**	**No Progress**	**Pending Action**	**Some Progress**	**Significant Progress**	**Complete**	**Notes**
Citation1	Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.				✓			The District Court is working with MSP and local law enforcement agencies have developed processes to reduce errors entering the system. The Court is continuing to streamline the process. The goal is to reach 99% error free. MSP implemented a checkbox when there is no license which reduced the number of issues with assumed missing data. National Resources Police citation data will be submitted.
Citation2	Improve the interfaces with the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.			✓				No new interfaces have since been developed; still working on system functionality issues.

ISS2	Improve the data quality control program for the Injury Surveillance systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.					✓		For the Injury Surveillance System components, Emergency Medical Services and Trauma Registry, each have been assigned all six Advisory data quality control measurements (including goals, baselines and measurements). These were developed in conjunction with respective user groups and address Motor Vehicle Crash related patients directly or indirectly. Appendix 9 illustrates the many improvements and steady progress for the data derived from NEMSIS-compliant patient run records.

2019 Assessment Recommendations

	Number	%
Not addressed		0%
No progress		0%
Pending Action	1	9.%
Some Progress	2	18%
Significant Progress	8	73%
Complete		0%
Total	11	100%

Updated as of May 2023

Appendix 5: Performance Measures

System			
EMS	**Performance Measure Statement**	**Measure (Baseline/Goal)**	**Outcome**
Accessibility	Ensure that all data access requests for electronic Maryland EMS Data System® (eMEDS® -- the State's patient care reporting system) data/information are reviewed for appropriateness (non-confidentiality adherence) and facilitated within 30 days of request.	Number of Data Access Committee (DAC) related approved EMS data requests completed within 30 days over the total number of Data Access Committee related approved EMS data requests. Baseline is 95%. Goal is to maintain 95% or greater during the SFY 2021.	See Appendix 9.
Accuracy	Reduce the % Potential Motor Vehicle Crash (MVC) Transports with "Blank" Cause of Injury responses: Statewide CY 2017 Baseline – 18%	Number of MVC dispatch code records with a "Blank" Cause of Injury" over the total number MVC dispatch code records (by Emergency Medical Services Operational Program {EMSOP}). Baseline is 18% statewide average. Goal is to maintain an individual EMSOP average of 10% or less for all EMSOPS.	Accuracy: MVC Cause of Injury Blanks: **2.0 percent improvement**
Completeness	Increase the number of eMEDS® records that employ the use of the Computer-Aided Dispatch (CAD) data interface downloads. Increase the % match of patient account number in the Shock Trauma Center Toxicology database to the HSCRC Hospital and ED database. Increase the completeness percentage of MVC Cause on Injury data in eMEDS.	Number of eMEDS® records with CAD downloads over the total number of records. Baseline is 96%. Goal is to maintain 96% or greater during the SFY 2021. Increase from 87%-88% in 2015-2016 (the most recent years for which we have available data) to 95% by the year 2025. Increase the completeness percentage of MVC Cause on Injury data in eMEDS from 92% in 2017 to 99% in 2025.	See Appendix 9.

Integration	Increase the percent of eMEDS that match existing records within Chesapeake Regional Information System for Patients (CRISP, the State's health information exchange).	Number of eMEDS records provided to CRISP resulted in a match of a record within CRISP. Baseline is 81%. Goal is to maintain 81% or greater during the SFY 2021.	See Appendix 9.
Timeliness	Reduce the amount of time from unit dispatch until an eMEDS® record is properly marked completed by the clinician.	The statewide goal is to have an eMEDS® report properly marked completed within 24 hours or less of a unit's dispatch. A per jurisdiction baseline will be established and measured monthly with a jurisdictional goal of 95% of all calls being properly marked complete within 24 hours or less.	See Appendix 9.
Uniformity	Ensure compliance with the National Emergency Medical Services Information System (NEMSIS) standard data elements and responses through successful periodic submission to NEMSIS.	Number of eMEDS® records successfully submitted to NEMSIS over the total number of records submitted first time. Baseline is 100%. Goal is to maintain 100% during the SFY 2021.	See Appendix 9.
Trauma Registry	**Performance Measure Statement**	**Measure (Baseline/Goal)**	**Outcome**
Accessibility	Ensure that all data access requests for Maryland Trauma Registry (MTR) data/information are reviewed for appropriateness (non-confidentiality adherence) and facilitated within 30 days of agreement of request.	Number of Data Access Committee (DAC) related approved MTR data requests completed within 30 days of agreement over the total number of Data Access Committee related approved MTR data requests. Baseline is 95%. Goal is to maintain 95% or greater during the SFY 2021.	See Appendix 9.
Accuracy	Code of Maryland Regulations (COMAR) 30.08.05.21.I - Inter-Rater Reliability (IRR) monitoring of the trauma data entered	COMAR 30.08.05.21.I - The Trauma Registry shall have a plan to ensure IRR of the data entered into the MTR at individual trauma centers. Ongoing	See Appendix 9.

	into the MTR to ensure the quality, reliability, and validity.	review and evaluation shall ensure the quality, reliability, and validity of the institution's MTR registry data. A State baseline for IRR (15-20 trauma center records monthly) will be determined over SFY 2021; the minimum goal is 95% and a 99% stretch, to assess accuracy gaps at the data abstraction level.	
Completeness	Reduce the percentage of missing/unknown values in data elements (Patient Age-years, Glasgow Coma Score, Systolic Blood Pressure, Injury Severity Score) used for the calculation of Trauma Injury Severity Scores (TRISS).	Utilize the report, "Percent Date Completeness for Specific Data Elements" to identify qualifying records which TRISS elements are below a baseline of 86%. The goal is 95% for all elements, during the SFY 2021.	See Appendix 9.
Integration	Maryland trauma center submissions to the National Trauma Data Bank (NTDB) are included in the overall NTDB data repository.	Yearly comparisons of Maryland trauma centers with the rest of NTDB submittals nationwide. The baseline was Calendar Years 2010-2015 and comparing years thereafter to baseline and current year. Any differences that MIEMSS deems necessary will be investigated further.	See Appendix 9.
Timeliness	Verification of trauma records no later than 6 weeks after the end of each quarter.	All trauma patient records shall be submitted both quarterly and annually. Verification of counts and data element completeness shall be within six weeks after the end of each quarter. The goal is 100%.	See Appendix 9.

Uniformity	Ensure Maryland Trauma Registry (MTR) compliance with the National Trauma Data Bank (NTDB) standard data elements and responses through successful periodic submission to NTDB.	Each trauma center submits directly to the NTDB. MIEMSS currently does not receive feedback about the number of records successfully submitted on the first round. We are exploring a way to obtain this data over SFY 2021. The goal is 95%.	See Appendix 9.
ED/Inpatient Records	**Performance Measure Statement**	**Measure (Baseline/Goal)**	**Outcome**
Accessibility	Increase the number of users that report successfully accessing emergency department or inpatient discharge data for research purposes.	Increase the percent of data users to 85% from approx. 85 requests/year by 2021. Note: working with CRISP and other partners on this task- the outcome would be potentially more research done using hospital discharge data.	No reported updates.
Accuracy	Minimize the number of resubmissions for error corrections each quarter.	Reduce the error threshold from 10 % to 5 % for final quarterly submissions by 2022 (to be effective January 2021).	No reported updates.
Completeness	Reduce the percentage of missing/unknown values in data elements that do not have a state-level validation rule.	Reduce the percent of errors for important variables by 2-3% from an average of 6%.	No reported updates.

Integration	Increase the percentage of records with a traffic crash E-code and MAIS>1 that link to crash reports. Increase the percentage of records with an EMS transport that link to the EMS file.		No reported updates.
Timeliness	Reduce the number of days from the end of the quarter to when the file is ready for research/dissemination.	Reduce data processing time by 5 days by streamlining processing programs and edit checks July 2020, October 2020 and January 2021 - Data can be shared with external users sooner.	No reported updates.
Uniformity	Increase compliance with the most recent Uniform Billing Standard.		No reported updates.
Roadway	**Performance Measure Statement**	**Measure (Baseline/Goal)**	**Outcome**
Accessibility	Increase the number of local engineering users that report successfully accessing state roadway data for research purposes.	Increase the number of local engineering users that report successfully accessing state roadway data for research purposes from 40% to 100% by December 31, 2025.	No reported updates.
Accuracy	Increase the percentage of correct/accurate values in data elements that do not have a state-level validation rule.	Increase the percentage of correct/accurate values in data elements that do not have a state-level validation rule from 75% to 100% by December 31, 2025.	Data freely available and published here annually: https://data-maryland.opendata.arcgis.com/pages/mdot Data cleanup complete and any errors identified are promptly corrected.
Completeness	Increase the percentage of Baltimore City streets and/or alleys captured in the state file.	Increase the percentage of Baltimore City streets and/or alleys captured in the state file from 70% to 100% by December 31, 2025.	County and City data from DoIT for NG911 purposes if conflated to OMOC quarterly. Near 100% completeness.

Integration	Increase the percentage of crash reports with location information that matches the state roadway file.	Increase the percentage of crash reports with location information that matches the state roadway file from 50% to 85% by December 31, 2025.	Working with MSP to provide data replacement for ACRS. This should raise accuracy to goal or higher.
Timeliness	Reduce the number of days needed to incorporate roadway changes/additions to the state file.	Reduce the number of days needed to incorporate roadway changes/additions to the state file from 365 to fewer than 90 days by December 31, 2025.	DoIT NG911 data is conflated quarterly, and we add state roadway project data before road open using drone derived imagery.
Uniformity	Increase compliance with the Model Inventory for Roadway Elements guidelines and Fundamental Data Elements—Number of MIRE Fundamental Data Elements for Non-Local (based on functional classification) Paved Roads; Number of MIRE Fundamental Data Elements for Local (based on functional classification) Paved Roads; Number of MIRE Fundamental Data Elements for Unpaved Roads.	Increase the percentage of MIRE Compliant FDEs in the state file from 80% to 100% by December 31, 2025.	Local roadway data will remain the issue with completeness as the local jurisdictions do not capture and MDOT SHA is not funded to capture. HSIP dollars may help fill gap and provide incentive for all parties
<u>Crash</u>	**Performance Measure Statement**	**Measure (Baseline/Goal)**	**Outcome**
Accessibility	Increase the number of users that report successfully accessing crash report data from RAVEN/Washington College/National Study Center.	Increase the percentage of customers (data users) who report satisfaction in the timeliness of the data analysis request fulfillment, and the comfortability level in the use of the data.	Washington College conducts an annual survey of RAVEN users and GIS analysis customers. Closing out the FFY2022, 52 customers responded to a survey regarding their access and understanding of the data provided and 94.57% reported overall satisfaction, up from 92.09% in FFY2021.

Accuracy	Increase the percentage of crash reports with a citation number that matches the corresponding record numbers in the citation file (indicate an association with a crash (PD, PI, fatal)). Decrease the number of crash reports marked as "off road." Increase the percentage of crashes with longitude and latitude coordinates (i.e., x/y) with values inside the state of Maryland (where the crashes would have had to occur). Maintain a "good" rating in accuracy for commercial vehicle crashes uploaded to the FMCSA SAFETYNET database.	Increase the citation issued flag response rate in the Crash file from 91% in 2018 to 99% by 2025. Increase the valid driver date of birth captured in the Crash file from 82% complete in 2018 to 95% complete by 2025. Decrease the proportion of cases with an invalid vehicle year in the crash-related Vehicle file from 6% in 2018 to 1% by 2025. Decrease the number of crash reports marked as "off road" from 19.75% in 2018 to less than 5% by 2025.	The number of crash reports marked as "off-road" continue to improve with the most recent measure showing a .18% decrease compared to the previous time period.
Completeness	Reduce the percentage of missing/unknown values on crash reports that should have a citation number (as identified in the citation file). Maintain a "good" rating in completeness for commercial vehicle crashes uploaded to the FMCSA SAFETYNET database.	Missing/invalid driver DOB, age, sex, drivers license number	No progress reported.
Integration	Increase the percentage of injury (KABCO 2-5) crash records that link to an EMS record.		No progress reported.
Timeliness	Reduce the number of days from the end of the quarter to when the data is posted on the Open Data Portal. Achieve and maintain a "good" rating in timeliness for commercial vehicle crashes		No progress reported.

	uploaded to the FMCSA SAFETYNET database.		
Uniformity	Increase compliance with the Model Minimum Uniform Crash Criteria and ANSI D.16.		No progress reported.
Citation/Adjudication	**Performance Measure Statement**	**Measure (Baseline/Goal)**	**Outcome**
Accessibility	Determine through a survey the usefulness and timeliness of appropriate users accessing and using JPORTAL data.		No updates reported.
Accuracy	Increase the percentage of citations that indicate an association with a crash (PD, PI, fatal) that will match a corresponding crash record (citation number listed on crash report).	Decrease the proportion of invalid case license numbers in the Citation file from 3% in 2018 (approximately 15,000 records) to 1% by 2025.	No updates reported.

Completeness	Reduce the percentage of missing/unknown values on crash reports that should have a citation number (as identified in the citation file). Reduce the number of missing x/y coordinates on citations issued to motorists. Percent cases in the Citation database with missing gender. Percent cases in the Citation database with missing DOB (Age).	Reduce the number of missing x/y coordinates on citations issued to motorists. Decrease the proportion of invalid case license numbers in the Citation file from 3% in 2018 (approximately 15,000 records) to 1% by 2025. Decrease the percent of missing genders in the citation /adjudication database. Decrease the percent of missing age (DOB) in the citation /adjudication database.	Completeness, Stops Outside of Maryland: **83 fewer records outside Maryland state boundaries** Completeness, Percentage of Mappable Stops: **0.22% decline in mappable stops [no progress]** Completeness, Percentage of Mappable Citations: **0.41% decline in mappable citations [no progress]** Completeness, Percentage of Missing x/y coordinates for stops: **0.66% decrease**
Integration	Increase the percentage of citations given to Maryland drivers that may be linked to the correct driver record.		No updates reported.
Timeliness	Reduce the amount of time between the violation being issued and inclusion in the court file (and available to judges).		No updates reported.

Uniformity	Improve the uniformity of coding traffic violation information in citations database.	Increase the correct coding of citations issued for alcohol and/or drug use in the Citation file from 30% in 2018 to 75% by 2025. Increase the uniformity of missing license data. The current percentage will be determined using the 2018 data and a goal will be set.	No updates reported.
Driver	**Performance Measure Statement**	**Measure (Baseline/Goal)**	**Outcome**
Accessibility	Increase the number of users that report successfully accessing driver record data electronically, including law enforcement, courts, employers and individuals.		No progress reported.
Accuracy	Reduce the rate of validation errors for critical driver record transactions.		CDLIS Measures. See table in Appendix 8. % of withdrawal messages returned in error by the CDLIS Central Site: decreased by 96.5% % of messages sent to update MPR PII returned in error: decreased by 66.9% % of Delete Driver messages returned in error: decreased by 99.0% % of Negate messages returned in error: decreased by 90.3%

Completeness	Reduce the percentage of missing/unknown values in critical driver records, including actions for commercial driver licenses/commercial vehicle-related offenses.		No progress reported.
Integration	Increase the number of systems that are integrated to produce real-time transactions/record updates.		No progress reported.
Timeliness	Increase the percentage of error records that are corrected and resubmitted within 24 hours.		% of convictions sent successfully within the 10-day federal time limit: increased by 0.3% % of withdrawals sent successfully within the 10-day federal time limit: increased by 32.9%
Uniformity	Increase the number of vehicle data elements that are entered automatically after validation and improve consistency among driver-related fields in that are entered into the vehicle data system manually.		No progress reported.
Vehicle	**Performance Measure Statement**	**Measure (Baseline/Goal)**	**Outcome**
Accessibility	Increase the number of users that report successfully accessing vehicle registration data electronically, including law enforcement, courts, employers and individuals.		No progress reported.

Accuracy	Increase the percentage of records with values that are compliant with system standards for critical elements in the vehicle file (e.g., vehicle body type and fuel type).		No progress reported.
Completeness	Reduce the percentage of missing/unknown/mismatched values in the vehicle file (e.g., vehicle body type and fuel type).		No progress reported.
Integration	Increase the percentage of vehicle records that successfully link to external data systems.		No progress reported.
Timeliness	Increase the percentage of vehicle transactions posting to the state file within 30 days of the sale of vehicle.		No progress reported.
Uniformity	Increase the number of vehicle data elements that are entered automatically after validation and improve consistency among vehicle-related fields in that are entered into the vehicle data system manually.		No progress reported.

Appendix 6: MIRE FDE

Project Evaluation: 49. MIRE fundamental data elements

Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.

- MDOT SHA has implemented Esri's Roads and Highways (R&H) software to manage our GIS roadway and LRS data for HPMS submission. This year MDOT SHA used Roads and Highways for their HPMS submission. With the Intersection Manager tool, our ability to better manager intersection data, and data gaps, we will be able to be 100 percent compliant by 2026.
- In conjunction with the Esri R&H implementation, we also began the One Maryland, One Centerline (OMOC) program where MDOT SHA has met with all 23 counties, and Baltimore City, to discuss the sharing of data between jurisdictions via one common geometry, maintained by the appropriate authority. We have begun a pilot conflation process between MDOT SHA and two county jurisdictions to test process and develop the protocols that will be used for the integration of the remaining counties of Maryland. This geometry will be the base of the R&H data model. This data sharing and cooperation between the local and state jurisdictions will better allow us to identify and fill data gaps, with the appropriate, authoritative information.
- FHWA has authorized several pilots to investigate developing methodologies to more accurately calculate local AADTs for lower functionally classified roadways. MIRE FDEs require this type of data, while the local jurisdictions do not have the wherewithal nor need to completely capture and maintain this type of data. Therefore, the need to develop better proxies or models to better estimate these AADTs for local roads is an ongoing FHWA investigation.

(*Confirmed as up-to-date, Mike Sheffer, May 5, 2023*)

	NON-LOCAL PAVED ROADS - SEGMENT		NON-LOCAL PAVED ROADS - INTERSECTION		NON-LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
MIRE NAME (MIRE NO.)	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**
ROADWAY SEGMENT										
Segment Identifier (12)	100	100					100	100	100	100
Route Number (8)	100	100								

	NON-LOCAL PAVED ROADS - SEGMENT		NON-LOCAL PAVED ROADS - INTERSECTION		NON-LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
MIRE NAME (MIRE NO.)	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**
Route/Street Name (9)	100	100								
Federal Aid/Route Type (21)	100	100								
Rural/Urban Designation (20)	100	100					100	100		
Surface Type (23)	100	100					100	100		
Begin Point Segment Descriptor (10)	100	100					100	100	100	100
End Point Segment Descriptor (11)	100	100					100	100	100	100
Segment Length (13)	100	100								
Direction of Inventory (18)	100	100								
Functional Class (19)	100	100					100	100	100	100
Median Type (54)	100	100								
Access Control (22)	100	100								
One/Two Way Operations (91)	100	100								

	NON-LOCAL PAVED ROADS - SEGMENT		NON-LOCAL PAVED ROADS - INTERSECTION		NON-LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
MIRE NAME (MIRE NO.)	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**
Number of Through Lanes (31)	100	90					100	90		
Average Annual Daily Traffic (79)	100	98					50	0		
AADT Year (80)	100	100								
Type of Governmental Ownership (4)	100	100					100	100	100	100
INTERSECTION										
Unique Junction Identifier (120)			100	100						
Location Identifier for Road 1 Crossing Point (122)			100	100						
Location Identifier for Road 2 Crossing Point (123)			100	100						
Intersection/Junction Geometry (126)			85	85						
Intersection/Junction Traffic Control (131)			50	50						
AADT for Each Intersecting Road (79)			25	25						

	NON-LOCAL PAVED ROADS - SEGMENT		NON-LOCAL PAVED ROADS - INTERSECTION		NON-LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
MIRE NAME (MIRE NO.)	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**
AADT Year (80)			25	25						
Unique Approach Identifier (139)			75	75						
INTERCHANGE/RAMP										
Unique Interchange Identifier (178)					100	100				
Location Identifier for Roadway at Beginning of Ramp Terminal (197)					100	100				
Location Identifier for Roadway at Ending Ramp Terminal (201)					100	100				
Ramp Length (187)					100	100				
Roadway Type at Beginning of Ramp Terminal (195)					100	100				
Roadway Type at End Ramp Terminal (199)					100	100				
Interchange Type (182)					100	100				
Ramp AADT (191)					100	100				

	NON-LOCAL PAVED ROADS - SEGMENT		NON-LOCAL PAVED ROADS - INTERSECTION		NON-LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
MIRE NAME (MIRE NO.)	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**	**STATE**	**NON-STATE**
Year of Ramp AADT (192)					100	100				
Functional Class (19)					100	100				
Type of Governmental Ownership (4)					100	100				
Totals (Average Percent Complete):	**100.00**	**100.00**	**72.5**	**72.5**	**100.00**	**100.00**	**89.44**	**87.78**	**100.00**	**100.00**

Appendix 7: Maryland's Traffic Safety Information System Improvement Program (FFY2024)

Problem Identification

Hardware, software, personnel, and procedures that capture, store, transmit, analyze, and interpret traffic safety data are critical components to Maryland's traffic records system. The datasets managed by this system include crash, driver licensing and history, vehicle registration and titling, commercial motor vehicle, roadway, injury control, citation/adjudication, and EMS/trauma registry data.

Maryland employs a two-tiered Traffic Records Coordinating Committee (TRCC), with both General (or technical) and Executive Councils, comprised of data owners, data managers, and data users with oversight and interest in the datasets listed above. MHSO staff serves on the TRCC General Council and subcommittees, and advises the TRCC Executive Council, which oversees and approves the Maryland Traffic Records Strategic Plan (TRSP).

The MHSO's Traffic Records Program Manager coordinates updates to TRSP and leads the implementation of recommendations provided in the 2019 NHTSA Traffic Records Assessment, including the development of performance measures for all six systems in the traffic records system. The current TRSP (2021–2025) is aligned with the 2021–2025 Maryland Strategic Highway Safety Plan (SHSP), and members from both the Executive and Technical Councils frequently discuss related topics and meet twice a year in back-to-back meetings. The Traffic Records Program Manager serves as a Data Strategy Lead and/or Action Step Lead for all SHSP Emphasis Area Teams (EATs).

Solution

The accurate collection and timely dissemination of traffic records information are crucial to ensuring positive results from projects and strategies within the five-year plan. Data elements form the informational backbone for all the MHSO's programs and the SHSP itself. All activities, from enforcement to education, rely on good data, and the MHSO's focus is to provide effective data support and analysis for programs that can help the State meet traffic safety goals in reducing crashes and resulting injuries and fatalities.

Maryland's Traffic Records Executive Council's leadership goal is to develop a comprehensive statewide traffic records system that provides traffic safety professionals with reliable, accurate, and timely data to inform decisions and actions for implementing proven countermeasures and managing and evaluate safety activities to resolve traffic safety problems. The traffic records system encompasses the hardware, software, personnel, and procedures that capture, store, transmit, analyze, and interpret traffic safety data. This system is used to manage basic crash data from all law enforcement agencies, along with information on driver licensing and history, vehicle registration and titling, commercial motor vehicles, roadways, injury control efforts, citation and adjudication activities, and the EMS/trauma registry.

Maryland's Traffic Records Executive Council provides policy leadership to the TRCC and its efforts to continually review and assess the status of Maryland's traffic safety information system and its components. The TRCC oversees the development and update of the Traffic Records Strategic Plan to

serve public- and private-sector needs for traffic safety information, to identify technologies and other advancements necessary to improve the system, and to support the coordination and implementation of system improvements.

The MHSO participates on all levels of the TRCC through its own staff and through a grant-funded project at the National Study Center for Trauma and EMS (NSC) called the Maryland Center for Traffic Safety Analysis (MCTSA), a more comprehensive, expert staff-based approach to provide services based on the Crash Outcome Data Evaluation System (CODES) and other traffic records data and to meet the wide and varied needs of the MHSO and its partners.

MHSO staff members work with subject matter experts from the MCTSA project to help manage the TRSP, and the MHSO continues the CODES program. These are some of the ways in which the MHSO relies on its many partner agencies to make data accessible for highway safety planning, as it employs various systems and programs, with the help of State agencies and grantees, to collect, maintain and analyze internal data information.

The mission to provide data and analytical support to traffic safety professionals at the local, State, regional, and national levels drive the direction of the Traffic Records Program. Projects to be considered for funding by the Traffic Safety Information System Improvement Program must adhere to goals and objectives within the TRSP and provide support for the data needs of the traffic records community.

Action Plan
Traffic safety information system projects funded for FFY 2024 are listed below, each referencing the TRSP strategy and the NHTSA Traffic Records Program Assessment recommendation addressed:

Proposed Projects

Project Agency: Maryland Highway Safety Office (Staffing: Traffic Records Program Manager)
Program Area: Traffic Records **Project Funds / Type:** 405C
Countermeasures: NHTSA Countermeasures That Work (2015, 8th Edition)
SHSP Strategies: • Use the collection, analysis and evaluation of data on all roads in Maryland to identify distracted driving safety issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration). • Use the collection, analysis and evaluation of data on all roads in Maryland to identify impaired by alcohol and drugged driving emphasis area safety issues, target audiences and locations of concern, as well as support the improvement of data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration) of impaired driving related data. • Use the collection, analysis and evaluation of data on all roads in Maryland to identify occupant protection (OP) safety issues, target audiences and locations of concern, as well as support the

improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, and integration).

- Use the collection, analysis and evaluation of data on all roads in Maryland to identify pedestrian and bicycle safety issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, and integration).
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify speed and aggressive driving related issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration).

TRSP Strategies:

- Prioritize strategic plan responsibilities using annual timelines.
- Catalog and publish data release policies and/or data sharing agreements from all partners with traffic records data, specifically identifying rules that allow intra- and inter-agency access, and public access.
- Review and prioritize federal data element requirements—Model Minimum Uniform Crash Criteria Guideline (MMUCC), National Emergency Medical Services (EMS) Information System (NEMSIS), and Model Inventory of Roadway Elements (MIRE)—to enhance State traffic records data improvement systems.
- Institutionalize the evaluation of TRCC responsibilities:
    - Monitor annual progress of the TRCC strategic plan.
    - Track agency policy decisions that impact the State's traffic records system.
    - Document progress through Council Meeting agendas/minutes.
- Improve performance measure monitoring and oversight at the TRCC. Assign responsibility to performance measure owners for reporting to the membership at each meeting.
- Establish regular quality control reporting and enhance the review of technical and training needs of traffic records system end users, expanding to a wider range of stakeholders and end-user needs.
- Ensure the annual addenda to the five-year plan are robust and detailed enough to meet the federal grant reporting requirements and provide the State with the necessary oversight and monitoring of its traffic records systems progress.
- Improve performance measures contained within the Strategic Plan by adding meaningful goals and baselines in addition to establishing quarterly monitoring at the TRCC.

Assessment Recommendation:

- Strengthen the TRCC's abilities for strategic planning that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Project Description: Funds are used to staff one full-time position at the Maryland Highway Safety Office to be the Statewide Traffic Records Coordinator.

Project Agency: University of Maryland Baltimore, NSC

Program Area: Traffic Records
Project Funds / Type: 405C

Countermeasures: NHTSA Countermeasures That Work (2015, 8th Edition)

SHSP Strategy:

- Use the collection, analysis and evaluation of data on all roads in Maryland to identify distracted driving safety issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration).
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify impaired by alcohol and drugged driving emphasis area safety issues, target audiences and locations of concern, as well as support the improvement of data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration) of impaired driving related data.
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify occupant protection (OP) safety issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, and integration).
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify pedestrian and bicycle safety issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, and integration).
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify speed and aggressive driving related issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration).

TRSP Strategies:

- Catalog and publish data release policies and/or data sharing agreements from all partners with traffic records data, specifically identifying rules that allow intra- and inter-agency access, and public access.
- Review and prioritize federal data element requirements—Model Minimum Uniform Crash Criteria Guideline (MMUCC), National Emergency Medical Services (EMS) Information System (NEMSIS), and Model Inventory of Roadway Elements (MIRE)—to enhance State traffic records data improvement systems.
- Institutionalize the evaluation of TRCC responsibilities:
    - Monitor annual progress of the TRCC strategic plan.
    - Track agency policy decisions that impact the State's traffic records system.
    - Document progress through Council Meeting agendas/minutes.
- Improve performance measure monitoring and oversight at the TRCC. Assign responsibility to performance measure owners for reporting to the membership at each meeting.
- Establish regular quality control reporting and enhance the review of technical and training needs of traffic records system end users, expanding to a wider range of stakeholders and end-user needs.
- Improve performance measures contained within the Strategic Plan by adding meaningful goals and baselines in addition to establishing quarterly monitoring at the TRCC.
- Provide ongoing access to traffic records data and analytic resources for problem identification, priority setting, and program evaluation with analytical partner support.
- Provide training sessions, presentations, webinars, and technical support to partners on all products and services provided by analysis resources (e.g., grant-funded university- or college-based analysts) in addition to GIS techniques and processes for traffic safety related datasets.
- Develop improved data visualization tools used to access the crash data.

Assessment Recommendations:

- Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
- Improve the data quality control program for the Injury Surveillance systems that reflects best practices identified in the Traffic Records Program Assessment Advisory.

Project Description: This project supports data analysis to the MHSO and statewide and partners, and administrative support for MHSO's Traffic Records Program.

Performance Measure: Accessibility: Increase the number of users that report successfully accessing crash report data from National Study Center.

Project Agency: Washington College GIS Program

Program Area: Traffic Records
Project Funds / Type: 405C; 402

Countermeasures: NHTSA Countermeasures That Work (2015, 8th Edition)

SHSP Strategy:

- Use the collection, analysis and evaluation of data on all roads in Maryland to identify distracted driving safety issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration).
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify impaired by alcohol and drugged driving emphasis area safety issues, target audiences and locations of concern, as well as support the improvement of data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration) of impaired driving related data.
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify occupant protection (OP) safety issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, and integration).
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify pedestrian and bicycle safety issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, and integration).
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify speed and aggressive driving related issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration).

TRSP Strategies:

- Provide ongoing access to traffic records data and analytic resources for problem identification, priority setting, and program evaluation with analytical partner support.
- Integrate data from traffic records component systems to satisfy specific analytical inquires.
- Provide timely access to data analyses and interpretation upon request.
- Make outputs from state data linkage systems available to state and local decision-makers to influence data-driven policy and reform.
- Make outputs from state data linkage systems available to the general public.
- Make integrated data outputs from data linkage systems available for research abiding by data security agreements.

- Provide training sessions, presentations, webinars, and technical support to partners on all products and services provided by analysis resources (e.g., grant-funded university- or college-based analysts) in addition to GIS techniques and processes for traffic safety related datasets.
- Develop improved data visualization tools used to access the crash data.

Assessment Recommendations:

1. Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.
2. Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.
3. Improve the interfaces with the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.

Project Description: This project will focus on strategies that will improve the ability to use data-driven analysis to reduce crashes and deaths on Maryland roads. This project also includes attendance at conferences to promote highway safety projects and practices in Maryland, and provides training sessions, presentations, webinars, and technical support to MHSO staff, LEA partners, EA teams, etc. on all products/services provided by Washington College, in addition to GIS techniques and processes for traffic safety related datasets.

Performance Measure: Accessibility: Increase the number of users that report successfully accessing crash report and citation data from RAVEN/Washington College.

Project Agency: Crash Center for Research and Education (CORE)

Program Area: Traffic Records
Project Funds / Type: 402

Countermeasures: NHTSA Countermeasures That Work (2015, 8th Edition)

SHSP Strategy:

- Use the collection, analysis and evaluation of data on all roads in Maryland to identify distracted driving safety issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration).
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify impaired by alcohol and drugged driving emphasis area safety issues, target audiences and locations of concern, as well as support the improvement of data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration) of impaired driving related data.
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify occupant protection (OP) safety issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, and integration).
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify pedestrian and bicycle safety issues, target audiences and locations of concern, as well as support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, and integration).
- Use the collection, analysis and evaluation of data on all roads in Maryland to identify speed and aggressive driving related issues, target audiences and locations of concern, as well as

support the improvement of the data quality (timeliness, accuracy, completeness, uniformity, accessibility, integration).
TRSP Strategies: • Provide ongoing access to traffic records data and analytic resources for problem identification, priority setting, and program evaluation with analytical partner support. • Integrate data from traffic records component systems to satisfy specific analytical inquires. • Provide timely access to data analyses and interpretation upon request. • Make outputs from state data linkage systems available to state and local decision-makers to influence data-driven policy and reform. • Make integrated data outputs from data linkage systems available for research abiding by data security agreements. • Provide training sessions, presentations, webinars, and technical support to partners on all products and services provided by analysis resources.
Assessment Recommendations: 4. Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory. 5. Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory. 6. Improve the interfaces with the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.
Project Description: The Predicting Outcomes in Traffic Injuries and Fatalities (POTIF) forecasting tool includes four models developed to predict fatalities, injuries and PDO crashes, based on human, vehicle, and physical and economic factors. This interactive tool can be used to exercise predictive models to explore interventions and their estimated impact on serious and fatal injury counts in Maryland at both state and jurisdiction levels. The results can be used by policymakers, behavioral and highway safety personnel to prioritize safety interventions to save lives and reduce casualties in Maryland most effectively.
Performance Measure: Accessibility: Increase the number of users that report successfully accessing crash report and citation data from POTIF.

Evaluation

Goals are prioritized for appropriate components of the traffic records information system, with objectives developed based on the periodic assessments, ongoing TRCC evaluation and input, and other state agency-identified needs. The TRCC sets performance measures for priority objectives identified in the TRSP, which are reviewed regularly throughout each year. Systems are evaluated for quantitative progress, such as improved timeliness and completeness, with reports submitted to NHTSA at least annually. Additionally, MHSO grants are evaluated during and after implementation through grantee reporting using proven process evaluation measures.

Appendix 8: Performance Measures Annual Progress Calculations (FFY2024)

1. Crash Data: Accuracy: The percentage of off-road crashes which were not actually off-road crashes reduced .18 % in the most recent assessment of the crash data.

Measure of the quality control (QC) process at the MSP. ACRS “off-road” crashes are meant to be a selection for officers to indicate a crash occurring on a non-trafficway (e.g., parking lots, private road) but officers have been selecting “off-road” for vehicles that run off the roadway (crash starting on a trafficway). Through QC processes at MSP, to include an automated selection of reports marked off-road, to a manual review of crash reports, and a communications procedure from the training unit, Maryland has been able to improve the accuracy of its crash data by reducing the percentage of crashes erroneously marked as off-road.

Query Language:

```
SELECT round(count(A.ReportNumber)/tot_crashes * 100 ,2) PERCENTAGE_2015
FROM ACRS_QUEUE A,  (SELECT count(ReportNumber) tot_crashes FROM acrs_QUEUE d WHERE
type_id=2 and CRASH_DATE between '01-APR-YEAR' and '01-APR-YEAR' )
where type_id=2 and CRASH_DATE between '01-APR-YEAR' and '01-APR-YEAR'
and STATUS_ID in ('03','04')
GROUP BY tot_crashes;
```

```
PERCENTAGE_2015
---------------
        36.26

PERCENTAGE_2016
---------------
        19.51

PERCENTAGE_2017
---------------
        19.75

PERCENTAGE_2018
---------------
        14.88
```

PERCENTAGE_2019

16.96

PERCENTAGE_2020

18.25

PERCENTAGE_2021

14.17

PERCENTAGE_2022

12.08

```
SELECT round(count(A.ReportNumber)/tot_crashes * 100 ,2) PERCENTAGE_2022
FROM ACRS_QUEUE A,  (SELECT count(ReportNumber) tot_crashes FROM acrs_QUEUE d WHERE
type_id=2 and CRASH_DATE between '01-APR-22' and '01-APR-23' )
where type_id=2 and CRASH_DATE between '01-APR-22' and '01-APR-23'
and STATUS_ID in ('03','04')
GROUP BY tot_crashes;
```

PERCENTAGE_2023

11.9

2. Citation Data:
   a. Completeness, Stops Outside of Maryland: **83 fewer records outside Maryland state boundaries**
   b. Completeness, Percentage of Mappable Stops: **0.22% decline in mappable stops**
   c. Completeness, Percentage of Mappable Citations: **0.41% decline in mappable citations**
   d. Completeness, Percentage of Missing x/y coordinates for stops: **0.66% decrease**

ETIX Citation/Stop Location Analysis April 1st 2021 to March 31st 2022				
Citation/Stop Data	**Location In Maryland**	**Outside of Maryland's Boundaries**	**No XYS**	**Total**
Raw Citation Data with Updated XYs	305,770		352,262	658,371
Raw Stop Data with Updated XYs	154,956	136	153,872	308,964

ETIX Citation/Stop Location Analysis April 1st 2022 to March 31st 2023				
Citation/Stop Data	**Location In Maryland**	**Outside of Maryland's Boundaries**	**No XYS**	**Total**
Raw Citation Data with Updated XYs	273,305	245	320,164	593,714
Raw Stop Data with Updated XYs	134,544	53	134,865	269,462

Reduction of Stops Located Outside of Maryland	
April 1st 2021 to March 31st 2022	136
April 1st 2022 to March 31st 2023	53
	83

Updated Percentage for Mappable Stops	
April 1st 2021 to March 31st 2022	50.15%
April 1st 2022 to March 31st 2023	49.93%
	-0.22%

Updated Percentage for No Xys (STOPS ONLY)	
April 1st 2021 to March 31st 2022	23.37%
April 1st 2022 to March 31st 2023	22.72%
	-0.66%

Updated Percentage for Mappable Citations	
April 1st 2021 to March 31st 2022	46.44%
April 1st 2022 to March 31st 2023	46.03%
	-0.41%

2. EMS Data:
    a. Accuracy: MVC Cause of Injury Blanks: **2.0 percent improvement**

eMEDS records related to Motor Vehicle Crash (MVC) transports represent roughly 30% on average annually all injury transports. This category for EMS transport is second only to falls (45.6%). A cooperative relationship has been maintained between the Maryland Department of Transportation's Highway Safety Office (MHSO), the TRCC, and the Maryland Institute for Emergency Medical Services Systems (MIEMSS) for the achievement of a mutually important common goal in the reduction of motor vehicle crash related patient morbidity and mortality. Additionally, both agencies value the importance of timely, complete, and accurate data as it pertains to the prehospital patient assessment, care, and outcome. However, data collection for all incident responses has become extensive and multi-faceted for responding personal with the growth of the electronic Maryland Emergency Medical Services Data System (eMEDS®).

	April 1, 2019 to March 30, 2020		April 1, 2020 to March 30, 2021		April 1, 2021 to March 30, 2022		April 1, 2022 to March 30, 2023	
Maryland EMS Operational Programs (EMSOP)	**Total Potential MVC Transports**	**% Potential MVC Transports with "Blank" Cause of Injury**	**Total Potential MVC Transports**	**% Potential MVC Transports with "Blank" Cause of Injury**	**Total Potential MVC Transports**	**% Potential MVC Transports with "Blank" Cause of Injury**	**Total Potential MVC Transports**	**% Potential MVC Transports with "Blank" Cause of Injury**
B	400	6.0%	337	7.4%	368	1.9%	389	2.1%
D	904	6.2%	655	13.1%	772	3.1%	756	4.0%
BA	5,122	32.5%	3,074	31.3%	3,907	31.7%	4,568	31.9%
BB	1,459	13.8%	1,102	14.4%	1,178	9.8%	1,495	6.8%
BC	6,494	46.2%	4,357	43.3%	4,566	44.5%	4,756	42.3%
E	236	8.1%	201	8.5%	163	3.7%	241	1.2%
F	638	11.1%	501	11.4%	452	11.3%	517	6.8%
G	1,300	10.8%	800	13.4%	875	6.3%	1,153	8.3%
I	1,149	11.3%	844	13.2%	924	9.2%	1,155	6.1%
J	948	10.0%	691	11.9%	710	8.0%	843	9.1%
K	5,808	15.5%	4,495	16.0%	4,982	11.2%	5,297	9.3%
L	205	3.4%	177	5.1%	161	3.1%	180	2.8%
M	994	13.2%	779	13.5%	831	13.5%	928	8.2%
N	189	12.7%	154	9.1%	95	6.3%	170	4.1%
O	438	7.5%	313	9.6%	349	4.0%	383	3.7%
Q	819	2.4%	806	4.8%	595	0.3%	757	0.4%
R	650	11.2%	412	16.3%	475	6.5%	636	5.5%
S	271	12.9%	187	9.1%	269	3.3%	272	3.7%
T	114	8.8%	75	13.3%	78	6.4%	74	1.4%
U	437	26.5%	328	16.8%	174	17.2%	310	11.9%
V	251	9.6%	207	12.6%	224	5.4%	248	3.2%
W	907	9.9%	723	10.1%	613	2.4%	536	2.6%
X	5,400	17.1%	4,409	18.7%	4,193	15.3%	4,427	11.7%
Y	3,251	14.3%	2,241	16.9%	2,318	12.9%	2,631	10.6%
Z	93	8.6%	78	20.5%	68	2.9%	79	3.8%
Grand Total	**38,477**	**21.5%**	**27,946**	**21.0%**	**29,340**	**18.4%**	**32,801**	**16.4%**

3. MVA Driver Records: Submission to CDLIS

During the performance period (April 1, 2021 – March 31, 2022, compared to April 1, 2022 – March 31, 2023), MDOT MVA reports improvement in three out of eleven AAMVA CDLIS data quality measures for which complete data are available.

- Timeliness: % of convictions sent successfully within the 10-day federal time limit: increased by 0.3%
- Timeliness: % of withdrawals sent successfully within the 10-day federal time limit: increased by 32.9%
- Accuracy: % of withdrawal messages returned in error by the CDLIS Central Site: decreased by 96.5%
- Accuracy: % of messages sent to update MPR PII returned in error: decreased by 66.9%
- Accuracy: % of Delete Driver messages returned in error: decreased by 99.0%
- Accuracy: % of Negate messages returned in error: decreased by 90.3%

Maryland CDLIS Data Quality Tracker TRSP FFY24 Summary					
Measure	**Description of Measure**	**Baseline Period (4/21-3/22)**	**Performance Period (4/22-3/23)**	**% Change**	**Improved ?**
Conviction Timeliness	% of Convictions Sent Successfully within the 10-day federal time limit	88.10%	88.39%	0.3%	**Y**
Conviction Error Rate	% of conviction messages returned in error by the CDLIS Central Site	0.50%	0.54%	7.8%	N
Withdrawal Timeliness	% of Withdrawals Sent Successfully within the 10-day federal time limit	60.60%	80.52%	32.9%	**Y**
Withdrawal Error Rate	% of withdrawal messages returned in error by the CDLIS Central Site	30.10%	1.05%	-96.5%	**Y**
Duplicate Resolution Timeliness	Number of Duplicates Resolved outside the 10-day federal time limit	4	7	64.6%	N
Transfer Resolution Timeliness	Number of Transfers Resolved outside the 10-day federal time limit	3	3	8.3%	N
Driver History Errors	Number of history errors returned by the CDLIS Common Validation Processor	78	89	13.5%	N
MPR PII Update Error Rate	% of messages sent to update MPR PII that were returned in error	3.90%	1.29%	-66.9%	**Y**
MPR SOR Update Error Rate	% of messages sent to update the MPR SOR and ST/DLN that were returned in error	2.60%	3.57%	37.3%	N
Pointer Deletion Error Rate	% of Delete Driver messages returned in error	8.00%	0.08%	-99.0%	**Y**
Negates Error Rate	% of Negate messages returned in error	6.00%	0.58%	-90.3%	**Y**
Prepared by MDOT MVA Office of Data Management		Data Source: CDLIS Timeliness and Data Accuracy Summary Workbook			

Appendix 9: Emergency Medical Systems (EMS) and Trauma Registry Performance Measures

Emergency Medical Services (EMS)

Accessibility

Performance Measure Statement	Measure (Baseline/Goal)
Ensure that all data access requests for electronic Maryland EMS Data System® (eMEDS® - the State's patient care reporting system) data/information are reviewed for appropriateness (non-confidentiality adherence) and facilitated within 30 days of request.	Number of Data Access Committee (DAC) related approved EMS data requests completed within 30 days over the total number of DAC related approved EMS data requests. **Baseline** is 95%. **Goal** is maintain 95+% during the SFY 2024.

Met Performance Measure:

X Yes _____ No

Notes:

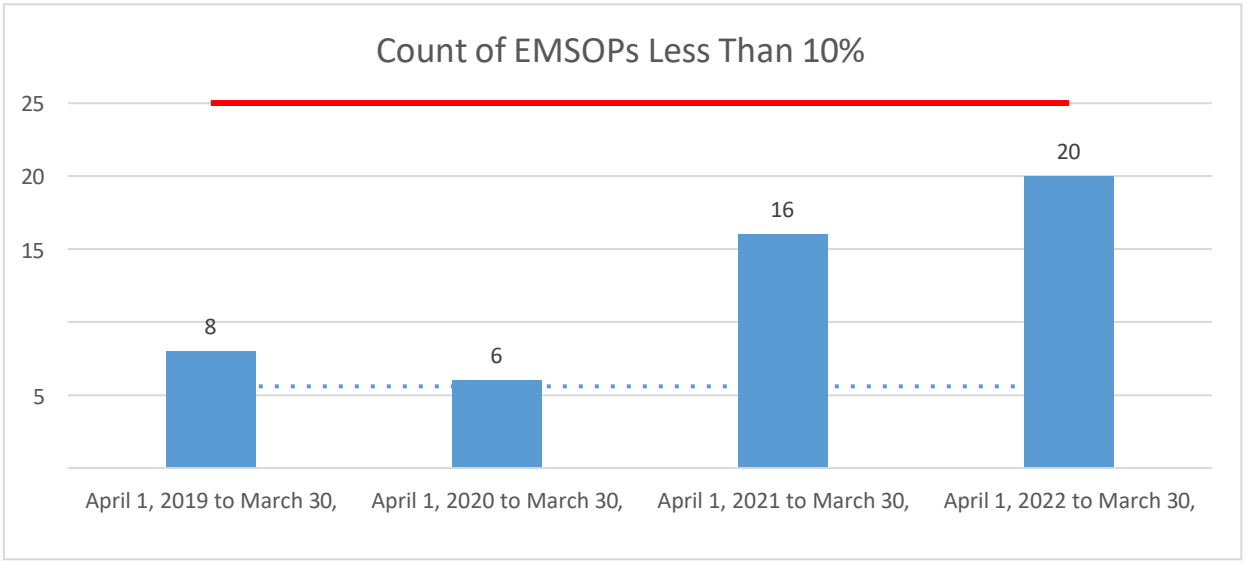
- Percentage Compliance Goal is 95+%: Currently 100%
- MIEMSS continues to meet this performance measure. Once a data request is approved MIEMSS supplies requested data within the 30 days. It was noted, that while MIEMSS works with a data requestor on confirming details of their request (e.g. approved IRBs, payment, signatures on agreements), we begin working on collecting and packaging the data in anticipation of delivery.

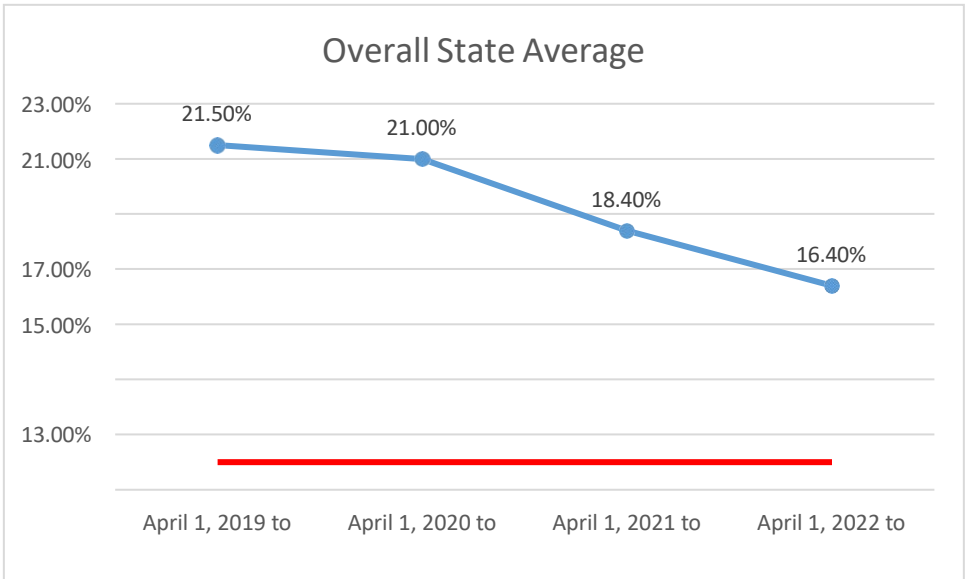
Accuracy

Performance Measure Statement	Measure (Baseline/Goal)
Reduce the % Potential Motor Vehicle Crash (MVC) Transports with "Blank" Cause of Injury responses: Statewide CY 2017 Baseline – 18%	Number of MVC dispatch code records with a "Blank" Cause of Injury" over the total number MVC dispatch code records by Emergency Medical Services Operational Program (EMSOP). **Baseline** is 18% statewide average. **Goal** is maintain an individual EMSOP average of 10% or less for all EMSOPS.

Met Performance Measure:

_____ Yes __X__ No





Notes:

- Continues to show improvement over time.

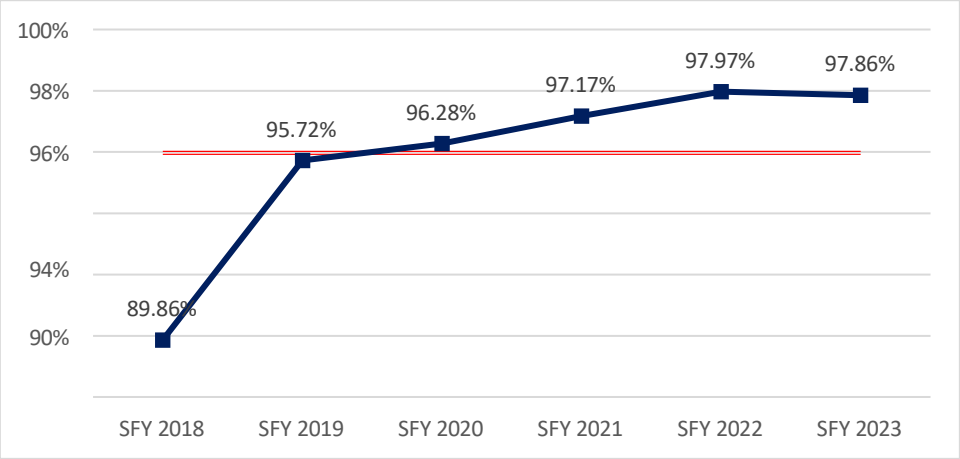
Maryland EMS Operational Programs (EMSOP)	April 1, 2019 to March 30, 2020		April 1, 2020 to March 30, 2021		April 1, 2021 to March 30, 2022		April 1, 2022 to March 30, 2023	
	Total Potential MVC Transports	% Potential MVC Transports with "Blank" Cause of Injury	Total Potential MVC Transports	% Potential MVC Transports with "Blank" Cause of Injury	Total Potential MVC Transports	% Potential MVC Transports with "Blank" Cause of Injury	Total Potential MVC Transports	% Potential MVC Transports with "Blank" Cause of Injury
B	400	6.0%	337	7.4%	368	1.9%	389	2.1%
D	904	6.2%	655	13.1%	772	3.1%	756	4.0%
BA	5,122	32.5%	3,074	31.3%	3,907	31.7%	4,568	31.9%
BB	1,459	13.8%	1,102	14.4%	1,178	9.8%	1,495	6.8%
BC	6,494	46.2%	4,357	43.3%	4,566	44.5%	4,756	42.3%
E	236	8.1%	201	8.5%	163	3.7%	241	1.2%
F	638	11.1%	501	11.4%	452	11.3%	517	6.8%
G	1,300	10.8%	800	13.4%	875	6.3%	1,153	8.3%
I	1,149	11.3%	844	13.2%	924	9.2%	1,155	6.1%
J	948	10.0%	691	11.9%	710	8.0%	843	9.1%
K	5,808	15.5%	4,495	16.0%	4,982	11.2%	5,297	9.3%
L	205	3.4%	177	5.1%	161	3.1%	180	2.8%
M	994	13.2%	779	13.5%	831	13.5%	928	8.2%
N	189	12.7%	154	9.1%	95	6.3%	170	4.1%
O	438	7.5%	313	9.6%	349	4.0%	383	3.7%
Q	819	2.4%	806	4.8%	595	0.3%	757	0.4%
R	650	11.2%	412	16.3%	475	6.5%	636	5.5%
S	271	12.9%	187	9.1%	269	3.3%	272	3.7%
T	114	8.8%	75	13.3%	78	6.4%	74	1.4%
U	437	26.5%	328	16.8%	174	17.2%	310	11.9%
V	251	9.6%	207	12.6%	224	5.4%	248	3.2%
W	907	9.9%	723	10.1%	613	2.4%	536	2.6%
X	5,400	17.1%	4,409	18.7%	4,193	15.3%	4,427	11.7%
Y	3,251	14.3%	2,241	16.9%	2,318	12.9%	2,631	10.6%
Z	93	8.6%	78	20.5%	68	2.9%	79	3.8%
Grand Total	**38,477**	**21.5%**	**27,946**	**21.0%**	**29,340**	**18.4%**	**32,801**	**16.4%**

Completeness

Performance Measure Statement	Measure (Baseline/Goal)
Increase the number of eMEDS® records that employ the use of the Computer-Aided Dispatch (CAD) data interface downloads.	Number of eMEDS® records with CAD downloads over the total number of records. **Baseline** is 96%. **Goal** is maintain 96% or greater.

Met Performance Measure:

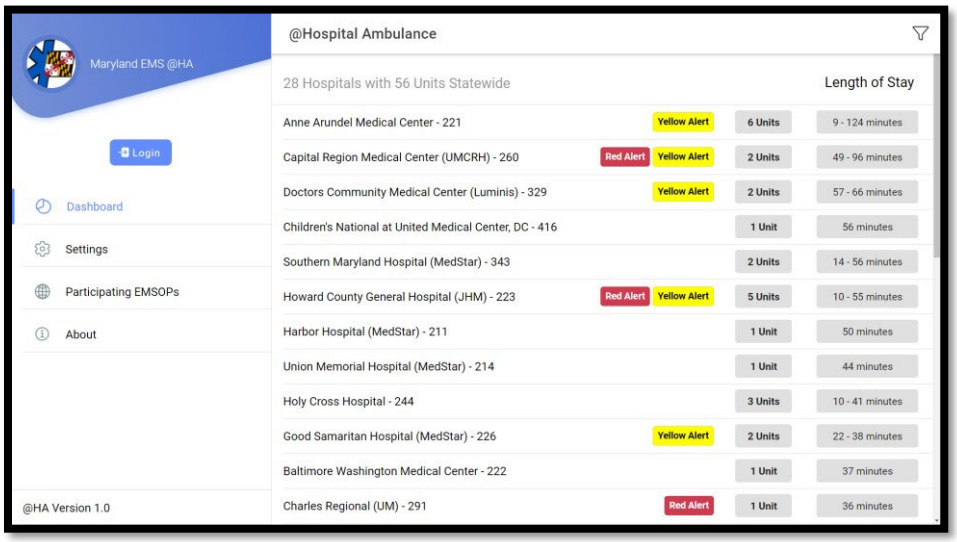
__X__ Yes _____ No



Note: SFY23 is July 1 to March 31

Notes:

- MIEMSS developed a custom application At Hospital Ambulances (@HA) to measure ambulance activity at hospitals. Jurisdictions must report specific data points in their CAD feed to ImageTrend in order for that information to be present in @HA in a timely manner. A beneficial outcome has been jurisdictions have modified and/or improved the data in their CAD file which also increases clinicians use of the CAD download as part of completing their PCR.

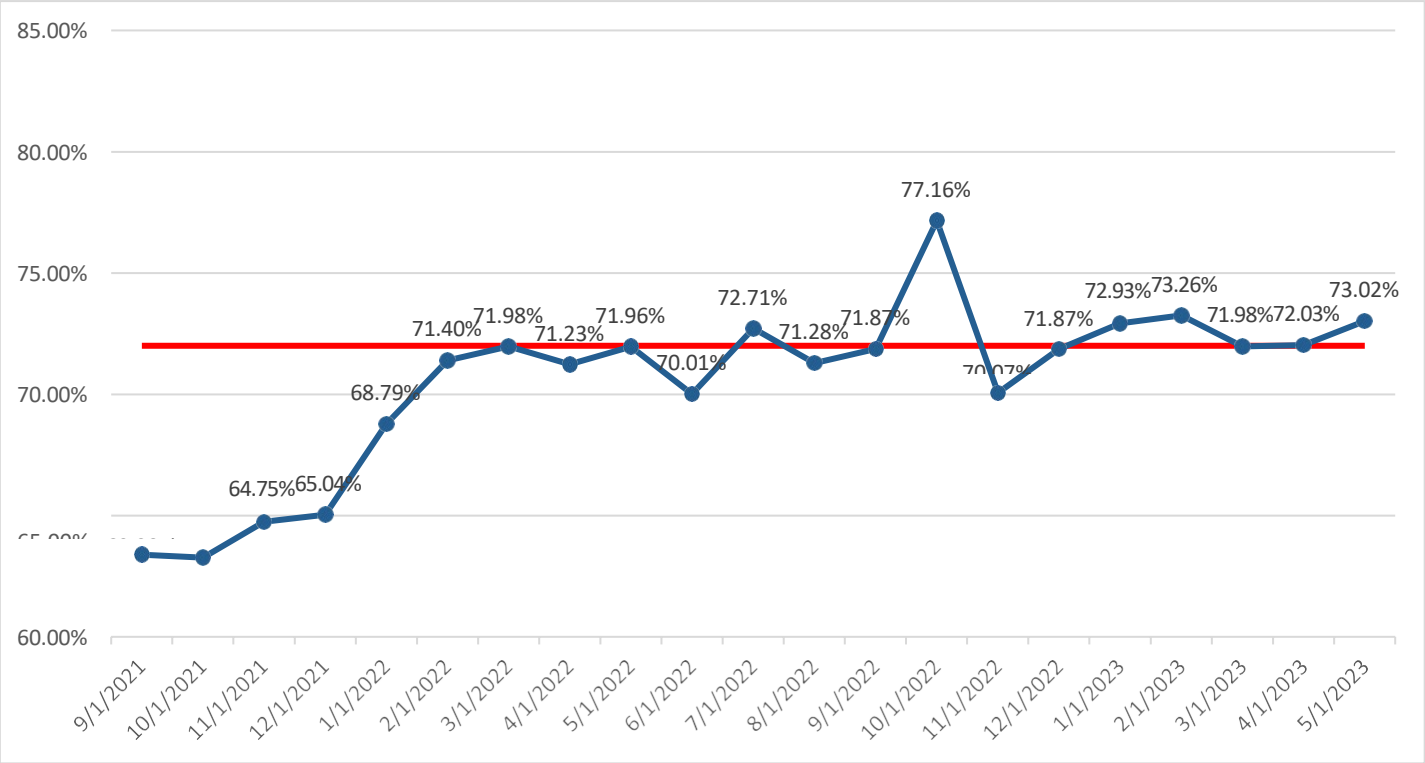

Maryland EMS @HA
Login
Dashboard
Settings
Participating EMSOPs
About
@HA Version 1.0
@Hospital Ambulance
28 Hospitals with 56 Units Statewide
Length of Stay
Anne Arundel Medical Center - 221
Yellow Alert
6 Units
9 - 124 minutes
Capital Region Medical Center (UMCRH) - 260
Red Alert
Yellow Alert
2 Units
49 - 96 minutes
Doctors Community Medical Center (Luminis) - 329
Yellow Alert
2 Units
57 - 66 minutes
Children's National at United Medical Center, DC - 416
1 Unit
56 minutes
Southern Maryland Hospital (MedStar) - 343
2 Units
14 - 56 minutes
Howard County General Hospital (JHM) - 223
Red Alert
Yellow Alert
5 Units
10 - 55 minutes
Harbor Hospital (MedStar) - 211
1 Unit
50 minutes
Union Memorial Hospital (MedStar) - 214
1 Unit
44 minutes
Holy Cross Hospital - 244
3 Units
10 - 41 minutes
Good Samaritan Hospital (MedStar) - 226
Yellow Alert
2 Units
22 - 38 minutes
Baltimore Washington Medical Center - 222
1 Unit
37 minutes
Charles Regional (UM) - 291
Red Alert
1 Unit
36 minutes

Integration

Performance Measure Statement	Measure (Baseline/Goal)
Increase the percent of eMEDS that match existing records within Chesapeake Regional Information System for Patients (CRISP, the State's health information exchange).	Number of eMEDS® records provided to CRISP resulted in a match of a record within CRISP. **Baseline** is 72%. **Goal** is to maintain 72% or greater

Met Performance Measure:

X Yes _____ No



Notes:

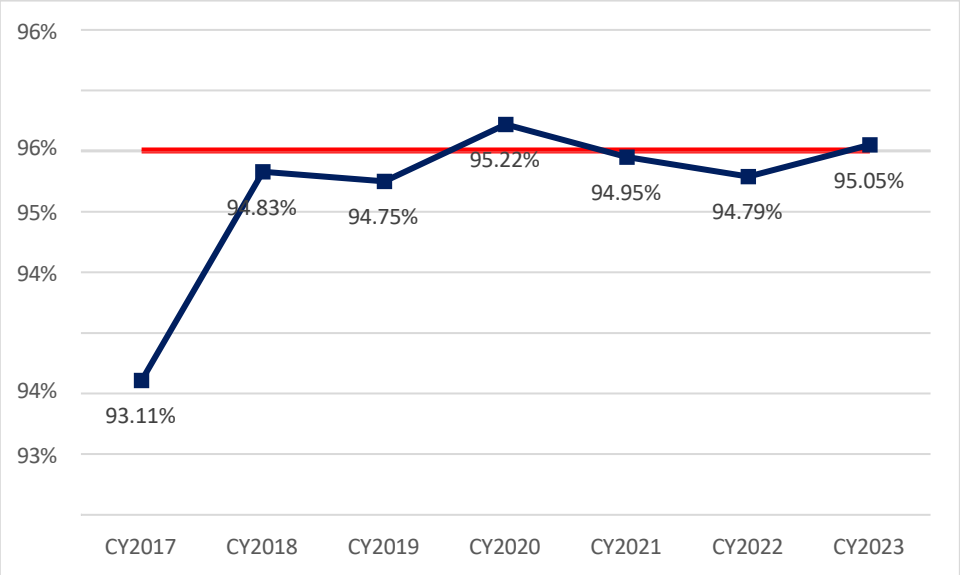
- Matching rate will never be 100%. New patients will always be introduced into the CRISP system as patients being treated are never going to be same patients previous treated.
- Baseline and Goal Updated from 81%. Previous data pull included those reports sent to CRISP where it matched to a "patient" with generic matching information (i.e. John Doe, Homeless Baltimore Cnty). Approx. 8.65% of records sent meet this type of match. New data pull excludes these types of matches as it doesn't match to an individual person in the CRISP system. Therefore, our bassline and goal is reduced by 9%
- Current match rate for EMS data is 73.02%

Timeliness

Performance Measure Statement	Measure (Baseline/Goal)
Reduce the amount of time from unit dispatch until an eMEDS® record is properly marked completed by the clinician.	The statewide goal is to have an eMEDS® report properly marked completed within 24 hours or less of a unit's dispatch. A per jurisdiction baseline will be established and measured monthly with a jurisdictional goal of 95% of all calls being properly marked complete within 24 hours or less.

Met Performance Measure:

__X__ Yes _____ No



Note: CY23 only Qtr1 Reported

Notes:

- There is a slight improvement over the previous calendar year. There is inconsistency across the EMSOPs in marking a report complete (Marked as Finished), which is the status used in evaluating this PM.
- 12 EMSOPs have over 75% of their records not using the Marked as Finished feature within the application. Therefore, these EMSOPs are excluded from the count on which the PM is based.
- Further evaluation of the CY2022 data shows indicates that 15 of the reporting EMSOP are above the 95% performance measure.
- Intend to reach out to the EMSOPs to get their perspective and see what can be done to improve their utilization of the Marked as Finished status.

Uniformity

Performance Measure Statement	Measure (Baseline/Goal)
Ensure compliance with the National Emergency Medical Services Information System (NEMSIS) standard data elements and responses through successful periodic submission to NEMSIS.	Number of eMEDS® records successfully submitted to NEMSIS over the total number of records submitted first time. **Baseline** is 100%. **Goal** is maintain 100% during the SFY 2024.

Met Performance Measure:

X Yes _____ No

Notes:

- Percentage Compliance Goal >= 100%: Currently 100%
- Records submitted are accepted. If there are issues with our submission NEMSIS would reach out to MIEMSS and would work to correct the issues.

Trauma Registry

Accessibility

Performance Measure Statement	Measure (Baseline/Goal)
Ensure that all data access requests for Maryland Trauma Registry (MTR) data/information are reviewed for appropriateness (non-confidentiality adherence) and facilitated within 30 days of agreement of request.	Number of Data Access Committee (DAC) related approved MTR data requests completed within 30 days of agreement over the total number of Data Access Committee related approved MTR data requests. **Baseline** is 95%. **Goal** is maintain 95+% during the SFY 2024.

Met Performance Measure:

X Yes _____ No

Notes:

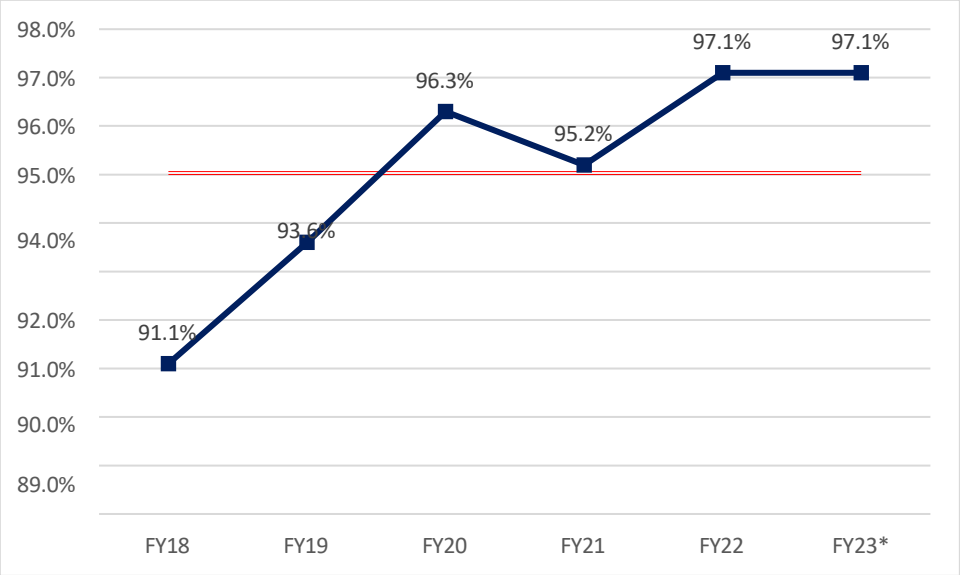
- Percentage Compliance Goal is 95+%: Currently 100%
- MIEMSS continues to meet this performance measure. Once a data request is approved MIEMSS supplies requested data within the 30 days. It was noted, that while MIEMSS works with a data requestor on confirming details of their request (e.g. approved IRBs, payment, signatures on agreements), we begin working on collecting and packaging the data in anticipation of delivery.

Accuracy

Performance Measure Statement	Measure (Baseline/Goal)
Code of Maryland Regulations (COMAR) 30.08.05.21.I - Inter-Rater Reliability (IRR) monitoring of the trauma data entered into the MTR to ensure the quality, reliability, and validity.	COMAR 30.08.05.21.I - The Trauma Registry shall have a plan to ensure IRR of the data entered into the MTR at individual trauma centers. Ongoing review and evaluation shall ensure the quality, reliability, and validity of the institution's MTR registry data. A State baseline for IRR (15-20 trauma center records monthly) will be determined over SFY 2021; the minimum goal is 95% and a 99% stretch, to assess accuracy gaps at the data abstraction level.

Met Performance Measure:

__X__ Yes _____ No



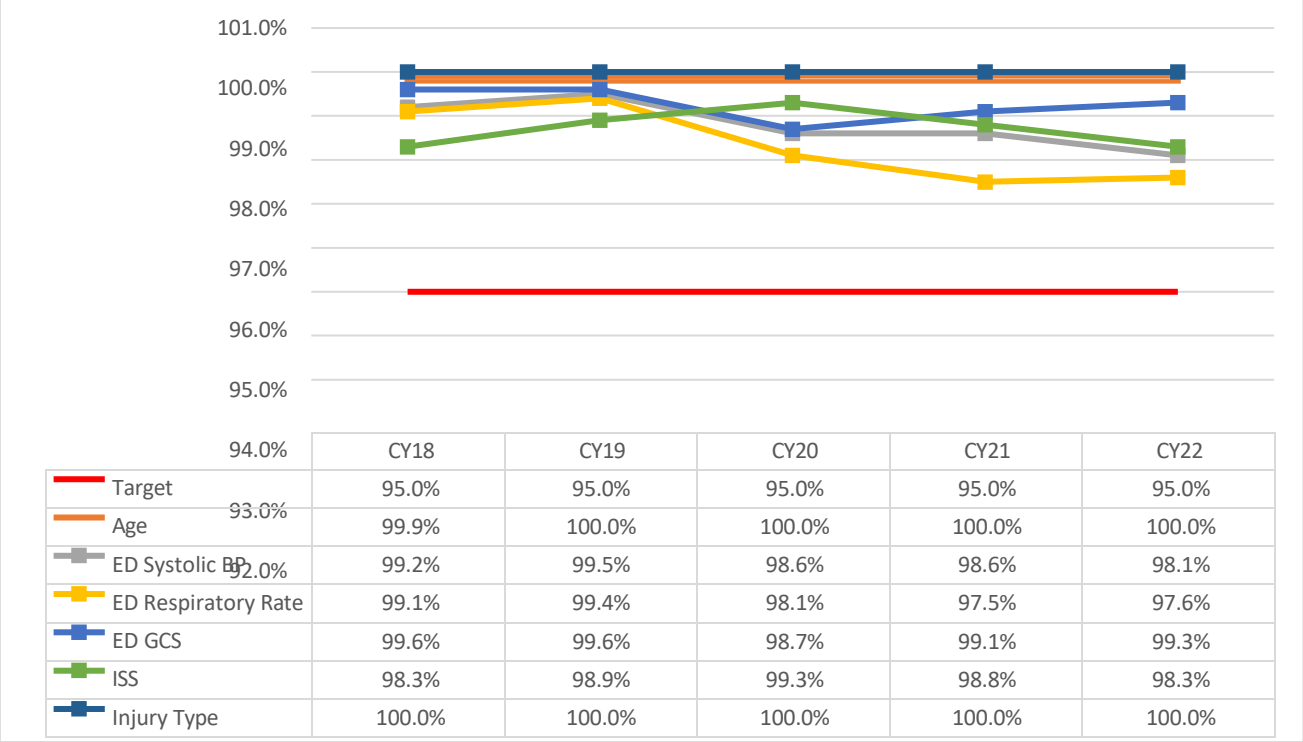
*Note: *FY23 only Qtr1 & Qtr2 Reported*

Completeness

Performance Measure Statement	Measure (Baseline/Goal)
Reduce the percentage of missing/unknown values in data elements (Patient Age-years, Glasgow Coma Score, Systolic Blood Pressure, Injury Severity Score) used for the calculation of Trauma Injury Severity Scores (TRISS).	Utilize the report, "Percent Date Completeness for Specific Data Elements" to identify qualifying records which TRISS elements are below a baseline of 86%. **Goal** is 95% for all elements, during the SFY 2024.

Met Performance Measure:

X Yes _____ No



	CY18	CY19	CY20	CY21	CY22
Target	95.0%	95.0%	95.0%	95.0%	95.0%
Age	99.9%	100.0%	100.0%	100.0%	100.0%
ED Systolic BP	99.2%	99.5%	98.6%	98.6%	98.1%
ED Respiratory Rate	99.1%	99.4%	98.1%	97.5%	97.6%
ED GCS	99.6%	99.6%	98.7%	99.1%	99.3%
ISS	98.3%	98.9%	99.3%	98.8%	98.3%
Injury Type	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:

- Percentage Compliance Goal is 95+%: Currently 98.8%
- For the six (6) measures, we have a measurement of greater than 95% compliance for each.
  - Age (years)
  - ED Systolic Blood Pressure (BP)
  - ED Respiratory Rate
  - ED Glasgow Coma Score (GCS)
  - Injury Severity Score (ISS)
  - Injury Type

Integration

Performance Measure Statement	Measure (Baseline/Goal)
Maryland trauma center submissions to the National Trauma Data Bank (NTDB) are included in the overall NTDB data repository.	Yearly comparisons of Maryland trauma centers with the rest of NTDB submittals nationwide.

Met Performance Measure:

X Yes _____ No

Notes:

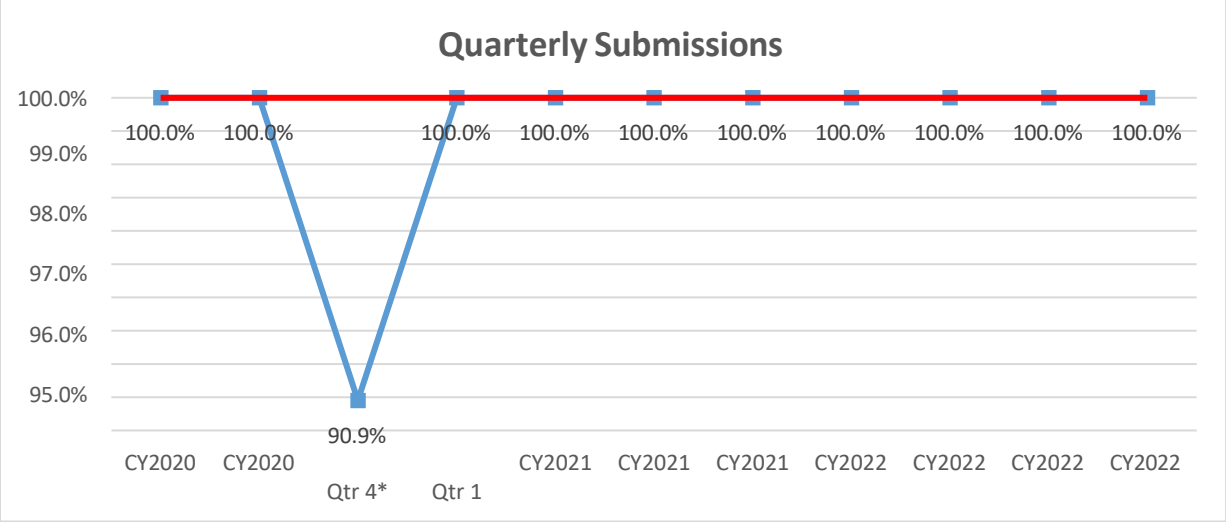
- We are meeting this measure with 100% across the board due to a process change within the Trauma Registry. The Trauma Registry now has an inclusion button with an ITDX report check that produces errors prior to NTDB submission. This allows the centers to correct their data prior to submission to the NTDB. This measure will remain at 100 percent compliance for the foreseeable future.

Timeliness

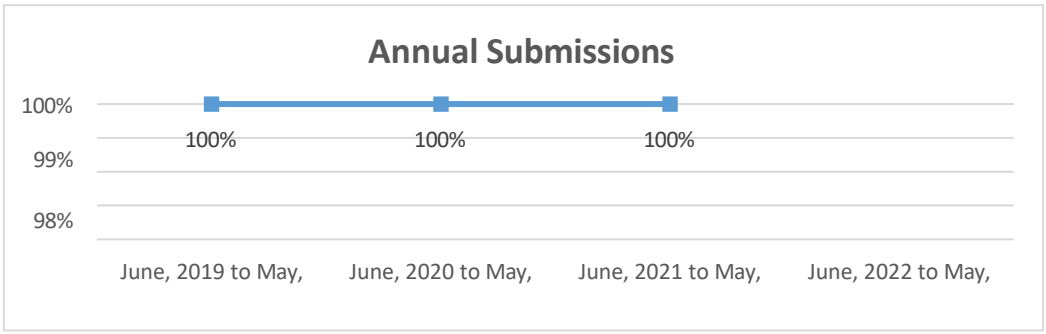
Performance Measure Statement	Measure (Baseline/Goal)
Verification of trauma records no later than 6 weeks after the end of each quarter.	All trauma patient records shall be submitted both quarterly and annually. Verification of counts and data element completeness shall be within six weeks after the end of each quarter. The goal is 100%.

Met Performance Measure:

X Yes _____ No



**During CY2020, MIEMSS moved to a new version of the Maryland State Trauma Registry (ESO Gen 6). Only one center was slightly delayed as a result of the transition. That center's data was submitted a short while later.*



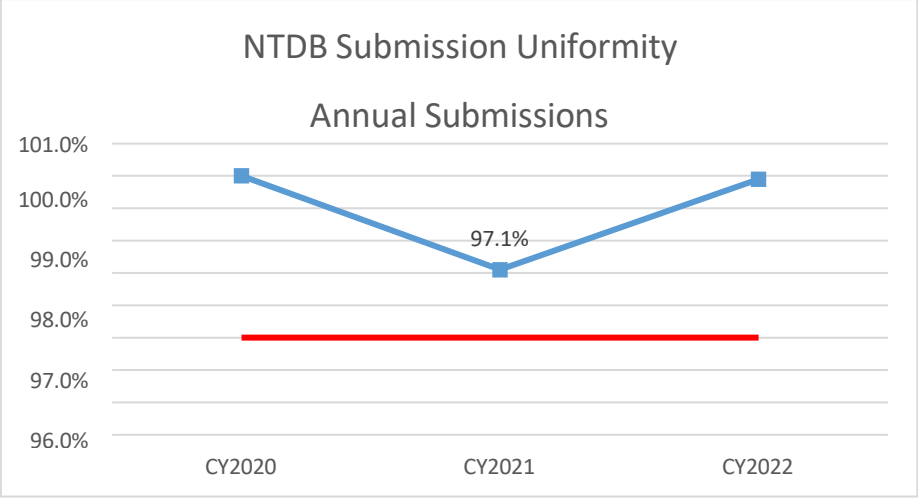
Data not available for Annual Submissions (June 2022 to May 2023). Reporting deadline is July 2023.

Uniformity

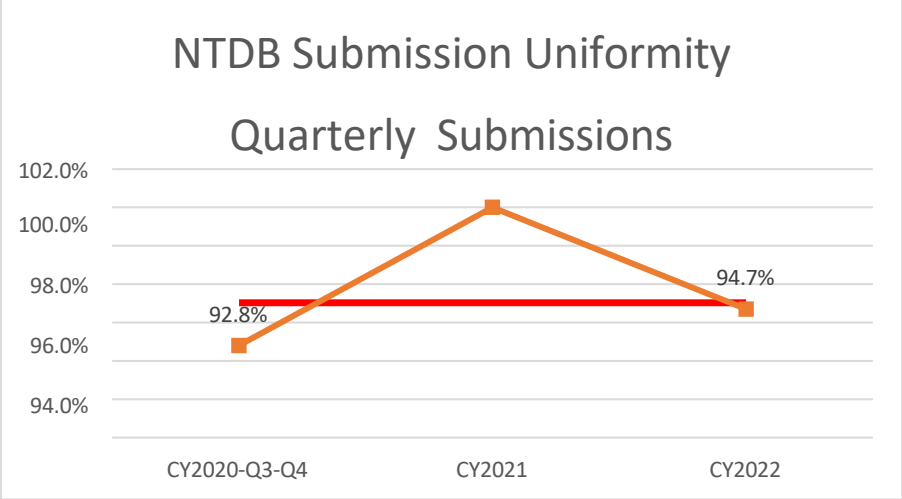
Performance Measure Statement	Measure (Baseline/Goal)
Ensure Maryland Trauma Registry (MTR) compliance with the National Trauma Data Bank (NTDB) standard data elements and responses through successful periodic submission to NTDB.	Each trauma center submits directly to the NTDB. MIEMSS currently does not receive feedback directly from the NTDB. Each hospital reports the number of records successfully submitted to MIEMSS. We are exploring a way to obtain this data over SFY 2021. The goal is 95%.

Met Performance Measure - ANNUAL:

Annual		**Quarterly**	
X Yes	____ No	____ Yes	X No



Note: CY2022, reporting one (1) facility.



Note: CY2022: Two (2) facilities reported first 3 quarters. Three (3) reported all quarters.

Notes:

- There are eleven (11) designated trauma centers in the State of Maryland. Of these centers, six (6) report annually and five (5) report quarterly.
    - Annual Reporting Centers:
        - American College of Surgeons (ACS) NTDB requires annual data submission.
        - In CY2022 Maryland has met the measure. However, only one (1) facility has reported at the time of this report. This annual ACS report deadline has been extended due to software issues at the national level. The new reporting deadline is July 14, 2023.
    - Quarterly Reporting Centers:
        - Quarterly Submission are made by ACS-TQIP Centers – TQIP collects more data points (performance measures) than the general NTDB and requires more frequent submissions.

###

Appendix 10: FFY2023-2024 TRSP Projects with Funding Sources

#	Project	Funding
	• Maryland Center for Traffic Safety Analysis (MCTSA) (National Study Center for Trauma and EMS)	NHTSA 405c
	• Seat Belt Observation Project (NOPUS Analysis) (National Study Center for Trauma and EMS)	NHTSA 405b
	• Implementation of Web Based Crash Forecasting Application and Approaches to Reach Zero Deaths in MD (Crash CORE/National Study Center)	NHTSA 402
	• Toxicology Sampling (Drugged Driving Data Project) (National Study Center for Trauma and EMS) • Impaired Driving Analysis and SPIDRE Support (Washington College) • DRE Database Development in Delta Plus (MSP ITD)	NHTSA 405d
	• Traffic Records Program Manager/MHSO TRCC Coordinator Position	NHTSA 405c
	• Traffic Records Data Improvement and Accessibility (Washington College)	NHTSA 405c
	• Maryland Safety and Crash Analysis Network (MSCAN)	State Funding; FHWA HSIP
	• Customer Connect (Driver and Vehicle Systems, MDOT-MVA)	Maryland State Funds
	• CDLIS, State State/SPEXS (MDOT-MVA)	Maryland State Funds
	• PRISM (MDOT MVA) • FMCSA Facial Recognition Pilot Program (MDOT MVA)	FMCSA
	• SAFETYNET Data Management (SHA Motor Carrier Division)	FMCSA
	• Commercial Vehicle Crashes Dashboard Development (Washington College and SHA Motor Carrier Division)	FMCSA
	• Race/Ethnicity and Traffic Stops in Maryland (NSC)	1906

###

Appendix F: Occupant Protection Emphasis Area Team Contact List

First Name	Last Name	Agency	Title
Bala	Akundi	Baltimore Metropolitan Council	Principal Transportation Engineer
Kevin	Anderson	Maryland Transportation Authority Police	Chief Law Enforcement Officer
Kim	Auman	National Study Center	Epidemiologist / Database Engineer
Janet	Bahouth	Crash Center for Research and Education	CEO
Komal	Bhagat	National Study Center	Lead Research Analyst
Larry	Branche	Fitzgerald Auto Mall	CPS
Colin	Bristow, Sgt.	Maryland State Police	State Police
Janet	Brooking	Drive Smart VA	Director
Jim	Brown	Maryland Institute for Emergency Medical Services Systems	Director, Educational Support Services
Cindy	Burch	University of Maryland National Study Center	Transportation Planner, Safety
Cindy	Burch	BMC	Transportation Planner, Safety
Frank	Carson	Prince George's County Police Department	Crash Reconstructionist
Allie	Chavez	National Study Center	Research Analyst/Site Coordinator
Morgan	Cihak	SADD	Coordinator
Brian	Clark	PG Fire and Rescue	CPST, FF
Torine	Creepy	Safe Kids Worldwide	Director
Teresa Ann	Crisman	Prince George's Fire Department/EMS	Community Risk Reduction Manager
Robert	Cumberland	Cumberland Valley Fire and Rescue	Public Outreach Director
JJ	Current	Med Star	RN
Randy	Cutter	Allegany County Sheriffs Office	Police Communications Supervisor
David	Daggett	Maryland State's Attorney's Association	Resource Prosecutor
Joyce	Dantzler	Maryland Department of Health	Chief, Center for Injury Prevention
Jessica	Dayan	Frederick Co. Health Department	CPST
Jason	Dean	Calvert County Sheriff's Office	Sergeant
Bruce	DeGrange	Frederick County Police Department	Lieutenant
Jayme	Derbyshire	Montgomery County Police Department	Officer III
Donald	Distance	Maryland State Highway Administration District 4	Traffic Team Leader
Sara	Dorsey	Howard County Police Department	PFC
Becca	Drayer	The Impact Society	Statistician
John	Durham	Montgomery County Police	Officer
Jerry	Eaton	Harford County Sheriff's Office	Officer
Lauren	Galgan	Maryland State Police	Police Communications Supervisor
Reynold (R.J.)	Giese	Maryland Transportation Authority	Police Communications Supervisor
Tara	Gill	Advocates for Highway & Auto Safety	Government Relations
Jeannie	Glenn	Safekids	CPS
Patricia	Haddon	Calvert County	Principal Planner
Kamiell	Hall	SADD	Coordinator
Karen	Hardingham	Safe Kids Baltimore UMD Children's Hospital	CPS

Bill	Hardy	Western Maryland Health System Trauma and Pre-Hospital Coordinator	Trauma Coordinator
Pretam	Harry	Maryland Motor Vehicle Administration	CFO
Jonathan	Heiderich	Montgomery County Police	State Police
Laura	Henson	Pediatric Nurse Howard County	RN
Lori	Hippensteel	Baltimore County Police Department	Public Information Officer
Cheryl	Holden	University of Maryland Medical System	Child Passenger Safety Technician
Mansoureh	Jeihani	Morgan State University	Professor
Debbie	Jennings	Chesapeake Region Safety Council	Director of Traffic Services and Special Projects
Kartik	Kaushik	National Study Center	Senior Database Specialist
Allison	Kennedy	Advocates for Highway and Auto Safety	Director of Government Relations
Tim	Kerns	MDOT Highway Safety Office	Director
Chris	Krieger	Impact Research	Former Law Enforcement
Joe	Kufera	National Study Center	Statistician
Joe	Kufera	UM NSC	Biostatistician
Julie	Kwedar	MDOT Highway Safety Office	Outreach Program Manager
Richard (Mike)	Lane	Harford County Sheriff's Office	Sergeant
Michael	Laney	Maryland State Police	Police Communications Supervisor
Anna	Levendusky	Maryland Highway Safety Office	Manager, Communications and Media Section
Kelly	Llewellyn	Meritus Health Hospital	CPS
Tom	Lubinski	MDOT/MHSO	Western MD Law Enforcement Liaison
Madison	Lumpkin	MVA	MVA Program Management
Sean	Lynn	Washington College	GIS Senior Project Manager
Riley	MaCauley	RN, CPST, JHU MD KISS	CPST
L'Kiesha	Markley	Maryland State Highway Administration	ADC/Frieght Planning Coordinator
Kelly	Melhem	MDTA	Director of Communications
Meg	Miller	National Highway Traffic Safety Administration	Deputy Administrator
Rich	Mioduszewski	MDOT Highway Safety Office	Southern, MD Law Enforcement Liaison
Doug	Mowbray	MDOT Highway Safety Office	Traffic Records Program Manager
Claire	Myer	Maryland Department of Health	CPS Tech
Steve	Noel	Dimensional Products, Inc	Engineer
Adrian	Nunez	Baltimore City Police Department	Ofc.
Cathy	Nyce	Maryland Auto Insurance	Director
Susanne	Ogaitis-Jones	Maryland Institute for Emergency Medical Services Systems	Coordinator, CPS & OP Healthcare
John	Peer	Perryville Police Department	Det.
Walter	Phillips	Maryland State Highway Administration - District 4	Transportation Engineer
David	Resnick	MD Professional Driving Schools	President
Tim	Richards	Maryland Highway Safety Office	Manager, Safety Programs Section
Steve	Rutzebeck	MDOT/MHSO	Lieutenant
Eazaz	Sadeghuazari	Morgan State University	Student

Nanette	Schieke	MVA	CAV
Derrick	Sexton	SHA	Planner
Rob	Smith	Fitzgerald Auto Mall	CPS Tech
Terri	Taylor	SAFE KIDS Howard County and Fire & Rescue	CPS Tech
Nancy	Thornton	Westat, CPST	CPS
Monica	Tompkins	Maryland Transportation Authority Police	Corporal
Christina	Utz	MDOT Highway Safety Office	Manager, Community Engagement Section
Roumen	Vesselinov	National Study Center	Research Associate
Mark	Wall	MDOT Highway Safety Office	OP/DDProgram Manager
Jennifer	Weaver	Private Advocate Distracted Driving	Speaker/Presenter
Felix	Wellington	NHTSA	Regional Manager
Tracy	Whitman	Maryland Department of Health	Program Coordinator
Karen	Wieland	Integrated Design Corporation	Media Company
Myra	Wieman	MDOT Highway Safety Office	Deputy Director
Laura	Wisely	Children's National Medical Center	RN
Cyndy	Wright-Johnston	Maryland Institute for Emergency Medical Services Systems	Director - Maryland EMS for Children

Appendix G: Highway Safety Plan Transaction (HSP-1)

U.S. Department of Transportation National Highway Traffic Safety Administration

State: Maryland

Highway Safety Plan Cost Summary

2024-HSP-1

Report Date: 07/25/2023

For Approval

Program Area	Project	Description	Prior Approved Program Funds	State Funds	Previous Bal.	Incre/(Decre)	Current Balance	Share to Local
NHTSA								
FAST Act NHTSA 402								
Speed Enforcement								
	SE-2024-L2-58-LC	Baltimore City PD - Speed Enforcement	$.00	$.00	$.00	$464.64	$464.64	$464.64
Speed Enforcement Total			**$.00**	**$.00**	**$.00**	**$464.64**	**$464.64**	**$464.64**
NHTSA 402 Match								
	MATCH-2024-11-11-11	FAST Act NHTSA 402 Match	$.00	$120.81	$.00	$.00	$.00	$.00
NHTSA 402 Match Total			**$.00**	**$120.81**	**$.00**	**$.00**	**$.00**	**$.00**
FAST Act NHTSA 402 Total			***$.00***	***$120.81***	***$.00***	***$464.64***	***$464.64***	***$464.64***
BIL NHTSA 402								
Planning and Administration								
	PA-2024-G1-25-SW	MHSO - GPS Grant System	$.00	$.00	$.00	$1,050.00	$1,050.00	$.00
	PA-2024-G1-29-SW	MHSO - Staffing Grant 1	$.00	$.00	$.00	$123,662.44	$123,662.44	$.00
	PA-2024-G1-35-SW	MHSO - Planning and Administration	$.00	$.00	$.00	$73,607.87	$73,607.87	$.00
Planning and Administration Total			**$.00**	**$.00**	**$.00**	**$198,320.31**	**$198,320.31**	**$.00**
Alcohol								
	AL-2024-G0-15-LC	MSAA - Traffic Safety Resource Prosecuto	$.00	$.00	$.00	$26,546.85	$26,546.85	$26,546.85
	AL-2024-G1-62-LC	MSP-DRE - DRE Training	$.00	$.00	$.00	$224,478.88	$224,478.88	$224,478.88
	AL-2024-G2-35-LC	CAASA - Impaired Driving Activities	$.00	$.00	$.00	$4,220.00	$4,220.00	$4,220.00
	AL-2024-G2-38-LC	Morgan State - PedestrianBicycle	$.00	$.00	$.00	$12,080.00	$12,080.00	$12,080.00
	AL-2024-G2-57-LC	Garrett Co Liq Bd - Impaired Driving	$.00	$.00	$.00	$11,230.00	$11,230.00	$11,230.00
Alcohol Total			**$.00**	**$.00**	**$.00**	**$278,555.73**	**$278,555.73**	**$278,555.73**
Motorcycle Safety								
	MC-2024-G1-08-LC	MHSO - Media Internal Projects	$.00	$.00	$.00	$93,904.30	$93,904.30	$93,904.30
	MC-2024-G1-09-LC	MHSO - Communications DUI	$.00	$.00	$.00	$230,000.00	$230,000.00	$230,000.00
Motorcycle Safety Total			**$.00**	**$.00**	**$.00**	**$323,904.30**	**$323,904.30**	**$323,904.30**
Occupant Protection								
	OP-2024-G0-55-LC	UMB NSC - Seat Belt Observation Project	$.00	$.00	$.00	$194,504.44	$194,504.44	$194,504.44
	OP-2024-G0-77-LC	Maryland DOH - Maryland Kids In Safety S	$.00	$.00	$.00	$18,242.13	$18,242.13	$18,242.13
	OP-2024-G0-90-LC	MIEMSS - Occupant Protection	$.00	$.00	$.00	$93,354.68	$93,354.68	$93,354.68
	OP-2024-G1-08-LC	MHSO - Media Internal Projects	$.00	$.00	$.00	$225,000.00	$225,000.00	$225,000.00
	OP-2024-G1-55-LC	Cecil Co DES - Occupant Protection	$.00	$.00	$.00	$1,268.00	$1,268.00	$1,268.00
	OP-2024-L0-08-LC	Manchester PD - Buckle Up Phone Down	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00

OP-2024-L0-13-LC	Cumberland PD - Occupant Protection	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
OP-2024-L0-28-LC	Queen Anne Sheriff - Occupant Safety	$.00	$.00	$.00	$4,018.50	$4,018.50	$4,018.50
OP-2024-L0-35-LC	Sykesville PD - Stay in your lane	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
OP-2024-L0-40-LC	Princess Anne PD - Occupant 2024	$.00	$.00	$.00	$1,498.55	$1,498.55	$1,498.55
OP-2024-L0-44-LC	Carroll Co Sheriff - Buckle UpPhone Down	$.00	$.00	$.00	$7,500.00	$7,500.00	$7,500.00
OP-2024-L0-46-LC	Taneytown PD - Occupant Protection	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
OP-2024-L0-53-LC	Frederick PD - Occupant Protection FY24	$.00	$.00	$.00	$5,000.00	$5,000.00	$5,000.00
OP-2024-L0-83-LC	Ocean City PD - Occupant Protection	$.00	$.00	$.00	$1,890.00	$1,890.00	$1,890.00
OP-2024-L1-04-LC	Salisbury PD - Distracted Driving Applic	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
OP-2024-L1-12-LC	Talbot Co Sheriff - 2024 Occupant Protec	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
OP-2024-L1-18-LC	Fruitland PD - Occupant Protection	$.00	$.00	$.00	$999.00	$999.00	$999.00
OP-2024-L1-20-LC	Berlin PD - Berlin Occupant FY23	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
OP-2024-L1-47-LC	Easton PD - Distracted Occupant Protecti	$.00	$.00	$.00	$1,856.00	$1,856.00	$1,856.00
OP-2024-L1-67-LC	Washington Co Sheriff - Occupant Protect	$.00	$.00	$.00	$5,000.00	$5,000.00	$5,000.00
OP-2024-L1-68-LC	Salisbury Univ PD - Occupant Protection	$.00	$.00	$.00	$1,997.00	$1,997.00	$1,997.00
OP-2024-L1-76-LC	Kent Co Sheriff - Occupant Protection	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
OP-2024-L1-80-LC	Wicomico Co Sheriff - Occupant Protectio	$.00	$.00	$.00	$1,980.00	$1,980.00	$1,980.00
OP-2024-L1-91-LC	Frostburg City PD - Occupant Protection	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
OP-2024-L1-93-LC	Worcester Co Sheriff - Occupant Protecti	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
OP-2024-L2-05-LC	Allegany Co Sheriff - Buckle Up Phone Do	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
OP-2024-L2-12-LC	Hampstead PD - Occupant Protection	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
OP-2024-L2-18-LC	Chestertown PD - Occupant Protection	$.00	$.00	$.00	$495.00	$495.00	$495.00
OP-2024-L2-25-LC	Somerset Co Sheriff - Occupant Protectio	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
Occupant Protection Total		**$.00**	**$.00**	**$.00**	**$584,603.30**	**$584,603.30**	**$584,603.30**
Pedestrian/Bicycle Safety							
PS-2024-G0-89-LC	WASHCOG - PedestrianBicycle	$.00	$.00	$.00	$37,719.77	$37,719.77	$37,719.77
PS-2024-G1-08-LC	MHSO - Media Internal Projects	$.00	$.00	$.00	$50,000.00	$50,000.00	$50,000.00
PS-2024-G1-46-LC	Bikemore - Mobile Bike Shop	$.00	$.00	$.00	$36,405.76	$36,405.76	$36,405.76
PS-2024-G2-38-LC	Morgan State - PedestrianBicycle	$.00	$.00	$.00	$67,750.00	$67,750.00	$67,750.00
Pedestrian/Bicycle Safety Total		**$.00**	**$.00**	**$.00**	**$191,875.53**	**$191,875.53**	**$191,875.53**
Police Traffic Services							
PT-2024-G0-57-LC	MD Sheriffs - MSA Training and Conferenc	$.00	$.00	$.00	$3,300.00	$3,300.00	$3,300.00
PT-2024-G0-60-LC	MCPA - Training Conferences	$.00	$.00	$.00	$95,850.00	$95,850.00	$95,850.00
PT-2024-G1-06-LC	Chesapeake Reg Safety - Special Projects	$.00	$.00	$.00	$347,005.24	$347,005.24	$347,005.24
PT-2024-G1-29-SW	MHSO - Staffing Grant 1	$.00	$.00	$.00	$263,789.15	$263,789.15	$.00
PT-2024-G1-72-LC	Balt Co PD-Crash Recon - Crash Reconstru	$.00	$.00	$.00	$58,000.00	$58,000.00	$58,000.00
PT-2024-G1-82-LC	Wor-Wic - Training Traffic Programs	$.00	$.00	$.00	$7,600.00	$7,600.00	$7,600.00
Police Traffic Services Total		**$.00**	**$.00**	**$.00**	**$775,544.39**	**$775,544.39**	**$511,755.24**
Community Traffic Safety Project							
CP-2024-G0-48-LC	MADD - Power of Youth	$.00	$.00	$.00	$55,990.00	$55,990.00	$55,990.00
CP-2024-G0-59-LC	MCPA - Impaired Driving Trainings	$.00	$.00	$.00	$142,850.00	$142,850.00	$142,850.00
CP-2024-G1-08-LC	MHSO - Media Internal Projects	$.00	$.00	$.00	$870,000.00	$870,000.00	$870,000.00
CP-2024-G1-09-LC	MHSO - Communications DUI	$.00	$.00	$.00	$7,000.00	$7,000.00	$7,000.00
CP-2024-G1-24-LC	MML PEA - Committee 2024	$.00	$.00	$.00	$7,000.00	$7,000.00	$7,000.00
CP-2024-G1-25-SW	MHSO - GPS Grant System	$.00	$.00	$.00	$231,258.80	$231,258.80	$.00
CP-2024-G1-26-LC	CORE - Special Projects	$.00	$.00	$.00	$53,296.07	$53,296.07	$53,296.07

CP-2024-G1-29-SW	MHSO - Staffing Grant 1	$.00	$.00	$.00	$618,632.66	$618,632.66	$.00
CP-2024-G1-33-SW	MHSO - Staffing Grant 2	$.00	$.00	$.00	$426,601.78	$426,601.78	$.00
CP-2024-G1-35-SW	MHSO - Planning and Administration	$.00	$.00	$.00	$5,000.00	$5,000.00	$.00
CP-2024-G1-46-LC	Bikemore - Mobile Bike Shop	$.00	$.00	$.00	$13,401.00	$13,401.00	$13,401.00
CP-2024-G1-51-LC	CORE - Occupant Protection	$.00	$.00	$.00	$31,683.49	$31,683.49	$31,683.49
CP-2024-G1-71-LC	CORE - Aggressive Driving	$.00	$.00	$.00	$77,929.30	$77,929.30	$77,929.30
CP-2024-G2-07-LC	MD Soybean Board - Special Projects	$.00	$.00	$.00	$66,743.92	$66,743.92	$66,743.92
CP-2024-G2-38-LC	Morgan State - PedestrianBicycle	$.00	$.00	$.00	$1,208.00	$1,208.00	$1,208.00
Community Traffic Safety Project Total		**$.00**	**$.00**	**$.00**	**$2,608,595.02**	**$2,608,595.02**	**$1,327,101.78**
Speed Enforcement							
SE-2024-G1-08-LC	MHSO - Media Internal Projects	$.00	$.00	$.00	$285,000.00	$285,000.00	$285,000.00
SE-2024-L0-04-LC	Laurel PD - Speed Enforcement	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
SE-2024-L0-07-LC	Manchester PD - Speed Enforcement	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
SE-2024-L0-11-LC	Elkton PD - Speed Enforcement	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
SE-2024-L0-21-LC	Baltimore Co PD - Speed Enforcement	$.00	$.00	$.00	$37,060.00	$37,060.00	$37,060.00
SE-2024-L0-25-LC	Queen Anne Sheriff - Speed Enforcement	$.00	$.00	$.00	$13,024.50	$13,024.50	$13,024.50
SE-2024-L0-37-LC	Sykesville PD - Slow Down	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
SE-2024-L0-39-LC	Princess Anne PD - Speed 2024	$.00	$.00	$.00	$1,498.55	$1,498.55	$1,498.55
SE-2024-L0-45-LC	Carroll Co Sheriff - Slow Down	$.00	$.00	$.00	$7,500.00	$7,500.00	$7,500.00
SE-2024-L0-47-LC	Taneytown PD - Speed Enforcement	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
SE-2024-L0-50-LC	Riverdale Park PD - Speed Enforcement	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
SE-2024-L0-51-LC	UMCP PD - Speed Enforcement	$.00	$.00	$.00	$2,500.00	$2,500.00	$2,500.00
SE-2024-L0-54-LC	Frederick PD - Speed Enforcement FY24	$.00	$.00	$.00	$12,000.00	$12,000.00	$12,000.00
SE-2024-L0-64-LC	Charles Co Sheriff - Speed Enforcement	$.00	$.00	$.00	$13,000.00	$13,000.00	$13,000.00
SE-2024-L0-65-LC	Howard Co PD - Speed Enforcement	$.00	$.00	$.00	$15,000.00	$15,000.00	$15,000.00
SE-2024-L0-67-LC	Allegany Co Sheriff - Aggressive Driving	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
SE-2024-L0-75-LC	MDTA - Speed Enforcement	$.00	$.00	$.00	$20,000.00	$20,000.00	$20,000.00
SE-2024-L0-79-LC	St. Marys Co Sheriff - Aggressive Drivin	$.00	$.00	$.00	$4,500.00	$4,500.00	$4,500.00
SE-2024-L0-84-LC	Ocean City PD - Aggressive Driving	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
SE-2024-L0-94-LC	Anne Arundel Co PD - Speed Enforcement	$.00	$.00	$.00	$20,000.00	$20,000.00	$20,000.00
SE-2024-L0-99-LC	Mt. Airy PD - Speed Enforcement	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
SE-2024-L1-03-LC	Salisbury PD - Speed Enforcement Applica	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
SE-2024-L1-16-LC	Fruitland PD - FPD Speeding OT	$.00	$.00	$.00	$999.00	$999.00	$999.00
SE-2024-L1-22-LC	Berlin PD - Berlin Speed FY23	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
SE-2024-L1-23-LC	Talbot Co Sheriff - 2024 Speed Enforceme	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
SE-2024-L1-32-LC	City of Bowie - Bowie City Speed Enforce	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
SE-2024-L1-39-LC	MSP-Statewide - Speed Enforcement	$.00	$.00	$.00	$115,000.00	$115,000.00	$115,000.00
SE-2024-L1-49-LC	Easton PD - Speed Enforcement	$.00	$.00	$.00	$4,640.00	$4,640.00	$4,640.00
SE-2024-L1-56-LC	Cecil Co Sheriff - Speed Enforcement	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
SE-2024-L1-60-LC	Harford Co Sheriff - Aggressive Driving	$.00	$.00	$.00	$18,000.00	$18,000.00	$18,000.00
SE-2024-L1-65-LC	Washington Co Sheriff - Speed Enforcemen	$.00	$.00	$.00	$2,999.00	$2,999.00	$2,999.00
SE-2024-L1-69-LC	Aberdeen PD - Speed Enforcement Campaign	$.00	$.00	$.00	$753.60	$753.60	$753.60
SE-2024-L1-75-LC	Kent Co Sheriff - Aggressive Driving	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
SE-2024-L1-81-LC	Wicomico Co Sheriff - Aggressive Driving	$.00	$.00	$.00	$5,460.00	$5,460.00	$5,460.00
SE-2024-L1-87-LC	City of Hyattsville PD - Aggressive Driv	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00

SE-2024-L1-95-LC	Bel Air PD - Speed Enforcement	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
SE-2024-L1-97-LC	Frostburg City PD - Speed Enforcement	$.00	$.00	$.00	$800.00	$800.00	$800.00
SE-2024-L1-98-LC	Worcester Co Sheriff - Speed Enforcement	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
SE-2024-L2-01-LC	Havre de Grace PD - Speed Enforcement	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
SE-2024-L2-14-LC	Hampstead PD - Speed Enforcement	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
SE-2024-L2-17-LC	Chestertown PD - Aggressive Driving	$.00	$.00	$.00	$1,485.00	$1,485.00	$1,485.00
SE-2024-L2-24-LC	Somerset Co Sheriff - Aggressive Driving	$.00	$.00	$.00	$2,500.00	$2,500.00	$2,500.00
SE-2024-L2-36-LC	Rockville PD - Speed Enforcement	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
SE-2024-L2-42-LC	Calvert Co Sheriff - Speed Enforcement	$.00	$.00	$.00	$9,000.00	$9,000.00	$9,000.00
SE-2024-L2-58-LC	Baltimore City PD - Speed Enforcement	$.00	$.00	$.00	$4,535.36	$4,535.36	$4,535.36
Speed Enforcement Total		**$.00**	**$.00**	**$.00**	**$632,755.01**	**$632,755.01**	**$632,755.01**
Distracted Driving							
DD-2024-G1-08-LC	MHSO - Media Internal Projects	$.00	$.00	$.00	$120,000.00	$120,000.00	$120,000.00
DD-2024-G1-29-SW	MHSO - Staffing Grant 1	$.00	$.00	$.00	$27,993.15	$27,993.15	$.00
DD-2024-G1-35-SW	MHSO - Planning and Administration	$.00	$.00	$.00	$2,000.00	$2,000.00	$.00
DD-2024-G1-77-LC	Emerg Respond - PedestrianBicycle	$.00	$.00	$.00	$11,689.12	$11,689.12	$11,689.12
DD-2024-G2-19-LC	DRIVE SMART VA - Special Projects	$.00	$.00	$.00	$77,953.56	$77,953.56	$77,953.56
DD-2024-G2-39-LC	Chesapeake Reg Safety - Distracted Drivi	$.00	$.00	$.00	$7,040.00	$7,040.00	$7,040.00
DD-2024-L0-09-LC	Elkton PD - Distracted Driving	$.00	$.00	$.00	$2,500.00	$2,500.00	$2,500.00
DD-2024-L0-18-LC	Baltimore Co PD - Distracted Driving	$.00	$.00	$.00	$35,000.00	$35,000.00	$35,000.00
DD-2024-L0-26-LC	Calvert Co Sheriff - Distracted Driving	$.00	$.00	$.00	$4,000.00	$4,000.00	$4,000.00
DD-2024-L0-61-LC	Charles Co Sheriff - Distracted Driving	$.00	$.00	$.00	$5,000.00	$5,000.00	$5,000.00
DD-2024-L0-66-LC	Howard Co PD - Distracted Driving	$.00	$.00	$.00	$12,000.00	$12,000.00	$12,000.00
DD-2024-L0-71-LC	Takoma Park PD - Distracted Driving	$.00	$.00	$.00	$1,980.00	$1,980.00	$1,980.00
DD-2024-L0-72-LC	MD Capitol Police - Distracted Driving	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
DD-2024-L0-76-LC	MDTA - Distracted Driving	$.00	$.00	$.00	$18,000.00	$18,000.00	$18,000.00
DD-2024-L0-80-LC	St. Marys Co Sheriff - Distracted Drivin	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
DD-2024-L0-91-LC	Anne Arundel Co PD - Distracted Driving	$.00	$.00	$.00	$27,995.00	$27,995.00	$27,995.00
DD-2024-L0-95-LC	Riverdale Park PD - Distracted Driving	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
DD-2024-L0-97-LC	Bel Air PD - Distracted Driving	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
DD-2024-L1-00-LC	Mt. Airy PD - Occupant Protection	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
DD-2024-L1-19-LC	MSP-Statewide - Distracted Driving	$.00	$.00	$.00	$57,000.00	$57,000.00	$57,000.00
DD-2024-L1-28-LC	City of Bowie - Bowie City Distracted Dr	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
DD-2024-L1-54-LC	Harford Co Sheriff - Distracted Driving	$.00	$.00	$.00	$18,000.00	$18,000.00	$18,000.00
DD-2024-L1-58-LC	Cecil Co Sheriff - Distracted Driving	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
DD-2024-L1-83-LC	City of Hyattsville PD - Distracted Driv	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
DD-2024-L1-88-LC	UMCP PD - Distracted Driving	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
DD-2024-L1-99-LC	Havre de Grace PD - Distracted Driving	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
DD-2024-L2-26-LC	Aberdeen PD - Distracted Driving Enforce	$.00	$.00	$.00	$2,009.60	$2,009.60	$2,009.60
DD-2024-L2-34-LC	Rockville PD - Distracted Driving	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
DD-2024-L2-55-LC	Edmonston PD - Edmonston Police Safe Str	$.00	$.00	$.00	$550.00	$550.00	$550.00
DD-2024-L2-60-LC	Baltimore City PD - Impaired Driving	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
Distracted Driving Total		**$.00**	**$.00**	**$.00**	**$450,210.43**	**$450,210.43**	**$420,217.28**
NHTSA 402 Match							
MATCH-2024-11-11-11	BIL NHTSA 402 Match	$.00	$1,519,971.36	$.00	$.00	$.00	$.00
MATCH-2024-22-22-22	BIL NHTSA 402 Match	$.00	$198,320.31	$.00	$.00	$.00	$.00

NHTSA 402 Match Total		**$.00**	**$1,718,291.67**	**$.00**	**$.00**	**$.00**	**$.00**
BIL NHTSA 402 Total		***$.00***	***$1,718,291.67***	***$.00***	***$6,044,364.02***	***$6,044,364.02***	***$4,270,768.17***
BIL 405b OP High							
405b High Public Education							
M1PE-2024-G1-29-SW	MHSO - Staffing Grant 1	$.00	$.00	$.00	$44,973.55	$44,973.55	$.00
405b High Public Education Total		**$.00**	**$.00**	**$.00**	**$44,973.55**	**$44,973.55**	**$.00**
405b High Community CPS Services							
M1CPS-2024-G0-77-LC	Maryland DOH - Maryland Kids In Safety S	$.00	$.00	$.00	$308,227.78	$308,227.78	$308,227.78
405b High Community CPS Services Total		**$.00**	**$.00**	**$.00**	**$308,227.78**	**$308,227.78**	**$308,227.78**
405b High Match							
M1MATCH-2024-11-11-11	BIL 405b OP High Match	$.00	$91,832.35	$.00	$.00	$.00	$.00
405b High Match Total		**$.00**	**$91,832.35**	**$.00**	**$.00**	**$.00**	**$.00**
BIL 405b OP High Total		***$.00***	***$91,832.35***	***$.00***	***$353,201.33***	***$353,201.33***	***$308,227.78***
BIL 405c Data Program							
405c Data Program							
M3DA-2024-G0-56-LC	UMB NSC - Traffic Records Project	$.00	$.00	$.00	$349,390.55	$349,390.55	$349,390.55
M3DA-2024-G1-29-SW	MHSO - Staffing Grant 1	$.00	$.00	$.00	$148,589.09	$148,589.09	$.00
M3DA-2024-G2-41-LC	Washington College - Traffic Records	$.00	$.00	$.00	$518,410.15	$518,410.15	$518,410.15
405c Data Program Total		**$.00**	**$.00**	**$.00**	**$1,016,389.79**	**$1,016,389.79**	**$867,800.70**
405c Match							
M3MATCH-2024-11-11-11	BIL 405c Data Program Match	$.00	$264,261.35	$.00	$.00	$.00	$.00
405c Match Total		**$.00**	**$264,261.35**	**$.00**	**$.00**	**$.00**	**$.00**
BIL 405c Data Program Total		***$.00***	***$264,261.35***	***$.00***	***$1,016,389.79***	***$1,016,389.79***	***$867,800.70***
BIL 405d Impaired Driving Low							
405d Low Other Based on Problem ID							
M6OT-2024-G0-01-LC	Worcester Co Health - Impaired Driving	$.00	$.00	$.00	$27,891.84	$27,891.84	$27,891.84
M6OT-2024-G0-15-LC	MSAA - Traffic Safety Resource Prosecuto	$.00	$.00	$.00	$193,510.30	$193,510.30	$193,510.30
M6OT-2024-G0-32-LC	WRAP - Impaired Driving	$.00	$.00	$.00	$239,079.87	$239,079.87	$239,079.87
M6OT-2024-G0-48-LC	MADD - Power of Youth	$.00	$.00	$.00	$7,675.32	$7,675.32	$7,675.32
M6OT-2024-G0-82-LC	Restaurant Association - Impaired Drivin	$.00	$.00	$.00	$47,106.96	$47,106.96	$47,106.96
M6OT-2024-G2-30-LC	St. Marys Co Health Dept - Impaired Driv	$.00	$.00	$.00	$14,500.00	$14,500.00	$14,500.00
M6OT-2024-G2-40-LC	Cecil Co DES - Impaired Driving	$.00	$.00	$.00	$375.00	$375.00	$375.00
M6OT-2024-L0-19-LC	Baltimore Co PD - Impaired Driving	$.00	$.00	$.00	$900.00	$900.00	$900.00
M6OT-2024-L0-43-LC	Carroll Co Sheriff - Drive Sober	$.00	$.00	$.00	$4,500.00	$4,500.00	$4,500.00
M6OT-2024-L0-52-LC	Frederick PD - Impaired Driving FY24	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
M6OT-2024-L0-62-LC	Charles Co Sheriff - Impaired Driving	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
M6OT-2024-L0-78-LC	MDTA - Impaired Driving	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
M6OT-2024-L0-81-LC	St. Marys Co Sheriff - Impaired Driving	$.00	$.00	$.00	$600.00	$600.00	$600.00
M6OT-2024-L1-30-LC	City of Bowie - Bowie City Impaired and	$.00	$.00	$.00	$500.00	$500.00	$500.00
M6OT-2024-L1-37-LC	Greenbelt PD - impaired driving	$.00	$.00	$.00	$1,100.00	$1,100.00	$1,100.00
M6OT-2024-L1-43-LC	MSP-Statewide - Saturation Patrols	$.00	$.00	$.00	$13,000.00	$13,000.00	$13,000.00
M6OT-2024-L1-66-LC	Washington Co Sheriff - DUI	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
M6OT-2024-L1-85-LC	City of Hyattsville PD - Impaired Drivin	$.00	$.00	$.00	$500.00	$500.00	$500.00
M6OT-2024-L2-06-LC	Allegany Co Sheriff - Impaired Driving	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
M6OT-2024-L2-11-LC	Hampstead PD - Impaired Driving 2024	$.00	$.00	$.00	$500.00	$500.00	$500.00

M6OT-2024-L2-13-LC	MSP-SPIDRE - SPIDRE Team	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
M6OT-2024-L2-44-LC	Calvert Co Sheriff - Impaired Driving	$.00	$.00	$.00	$1,300.00	$1,300.00	$1,300.00
M6OT-2024-L2-52-LC	Prince Georges Co PD - Impaired Driving	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
405d Low Other Based on Problem ID Total		**$.00**	**$.00**	**$.00**	**$565,039.29**	**$565,039.29**	**$565,039.29**
405d Low HVE							
FDLHVE-2024-L0-02-LC	Laurel PD - Impaired Driving	$.00	$.00	$.00	$4,980.00	$4,980.00	$4,980.00
FDLHVE-2024-L0-06-LC	Manchester PD - DUI Saturation	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
FDLHVE-2024-L0-10-LC	Elkton PD - Impaired Driving	$.00	$.00	$.00	$2,480.00	$2,480.00	$2,480.00
FDLHVE-2024-L0-12-LC	Cumberland PD - DUI Enforcement	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
FDLHVE-2024-L0-16-LC	Ocean City PD - Impaired Driving	$.00	$.00	$.00	$19,980.00	$19,980.00	$19,980.00
FDLHVE-2024-L0-19-LC	Baltimore Co PD - Impaired Driving	$.00	$.00	$.00	$137,100.00	$137,100.00	$137,100.00
FDLHVE-2024-L0-24-LC	Garrett Co Sheriff - Impaired Driving	$.00	$.00	$.00	$4,000.00	$4,000.00	$4,000.00
FDLHVE-2024-L0-27-LC	Queen Anne Sheriff - Impaired Driving	$.00	$.00	$.00	$12,996.00	$12,996.00	$12,996.00
FDLHVE-2024-L0-34-LC	Gaithersburg PD - Impaired Driving	$.00	$.00	$.00	$9,960.00	$9,960.00	$9,960.00
FDLHVE-2024-L0-36-LC	Sykesville PD - Call a ride	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
FDLHVE-2024-L0-38-LC	Princess Anne PD - DUI Grant 2024	$.00	$.00	$.00	$2,997.10	$2,997.10	$2,997.10
FDLHVE-2024-L0-43-LC	Carroll Co Sheriff - Drive Sober	$.00	$.00	$.00	$15,500.00	$15,500.00	$15,500.00
FDLHVE-2024-L0-52-LC	Frederick PD - Impaired Driving FY24	$.00	$.00	$.00	$17,000.00	$17,000.00	$17,000.00
FDLHVE-2024-L0-62-LC	Charles Co Sheriff - Impaired Driving	$.00	$.00	$.00	$30,000.00	$30,000.00	$30,000.00
FDLHVE-2024-L0-68-LC	Howard Co PD - Impaired Driving	$.00	$.00	$.00	$30,000.00	$30,000.00	$30,000.00
FDLHVE-2024-L0-73-LC	Takoma Park PD - Impaired Driving	$.00	$.00	$.00	$1,485.00	$1,485.00	$1,485.00
FDLHVE-2024-L0-78-LC	MDTA - Impaired Driving	$.00	$.00	$.00	$34,000.00	$34,000.00	$34,000.00
FDLHVE-2024-L0-81-LC	St. Marys Co Sheriff - Impaired Driving	$.00	$.00	$.00	$11,400.00	$11,400.00	$11,400.00
FDLHVE-2024-L0-96-LC	Riverdale Park PD - Impaired Driving	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
FDLHVE-2024-L0-98-LC	Mt. Airy PD - Impaired Driving	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
FDLHVE-2024-L1-02-LC	Salisbury PD - Impaired Driving Applicat	$.00	$.00	$.00	$4,000.00	$4,000.00	$4,000.00
FDLHVE-2024-L1-11-LC	Talbot Co Sheriff - 2024 Impaired Drivin	$.00	$.00	$.00	$4,000.00	$4,000.00	$4,000.00
FDLHVE-2024-L1-14-LC	Fruitland PD - FPD DUI Overtime	$.00	$.00	$.00	$3,996.00	$3,996.00	$3,996.00
FDLHVE-2024-L1-17-LC	Berlin PD - Berlin Impaired FY23	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
FDLHVE-2024-L1-30-LC	City of Bowie - Bowie City Impaired and	$.00	$.00	$.00	$3,500.00	$3,500.00	$3,500.00
FDLHVE-2024-L1-37-LC	Greenbelt PD - impaired driving	$.00	$.00	$.00	$2,600.00	$2,600.00	$2,600.00
FDLHVE-2024-L1-38-LC	Montgomery Co Sheriff - Impaired Driving	$.00	$.00	$.00	$8,000.00	$8,000.00	$8,000.00
FDLHVE-2024-L1-43-LC	MSP-Statewide - Saturation Patrols	$.00	$.00	$.00	$256,000.00	$256,000.00	$256,000.00
FDLHVE-2024-L1-45-LC	Easton PD - Impaired Driving Enforcement	$.00	$.00	$.00	$9,744.00	$9,744.00	$9,744.00
FDLHVE-2024-L1-50-LC	Bel Air PD - Impaired Driving	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
FDLHVE-2024-L1-57-LC	Cecil Co Sheriff - Impaired Driving	$.00	$.00	$.00	$3,000.00	$3,000.00	$3,000.00
FDLHVE-2024-L1-61-LC	MSP-Mob Unit - Impaired Driving	$.00	$.00	$.00	$16,450.00	$16,450.00	$16,450.00
FDLHVE-2024-L1-66-LC	Washington Co Sheriff - DUI	$.00	$.00	$.00	$8,500.00	$8,500.00	$8,500.00
FDLHVE-2024-L1-70-LC	Aberdeen PD - Impaired Driving Campaign	$.00	$.00	$.00	$1,004.80	$1,004.80	$1,004.80
FDLHVE-2024-L1-73-LC	Anne Arundel Co PD - Impaired Driving	$.00	$.00	$.00	$25,000.00	$25,000.00	$25,000.00
FDLHVE-2024-L1-74-LC	Kent Co Sheriff - Impaired Driving	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
FDLHVE-2024-L1-78-LC	Wicomico Co Sheriff - Impaired Driving	$.00	$.00	$.00	$4,980.00	$4,980.00	$4,980.00
FDLHVE-2024-L1-85-LC	City of Hyattsville PD - Impaired Drivin	$.00	$.00	$.00	$3,500.00	$3,500.00	$3,500.00
FDLHVE-2024-L1-89-LC	UMCP PD - Impaired Driving	$.00	$.00	$.00	$9,000.00	$9,000.00	$9,000.00
FDLHVE-2024-L1-92-LC	Harford Co Sheriff - Impaired Driving	$.00	$.00	$.00	$60,000.00	$60,000.00	$60,000.00

FDLHVE-2024-L1-94-LC	Frostburg City PD - DUI Grant	$.00	$.00	$.00	$1,000.00	$1,000.00	$1,000.00
FDLHVE-2024-L1-96-LC	Worcester Co Sheriff - Impaired Driving	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
FDLHVE-2024-L2-00-LC	Havre de Grace PD - DUI Enforcement	$.00	$.00	$.00	$1,500.00	$1,500.00	$1,500.00
FDLHVE-2024-L2-06-LC	Allegany Co Sheriff - Impaired Driving	$.00	$.00	$.00	$5,000.00	$5,000.00	$5,000.00
FDLHVE-2024-L2-10-LC	Montgomery Co - Impaired Driving	$.00	$.00	$.00	$51,920.00	$51,920.00	$51,920.00
FDLHVE-2024-L2-11-LC	Hampstead PD - Impaired Driving 2024	$.00	$.00	$.00	$2,000.00	$2,000.00	$2,000.00
FDLHVE-2024-L2-13-LC	MSP-SPIDRE - SPIDRE Team	$.00	$.00	$.00	$383,000.00	$383,000.00	$383,000.00
FDLHVE-2024-L2-16-LC	Chestertown PD - Impaired Driving	$.00	$.00	$.00	$990.00	$990.00	$990.00
FDLHVE-2024-L2-23-LC	Somerset Co Sheriff - Impaired Driving	$.00	$.00	$.00	$4,000.00	$4,000.00	$4,000.00
FDLHVE-2024-L2-37-LC	Rockville PD - Impaired Driving	$.00	$.00	$.00	$4,000.00	$4,000.00	$4,000.00
FDLHVE-2024-L2-44-LC	Calvert Co Sheriff - Impaired Driving	$.00	$.00	$.00	$11,700.00	$11,700.00	$11,700.00
FDLHVE-2024-L2-52-LC	Prince Georges Co PD - Impaired Driving	$.00	$.00	$.00	$50,000.00	$50,000.00	$50,000.00
FDLHVE-2024-L2-56-LC	Edmonston PD - Impaired Driving	$.00	$.00	$.00	$1,320.00	$1,320.00	$1,320.00
FDLHVE-2024-L2-59-LC	Baltimore City PD - Impaired Driving	$.00	$.00	$.00	$3,500.00	$3,500.00	$3,500.00
405d Low HVE Total		**$.00**	**$.00**	**$.00**	**$1,297,082.90**	**$1,297,082.90**	**$1,297,082.90**
405d Low ID Coordinator							
FDLIDC-2024-G1-33-SW	MHSO - Staffing Grant 2	$.00	$.00	$.00	$81,412.59	$81,412.59	$.00
405d Low ID Coordinator Total		**$.00**	**$.00**	**$.00**	**$81,412.59**	**$81,412.59**	**$.00**
405d Low Paid/Earned Media							
FDLPEM-2024-G1-09-LC	MHSO - Communications DUI	$.00	$.00	$.00	$930,000.00	$930,000.00	$930,000.00
405d Low Paid/Earned Media Total		**$.00**	**$.00**	**$.00**	**$930,000.00**	**$930,000.00**	**$930,000.00**
405d Low Drug and Alcohol Training							
FDLDATR-2024-G0-15-LC	MSAA - Traffic Safety Resource Prosecuto	$.00	$.00	$.00	$7,865.00	$7,865.00	$7,865.00
FDLDATR-2024-G0-58-LC	MD Sheriffs - MSA DUI Institute	$.00	$.00	$.00	$19,250.00	$19,250.00	$19,250.00
FDLDATR-2024-G1-62-LC	MSP-DRE - DRE Training	$.00	$.00	$.00	$156,000.00	$156,000.00	$156,000.00
FDLDATR-2024-L0-19-LC	Baltimore Co PD - Impaired Driving	$.00	$.00	$.00	$12,000.00	$12,000.00	$12,000.00
FDLDATR-2024-L0-68-LC	Howard Co PD - Impaired Driving	$.00	$.00	$.00	$4,000.00	$4,000.00	$4,000.00
FDLDATR-2024-L1-43-LC	MSP-Statewide - Saturation Patrols	$.00	$.00	$.00	$21,000.00	$21,000.00	$21,000.00
FDLDATR-2024-L2-10-LC	Montgomery Co - Impaired Driving	$.00	$.00	$.00	$5,000.00	$5,000.00	$5,000.00
FDLDATR-2024-L2-13-LC	MSP-SPIDRE - SPIDRE Team	$.00	$.00	$.00	$14,000.00	$14,000.00	$14,000.00
FDLDATR-2024-L2-52-LC	Prince Georges Co PD - Impaired Driving	$.00	$.00	$.00	$5,000.00	$5,000.00	$5,000.00
405d Low Drug and Alcohol Training Total		**$.00**	**$.00**	**$.00**	**$244,115.00**	**$244,115.00**	**$244,115.00**
405d Low Match							
M6MATCH-2024-11-11-11	BIL 405d Impaired Driving Low Match	$.00	$810,588.94	$.00	$.00	$.00	$.00
405d Low Match Total		**$.00**	**$810,588.94**	**$.00**	**$.00**	**$.00**	**$.00**
BIL 405d Impaired Driving Low Total		***$.00***	***$810,588.94***	***$.00***	***$3,117,649.78***	***$3,117,649.78***	***$3,036,237.19***
BIL 405f Motorcycle Safety Programs							
405f Safety Motorcyclist Awareness							
M11MA-2024-G1-08-LC	MHSO - Media Internal Projects	$.00	$.00	$.00	$81,095.70	$81,095.70	$81,095.70
405f Safety Motorcyclist Awareness Total		**$.00**	**$.00**	**$.00**	**$81,095.70**	**$81,095.70**	**$81,095.70**
405f Safety Match							
M11MATCH-2024-11-11-11	BIL 405f Motorcycle Safety Programs Matc	$.00	$21,084.88	$.00	$.00	$.00	$.00
405f Safety Match Total		**$.00**	**$21,084.88**	**$.00**	**$.00**	**$.00**	**$.00**

BIL 405f Motorcycle Safety Programs Total		***$.00***	***$21,084.88***	***$.00***	***$81,095.70***	***$81,095.70***	***$81,095.70***
BIL 405h Nonmotorized Safety							
405h Public Education							
FHPE-2024-G0-89-LC	WASHCOG - PedestrianBicycle	$.00	$.00	$.00	$162,594.30	$162,594.30	$162,594.30
FHPE-2024-G1-33-SW	MHSO - Staffing Grant 2	$.00	$.00	$.00	$61,862.67	$61,862.67	$.00
FHPE-2024-G1-79-LC	Balt Metropolitan Council	$.00	$.00	$.00	$450,000.00	$450,000.00	$450,000.00
405h Public Education Total		**$.00**	**$.00**	**$.00**	**$674,456.97**	**$674,456.97**	**$612,594.30**
405h Match							
FHMATCH-2024-11-11-11	BIL 405h Nonmotorized Safety Match	$.00	$175,358.81	$.00	$.00	$.00	$.00
405h Match Total		**$.00**	**$175,358.81**	**$.00**	**$.00**	**$.00**	**$.00**
BIL 405h Nonmotorized Safety Total		***$.00***	***$175,358.81***	***$.00***	***$674,456.97***	***$674,456.97***	***$612,594.30***
SUPPLEMENTAL BIL NHTSA 402							
Motorcycle Safety							
MC-2024-G1-40-LC	CORE - MD Motors Coordination and Evalua	$.00	$.00	$.00	$58,697.38	$58,697.38	$58,697.38
Motorcycle Safety Total		**$.00**	**$.00**	**$.00**	**$58,697.38**	**$58,697.38**	**$58,697.38**
Community Traffic Safety Project							
CP-2024-G2-07-LC	MD Soybean Board - Special Projects	$.00	$.00	$.00	$138,698.85	$138,698.85	$138,698.85
Community Traffic Safety Project Total		**$.00**	**$.00**	**$.00**	**$138,698.85**	**$138,698.85**	**$138,698.85**
Speed Enforcement							
SE-2024-L2-08-LC	Montgomery Co - SpeedAggressive	$.00	$.00	$.00	$30,000.00	$30,000.00	$30,000.00
SE-2024-L2-49-LC	Prince Georges Co PD - Aggressive Drivin	$.00	$.00	$.00	$40,000.00	$40,000.00	$40,000.00
Speed Enforcement Total		**$.00**	**$.00**	**$.00**	**$70,000.00**	**$70,000.00**	**$70,000.00**
Distracted Driving							
DD-2024-L2-09-LC	Montgomery Co - Distracted	$.00	$.00	$.00	$20,000.00	$20,000.00	$20,000.00
DD-2024-L2-50-LC	Prince Georges Co PD - Distracted Drivin	$.00	$.00	$.00	$30,000.00	$30,000.00	$30,000.00
Distracted Driving Total		**$.00**	**$.00**	**$.00**	**$50,000.00**	**$50,000.00**	**$50,000.00**
NHTSA 402 Match							
MATCH-2024-11-11-11	SUPPLEMENTAL BIL NHTSA 402 Match	$.00	$82,523.02	$.00	$.00	$.00	$.00
NHTSA 402 Match Total		**$.00**	**$82,523.02**	**$.00**	**$.00**	**$.00**	**$.00**
SUPPLEMENTAL BIL NHTSA 402 Total		***$.00***	***$82,523.02***	***$.00***	***$317,396.23***	***$317,396.23***	***$317,396.23***
SUPPLEMENTAL BIL 405b OP High							
405b High Public Education							
M1PE-2024-G1-29-SW	MHSO - Staffing Grant 1	$.00	$.00	$.00	$42,851.28	$42,851.28	$.00
405b High Public Education Total		**$.00**	**$.00**	**$.00**	**$42,851.28**	**$42,851.28**	**$.00**
405b High Match							
M1MATCH-2024-11-11-11	SUPPLEMENTAL BIL 405b OP High Match	$.00	$11,141.33	$.00	$.00	$.00	$.00
405b High Match Total		**$.00**	**$11,141.33**	**$.00**	**$.00**	**$.00**	**$.00**
SUPPLEMENTAL BIL 405b OP High Total		***$.00***	***$11,141.33***	***$.00***	***$42,851.28***	***$42,851.28***	***$.00***
SUPPLEMENTAL BIL 405c Data Program							
405c Data Program							
M3DA-2024-G0-56-LC	UMB NSC - Traffic Records Project	$.00	$.00	$.00	$683.16	$683.16	$683.16

405c Data Program Total		**$.00**	**$.00**	**$.00**	**$683.16**	**$683.16**	**$683.16**
405c Match							
M3MATCH-2024-11-11-11	SUPPLEMENTAL BIL 405c Data Program Match	$.00	$177.62	$.00	$.00	$.00	$.00
405c Match Total		**$.00**	**$177.62**	**$.00**	**$.00**	**$.00**	**$.00**
SUPPLEMENTAL BIL 405c Data Program Total		***$.00***	***$177.62***	***$.00***	***$683.16***	***$683.16***	***$683.16***
SUPPLEMENTAL BIL 405d Impaired Driving Low							
405d Low HVE							
FDLHVE-2024-L2-10-LC	Montgomery Co - Impaired Driving	$.00	$.00	$.00	$38,080.00	$38,080.00	$38,080.00
FDLHVE-2024-L2-52-LC	Prince Georges Co PD - Impaired Driving	$.00	$.00	$.00	$22,000.00	$22,000.00	$22,000.00
405d Low HVE Total		**$.00**	**$.00**	**$.00**	**$60,080.00**	**$60,080.00**	**$60,080.00**
405d Low ID Coordinator							
FDLIDC-2024-G1-33-SW	MHSO - Staffing Grant 2	$.00	$.00	$.00	$46,920.00	$46,920.00	$.00
405d Low ID Coordinator Total		**$.00**	**$.00**	**$.00**	**$46,920.00**	**$46,920.00**	**$.00**
405d Low Match							
M6MATCH-2024-11-11-11	SUPPLEMENTAL BIL 405d Impaired Driving L	$.00	$27,820.00	$.00	$.00	$.00	$.00
405d Low Match Total		**$.00**	**$27,820.00**	**$.00**	**$.00**	**$.00**	**$.00**
SUPPLEMENTAL BIL 405d Impaired Driving Low Total		***$.00***	***$27,820.00***	***$.00***	***$107,000.00***	***$107,000.00***	***$60,080.00***
SUPPLEMENTAL BIL 405h Nonmotorized Safety							
405h Public Education							
FHPE-2024-G0-89-LC	WASHCOG - PedestrianBicycle	$.00	$.00	$.00	$49,685.93	$49,685.93	$49,685.93
405h Public Education Total		**$.00**	**$.00**	**$.00**	**$49,685.93**	**$49,685.93**	**$49,685.93**
405h Match							
FHMATCH-2024-11-11-11	SUPPLEMENTAL BIL 405h Nonmotorized Safet	$.00	$12,918.34	$.00	$.00	$.00	$.00
405h Match Total		**$.00**	**$12,918.34**	**$.00**	**$.00**	**$.00**	**$.00**
SUPPLEMENTAL BIL 405h Nonmotorized Safety Total		***$.00***	***$12,918.34***	***$.00***	***$49,685.93***	***$49,685.93***	***$49,685.93***
NHTSA Total		***$.00***	***$3,216,119.12***	***$.00***	***$11,805,238.83***	***$11,805,238.83***	***$9,605,033.80***
Total		***$.00***	***$3,216,119.12***	***$.00***	***$11,805,238.83***	***$11,805,238.83***	***$9,605,033.80***

Appendix H: Distracted Driving Questions on State Exam

CDL Distraction questions:

Question: How can you identify a distracted driver?

1. The vehicle is speeding.
2. The vehicle is weaving in and out of traffic.
3. *The vehicle is drifting across lanes and moving at variable speeds.

Question: Which of the following can keep you from being distracted while you drive?

1. Try to use communication devices only in light traffic.
2. Constantly review your maps and your route plan as you drive.
3. *Pre-load your favorite CDs or cassette tapes.

Non - commercial C questions:

If you become tired or sleepy while driving, it is best to:

1. Drink an energy drink and keep driving
2. Continue to drive and look for the nearest coffee shop
3. *Stop and rest or, if possible, change drivers

Which of the following is a warning sign for drowsy drivers:

1. You keep driving in your lane
2. *Your eyes close or go out of focus
3. Your focus is on your constant speed

Driving while drowsy is dangerous because it:

1. *Dulls the mind and slows reactions
2. Increases awareness and sharpens sense of judgment
3. Increases destination time

Which of the following is not a potential cause for distracted driving?

1. Use of a cell phone

2. Changing the radio station or CD

3. *Concentrating on the road and other vehicles around you

Using a cell phone while driving can be a distraction, so a safe driving practice would be:

1. Using a hands-on device

2. Calling contacts only on speed dial

3. *Using your cell phone only in emergencies

Driver distraction may be:

1. Anything that causes you to turn sharply while driving

2. *Anything that takes your attention away from driving

3. Anything that takes a longer time to adjust the GPS

Texting while driving a motor vehicle is:

1. Permitted when driving at a slow speed

2.* Is illegal

3. Legal if the driver is 21 years of age or older

Appendix I: Motorcyclist Safety Grant

Below is a list of counties and political subdivisions in the state where motorcycle rider training courses will be conducted during the fiscal year.

Allegany County
Baltimore County
Carroll County
Charles County
Frederick County
Harford County
Howard County
Montgomery County
Prince George's County
Wicomico County

Below is the number of registered motorcycles in each county or political subdivision according to the Motor Vehicle Administration's records.

MARYLAND DEPARTMENT OF TRANSPORTATION MOTOR VEHICLE ADMINISTRATION REGISTERED MOTORCYCLES BY COUNTY AND YEAR	
COUNTY	**2022**
ALLEGANY	2,053
ANNE ARUNDEL	11,914
BALTIMORE CITY	3,206
BALTIMORE	12,229
CALVERT	2,987
CAROLINE	1,177
CARROLL	6,107
CECIL	3,472
CHARLES	4,202
DORCHESTER	707
FREDERICK	7,251
GARRETT	1,122
HARFORD	6,792
HOWARD	4,140
KENT	505
MONTGOMERY	10,163
PRINCE GEORGE'S	9,614
QUEEN ANNE'S	1,415
ST. MARY'S	3,545

SOMERSET	446
TALBOT	800
WASHINGTON	4,378
WICOMICO	2,041
WORCESTER	1,566
NO COUNTY	1,119
GRAND TOTALS	**102,951**

Appendix J: Racial Profiling Data Legislation for Maryland

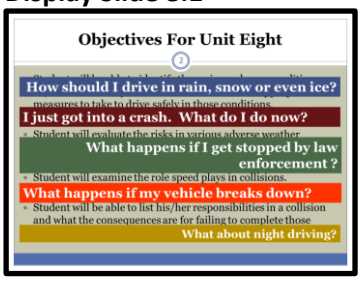
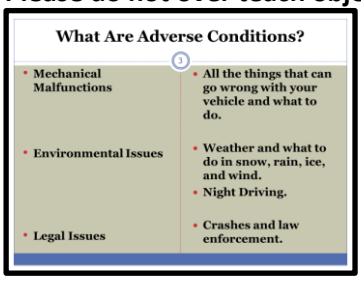
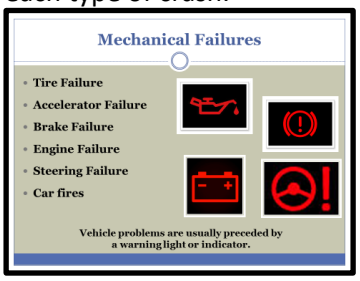
House Bill 301, Chapter 625 can be viewed here:
https://mgaleg.maryland.gov/2019RS/chapters_noln/Ch_625_hb0301E.pdf

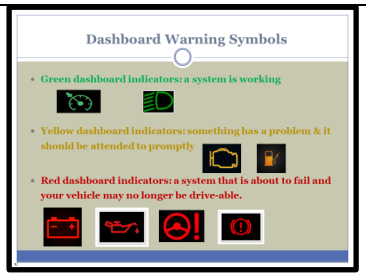
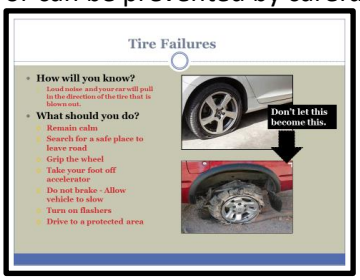
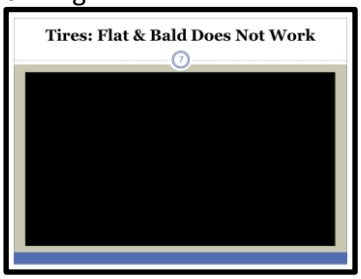
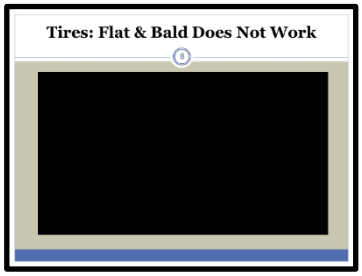
Appendix K: Driver Education and Driving Safety Courses

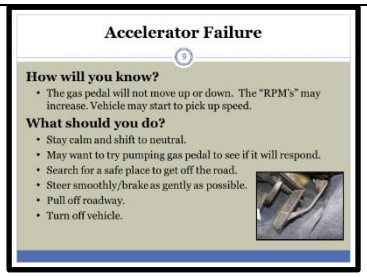
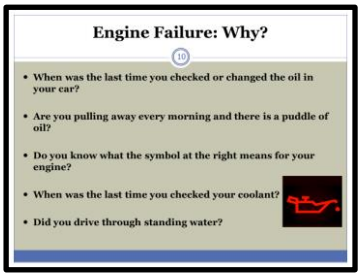
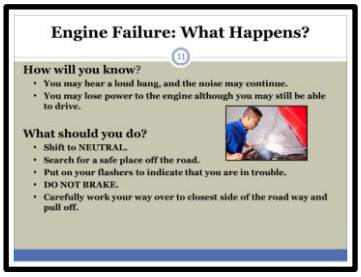
In the official MVA curriculum for driver education and driving safety courses, the below section is included.

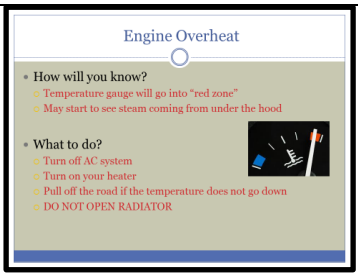
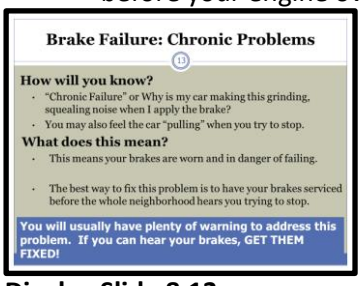
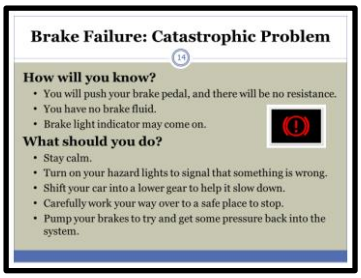
Teaching Guide for Unit Eight

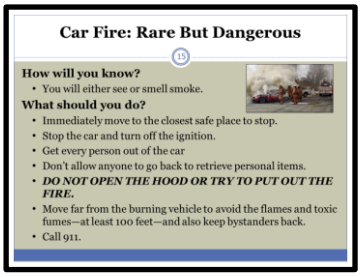
- Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions.
- Student will evaluate the risks in various adverse weather conditions.
- Student will examine the role speed plays in collisions.
- Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities.

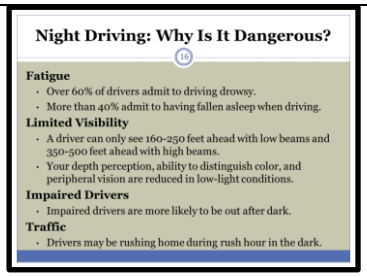
Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions.	Students will identify adverse mechanical conditions and how to address them.	 **Display Slide 8.1**  **Display Slide 8.2** **Please do not over teach objective slide.**  **Display Slide 8.3** **Talking Points and Discussion Questions:** The purpose of this slide is to develop a list of adverse conditions that are likely to impact new drivers and group them according to type. As each definition comes up, you may want to discuss some specific examples of each type of crash.  **Display Slide 8.4** **Talking Points and Discussion Questions:** This slide is a transitional slide that covers the various types of failures a student might encounter. The next few slides will develop the ways to address each type of problem.

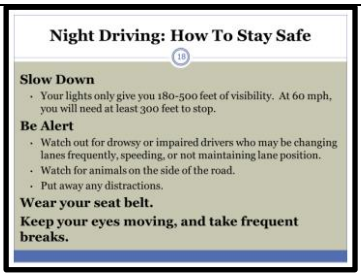
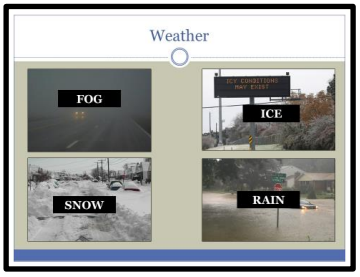
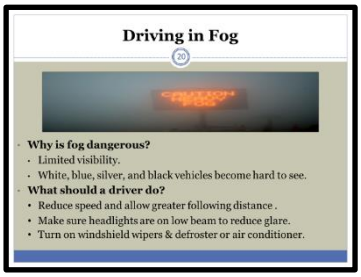
Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions.	Students will identify adverse mechanical conditions and how to address them including brake failure, engine failure, accelerator failure, steering failure, and tire failure.	 **Display Slide 8.5** **Talking Points and Discussion Questions:** Problems with your vehicle are usually indicated by warning indicators on your dash or by completing a pre-entry check to look for flat tires or fluids on the ground. Important Point to Stress: Most vehicle malfunctions are indicated beforehand or can be prevented by careful maintenance.  **Display Slide 8.6** **Talking Points and Discussion Questions:** Review the importance of a pre-entry check and how a good pre-entry check will show any tire issues before leaving the house. Also, discuss the relationship between safe tires, traction and driving. Review the steps that a driver should take when faced with a tire problem when driving.   **Display Slide 8.7 and 8.8** **Talking Points and Discussion Questions** 1) How do you check for the correct amount of tire tread? 2) How do you check for the correct amount of tire pressure? 3) How does tire tread and tire pressure relate to safe driving? 4) What is the relationship between safe tires and maintaining good traction on the road? 5) Why is maintaining traction important? **Supplemental Material: Worksheet 8.1 provides additional support for both videos. Please complete and discuss after watching both.**

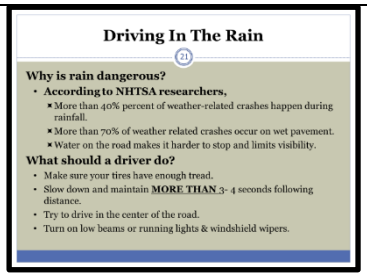
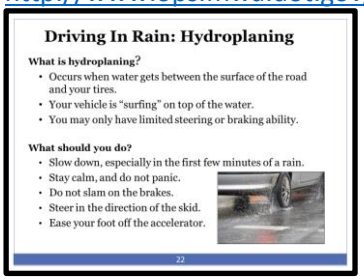
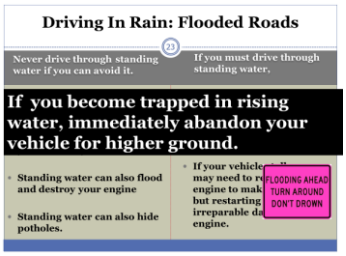
Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions.	Students will identify adverse mechanical conditions and how to address them including brake failure, engine failure, accelerator failure, steering failure, and tire failure.	 **Display Slide 8.9** **Talking Points and Discussion Questions: Please discuss what accelerator failure is and how it can impact a vehicle. Please also review the steps necessary to address the problem.**  **Display Slide 8.10: Talking Points and Discussion Questions:** Each of these questions are designed to get students to think about the connection between a major failure of their vehicle and preventative maintenance before the vehicle fails. • Oil should be changed every 3000 miles. If it is not, it will become thin and dirty. When the oil becomes thin and dirty, it does not protect the metal moving pieces in your engine. • If there is a puddle of oil under your vehicle every morning, then your vehicle is slowly and surely leaking oil. A slow, steady leak means your car is running on less and less oil. • If your red oil pressure light comes on, you are already doing damage to your engine. • If you drive through standing water, you may get water into your engine block**.**  **Display Slide 8.11** **Talking Points and Discussion Questions** Discuss what engine failure means and how a new driver can address the problem safely.

Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions.	Students will identify adverse mechanical conditions and how to address them including brake failure, engine failure, accelerator failure, steering failure, and tire failure.	 **Display Slide 8.12** **Talking Points and Discussion Questions:** 1) What does coolant look like? Usually a bright green, thick fluid 2) Like all the other fluids in your vehicle, checking your coolant or having it checked when you get your car serviced keeps your car running. 3) If your engine is consistently running hot, you should get it checked before your engine overheats on the dies of the road.  **Display Slide 8.13** **Talking Points and Discussion** Discuss the difference between a sudden and total failure of brakes and a slow chronic problem that can lead to a total failure. Chronic problems are usually indicated by a grinding or squealing noise. Please stress that this is the time to get brakes fixed before there ia massive failure.  **Display Slide 8.14** **Talking Points and Discussion** Discuss the difference between a sudden and total failure of brakes and a slow chronic problem that can lead to a total failure. Chronic problems are usually indicated by a grinding or squealing noise. Please stress that this is the time to get brakes fixed before there ia massive failure.

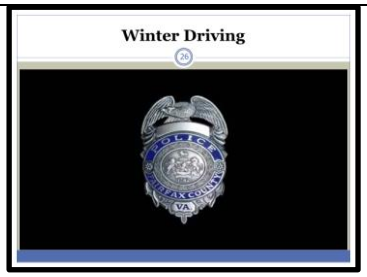
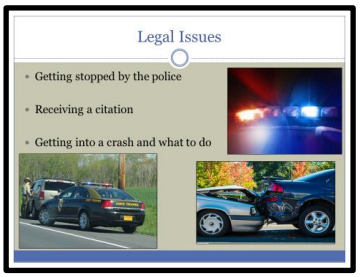
Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions.	Students will identify adverse mechanical conditions and how to address them including brake failure, engine failure, accelerator failure, steering failure, and tire failure.	 **Display Slide 8.15** **Talking Points and Discussion Questions:** It is critical that you stress to students that they should not try to put out the fire or open the hood. Opening the hood will give the fire oxygen and allow it to spread faster. Pouring water on the flames will allow the petroleum products that are fueling the fire to spread. According to State Farm, here are some of the reasons for a vehicle fire: • Fuses that blow repeatedly • Spilled oil under the hood left over from an oil change • Oil or other fluid leaks under the vehicle • Cracked or loose wiring, or wiring with exposed metal • Very loud sounds from the exhaust system • Rapid changes in fuel level, oil levels, or engine temperature • A missing cap from the oil filler • Broken or loose hoses For additional information: https://learningcenter.statefarm.com/auto/safety/what-to-do-if-your-car-catches-fire

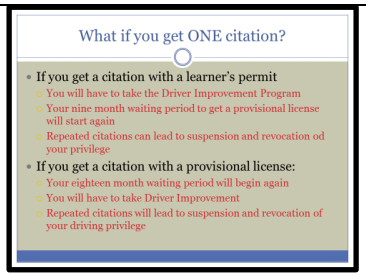
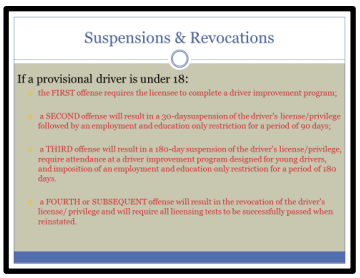
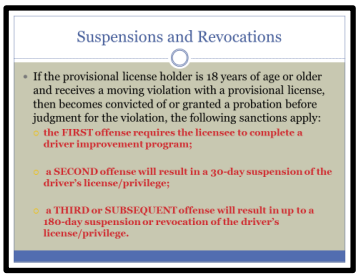
Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions. Student will evaluate the risks in various adverse weather conditions.	Student will identify the risks of various weather related conditions and what steps they can take to drive safely in those conditions including night driving.	 **Display Slide 8.16** **Talking Points and Discussion** Before displaying slide, discuss the particular problems that new drivers may have with night driving and why the GLS specifically mentions night driving and requires additional practice at night. This points focus more on overall night driving. It may be important to discuss why night driving is especially dangerous for new drivers. For additional information please see: http://www.nsc.org/learn/safety-knowledge/Pages/news-and-resources-driving-at-night.aspx  D**isplay Slide 8.17: Talking Points and Discussion** After discussing what makes night driving risky, this slide develops ways to stay safe at night. Be sure to discuss why each of these steps is important for new drivers. (or any drivers) Adjust and clean your headlights. Consult your owners manual if necessary. Make sure your windows and mirrors are clean. Dim your instrumental panel and dashboard lights. Look for animals' eyes on the side of the road. Don't stare into the lights of oncoming vehicles. Please develop a list of things new drivers think they should do before going through the list above. **For additional information:** **http://www.popularmechanics.com/cars/how-to/g106/10-safety-tips-for-driving-after-dark/**

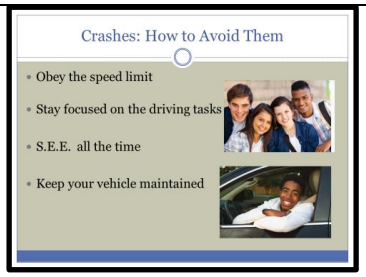
Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions. Student will evaluate the risks in various adverse weather conditions.	Student will identify the risks of various weather related conditions and what steps they can take to drive safely in those conditions including night driving.	 **Display Slide 8.18** **Talking Points and Discussion** This gives a list of specific things a new driver can do to stay safe at night.  **Display Slide 8. 19** **Talking points and Discussion questions:** This is a transition slide to describe some of the weather conditions a Maryland driver may have to face. Before discussing each situation, it may be helpful to have students discuss what concerns them.  **Display Slide 8.20 Talking Points and Discussion Questions:** Each of the points above discuss strategies a driver can use to deal with driving in fog. Have students discuss some additional strategies they could use: 1) Having passengers become co-pilots to help them see things they may have missed. 2) Be sure to have their seatbelts on, and put away all electronics. 3) May want to use emergency flashers when driving to increase visibility

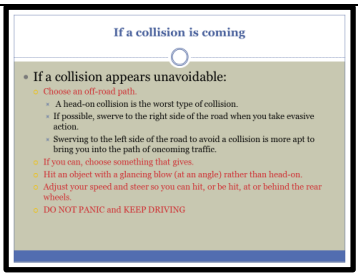
Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions. Student will evaluate the risks in various adverse weather conditions.	Student will identify the risks of various weather related conditions and what steps they can take to drive safely in those conditions including night driving.	 **Display Slide 8.21 Talking Points and Discussion Questions:** Rain is surprisingly more dangerous than snow. Why? Because rain is common and snow less so, drivers tend not to take it seriously. It will be important to stress as you go through each of these slides about weather that is if a driver does not feel confident or safe to drive, don't drive. For additional information about driving in all types of inclement weather: http://www.ops.fhwa.dot.gov/weather/q1_roadimpact.htm  **Display Slide 8.22 Talking Points and Discussion Points** Stress to students that hydroplaning is most likely to occur in the first few minutes of a rain when the oil on the road and the water from the rain can create a barrier. Most skids from hydroplaning only last a few seconds. Slamming on the brakes or jerking the steering wheel will only make the problem worse. The best way to prevent hydroplaning is make sure your tires are in good shape and slow down in the rain.  **Display Slide 8.23 Talking Points and Discussion Questions:** Stress that it is best to not drive through high water under any conditions. If it is unavoidable, follow the directions above. You should also stress that is important not to ignore signs or barricades that indicate flooded roads. **For additional information about driving through water:** **https://www.progressive.com/vehicle-resources/flood-safety/**

Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions. Student will evaluate the risks in various adverse weather conditions.	Student will identify the risks of various weather related conditions and what steps they can take to drive safely in those conditions including night driving.	 **Display Slide 8.24** Talking points and discussion questions: What is traction? Traction is the ability of a vehicle to respond to steering and braking and to stay on the road. Snow and ice create conditions where there is much less (or no) traction, making it difficult for a driver to steer or brake. Once again, stress to students that if they do not feel comfortable driving, don't. There is a good reason schools and businesses close during snowstorms. For additional information: https://www.esurance.com/info/car/dangers-of-winter-driving  **Display Slide 8.25** **Talking Points and Discussion Questions:** 1) Stress to students that driving on ice is extremely unpredictable. a) Ice does not always from uniformly so you could be driving on snow or even clear road and then hit a patch of ice. b) Black ice which can appear to be dry pavement is the riskiest. c) The best thing to do when there is ice on the road is stay home. d) No driver can overcome physics and the mechanics of traction. For additional information about driving in ice and snow: http://exchange.aaa.com/wp-content/uploads/2012/12/AAA-How-to-Go-Ice-Snow.pdf

Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to identify the various adverse conditions he/she will be likely to encounter and define the appropriate measures to take to drive safely in those conditions. Students will develop ways to safely and appropriately interact with law enforcement. Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities.	Student will identify the risks of various weather related conditions and what steps they can take to drive safely in those conditions including night driving. Students will develop ways to safely and appropriately interact with law enforcement. Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities.	 **Display Slide 8.26** **Talking Points and Discussion Questions:** 1) What are some of the objects suggested to put in your vehicle before winter? 2) Why are those things important? 3) What is oversteering? 4) What is understeering? 5) How do you correct? 6) What are some the tips given about driving in winter? **Supplemental Materials: Worksheet on pg. 8.2 of the Student Workbook provides additional material to support this video.**  **Display Slide 8.27** **Talking Points and Discussion Questions:** Transitional Slide to go from weather conditions to legal issues  **Display Slide 8.28 Talking Points and Discussion Questions:** 1) What should you do if law enforcement stops you? 2) What are the different types of citations law enforcement can give you? 3) What is the difference between a safety equipment repair order and a citation? 4) Should you sign any documents given you by an officer? **Supplemental Material: Worksheet on pg. 8.4 provides material to support this video.**

Objective	Enabling Objective	Teaching Notes and Activities
Students will develop ways to safely and appropriately interact with law enforcement. Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities.	Students will develop ways to safely and appropriately interact with law enforcement. Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities.	 **Display Slide 8.29 Talking points and discussion questions:** Using the Maryland Driver handbook or the Rookie Handbook, review with students the penalties for getting citations. You may also want to remind them that the person who signed for them to receive their license can cancel their license at any point for any reason. **Supplemental Material: Factsheet with additional information about moving violations and their impact on licenses can be found on pg. 8.3 of the Student Workbook.**  **Display Slide 8.30 Talking points and discussion questions:** Using the Maryland Driver handbook or the Rookie Handbook, review with students the penalties for getting citations. You may also want to remind them that the person who signed for them to receive their license can cancel their license at any point for any reason. **Supplemental Material: Factsheet with additional information about moving violations and their impact on licenses can be found on pg. 8.3 of the Student Workbook.**  **Display Slide 8.31 Talking points and discussion questions:** Using the Maryland Driver handbook or the Rookie Handbook, review with students the penalties for getting citations. You may also want to remind them that the person who signed for them to receive their license can cancel their license at any point for any reason.

Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities.	 **Display Slide 8.32 Talking Points and Discussion Questions:** 1) Why does obeying the speed limit help avoid crashes? ? 2) Obeying the speed limit gives you more time to search, evaluate your options, and execute a plan 3) Higher speeds cause worse crashes with more damage and injuries 4) Focus is critical to driving. i) Distraction isn't just electronics ii) Passengers, personal grooming, and even eating can be distractors take a driver's hands off the wheel, eyes off the road, and mind off the driving task. 5) Even brief periods of inattention can lead to horrible crashes 6) Search Evaluate execute helps keep you focused and aware of what is going on in your driving environment 7) Keeping your vehicle maintained including tires, brakes, and steering will help you avoid crashes and respond better to dangerous situations.

Objective	Enabling Objective	Teaching Notes and Activities
Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	 **Display Slide 8.33 Talking Points and Discussion Questions:** 1) Go off the road or swerve out of the lane of traffic rather than hit or be hit. a) Before you change your lane or position, be sure it is clear. b) If you hit someone else to avoid a crash, you may cause the crash you were trying to avoid. 2) Swerve to the right so you are not crossing the lanes of traffic. 3) Hit something soft rather than something hard. Remember what happened to the egg in the movie. 4) Avoid hitting something head on which is the worst kind of collision with the most fatalities. 5) Go off the road or swerve out of the lane of traffic rather than hit or be hit. a) Before you change your lane or position, be sure it is clear. b) If you hit someone else to avoid a crash, you may cause the crash you were trying to avoid. 6) Swerve to the right so you are not crossing the lanes of traffic. 7) Hit something soft rather than something hard. Remember what happened to the egg in the movie. 8) Avoid hitting something head on which is the worst kind of collision with the most fatalities. 9) Slow down. Speed (yours and the other vehicles) make the crash worse. 10) Most important, do not panic and keep driving. If you scream or take your hands off the wheel or slam on the brakes, you are no longer driving and cannot do much to help yourself. Keep driving and chances are you will minimize the impact of the collision. .

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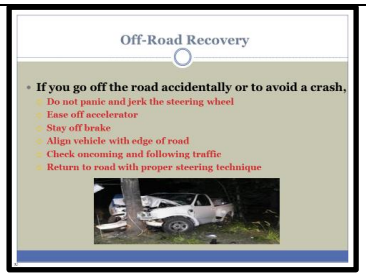
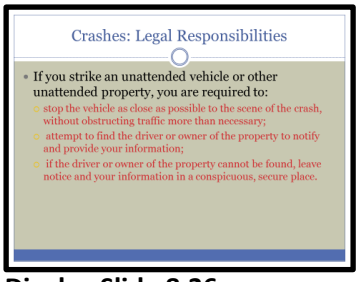
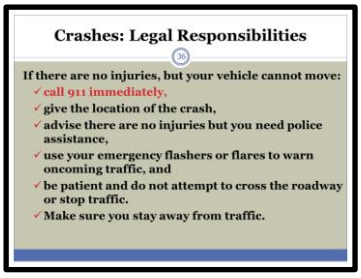
Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	 **Display Slide 8.34**  **Display Slide 8.35** Talking Points and Discussion Questions: The next few slides come directly from the Maryland Driver Manual and review what a driver's responsibilities are in various types of crashes  **Display Slide 8.36** Talking Points and Discussion Questions: The next few slides come directly from the Maryland Driver Manual and review what a driver's responsibilities are in various types of crashes.  **Display Slide 8.36** Talking Points and Discussion Questions: The next few slides come directly from the Maryland Driver Manual and review what a driver's responsibilities are in various types of crashes.

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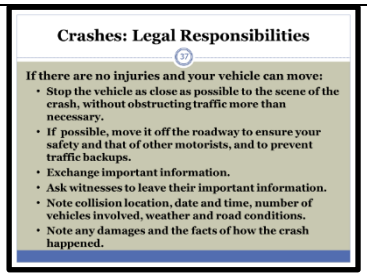
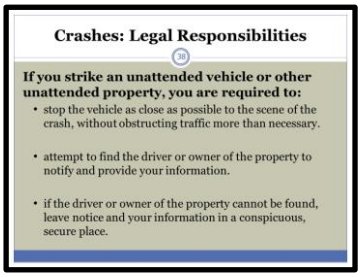
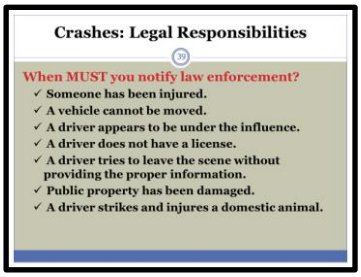
Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	 **Display Slide 8.37** Talking Points and Discussion Questions: The next few slides come directly from the Maryland Driver Manual and review what a driver's responsibilities are in various types of crashes.  **Display Slide 8.38** Talking Points and Discussion Questions: The next few slides come directly from the Maryland Driver Manual and review what a driver's responsibilities are in various types of crashes.  **Display Slide 8.39** Talking Points and Discussion Questions: The next few slides come directly from the Maryland Driver Manual and review what a driver's responsibilities are in various types of crashes.

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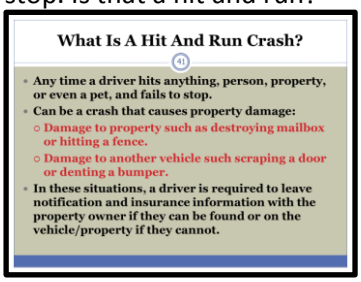
Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	 **Display Slide 8.40** **Talking Points and Discussion Questions:** **Discuss each of these scenarios with your students:** If you back into a mail box and don't tell the home owner, is that a hit and run? What if you're backing out of your best friend's driveway and you run over the family's cat, and you say nothing, is that a hit and run? If you scrape another car while you're parallel parking, then quickly drive off, is that a hit and run? Suppose you knock down a senior citizen crossing the street, and you don't stop. Is that a hit and run?  **Display Slide 8.41** **Before you display the content in these slides, you may want to ask the students** 1) What a hit and run crash is? 2) Are hit and run crashes a significant problem for drivers? 3) Ask them if they think the penalties for hit and run are more severe or less severe than the penalties for other types of crashes? 4) Have each student write down on a piece of paper (not to be shared with the class) what they think the possible penalties are a serious hit and run?

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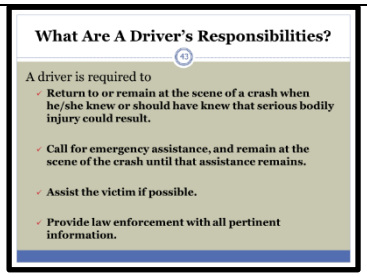
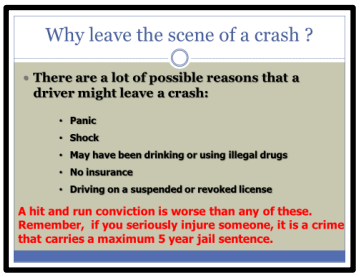
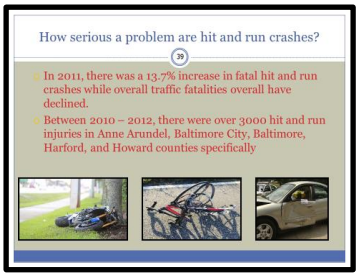
Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	 **Display Slide 8.43** **Talking Points and Discussion Questions:** After discussing each of the slides, please return to these scenarios and discuss with the class the appropriate actions and why someone might not want to take those actions. 1) If you back into a mail box and don't tell the home owner, is that a hit and run? 2) What if you're backing out of your best friend's driveway and you run over the family's cat, and you say nothing, is that a hit and run? 3) If you scrape another car while you're parallel parking, then quickly drive off, is that a hit and run? 4) Suppose you knock down a senior citizen crossing the street, and you don't stop. Is that a hit and run?  **Display Slide 8.44** **Talking Points and Discussion Questions:** Before going through this slide, please discuss with the class some reasons why they think people hit and run from the scene of a crash. Have the students discuss whether these are valid reasons for leaving the scene of a crash.  **Display Slide 8.45 Talking Points and Discussion** **This slide discusses the recent upswing in hit and run crashes. Discuss with students whythey believe that hit and run crashes may have increased intheir area.**

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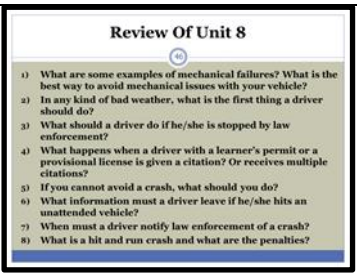
Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	Student will be able to list his/her responsibilities in a collision and what the consequences are for failing to complete those responsibilities. Student will examine the role speed plays in collisions.	 **Display Slide 8.46** ***1*) What are some examples of mechanical issues? How can a driver address the failures?** Tire Failure Accelerator Failure Brake Failure Engine Failure Steering Failure Car fires For most of the above failures, a driver should plan to get off the road and to a safe location as soon as possible. It is also important to stay calm and focused when addressing mechanical issues. The exception is a car fire. In the case of a car fire, a driver should immediately get off the travel portion of the road and get out of the car as soon as possible. **2) What is the best way to avoid mechanical issues?** Most mechanical issues can be avoided by preventative maintenance and by paying attention to your vehicle. **3) Why are tire tread and pressure important?** Tire tread and pressure allow your vehicle to grip the road. If your tread is worn or pressure is low, your vehicle's ability to grip the road may be diminished. ***4*) In any kind of bad weather, what is the first thing a driver should do?** Turn on headlights and slow down. Increase following distance. ***5)* What should a driver do in snow and ice?** Stay home if possible. Only go out if absolutely necessary. Increase following distance significantly. Slow down. Test brakes to see how they are operating. Make sure your vehicle is free of snow and ice before leaving. **6) What happens if a driver with a learner's permit or a provisional license is given a citation?** Will need to attend Driver Improvement Program in the classroom. Will need to restart waiting period to move to next stage of Graduated Licensing System**.** **7) What are the best ways to avoid a collision?** Obey the speed limit. Stay focused on the driving tasks. S.E.E. all the time. Keep your vehicle maintained.

		8) When must a driver notify law enforcement of a crash? Someone has been injured. A vehicle cannot be moved. A driver appears to be under the influence. A driver does not have a license. A driver tries to leave the scene without providing the proper information. Public property has been damaged. A driver strikes and injures a domestic animal **9) What is a hit and run crash, and what are the penalties?** Any time a driver hits anything, person, property, or even a pet, and fails to stop. If you are involved in a crash that causes serious bodily injury or one that you should have known would cause serious injury and you fail to remain at or return to the crash, YOU WILL BE COMMITTING A MISDEMEANOR AND MAY BE SUBJECT TO 5 YEARS OF IMPRISONMENT AND/OR A $5000.00 FINE. If you are involved in a crash and you knew or should have known that the crash might result in death and you fail to remain at or return to the crash, YOU WILL BE COMMITTING A FELONY AND CAN FACE UP TO 10 YEARS IMPRISONMENT AND/OR $10,000 FINE .