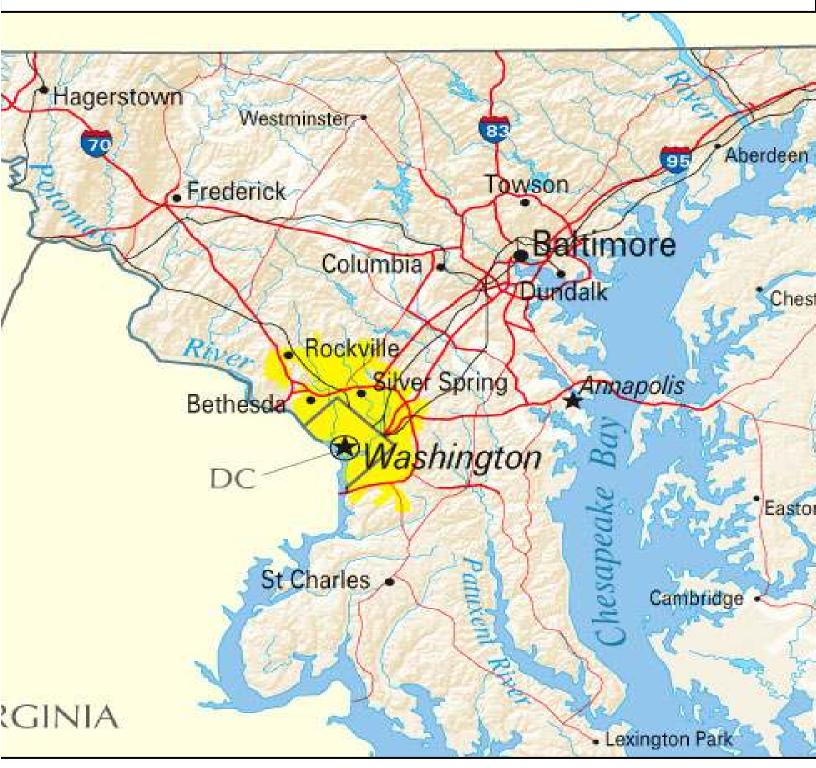
# STATE OF MARYLAND FFY 2008 ANNUAL REPORT



**Maryland Highway Safety Office** 

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John D. Poreari, Secretary Neil J. Pedersen, Administrator

December 22, 2008

Elizabeth A. Baker, Ph.D.
Regional Administrator
National Highway Traffic Safety Administration, Mid-Atlantic Region
10 South Howard Street, Suite 4000
Baltimore, MD 21201

Dr. Baker:

On behalf of The Honorable Martin O'Malley, Governor of Maryland and Neil J. Pedersen, Governor's Highway Safety Representative, I am pleased to present the Maryland Highway Safety Office Annual Report for Federal Fiscal Year 2008. This year's report has been prepared per the specification outlined by the Governors Highway Safety Association. Characterized by its improved data integrity, correlation to the Federal Fiscal Year 2008 Benchmark Report and the Maryland Strategic Highway Safety Plan, this report attempts to allow straightforward conclusions to be drawn about the progress being made with Maryland's highway safety programs.

Throughout this report, we have attempted to provide ample and accurate information regarding highway safety activities in Maryland; however, if you have any questions or if more information is needed, please do not hesitate to contact me at 410.787.5824. Thank you for your strong support and continued partnership with the Maryland Highway Safety Office.

Sincerely,

Vernon F. Betkey, Jr., Chief Maryland Highway Safety Office & Maryland Highway Safety Coordinator

cc: Mr. Neil J. Pedersen, Administrator, SHA
 & Governor's Highway Safety Representative
 Mr. Thomas L. Hicks, Director, Office of Traffic and Safety, SHA

 $\underline{\qquad\qquad} \textbf{My telephone number/toll-free number is} \underline{\qquad\qquad} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free} \\ \textbf{\textit{Maryland Relay Service for Impaired Hearing or Speech 1.800.735.2258 Statewide Toll Free Toll F$ 

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# Maryland Highway Safety Office **2008 Annual Report**

## Submitted to:

# Elizabeth A. Baker, Ph.D. Regional Administrator

NHTSA Region III 10 South Howard Street, Suite 6700 Baltimore, MD 21201

On behalf of:

## Neil J. Pedersen

Administrator, State Highway Administration and Governor's Highway Safety Representative

## Vernon F. Betkey, Jr.

Chief, Maryland Highway Safety Office and Maryland Highway Safety Coordinator

**December 21, 2008** 







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## Introduction

Motor vehicle crashes are the leading cause of death in the United States for those between 4 and 34 years of age. Because these deaths disproportionately strike the young, motor vehicle crashes are also the leading cause for lost years of productive life. In 2007, NHTSA estimates over 41,000 people died and nearly 2.5 million were injured in motor vehicle related crashes on the nation's roadways. Over the past few years the number of fatalities has remained essentially unchanged. The human and economic consequences of these crashes are unacceptable and unaffordable. In the absence of substantial progress, more than 400,000 people will die on our nation's roadways during this current decade at a cost of nearly two trillion dollars. The majority of these motor vehicle crashes are predictable and preventable; in short, we can do better.

Maryland has made hard earned progress towards reducing motor vehicle fatalities and injuries despite increases in population and vehicle miles of travel. Maryland's progress has also afforded the opportunity to utilize federal incentive grant monies, including Section 405, 2010, 406, and 408 monies. There are, however, reasons for concern. In Maryland there are more cars on the road than ever before. By 2006, the annual vehicle miles of travel (VMT) had increased to 56.6 billion from the 1996 estimate of 45.9 billion VMT, a twenty-three percent increase with no signs of decreasing in the near future. The positive highway safety trends of previous years have reached a plateau over the past five years and have, in some cases, shown increases.

In 2007, there was a total of 100,943 police-reported motor vehicle crashes, or one every five minutes, occurring on Maryland's roadways and resulting in 51,729 injuries and 615 lives lost. The bigger picture shows that from 1997 to 2007 more than 6,900 people died on Maryland roads, and roughly 640,000 were injured at a cost of more than \$45 billion.

Maryland's goal is to significantly reduce and, if possible, eliminate all motor vehicle fatalities, serious injuries, and property damage on all Maryland roads and highways. To address these goals, Maryland has increased its emphasis on implementing a well-coordinated plan and approach to highway safety that combines the "Four Es" of Education, Enforcement, Engineering, and Emergency Medical Services (EMS). No other recent endeavor has been as monumental to Maryland's traffic safety initiatives as the mandate by Congress for states to implement a comprehensive State Strategic Highway Safety Plan (SHSP) as a requirement by the *Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU) officially passed during Federal Fiscal Year (FFY) 2006. Rather than merely being implemented as a step toward securing highway safety funding, Maryland's leadership has utilized the SHSP implementation process as an opportunity to galvanize the State's traffic safety efforts by securing commitments from a multitude of partners, many of which were not previously engaged in such programs. Maryland's SHSP provides a comprehensive framework for further reductions in highway safety fatalities and injuries on *all* public roads through the establishment of a statewide goal, objectives, key emphasis areas, and strategies. As a point of reference, a summary of Maryland's SHSP is included in this report.

The Maryland Highway Safety Office, a division within the Maryland State Highway Administration's (SHA) Office of Traffic and Safety (OOTS), serves as Maryland's designated State Highway Safety Office (SHSO). The SHA Administrator serves as the Governor's Highway Safety Representative and the Chief of the MHSO serves as Maryland's Highway Safety Coordinator. Maryland's highway safety program and SHSP are facilitated by the MHSO's staff and supported by a combination of federal highway safety incentive and innovative program funds, as well as state and local funds.

The MHSO, recognized by the U.S. Department of Transportation Secretary and created per the U.S. Highway Safety Act of 1966, conducts the State's highway safety program, one that is designed to reduce traffic crashes and deaths, injuries and property damage. The mission of the MHSO is to save lives and preventing injuries within Maryland by reducing the number and severity of motor-vehicle crashes through the administration of a comprehensive and effective network of traffic safety programs.

The FFY 2008 Annual Report is meant to provide a barometric reading of how well Maryland has done in reducing automobile crashes and fatalities over the past year. Furthermore, this report provides an opportunity to examine how closely the MHSO met the objectives outlined within the FFY 2008 Highway Safety Plan. Each programmatic section within this report attempts to provide a clear picture of activities that support those objectives. The State of Maryland FFY 2008 Highway Safety Plan (HSP) outlined the key objectives and goals of the MHSO for FFY2008. These goals and objectives or benchmarks are the "ideals" toward which we continue to strive. During FFY 2008, highway safety countermeasures were designed and implemented to enhance existing state, local, and non-government efforts to modify unsafe driving behaviors by promoting safe, responsible driving. While these benchmarks presented earlier in the year are quantifiable for evaluation and accountability purposes, it should be noted that they are heavily influenced by external factors such as legislation and the publics' safe driving actions. Within the following pages the outcomes of the implemented strategies, financial investments, upcoming challenges and noteworthy achievements are detailed to brief our customers on the status of our progress made in FFY2008.

## Maryland's Strategic Highway Safety Plan Summary

Maryland is on a journey to "Destination – Saving Lives," and the vehicle is the Strategic Highway Safety Plan (SHSP). The purpose for taking this journey is clear. Motor vehicle crashes are already costing Marylanders entirely too much...the toll includes not only dollars, but lives as well.

The goal of the SHSP is to reduce these crashes and the resulting fatalities and injuries by sharing resources and targeting efforts to the areas of greatest need. The SHSP is a statewide comprehensive safety plan that provides a coordinated framework for reducing fatalities and serious injuries on all public roads. The SHSP strategically establishes statewide goals, objectives, and key emphasis areas developed in consultation with federal, state, local, and private sector safety stakeholders.

## Strategic Highway Safety Plan Strategies

The primary goal within the SHSP is:

To eliminate motor vehicle fatalities and serious injuries on Maryland roads and highways.

The overall strategies for the plan are as follows:

- To reduce annual motor vehicle fatalities to fewer than 550 by 2010.
- To reduce annual motor vehicle injuries to fewer than 50,000 by 2010.

The measurable objectives and strategies for each MHSO program area are designed to accomplish these overall strategies:

#### **Aggressive Driving Prevention**

- Conduct public education and outreach activities that elevate awareness of aggressive driving.
- Educate judiciary and legislatures on aggressive driving risks.
- Communicate aggressive driving factors to transportation engineering and planning communities.
- Increase aggressive driving enforcement.

## **Bicycle & Pedestrian Safety**

- Conduct road safety audits targeting high-risk pedestrian and intersection locations.
- Develop and implement projects to reduce or eliminate safety hazards or enhance safety for road users.
- Conduct assessments of traffic and pedestrian volumes and conduct road safety audits.
- Implement effective countermeasures for areas as determined by safety assessments and road safety audits.

#### **Community Traffic Safety**

- Reduce the number of intersection conflict points and provide better guidance for motorists.
- Encourage more multidisciplinary collaboration at the state and local level on intersection safety.

- Create intersection safety checklists for existing conditions and new design.
- Improve state and local collaboration and communication on work zone safety.
- Conduct public education and outreach activities to increase understanding of the "No Zone".
- Conduct a public information and education campaign on aspects of hazardous locations.

## **Data Analysis & Traffic Records**

- Develop a tracking system to evaluate countermeasure effectiveness at high-crash intersections.
- Develop infrastructure and policies that increase appropriate access to data.
- Develop an impaired driving tracking system through citation, disposition, and treatment.
- Revise the policy and crash analysis system to identify hazardous locations.
- Develop a standardized crash reporting threshold requirement.
- Develop systems to identify, assess, and evaluate roadway risk factors.
- Improve data collection and analysis for fatal and injury run-off-the road crashes
- Improve data collection and analysis to more accurately determine the factors involved in high-risk driving and to better identify high-risk drivers and operators.

#### **Diversity Outreach**

- Encourage more civic groups to get involved in the struggle to address traffic safety diversity.
- To consistently provide the most successful outreach efforts in non-traditional ways to meet the needs of diverse communities statewide.

## **Drowsy & Distracted Driving Prevention**

- Educate Legislators on implementing stricter laws and increasing fines for violations that result in run-off-the road crashes.
- Develop a definition of distracted driving which results in a more accurate reporting of such behavior.
- Reduce roadside distractions.
- Educate legislators and enforce legislation that specifically penalizes distracted driving.
- Increase education on the use of techniques that limit the frequency and severity of distracted driving crashes.
- Address distracted driving through the drivers' education curriculum and the license exam.
- Develop and implement a public awareness and education campaign aimed at distracted driving, older drivers, young drivers, and motorcyclists.

## **Employer Awareness**

- Develop, implement, and evaluate improved work zone planning.
- Heighten the visibility of workers, vehicles, equipment, and traffic control devices.
- Ensure work zone messaging devices display information that is accurate and timely.
- Use Intelligent Transportation Systems (ITS) for advanced communication of work zones.
- Increase speed enforcement in work zones.
- Reduce the need for trucks to park on highspeed highways.
- Increase in-terminal truck enforcement and increase enforcement in high-crash locations.
- Establish virtual weigh stations.
- Educate the judiciary and the legislature on the safety risks associated with trucks and buses.
- Educate legislators on implementing innovative enforcement tools.

#### **Enforcement & Justice Services**

- Educate the judiciary on the importance of penalties for violation of pedestrian laws.
- Develop effective law enforcement and judicial procedures to address the lawful operation of motorcycles.
- Develop an incentive/recognition program for law enforcement efforts.

 Identify best practices and innovative enforcement techniques for high-crash pedestrian locations and work zones.

## **Impaired Driving Prevention**

- Increase the number and effectiveness of sobriety checkpoints and saturation patrols.
- Strengthen, expand and enhance Driving Under the Influence (DUI) courts.
- Educate legislators for stronger and more effective DUI legislation.
- Develop educational programs targeting specific high risk audiences.

#### **Media Communications**

 Create effective paid media campaigns and generate more earned media.

## **Motorcycle Safety**

- Create and administer a comprehensive training program for new, existing, and returning motorcycle drivers.
- Implement motorcycle licensing procedures that effectively evaluate motorcycle operator entry level knowledge and skills.

## **Young Driver Safety**

- Review, evaluate, and improve the driver preparation program.
- Develop a program to increase enforcement, prosecution, and adjudication of young driver traffic law violations.
- Identify engineering solutions to prevent young driver crashes through road safety audits and other measures.

## Occupant Protection & Child Passenger Safety

- Conduct an enforcement program that targets pickup truck drivers and passengers.
- Conduct sustained high-visibility enforcement initiatives.
- Enhance current enforcement and education programs.
- Provide more paid media in highly populated metropolitan areas.
- Conduct outreach to teens.

#### **Older Driver Safety**

- Develop effective methods to identify at risk older drivers.
- Incorporate the FHWA Older Driver and Pedestrian Guidelines into the Maryland design guidelines.

## **State Demographic Profile**

According to the U.S. Census Bureau, as of August 2008, Maryland is now the wealthiest state in the United States, with a median household income of \$68,080. Maryland is also a life sciences hub with over 350 biotechnology firms, making it the third-largest such cluster in the nation.

As of 2007, Maryland has an estimated population of 5,597,843, which is an increase of 301,357, or 6%, since the year 2000. This includes a natural increase since the last census of 189,158 people (543,744 births minus 315,834 deaths). In 2007, 675,828 were counted as foreign born, with a majority arriving from Latin America and Asia.

The majority of Maryland's population is concentrated in the areas surrounding Washington, D.C. and Baltimore, the most populous city in the State. The center of population for Maryland is located on the county line between Anne Arundel and Howard Counties, in the unincorporated town of Jessup. Other major population centers include the following: Columbia in Howard County, Silver Spring, Rockville and Gaithersburg in Montgomery County, Frederick in Frederick County and Hagerstown in Washington County. The eastern, southern, and western portions of the state tend to be more rural, with cities of regional importance such as Salisbury and Ocean City on the eastern shore, Waldorf and La Plata in Southern Maryland, and Cumberland in Western Maryland.

Profile Elements	2000	2007*	Change
Population	5,296,486	5,597,843	<b>▲</b> 301,357
Under Age 5	353,393	373,878	<b>▲</b> 20,485
Age 18 and Over	3,940,314	4,230,957	<b>290,643</b>
Age 65 and Older	599,307	650,388	<b>▲</b> 51,081
Female	2,738,692	2,891,414	<b>▲</b> 152,722
Male	2,557,794	2,706,429	<b>▲</b> 148,635
Caucasian	3,391,308	3,421,834	<b>▲</b> 30,526
African-American	1,477,411	1,613,156	<b>▲</b> 135,745
American Indian & Alaska Native	15,423	14,166	<b>▼</b> (1,257)
Asian	210,929	270,638	<b>▲</b> 59,709
Native Hawaiian & Other Pacific Islander	2,303	3,237	<b>▲</b> 934
Reporting Multiple Race	103,587	104,695	<b>▲</b> 1,108
Hispanic or Latino Origin	227,916	337,494	<b>▲</b> 109,578
Foreign Born	518,315	675,828	<b>▲</b> 157,513
Language Other Than English at Home	622,714	767,766	<b>▲</b> 145,052
Persons Per Square Mile	542	579	<b>▲</b> 37
Licensed Drivers	3,382,451	3,937,181	<b>▲</b> 554,730
Registered Vehicles	3,847,538	5,067,156	<b>▲</b> 1,219,618
Mean Work Travel Time (Minutes)	31.2	30.8	<b>▼</b> (0.4)
Land Area (Square Miles)	9,774	9,774	0
Total Road Mileage	29,893	30,765	<b>▲</b> 872
State / US Roads	5,231	5,241	<b>▲</b> 10
County Roads	20,222	20,901	<b>▲</b> 679
City Roads	4,440	4,623	<b>▲</b> 183

Sources: U.S Geological Survey, U.S. Census Bureau, University of Maryland Capitol News Service, Maryland Department of Business & Economic Development

<sup>\*2008</sup> data unavailable

## **Crash Data & Trends**

The following tables represent various traffic safety-related rates and trends in the State of Maryland, and were generated in conjunction with guidelines supplied by the Governors Highway Safety Association (GHSA). The tables were also designed to allow a comparison of statistics\* from state to state and to provide a measure of consistency and benchmarking. In the following pages, graphs on the nationally measured issues will be presented and will detail:

- Fatality Trends,
- Fatality Rate per 100M VMT,
- Injury Trends,
- Fatal and Serious Injury Rate per 100M VMT,
- Fatality Rate per 100K Population,
- Fatal and Serious Injury Rate per 100K Population,
- Alcohol-Related Fatalities,
- Alcohol-Related Fatalities as a Proportion of All Fatalities,
- Alcohol-Related Fatality Rate per 100M VMT, and
- Percent of Population Using Safety Belts.

\*Unless otherwise noted, data sources for graphs derived from Maryland Automated Accident Reporting System (MAARS)

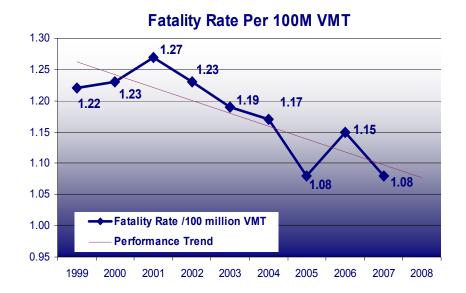
## **Graph A - Fatality Trends**



## **Fatality Trends**

Until 2006, fatalities on roads in Maryland were on a steadily decline of 7% over 4 years. In 2006 a spike occurred but did not dramatically affect the trend, as evidenced by 2007 overall fatality numbers.

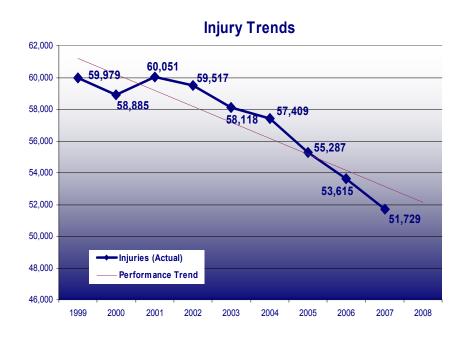
## Graph B - Fatality Rate per 100MVMT



## **Fatality Rate**

Based on the 2007 reduction in overall fatalities, the fatality rate was similarly impacted. The fatality rate for the last complete reporting period reflects a decrease of 6.1% to 1.08 per 100 million vehicle miles traveled.

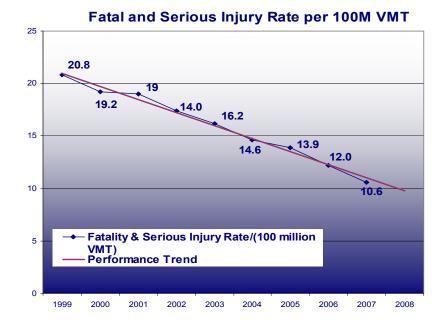
Graph C - Injury Trend



## **Injury Trends**

Injuries due to crashes on all roads in Maryland have declined by 13.9% between 2001 and 2006. The challenging areas for injury can be attributed to crashes involving aggressive driving, motorcycles and impaired driving. The target remains revised to further reduce injuries to less than 50,000 by the year 2010.

Graph D - Fatality & Serious Injury Rate per 100 Million Vehicle Miles Traveled

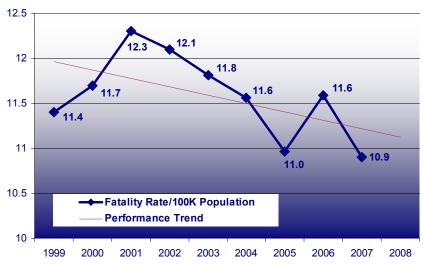


## Fatality & Serious Injury Rate per 100 Million Vehicle Miles Traveled

The rate of fatality and serious injury related to vehicle miles traveled continued to demonstrate a decrease mainly attributed to the decrease in reported injuries during 2007.

Graph E - Fatality Rate per 100,000 Population

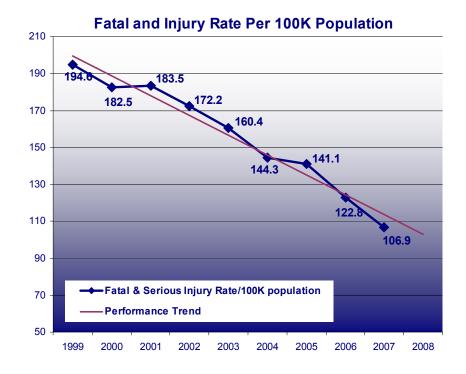




## Fatality Rate per 100,000 Population

The fatality rate in relation to population decreased to 10.9 for 2007 reflecting the physical decrease in fatalities. This is a 6.1% decrease over 2006.

Graph F - Fatal and Injury Rate per 100,000 Population

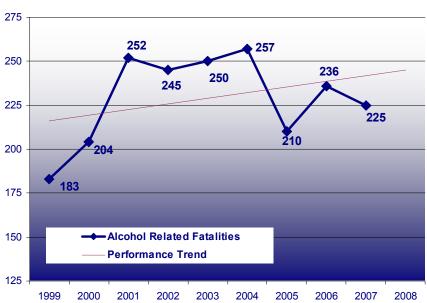


## Fatal and Injury Rate per 100,000 Population

The fatality and injury rate in relation to population decreased to 106.9 for 2007 reflecting the physical decrease in injuries counteracting the increase in fatalities. This is a 13% decrease from 2006.

**Graph G - Alcohol Related Fatalities** 



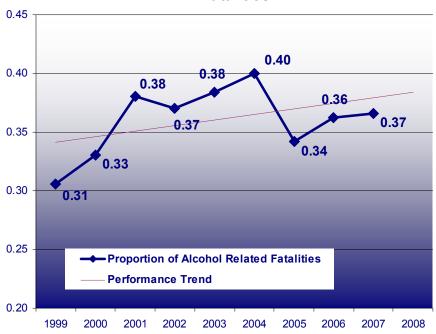


#### **Alcohol Related Fatalities\***

For 2007 fatalities in general experienced a slight decrease. As mentioned earlier impaired driving is one of the major areas demonstrating a negative increasing trend. The reported numbers in the chart to the left reflect the U.S. Department of Transportation's Fatal Analysis Reporting System (FARS) statistics for Maryland. FARS reported data makes use of formula based methodology. (\*0.01 BAC)

Graph H - Alcohol Related Fatalities as a Proportion of All Fatalities

## Alcohol Related Fatalities as a Proportion of All Fatalities



## Alcohol Related Fatalities as a Proportion of All Fatalities\*

Impaired driving represented a significant portion (36%) of the 615 fatalities reported during 2007. During the 2007 Legislative Session a DUI Task force was established to determine countermeasures to this deadly trend. (\*0.01 BAC)

**Graph I - Alcohol Related Fatality Rate** 

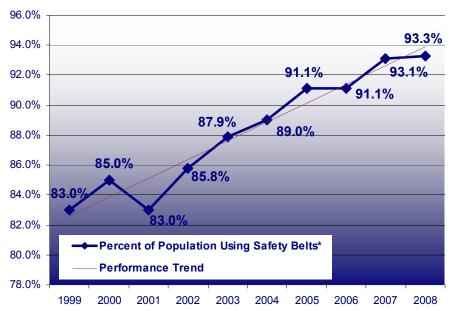
#### Alcohol Related Fatality Rate Per 100M VMT 0.50 0.48 0.47 0.45 0.46 0.46 0.42 0.41 0.40 0.40 0.37 0.37 0.35 0.30 -Alcohol Related Fatality Rate/100M VMT **Performance Trend** 0.25 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

## Alcohol Related Fatality Rate\*

The impaired driving fatality rate in relation to vehicle miles traveled decreased to .40 for 2007 reflecting the physical decrease in fatalities. This is a 4.8% decrease over 2006. (\*0.01 BAC)

**Graph J - Percent of Population Using Safety Belts** 

## **Percent of Population Using Safety Belts**



## Percent of Population Using Safety Belts

Maryland's usage of seat belts continues to trend in a positive direction with a compliance percentage of 93.3% being reported for 2008. This is more than a 10 percentage point increase between 2001 and 2007.

## **Crash Profiles By Involvement Type**

Occupant Protection (Belt Usage)	% Change	2004 Base	2008 Data	2010 Goal
Statewide Belt Usage (Combined)	<b>4.8%</b>	89%	93.3%	94.5%
Statewide Belt Usage (Automobiles)	<b>▲</b> 3.7%	90.8%	94.2%	94.4%
Statewide Belt Usage (Pick-Ups)	<b>▲</b> 10.6%	79.8%	88.3%	92.3%

Fatalities by Program Area	% Change	2004 Base	2007 Data	2010 Goal
Statewide	<b>v</b> 4.4%	643	615	608
Aggressive Driving**	▲ 31.0%	58	76	52
Bicycles	<b>▼</b> 41.7%	12	7	10
Drowsy & Distracted Driving**	▼ 78.7%	187	40	139
Impaired Driving *	<b>▼</b> 21.4%	286	225	206
Motorcycles	▲ 38.2%	68	94	62
New Drivers	▼ 8.2%	122	112	100
Occupant Protection (Unbelted)	▼ 14.5%	229	196	168
Older Drivers	▼ 24.1%	104	79	85
Pedestrians	<b>▲</b> 14.5%	96	110	85

Injuries by Program Area	% Change	2004 Base	2007 Data	2010 Goal
Statewide	▼ 9.9%	57,409	51,729	52,469
Aggressive Driving**	<b>▲</b> 48.2%	2,861	4,242	2,552
Bicycles	▼ 8.6%	705	645	552
Drowsy & Distracted Driving**	▼ 51.1%	26,523	12,994	21,655
Impaired Driving	▼ 1.4%	4,886	4,820	3,069
Motorcycles	<b>▲</b> 7.8%	1,416	1,527	1,333
New Drivers	▼ 16.3%	13,927	11,666	9,643
Occupant Protection (Unbelted)	<b>▼</b> 22.6%	8,242	6,381	2,959
Older Drivers	▼ 5.3%	7,202	6,822	5,066
Pedestrians	<b>V</b> 4.0%	2,631	2,526	2,237

Fatal Crashes by Program Area	% Change	2004 Base	2007 Data	2010 Goal
Statewide	▼ 3.2%	576	558	527
Aggressive Driving**	▲ 25.0%	52	65	46
Bicycles	<b>▼</b> 41.7%	12	7	10
Drowsy & Distracted Driving**	▼ 76.4%	161	38	112
Impaired Driving*	▼ 13.2%	183	159	176
Motorcycles	<b>▲</b> 40.0%	65	91	62
New Drivers	▼ 10.1%	109	98	88
Older Drivers	▼ 21.2%	90	71	70
Pedestrians	<b>▲</b> 13.6%	95	108	86

Injury Crashes by Program Area	% Change	2004 Base	2007 Data	2010 Goal
Statewide	▼ 6.9%	37,422	34,866	33,067
Aggressive Driving**	▲ 55.5%	1,660	2,582	1,559
Bicycles	▼ 3.8%	665	640	517
Drowsy & Distracted Driving**	▼ 48.2%	16,906	8,767	16,154
Impaired Driving*	▲ 0.2%	3,142	3,151	2,364
Motorcycles	<b>▲</b> 16.8%	1,222	1,428	1,164
New Drivers	▼ 13.7%	8,524	7,357	7,597
Older Drivers	▲ 0.0%	4,447	4,448	3,361
Pedestrians	▲ 1.2%	2,405	2,436	2,131

<sup>\*</sup> Fatality Analysis Reporting System data

\*\* A 2004 Maryland State Police change in policy redefined usage and attribution of the inattentive contributing circumstance in crash reports resulting in a lowering of crashes reported as inattentive driving related crashes.

## **Program Reports**

Throughout FFY 2008, the MHSO funded a variety of programs, projects and activities, with federal transportation dollars, which were intended to advance the traffic safety goals set forth by the State of Maryland. For FFY 2008, these Program Areas have been arranged to coincide with their position in the MHSO's overall set of priority Program Areas, as defined in Maryland's FFY 2008 Highway Safety Plan. Those priorities are as follows:

- Aggressive Driving Prevention
- · Bicycle and Pedestrian Safety
- Community Traffic Safety
- Data Analysis and Traffic Records
- Diversity Outreach
- Drowsy and Distracted Driving Prevention
- Employer Awareness
- Police Traffic Services

- Impaired Driving Prevention
- Injury Surveillance
- Media Communications
- Motorcycle Safety
- Young Driver Safety
- · Occupant Protection
- Older Driver Safety

Each section will provide a narrative description of the problem, a listing of objectives proposed in the Highway Safety Plan, strategies implemented throughout FFY 2008, challenges encountered throughout the year, and notable accomplishments achieved in FFY 2008.

As in past years, all of the program areas identified by the NHTSA as being of national priority are significant components of Maryland's traffic safety program. However, not all of the national priority program areas are addressed in this report. [MHSO's program is based on Maryland's data and problem identification, and is specifically tailored to best meet Maryland's needs.]

Measure	2007	2008
Total number of grants awarded	57	55
Total number of grant applications	63	59
Total Number Press events	8	14
Total Number of Educational Materials Distributed	254,119	264,239
Total Number of Message Based Incentive Items Distributed	87,300	39,500
Total Number of Free Media Runs	5,179	3,400
Total Number of Training Events	65	138
Total Training participants/students	1,161	8,771
Total Number of Educational Presentations & Taskforce Meetings	84	139
Total Number of Educational Presentation Attendees	6,125	3,654
Total Number of Outreach Events	42	35
Total Audience Exposure of Outreach Events and/or Impressions	4,203,491	~132,000,000
Total Number of Campaign-Related Seat Belt Citations and Warnings	~90,000	~100,000
Total Number of Campaign-Related Reported DWI Arrests	651	3,799
Total Number of Campaign-Related Speeding Citations and Warnings	385,604	243,939
Total Number of Enforcement Campaigns	4	842
Total Number of Participating Police Departments	152	110
Total Number of Checkpoint Events	119	89
Total Number of Saturation Patrols	377	657
Total Checkpoint Audience Exposure Alcohol	57,000	2,729,963

## **Aggressive Driving Prevention**

Polling and research conducted by AAA Mid-Atlantic through the years reveal a continued growing concern with the problem of aggressive driving (i.e., traffic signal violation, improper passing, failure to drive in a single or proper lane, following too closely, failure to stop/yield right of way, or exceeding the speed limit). In an effort to combat aggressive driving, the MHSO's largest effort in 2008 was to fund and partner with law enforcement, government officials, trauma experts, and others to conduct the Smooth Operator Program. Developed over 10 years ago, the Smooth Operator Program is a public safety initiative to provide education, information and solutions for the problem of aggressive driving.

The number of aggressive driving crashes increased dramatically in 2006, increasing from 5,651 in 2005 to 6,252 in 2006. Better data collection by police officers has resulted in a dramatic decrease in the use of a somewhat "non-specific" code on the Maryland crash report, namely "Failure to give full time and attention." A decrease in the use of this code has increased the use of other, more specific codes directly related to aggressive driving behaviors. All aggressive driving categories showed an increase from 2005 to 2006. This area should further normalize in 2007 and the data will give a clearer picture of the problem.

## **Objective**

- Decrease the total number of aggressive driver related crashes from 3,909 in 2004 to 3,754 or lower in 2010.
- Decrease the total number of aggressive driver related fatalities from 58 in 2004 to 52 in 2010.
- Decrease the total number of aggressive driver related injuries to 2,552 in 2010.

## **Accomplishments**

- The MHSO oversaw the involvement of more than 500 law enforcement agencies across the region, 71 in Maryland, coordinated their efforts to target aggressive drivers, conducting enforcement "waves" over a four month period. In 2008, they issued more than 233,655 citations and warnings for aggressive driving behaviors, far exceeding the 147,000 projected citations.
- Two major public relations events were held for the 2008 campaign, including one in Springfield, Virginia, and one at Timonium Fairgrounds, and included representatives of all the participating law enforcement agencies and other transportation industry partners. The event added to the campaign's earned media value.
- Over the course of the four Smooth Operator media waves, more than 119 million impressions were made with the media investments, averaging well over the anticipated 150 Target Rating Points (TRP).
- Contrary to previous years efforts of supplementing media with educational materials, this year the program
  was pointed in a different direction with all educational funds devoted to media and outdoor advertising.
  Next year, materials will be more specifically targeted at violators including citation jackets with aggressive
  driving & Smooth Operator information.
- Steering Committee meetings occurred as scheduled on a bi-monthly basis with tele-conferences for the 'funding partners' (executive committee) during the 'off-months.' Meetings included representatives from law enforcement, highway safety officials, and other partners from the private sector.
- Statewide Smooth Operator Law Enforcement Training Meetings were held in November, 2007 and May, 2008. Over 150 police officers and CTSP coordinators were in attendance for both meetings. November meeting included instruction on Speed Management Strategies and the May meeting included highlights from Baltimore County's Crash/Crime Corridor Enforcement Project. Also in attendance were representatives from the United Arab Emirates who were interested in gleaning ideas from the Smooth Operator campaign to use in their country to address a growing aggressive driving problem.

## **Bicycle & Pedestrian Safety**

Over the past five years 14,817 pedestrian and 4,100 pedalcyclist crashes have occurred on Maryland's roadways. On average, 104 pedestrians and 8 pedalcyclists have lost their lives each year, representing nearly 18% of Maryland's traffic fatalities. In addition, an average of 2,749 pedestrians and 674 pedalcyclists has been injured annually, representing 6% of all Maryland's traffic injuries.

The Maryland highway safety program includes a comprehensive pedestrian and bicycle safety program that promotes safe pedestrian and bicycle practices, educates drivers to share the road safely with other road users, and encourages safe facilities for pedestrians and bicyclists through a combination of policy, enforcement, communication, education, incentive, and engineering strategies. In the Washington DC metro area, the *StreetSmart Campaign* continues to address pedestrian safety issues through coordinated education and enforcement activities. The Statewide Bicycle and Pedestrian Safety Campaign continues to partner with elementary schools and bike and pedestrian organizations to promote programmatic goals.

The number of pedalcyclist crashes increased slightly from 794 in 2006 to 809 in 2007. Despite an increase in pedalcyclist crashes overall, both the number of injury crashes and pedalcyclists injured decreased from 2006 to 2007. Pedalcyclist fatalities remained consistent with 2005 and 2006, with 7 pedalcyclists killed. Pedestrian crashes decreased from 2,960 in 2006 to 2,928 in 2007. While pedestrian crashes, injury crashes and total pedestrians injured decreased from 2006 to 2007, pedestrian fatalities increased from 97 to 112 during that same period. High-density urban areas are locations for the majority of pedestrian crashes and will continue to be targets for high visibility enforcement operations and educational campaigns.

## **Objectives**

- Decrease the total number of pedalcyclist related crashes from 875 in 2004 to 733 in 2010.
- Decrease the total number of pedalcyclist related fatalities from 12 in 2004 to 10 in 2010.
- Decrease the total number of pedalcyclist related injuries from 702 in 2004 to 552 in 2010.
- Decrease the total number of pedestrian related crashes from 2,843 in 2004 to 2,528 in 2010.
- Decrease the total number of pedestrian fatalities from 96 in 2004 to 85 in 2010.
- Decrease the total number of pedestrian injuries from 2,626 in 2004 to 2,237 in 2010.

- The *StreetSmart* campaign, developed in partnership with the Washington Council of Governments, reached millions of people in the Washington, D.C. metropolitan area with pedestrian safety messages directed at both motorists and pedestrians.
  - The Fall and Spring launch events were very successful in gaining media attention and informing the public about stepped-up law enforcement activities throughout Virginia, Maryland and the DC Metropolitan area. The Fall 2007 and Spring 2008 campaigns launch earned an estimated 8,289,742 media impressions, with at least 45 broadcast hits, and at least nine print and online articles.
  - Transit advertising was used to reach users of the transit system about walking safely and radio advertisements emphasizing the responsibilities of motorists toward pedestrians. 102,250 StreetSmart-branded educational materials were distributed to reinforce the key campaign messages in the region.
  - o In order to promote law enforcement involvement and promote best practices, the National Capital Region Transportation Planning Board hosted a half-day seminar on June 23, 2008 focusing on pedestrian enforcement. Instructors from DDOT, DCMPD, and Arlington and Montgomery County police discussed their policies and practices with respect to pedestrian enforcement. Fifty law enforcement agents from around the Washington region attended.
- The Statewide Bicycle and Pedestrian Safety Campaign operated with the Washington Area Bicyclists
  Association (WABA), continued to promote the Maryland Pedestrian and Bicycle Safety Education Program.
  In FFY2008 the program:
  - Six train-the-trainer courses were conducted in Harford County, Prince George's County, Baltimore County and Baltimore City, developing 90 new Safety Education Program trainers;
  - Education programs at 25 venues were delivered, including schools, parks, summer camps and recreation centers, serving a total of 5,356 children.
- MHSO continued to provide coordination and support for bicycle and pedestrian safety initiatives statewide

- Four meetings of the Pedestrian and Bicycle Safety Task Force were convened by MHSO to promote coordination among statewide and local safety programs. Participants included CTSP coordinators, law enforcement officers, MDOT and SHA staff, members of the disabled pedestrian community, regional and local agency representatives and other stakeholders.
- MHSO distributed an estimated 70,000 pieces of educational material, including StreetSmart branded materials, pedestrian safety law cards, booklets for school aged children, copies of the Bicycling in Maryland booklet and the DVD Competence and Confidence: an Adults Guide to Safe Cycling, and other materials.

## **Community Traffic Safety**

Maryland continues to utilize a network of local traffic safety personnel to address various community issues. These local programs, known as the Community Traffic Safety Programs (CTSPs), are located in 23 counties (8 counties have regional coordinators) and Baltimore City. The CTSP program allows the MHSO to incorporate local efforts to address problems unique to a certain community and to allow for more effective local implementation of the MHSO's program areas.

Each year, local CTSP Coordinators work with their respective Task Forces to identify traffic safety issues and problems, develop appropriate countermeasures, and implement or advocate solutions. The Task Forces are the focal point for communication and cooperation among government agencies and the private sector on traffic safety matters, and serve as community facilitators for local traffic safety initiatives. The MHSO will continue to review the progress of the CTSPs and evaluate the effectiveness of each program.

#### **Objectives**

- Reduce the number of crashes from 104,103 in 2004 to 99,981 in 2010.
- Reduce the number of fatalities from 643 in 2004 to 608 in 2010.
- Reduce the number of injuries from 53,753 in 2004 to 43,069 in 2010.
- Facilitate the development and effectiveness of local Community Traffic Safety Programs through training and support.

#### **Accomplishments**

- Phase II of Johns Hopkins University/National Study Center Evaluation Program is nearly completed and initially involved ten CTSP coordinators conducting practical use of the developed tools. However, two coordinators left in mid-year to take positions in other states.
- Some restructuring of the Community Traffic Safety Program was conducted as six counties were combined into three regional programs.
- A Fall Training Meeting was held in October and a Spring Training Meeting was conducted in February. An Annual Administrative Evaluation of the Community Traffic Safety Program was preformed.
- The planned Administrative Manual for Project Directors and Coordinators was not developed. A procedure for monitoring was instituted by the Financial Management Team.

## **Data Analysis & Traffic Records**

Section 2006 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy For Users (SAFETEA-LU) provides that Maryland may qualify for multi-year grant funds by demonstrating that it has: (a) Established a highway safety data and traffic records coordinating committee (a "TRCC"); and (b) developed a multiyear highway safety data and traffic records system strategic plan (a "Multiyear Plan" or "Strategic Plan").

## **Objectives**

Implement a 100% 2<sup>nd</sup> edition compliant Model Minimum Uniform Crash Criteria crash report by 2010.

- Increase the total number of crash form Model Minimum Uniform Crash Criteria elements from 61 to 77 of 77 by 2010.
- Increase the total number of crash form Model Minimum Uniform Crash Criteria attributes from 333 to 622 of 622 by 2010.

#### **Accomplishments**

- Continuing with the implementation of the recommendations from the 2005 Traffic Records Assessment, the Maryland Traffic Records Coordinating Committee (TRCC) completed a new strategic plan with emphasis on access and data quality through provider and user distance learning.
- The Towson University Center for Geospatial Information Services started work to add functionality to the Maryland Incident Location Tool (MILT) that will allow law enforcement officers to complete MAARS crash reports electronically.
- The TRCC continued to work with the agencies represented in the TRCC to update the status of the 2005 Traffic Records Assessment recommendations.
- The Maryland Highway Safety Office continued to work with the Maryland State Police (MSP) to develop a new crash report which includes the necessary data elements to make Maryland's crash data more MMUCC compliant.
- Maryland's TRCC Executive Committee held 3 TRCC Executive Council meetings in 2008.
- Maryland's TRCC Technical Committee held 11 TRCC Technical Committee meetings in 2008.
- MHSO worked with Towson University's Extended Education and Online Learning (EEOL) Center to develop and implement the Safety and Transportation Knowledge Online (STKO) web portal which facilitates the sharing of Traffic Records information.

## **Diversity Outreach**

According to the United States Census Bureau, in 2007, the total population for the State of Maryland was 5,618,344 people. Of the total population, approximately 13 percent of the population has some type of disability, 12.1 percent of the population was estimated as foreign born, and nearly 14.7 percent of the population speaks a language other than English. Also, according to the United States Census Bureau, the Maryland demographic data profile estimates that 28.8 percent of the population is Black or African American, 61.1 percent of the population is white, 4.8 percent of the population is Asian and 6.0 percent of the population is Hispanic or Latino. This level of diversity in population requires a variety of outreach efforts. To address the multitude of issues affecting various audiences, a one size fits all approach would not be effective in accomplishing tasks or outreach programs. The Diversity in Traffic Safety Program was developed to address the needs of educating diverse audiences through traffic safety programs, initiatives, outreach projects and creating specific messaging. While creating programs for diverse communities can be a tremendous challenge, these programs are also life saving. The MHSO reaches out to thousands of individuals and groups who want to unleash new and innovative approaches to effectively save lives and prevent injuries across the state.

## **Objectives**

- Reduce the number of crashes from 104,103 in 2004 to 99,981 in 2010.
- Reduce the number of fatalities from 643 in 2004 to 608 in 2010.
- Reduce the number of injuries from 53,753 in 2004 to 52,469 in 2010.

## **Accomplishments**

 Quarterly Task Force Meetings were held to maintain partnerships throughout the state. The administrative objective was met and approximately 25 individuals attended each meeting.

- Diversity in Traffic Safety efforts and goals are also accomplished through each of the other MHSO programs areas. Specifically offering materials and messages in various languages.
- The Diversity in Traffic Safety Program worked very close with the Multi-Cultural Highway Outreach Safety Education Project (M-CHOSE) Grant to host two best practice seminars entitled "The Role of Information Sharing for Promising Approaches to Reach Diverse Populations and Communities." The seminars allowed key stakeholders to discuss how to optimally promote driver, passenger, and pedestrian safety in diverse and immigrant communities.
- Education and awareness materials were translated into French-Creole and disseminated in specific communities in Maryland.
- The MHSO Coordinator and the Baltimore CTSP Coordinator participate in the Annual Stone Soul Picnic, where more than 120,000 people attended this multi-cultural event. Throughout the event there were numerous resources and safety materials distributed to the public. Nearly 5,000 pieces of literature were disseminated throughout the day.

## **Drowsy & Distracted Driving Prevention**

The number of inattentive driving crashes continued to decrease. Proper coding of the motor vehicle accident report has helped to maintain a steady downward trend of inattentive driving related crashes. The number of inattentive driving crashes decreased between 2005 and 2007 by 6,197. The decreasing use of the "Failure to give full time and attention" code on the crash report is the principal reason for this change. Educational initiatives continue to expand while many of our partners disseminate materials and publicize our safety messages. In an effort to address unsafe driving, distracted driving, drowsy driving and risky driver behaviors, the MHSO has taken the necessary steps to provide continuous support for programs implemented statewide. Partners and stakeholders are asked to incorporate distracted driving messages with other program area initiatives to allow the public to receive dual messages at one time.

#### **Objectives**

- Decrease the total number of inattentive driving related crashes from 44,972 in 2004 to 43,191 in 2010.
- Decrease the total number of inattentive driving related fatalities from 187 in 2004 to 139 in 2010.
- Decrease the total number of inattentive driving related injuries from 24,860 in 2004 to 21,665 in 2010.

- Supported the Strategic Highway Safety Plan Distracted Driver Emphasis Area by hosting conference
  calls with the team, developing the distracted driver definition, and creating the Inattentive Driver Action
  Measure Tool.
- Supported National Sleep Awareness Week by providing resource materials, press releases and e-news updates. The Administrative Objective was met.
- Partnered with CTPS's, state and local agencies, and businesses to increase distracted and drowsy driver prevention.
- Supported National Drowsy Driving Prevention Week. Safety messages were displayed on the Variable
  Message Boards across the state. The messages reminded drivers of their responsibilities, and provided
  reminders to drivers about the dangers of driving drowsy.
- Forty-nine Positive Alternative to Dangerous and Destructive Decisions (PADDD) classes were presented to more than 12,218 students and individuals ordered by the court. The attendees were exposed to numerous traffic safety messages. These classes covered a multitude of driver safety concerns and driving habits. The classes also cover crash dynamics, the aftermath of a crash, and the personal consequences and perspectives. Roughly 13,039 pieces of literature were distributed.

- Displayed at ten public health and safety events. The Administrative Objective to hold one Inattentive
  Driving Mini Seminar was not met, but MHSO partnered with ten agencies to exhibit and disseminate
  Inattentive Driving material.
- Disseminated more than 30,000 pieces of literature and incentives to organizations, individuals, and highway safety professionals. The Administrative Objective was met in conjunction with the literature disseminated through the MHSO and grantees.
- The Administrative Objective to create two new pieces of literature was not met, but plans are under way to pursue this in FFY2009.

## **Employer Awareness**

The Maryland Traffic Safety Awareness for Employers (T-SAFE) Project was designed to be an employer-specific traffic safety investment program that increases traffic safety awareness among Maryland employers and their employees. The objective of this program is to provide employers with the tools and resources needed to protect their most important asset, their employees, while driving on and off the job. The benefits of implementing a workplace traffic-safety program include the reduction of traffic-related injuries, deaths, and the economic losses associated with traffic crashes to the employer, the employee, and the overall community. The main focus of the project is to share traffic safety information not only with employees but also with their customers. While this is an investment program to help employers reduce crashes and costs, the program looks at the startling financial losses being suffered statewide and nationally. The total cost of motor vehicle crashes in the state of Maryland is more than \$7.4 billion annually and crashes are the number one cause of fatal workplace accidents. A commitment to safety is based on the understanding that the entire management team commits itself to fully developing and maintaining a safe environment. Currently, the MHSO has approximately 30 T-SAFE Executive Council Members and more than 400 companies hold a general membership.

## **Objectives**

- Reduce the number of crashes from 104,103 in 2004 to 99,981in 2010.
- Reduce the number of fatalities from 643 in 2004 to 608 in 2010.
- Reduce the number of injuries from 53,753 in 2004 to 43,069 in 2010.

- Conducted a survey to support the T-SAFE Project. The survey responses helped in the developmental process to create and deliver more successful programs.
- Supported National Drive Safely Work Week with an emphasis on reaching diverse risky drivers. Provided
  new alerts, press releases, and a tip of the day to all T-SAFE partners throughout the entire week. The
  Administrative Objective to host a kick-off event was not met; however, the T-SAFE Executive Council
  Members did decide to invest in individual initiatives to support Drive Safely Work Week.
- Developed a radio commercial in Spanish to educate the Hispanic/Latino community about driving responsibilities during National Drive Safely Work Week. The commercial aired the week of October 6-10 in the DC market on El Zol radio.
- Held one T-SAFE Executive Council Meeting and partnered with four new companies to support Maryland's T-SAFE Initiative. The Administrative Objective was to hold two meeting and increase the T-SAFE membership by five percent. Due to scheduling conflicts, only one meeting occurred, but four new companies were recruited.
- T-SAFE was invited to participate at the State Employees Risk Management Conference. Numerous partnerships were formed, registration forms were completed, and resource information was distributed.
- T-SAFE was invited to participate at the BGE Safety Managers Conference. The conference focused on driver safety and a presentation was made to address and discuss the dangers of distracted driving and using a hand-held cell phone while driving. More than 1,500 employees attended the conference.

- Thirty-two Highway Safety Training classes were conducted that involved a total of 2,647drivers employed by the State of Maryland.
- Distributed over 5,000 pieces of literature and loaned 51 traffic safety videos to employers to show during monthly safety meetings.
- Trained and certified eight instructors to deliver the Highway Traffic Safety Trilogy Program.
- The Administrative Objective to hold one training seminar in conjunction with the MHSO Coordinator was not met. Training seminars are being coordinated in conjunction with grantees.
- The Administrative Objective to finalize the T-SAFE Resource Guide was met. Production of the guide will
  continue into FFY2009.

## **Police Traffic Services**

The MHSO administers a variety of federally funded highway safety programs and projects and almost every program includes a law enforcement component. Many of these programs cross over into multiple enforcement agencies across Maryland on the state, county and local levels, and successful deployment of these programs require skillful coordination of efforts.

The MHSO has developed many unique activities and programs that are specifically targeted towards aiding in the coordination and successful deployment of law enforcement activities that support MHSO objectives.

#### **Objectives**

- Reduce the number of crashes from 104,103 in 2004 to 99,981 in 2010.
- Reduce the number of fatalities from 643 in 2004 to 608 in 2010.
- Reduce the number of injuries from 53,753 in 2004 to 43,069 in 2010.
- Ensure MHSO's programmatic efforts are successfully complemented by efficient and advanced law enforcement involvement through education, incentives and recognition.
- Improve data collection and causational analysis relating to fatal and near fatal crashes.

- Northwestern University's Center for Public Safety conducted their 10-week School of Police Staff & Command during the months of February May, 2008. This highly prestigious command school included one entire week of Traffic Management studies, and every student was required to complete an in-depth Staff Study on a traffic related issue affecting their jurisdiction. This project was completed in conjunction with both the Maryland Chiefs of Police Association and the Maryland Police & Correctional Training Commission, It was held at the Public Safety Training Center in Sykesville, MD.
- Twenty-seven law enforcement executives from Maryland and 4 law enforcement executives from Pennsylvania and Delaware graduated from the Northwestern SPSC.
- A planning committee was established and guidelines for qualifications have been established for a Traffic Safety Specialist designation program. Likewise, the infrastructure and procedures for implementing and maintaining this designation program have been developed. Due to the amount of time spent in developing the infrastructure, actual awards were not presented in this project year but are anticipated in 2009.
- The Maryland Crash Reconstruction Committee met approximately every month to refine their training curriculum, schedule classes, assign students to classes, resolve training issues, and discuss pressing issues with crash reporting in the field. This group, comprised solely of Crash Reconstructionists, continues to function at a high level of sophistication, dedication, and professionalism. It likewise continues to examine and tackle tough training and reporting issues such as acquiring and properly reporting Blood Alcohol Concentration on drivers involved in fatal crashes.

- Two Advanced Collision Investigation classes were held regionally and 48 police students were graduated from this training.
- Two Crash Reconstruction Classes were held regionally and 45 police students were graduated from this training.
- There were a total of six advanced Crash Reconstruction topics offered by the MCRC across the state including two Crash Scene Photography classes; one Applied Physics for the Reconstructionist class; one Motorcycle Crash Reconstruction class; one Pedestrian/Bicycle Crash Reconstruction class; and one Microsoft Excel for the Reconstructionist class. Most classes reached their goal on the number of students to be trained although some scheduling difficulties were encountered and are being addressed by the MCRC. Nevertheless, over 140 student officers were trained as a result of these course offerings.
- There were over 230 student officers (all Maryland Law Enforcement) trained at various levels of Crash Reconstruction during the project year.
- The Maryland State Police held one command summit in 2008. This command summit was sponsored by the MSP Field Operations Bureau and attendance was mandatory for each barrack commander and assistant commander. This summit was held in April, 2008 and featured a presentation by the Chief of the Field Operations Bureau. Presentations on the Impaired Driving, Aggressive Driving, and Grants Management Programs were offered to the commanders as well as an hour-long presentation from MHSO on the overall highway safety mission. More than sixty commanders and assistant commanders were in attendance for this session as well as all six troop commanders.
- In conjunction with the Maryland Chiefs of Police Association, the MHSO launched its 'Traffic Safety IS Public Safety' program across the state. This 'internal marketing' initiative emphasizes the importance of traffic enforcement as a key element in a patrol officer's basic duties. In addition to the distribution of marketing tools such as two special (law enforcement posters and law cards, the program also involved a variety of training opportunities including It All Starts with a Traffic Stop as well as incentive items.
- For the first year in its 42 year history the Maryland Chiefs of Police Association dedicated an entire day of
  its annual conference to the theme that 'Traffic Safety IS Public Safety.' In addition to a featured guest
  speaker (whose topic included 'Leadership in a Traffic Oriented Agency'), select graduates of the
  Northwestern SPSC addressed the group to highlight their traffic research topics.
- Given their level of partnership and activity in conjunction with the Maryland Highway Safety Office, and all
  associated initiatives, the Maryland Chiefs of Police Association was one of ten state associations to
  receive a special SACOP (State Association Chiefs of Police) grant to assist with their highway safety
  efforts.

## Impaired Driving Prevention

On average, 189 persons die annually in Maryland due to alcohol-related crashes, and more than 5,000 persons are injured; 2007 figures for alcohol-related traffic fatalities involving drivers with a .08+ in Maryland include 179 deaths. Approximately 29 percent of the total traffic fatalities were alcohol-related with 48,000 drivers arrested in 2006 and 2007 for Driving Under the Influence/Driving While Intoxicated (DUI/DWI). According to NHTSA, "impaired driving can be defined as a reduction in the performance of critical driving tasks due to the effects of alcohol or other drugs. It is a serious crime that kills every 30 minutes nationally, and in Maryland, it equates to 15 deaths a month or a death every 46 hours. The number of alcohol and drug-related crashes decreased from 8,712 in 2006 to 8,610 in 2007. The MHSO's efforts to combat impaired driving have primarily been focused on enforcement and public information campaigns. The MHSO continues to partner with local and state law enforcement agencies, AAA Mid-Atlantic, the Washington Regional Alcohol Program, DUI/Drug Courts, the Maryland Institute for Emergency Medical Services Systems, Pacific Institute for Research and Evaluation, and this past year, with the Task Force to Combat Driving Under the Influence of Drugs and Alcohol.

The MHSO's Impaired Driving Program is highly supported and influenced by a statewide coalition made up of more than 280 members, consisting of representatives from federal, state and county agencies, non-profits and not-for profit organizations, law enforcement agencies; hospitals, institutions for higher education, advocate agencies; employers, and related agencies with an involvement in highway safety, the coalition is dedicated to education and

awareness through enforcement initiatives, local and statewide media campaigns ranging from paid and earned media activities, and countless prevention efforts. The legislative subcommittee of the Impaired Driving Coalition was successful during the 2007 legislative session in having the Task Force to Combat Driving Under the Influence of Drugs and Alcohol law passed and it was convened in October 2007. This 18 month Task Force was charged with conducting a comprehensive evaluation of the State's Impaired Driving program including impaired driving laws, the judiciary, and MVA process among others. The Task Force was chaired by State Highway Administrator and Governor's Representative for Highway Safety, Mr. Neil J. Pedersen. The lead staff person was Liza Aguila-Lemaster, MHSO Impaired Driving Coordinator. The Task Force successfully completed its charge and submitted an interim report in December 2007. The final report of findings and recommendations was presented to the Governor and General Assembly in October 2008. The recommendations are under review by the Governor's Office. A legislative package to address education, screening, intervention and treatment, law enforcement, and judicial issues are under consideration.

The Impaired Driving Campaign continues to combat impaired driving from a multi-faceted, data driven approach. It includes s high visibility enforcement program coupled with an intense marketing effort. The campaign is specifically designed for high-risk areas. The Checkpoint Strikeforce Campaign specifically targeted its enforcement efforts along rural roadways to support the NHTSA and Maryland crash data that show rural roadways to be at greater risk for impaired driving. A pilot project to increase the public awareness of impaired driving saturation patrols was launched using signs along targeted roadways that read "DUI Enforcement Zone."

The Tipsy?Taxi! and SoberRide campaigns continue to provide free cab rides to would be drunk drivers. Several law enforcement DUI trainings were held. A special marketing and education campaign was used to target latino based establishments and Maryland continues to operate DUI Courts. Nearly 17,000 Christmas tree tags that asked Marylanders to designate a sober driver were distributed statewide.

## **Objective**

- Decrease the total number impaired driving related crashes from 8,556 in 2004 to 8,173 in 2010\*.
- Decrease the total number of impaired driving related fatalities from 215 in 2004 to 206 in 2010\*.
- Decrease the total number impaired driving related injuries from 4,572 in 2004 to 3,069 in 2010\*.

- Law enforcement from all 23 Counties and Baltimore City participated in Checkpoint Strikeforce during FFY 2008.
- Over 40,390 motorists passed through sobriety checkpoints during FFY 2008.
- Nearly 51,682 motorists were stopped by Checkpoint Strikeforce checkpoints and saturation patrols yielding approximately 792 DUI/DWI arrests in FFY 2008.
- The goal for FFY 2008 was 192 *Checkpoint Strikeforce* activities, and the actual results are as follows: 657 saturation patrols and 89 checkpoints, for a total of 746 enforcement activities with an average of 31 activities per Checkpoint team.
- The Impaired Driving Coalition's legislative subcommittee's educational efforts were instrumental in the
  establishment of the Task Force to Combat Driving Under the Influence of Drugs and Alcohol. Three formal
  Impaired Driving Coalition meetings were held this past year, the third quarter meeting was postponed due
  to a conflicting meeting with the Task Force to Combat Driving Under the Influence of Drugs and Alcohol.
- The media component of the Checkpoint Strikeforce campaign was able to achieve more than 13,500,000 media impressions, and among all program advocates, grantees and CTSP's including Tipsy? Taxi!, SoberRide, and the Christmas Tree Tag Campaign, we met our goal of distributing 100,000 pieces of educational materials.
- Maryland's Lieutenant Governor Anthony Brown was recognized by Governor Martin O'Malley for his role
  and work as the Honorary Chairman of the *Impaired Driving Coalition* during 2007 and 2008. Lieutenant
  Governor Brown also served as the featured speaker for the 4<sup>th</sup> Annual Maryland Remembers ceremony.

- The Maryland Institute for Emergency Medical Services Systems (MIEMSS) continued its impaired driving prevention television campaign and expanded delivery of the message into radio. A new approach was introduced to the campaign entitled Checkpoint Check-In. This campaign included law enforcement and EMS representatives conducting live on-air calls to participating radio stations to inform listeners about current DUI arrests being made and the operation of sobriety checkpoints and saturation patrols that were being conducted. They also addressed the number of injury and fatal emergencies caused by impaired drivers..
- The Washington Regional Alcohol Program (WRAP) conducted the first of its kind evaluation of Maryland's
  impaired driving laws, the judiciary, a comparison of state DUI laws, and model legislation. The results of
  the evaluation have been submitted and will be used to support the findings and recommendations of the
  Task Force to Combat Driving Under the Influence of Drugs and Alcohol.
- Three press events were held in 2008; one each for SoberRide and Tipsy?Taxi! and one for the kick-off of the Checkpoint Strikeforce campaign, which coincided with the National Impaired Driving crackdown.
- Billboards were strategically placed in rural areas and over-represented jurisdictions to heighten driver awareness of impaired driving enforcement efforts.
- Discussions were held with the Judicial Training Institute to develop and implement an education course for judges, but a formal training was not confirmed for this year.

## **Injury Surveillance**

Maryland's Crash Outcome Data Evaluation System (CODES) was established in 1997 with funding from NHTSA in an effort to improve highway safety through the use of linked motor vehicle crash data collected from police, emergency medical services (EMS), hospitals, and other sources. Such linked data have been used by the University of Maryland National Study Center for Trauma and Emergency Medical Systems (NSC) for a variety of projects, abstracts, and papers, including a statewide study of injured motorcyclists, a study of older drivers, an analysis of mismatch crashes, a geographic analysis of pedestrian injuries, a study of the patterns of injury in frontal crashes, and a comparative analysis of costs among motor vehicle crashes. Since the development of the CODES Data Network, the NSC has continued investigations into these and other areas of traffic safety, in addition to responding to data requests from the NHTSA and other state and local agencies on topics such as motorcycle crashes, child safety seats, red light running etc.

CODES allows the NSC to expand its collaborative efforts with other state and local agencies, remain active on statewide committees, and continue efforts to reinforce the use and interpretation of the data that are collected. In recent months there has been an increased demand for the use of these datasets from both inside and outside of the State for problem identification and evaluation of safety programs and systems. It is anticipated that even more reliance will be placed upon the system as CODES data are successfully used for these purposes. Establishing a data repository to enable access to other agencies will make the use of Maryland data more timely and efficient. The establishment and use of linked data sets for analysis and problem identification continues to be an identified 'best practice' by the US Department of Transportation and other highway safety agencies and Maryland is continually pointed out as a good example of agency cooperation and data sharing.

#### **Objective**

- Reduce the number of crashes from 104,103 in 2004 to 99,981 in 2010.
- Reduce the number of fatalities from 643 in 2004 to 608 in 2010.
- Reduce the number of injuries from 53,753 in 2004 to 43,069 in 2010.

<sup>\*</sup> For consistency purposes, the data on fatal impaired driving related crashes are based on the national Fatal Analysis Reporting System (FARS). Injury data is based on the Maryland Accident Reporting System.

- During 2008, the CODES program responded to dozens of requests for data and reports and it has been used as the basis for more than 25 local and national presentations.
- CODES staff have participated in the Traffic Records Coordinating Committee and the Impaired Driving Assessment as well as numerous other activities with the MHSO.
- Recently, Maryland CODES was promoted to a Program Resource Center (PRC) for the nineteen current CODES states throughout the United States. In this capacity, the NSC is assisting with the coordination and response to data requests from NHTSA. Currently, NSC is working with NHTSA staff to develop a Strategic Plan for the CODES Data Network that will encourage more interaction with the CODES program and their NHTSA regional offices as well as state highway safety offices. CODES data has been used throughout the year in response to request from legislators, NHTSA, state and local agencies, and other highway safety groups. As reports are generated, they are made available on the NSC website at <a href="http://nsc.umaryland.edu">http://nsc.umaryland.edu</a>, this site is updated frequently. As the PRC, the NSC coordinated the three CODES presentation sessions that were scheduled at the 2008 Traffic Records Forum.
- Maryland is uniquely positioned to provide detailed data and analysis for a wide range of highway safety topics as this project has the support and cooperation of other agencies that is almost unmatched in other states. The NSC has established strong working relationships with a number of state agencies, allowing it to serve as a 'repository' for numerous data sets related to highway and motor vehicle safety. Operating as an agency of the University of Maryland affords the NSC the opportunity to gain access to these independent data sets and, under the umbrella of the University's Institutional Review Board, maintain the confidentiality and integrity of the data that are used and disseminated. Using this established network will allow us to work toward the development of a warehouse for traffic safety. The ultimate goal of this project is to provide online accessibility to data and predesigned reports.
- Access to crash data has been made available, on a limited basis, to the state's Highway Safety Office and
  members of its Community Traffic Safety Program though the Critical Analysis Reporting Environment
  (CARE). Implementing web access to portions of Maryland's CODES data using the CARE software was
  included in the state's 408 project application. Currently, there are three years of crash data available
  through the CARE website: 2004, 2005, and 2006. NSC is working with other members of the TRCC to
  explore alternatives using commercially available software products.

#### **Media Communications**

Programmatic use of media purchases continued to be one of the largest vehicles in delivering targeted highway safety messages throughout the State. Complementing other coordinated education and law enforcement activities during targeted campaigns, media buys continued to payoff with large dividends. Coupled with in-kind contributions from the MHSO media partners, the investments made within each programmatic media budget created tangible value. The following table lists only the paid media purchased during FFY 2008 for each of the specified program areas.

Program Area	2006	2007	2008
Aggressive Driving Prevention	503,000	415,800	286,518
Drowsy & Inattentive Driving Prevention	5,000	0	-
Employer Awareness	-	0	5,000
Impaired Driving Prevention	400,000	489,000	572,500
Motorcycle Safety	24,000	22,500	86,000
Occupant Protection & Child Passenger Safety	441,000	507,600	608,000
Pedestrian & Bicycle Safety	34,500	77,000	100,000
Total	\$1,407,500	\$1,511,900	\$1,658,018

## **Objective**

- Reduce the number of crashes from 104,103 in 2004 to 99,981in 2010.
- Reduce the number of fatalities from 643 in 2004 to 608 in 2010.
- Reduce the number of injuries from 53,753 in 2004 to 43,069 in 2010.

#### **Accomplishments**

- For the FFY 2008 Checkpoint Strikeforce campaign, a conservative reach of more than 100 million media impressions from radio, billboards, and bus backs was generated. More than 2.1 million impressions from television were generated.
- Billboard advertising with Clear Channel Outdoor was utilized in FFY 2008 to raise the awareness of
  motorists of the need to look for motorcyclists in the traffic mix. Local hip-hop radio disk jockey "Tigger" was
  used as spokesman on the radio and on billboards. This helped bring a champion to the voice of
  motorcycle safety, especially among sportbike riders.
- Media coverage of the Smooth Operator Program included extensive radio coverage including interviews on WTOP and WAMU (NPR), WMAL, and WBAL. Smooth Operator was mentioned on 81 television broadcasts including almost all network affiliate stations in the Washington, DC and Baltimore markets. It appeared in print articles in The Washington Post, The Baltimore Examiner, The Washington Examiner, and The Baltimore Sun.
- Reporting mechanisms for determining returns on media investments continued to improve in FY2008.
   Media vendors are now required to submit standardized reporting metrics that can more easily capture industry standard metrices like TRPs, Gross Ratings Points (GRP), reach, and frequency.
   MHSO will work with partners to improve upon this process.
- The Baltimore County Police Department's inclusion of *Smooth Operator* into their Crime-Crash Corridor Project helped garner additional attention and funding for targeted enforcement and innovative analysis along five corridors within the county. The initiative has gained national coverage.
- In conjunction with three Community Traffic Safety Partners in southern Maryland and the DriveCam manufacturer, the MHSO was able to help provide funding for a DriveCam pilot study in Charles, St. Marys, and Calvert counties. Designed to help parents coach their newly minted teen drivers with safe driving habits, the program and accompanying study has garnered much local and national print as well as television coverage.
- The media component of the *Checkpoint Strikeforce* campaign was able to achieve more than 13,500,000 media impressions, well exceeding projections and the preceding year's efforts.
- More than \$600,000 in media funding wasused for the 2008 Click It Or Ticket statewide campaign with the total number of impressions exceeding 20 million.

## **Motorcycle Safety**

Motorcycle safety is an increasing concern in Maryland. Ridership has increased dramatically over the past several years and the numbers of crashes, injuries, and fatalities involving motorcyclists has increased as well. Excessive speed on the part of the motorcycle rider is a predominant factor in fatal motorcycle crashes and aggressive driving by sport bikes continues to be a problem for state and local law enforcement agencies. In addition, motorist inattention and failure to yield right of way continues to be a significant problem in motorist-motorcyclist crashes.

The motorcycle safety program focuses on two major areas: rider responsibility and driver awareness. Rider responsibility includes proper licensing and skill training, the use of protective equipment, and responsible riding behavior. Riders are reached through outreach at public events and by involving leaders of the motorcycle community in the development of safety campaigns. Driver awareness includes recognition of motorcycles as part of the traffic mix and proper scanning for motorcycles before initiating traffic movements, notably left turns across oncoming traffic. Driver awareness is achieved through paid and earned media campaigns, including radio advertisements and billboard placements.

Motorcycle crashes increased from 1,804 in 2006 to 1841 in 2007. Motorcyclist injuries declined from 1,701 in 2006 to 1,661 in 2007; however, fatalities increased dramatically from 87 in 2006 to 96 in 2007.

## **Objectives**

- Decrease the total number of motorcycle related crashes from 1,570 in 2004 to 1,508 in 2010.
- Decrease the total number of motorcycle related fatalities from 68 in 2004 to 65 in 2010.
- Decrease the total number of motorcycle related injuries from 1,388 in 2005 to 1,333 in 2010.

- The 2008 Motorcycle Safety Summit, originally scheduled for May 2008 was postponed until December 2008. The Summit had a focus on developing a consensus plan for the 2009 riding season using active stakeholder involvement. Participants included rider organizations and club representatives, state agency staff, training center managers, law enforcement officers and CTSP coordinators. Working groups on motorist awareness, rider outreach, rider licensing and training, law enforcement and infrastructure prepared briefings for participants and consensus items were developed in each focus area.
- A pilot training on motorcycle safety for law enforcement was offered for officers in Harford and Cecil
  Counties in April 2008. The training, led by MHSO, MVA, and MSP included sessions on crash data and
  crash causation, licensing and training, compliant helmet identification, equipment violations, and impaired
  riding cues. The course is seeking accreditation through the Maryland Police Training Commission.
- 2008 marks the first year that specific funds have been allocated toward motorcycle safety as a part of CSTP activities. Funds were allocated to counties with the highest number of motorcycle-involved crashes. These funds may only be used on motorcycle safety overtime traffic law enforcement initiatives. Enforcement was focused on both motorcyclists and motorists. Specific guidance was given to law enforcement agencies to ensure equal application of the law for motorcycle safety. Nine-hundred and eighty-eight citations and warnings were issued to motorists and motorcyclists by participating agencies.
- MHSO collaborated with the Maryland Chiefs of Police Traffic Safety Committee to evaluate motorcycle safety enforcement practices, including a review of the motorcycle safety checkpoint concept developed by the New York State Patrol. This is an innovative and proactive approach to motorcycle safety targeting motorcycle licensure and proper equipment. A small working group involving MHSO and local law enforcement supervisors are assessing how this innovative approach may be implemented in Maryland. The group is also developing new strategies for improving the effectiveness of enforcement, including focused and coordinated waves of enforcement to create a border-to-border enforcement zone in high crash areas.
- Motorcycle safety has been included in the Maryland Chief's Challenge to encourage involvement of more law enforcement agencies in developing new enforcement programs.
- During May, motorcycle safety month, SHA and MVA sponsored local TV personality, Dick Gelfman, and his Ride Across Maryland. The MVA and MHSO also participated as vendors to reach out to participants and to distribute motorcycle safety campaign materials. SHA and MVA staffed the event, created motorcycle kickstand "coasters" for participants, and marked the ride as one of the special events celebrating SHA's 100 Centennial Anniversary of Modern Road Building in Maryland campaign.
- The overhead highway dynamic messaging signs (DMS) crossing I-95 and US-50 will display a "SHARE
  THE ROAD WITH MOTORCYCLES LOOK TWICE FOR BIKES" message from Thursday through Sunday
  in late May to promote motorist awareness of increased presence of motorcycles during the Rolling
  Thunder Rally in May and DelMarVa bike week in mid-September.
- During the Spring and Summer, a radio campaign partnership was developed with WPGC-FM to reach out to motorists and motorcyclists in the urban areas of Prince George's County, the Washington, DC Metropolitan region, and Baltimore City. Paid advertisements focused on awareness and promotion of the motorcyclist training program. A summit of Sportbike club leaders was held in March and a series of outreach events were conducted in May, June, July, and October. The newly-established DC Metro Club Association, a coalition of local motorcycle clubs, became an active partner in the campaign. Outreach events included an impaired driving prevention promotion at the largest "bike night" in the DC metro region, a "show and shine" promoting personal protective equipment and motorcycle maintenance at a local dealership, and the introduction of the new MVA Alternative Motorcycle Operator Skills Test at WPGCs BikeFest, which attracts thousands of riders each year. This campaign was significant in that it is the first major outreach specifically targeting the largely African-American rider group. Previous campaigns and

materials were not designed to reach this diverse audience.

- In coordination with the radio campaign, a billboard safety message campaign was implemented in the high-risk jurisdictions of Prince George's, Baltimore and Anne Arundel counties and Baltimore City. These areas account for more than half of the motorcycle crashes in the State.
- A promotional campaign was initiated with WHFS in Baltimore, including on-air public service
  announcements and a special event at the first Baltimore Ravens home game. Motorcycle officers from
  Baltimore County Police Department conducted outreach to drivers before the game to raise awareness of
  drivers of motorcycles and the danger that impaired driving presents to motorcyclists. A mobile billboard
  also promoted the Choose Safety For Life campaign message.
- The combined radio and outdoor campaigns achieved an estimated 2.2 million impressions, the broadest reach achieved to date for motorcycle safety.
- New collateral material was developed, including a booklet targeting both drivers and motorcyclists, a driver awareness flyer for use in enforcement waves, and three posters focusing on driver awareness in which one featured a stereotypical cruiser rider, one featured the high-profile African-American radio personality from WPGC, and one featured impaired motorcyclists. More than 20,000 pieces of educational material were distributed during FFY08, including the newly developed collateral material, and other information flyers from the Motorcycle Safety Foundation and material from the Maryland MVA. This does not include material distributed by the MVA through the Motorcycle Safety Program training courses.
- The MVA hired a new motorcycle safety communications coordinator to develop and execute a strategic
  communications plan in coordination with MHSO and other key stakeholders. The coordinator developed
  press materials for motorcycle safety month in May, and coordinated on outreach events, including
  DelMarVa Bike Week. The development of the long-term communications plan will be completed in concert
  with the 2008 Motorcycle Safety Summit and the 2009 riding season program plan.
- As a part of its ongoing effort to promote proper licensure, MVA pilot tested a new "Fast Track Licensing" event during DelMarVa Bike Week. Riders already attending the event, which did not have the required "M" endorsement, were invited to take both a knowledge and skills test at an on-site mobile MVA training facility. This expedited the process for application and testing, and the entire event was very well received by motorcyclists.
- MHSO convened three meetings of the Motorcycle Task Force to promote promising practices in education and enforcement and to ensure coordination of local programs. In addition, the MVA and MHSO organized a steering committee of stakeholders to assist MVA and MHSO in the development of the 2008 Motorcycle Safety Summit.

## **Occupant Protection**

Occupant protection programs, including those for Child Passenger Safety (CPS) continue to be some of the highest priorities of the MHSO. In 2008, efforts conducted by the MHSO and its traffic safety partners resulted in an increase in the statewide seat belt use rate to an all-time high of 93.3%. Although modest compared to the 2% jump from 2006 to 2007, this figure nonetheless represents progress toward Maryland's goal of a 94.5% use rate by 2010.

Maryland continues to place emphasis on increasing safety belt and CPS seat use with the general public through the use of sustained enforcement efforts combined with paid media programs. County-wide safety belt observational data is used to formulate programs to target specific population segments, to focus enforcement efforts, and to provide guidance for media-based and educational efforts throughout the State. Continued input is gathered from Maryland's law enforcement partners to focus the Maryland Chiefs' Challenge Program, ensuring that this highly successful endeavor continues to be a motivating factor in not only promoting and enforcing the State's occupant protection laws, but also providing a greater impact to overall public safety. Legislative efforts are pursued when appropriate to enhance and improve Maryland's adult seat belt and CPS laws.

Preliminary data indicates that Maryland has experienced an increase in the restraint-use during fatal crashes during 2008. While the data is not final, the increase in belt-use during fatal collisions is promising as an indicator of

overall belt use and the potential that proper safety belt use will prevent injuries and/or fatalities in future crashes. More than 180 unbelted fatalities occurred during 2007, roughly double the target goal of 2010, but Maryland is on pace to dramatically reduce this number.

In total, more than \$600,000 in media funding was placed on television, radio, and outdoor advertising in FFY 2008, with additional value given by media partners through streaming media and extensive internet-based exposure. Several populations continue to be areas of emphasis in the MHSO's occupant protection education programs, namely young drivers and pick up truck drivers. In addition, much greater emphasis was placed on reaching out to the African American and Hispanic populations throughout Maryland in FFY 2008, predominantly through radio campaigns and other media-based efforts.

Legislative efforts during the 2008 session of the Maryland General Assembly resulted in an enhancement to Maryland Child Passenger Safety law. The new law went into effect on June 30, 2008, and upon passage, increased the age at which a child may be legally transitioned from a CPS seat to an adult seat belt from 6 to 8 years of age. Provisions were incorporated to exempt children from this law if they had reached either a weight of 65 pounds or a height of 4' 9". While these exemptions weakened the law from its initial proposed verbiage of a stricter age limit-only requirement, the new CPS law is nonetheless an improvement and a multitude of press events and media-based activities were conducted in support of the new law and to educate parents and other caregivers with responsibility for transporting children.

Maryland is extremely fortunate to have a truly dedicated group of law enforcement agencies enforcing its primary seat belt law. Throughout the two-week *Click it or Ticket* (CIOT) campaign in May, thousands of citations were issued statewide and many agencies participated in a special night time enforcement blitz over the Memorial Day weekend. The MHSO also received tremendous support from the SHA, with overhead DMS messaging provided for the final week of the *CIOT* campaign.

One of the most dramatic changes set in place by the MHSO was the enhancement of a long-standing occupant protection effort, the *Maryland Chiefs' Challenge Program*. During FFY 2008, this program was re-evaluated and the decision was made to include additional traffic safety emphasis areas to be more reflective of the overall police work conducted statewide. Aggressive driving prevention and impaired driving prevention are now included as emphasis areas for Chiefs' Challenge and more than 100 law enforcement agencies enrolled to be a part of the program. Participating agencies were provided with additional media opportunities, including the chance to record PSAs with officers from each County. Scripted spots for the OP area were recorded for many of these agencies and carried through a paid media buy on cable outlets.

Maryland held four quarterly *Occupant Protection Task Force (OPTF)* meetings during FFY 2008, with emphasis placed upon providing information to members, aligning Maryland's Occupant Protection Program goals more closely with the State's SHSP, and coordinating media and law enforcement efforts. Furthermore, the MHSO's Occupant Protection Program Coordinator is also a co-chair for Maryland's Child Passenger Safety Review Board and coordinates relevant CPS efforts with a number of MHSO grantees, most notably Maryland Kids in Safety Seats (KISS). Partners represented within these groups include AAA Mid-Atlantic, the Maryland MVA, MIEMSS, CTSPs throughout the State, MSP, and a host of local, County and municipal police agencies, and Sheriff's offices.

#### **Objectives**

- To increase safety belt use to 94.5 percent in 2010.
- To decrease the total number of fatalities of unrestrained occupants to 65 in 2010.
- To decrease the total number of injuries of unrestrained occupants to 866 in 2010.

- Maryland attained a 93.3 percent safety belt use rate during the 2008 observations, representing a .2 percentage point increase from the previous year.
- More than \$600,000 in media funding was placed for the 2008 *CIOT* campaign statewide, with a total number of impressions exceeding 20 million.
- More than 100 law enforcement agencies enrolled to compete in the year-long Maryland Chiefs' Challenge Program.

- Roughly 100,000 citations for adult safety belt use non-compliance were issued throughout the year.
- Maryland's CPS law was enhanced during FFY 2008, increasing the age at which a child may transition to an adult safety belt-only seating position.

## Older Driver Safety

The safety and security of drivers aged 65 years or more is of increasing concern in Maryland. The percentage of older residents in Maryland is expected to increase to 25% of Maryland's projected population of 6.7 million by the year 2030. While in previous years older driver crashes have declined somewhat, 2006 figures show an increase in older driver fatalities – underscoring the need to continue prevention and outreach efforts toward older drivers.

The number of older driver-involved crashes decreased slightly from 10,364 in 2006 to 10,166 in 2007, reaching the 2010 goal for total crashes. Total injuries also decreased from 7,125 in 2006 to 6,822 in 2007. Total older driver-related fatalities decreased from 112 in 2006 to 79 in 2007, the lowest level in the last ten years and below the 2010 goal for total fatalities.

While this data is encouraging, crash levels have fluctuated over recent years, and efforts to educate older drivers and their families and to enforce traffic laws for the safety of older driver are still needed. MHSO's older driver programs include four major components: driver self-awareness and assessment, driving skills and strategies, occupant protection, and alcohol and drug impairment. The *Seniors on the M.O.V.E* (Mature Operators Vehicular Education), which includes four two-hour workshops addressing each of these four components, continues to be a primary intervention; however, awareness efforts targeting the family and caregivers of older drivers are also needed.

## **Objectives**

- Reduce annual crashes involving drivers 65 years or older from 10,226 in 2004 to 10,168 in 2010.
- Reduce annual fatalities involving drivers 65 years or older from 104 fatalities in 2004 to 85 in 2010.
- Reduce annual injuries involving drivers 65 years or older from 6,726 in 2004 to 5,066 in 2010.

- The Seniors on the M.O.V.E. program continued its success in reaching older drivers with a comprehensive traffic safety program tailored to their unique needs. The Seniors on the MOVE program is an active partnership between the MHSO and:
  - Community Traffic Safety Programs
  - o The Johns Hopkins Bloomberg School of Public Health -Center for Injury Research and Policy
  - o AAA Foundation for Safety and Education
  - o Peter Lamy Center for Drug Therapy and Aging at the University of Maryland School of Pharmacy
  - Kids in Safety Seats
- CTSP coordinators in five counties implemented nine Seniors on the MOVE programs.
- CTSP coordinators in Baltimore, Wicomico, and Calvert Counties hosted trainings on the CarFit program in
  coordination with the AAA Foundation for Traffic and Safety. CarFit is an educational program that offers
  older adults the opportunity to check how well their personal vehicles "fit" them, and reviews issues that are
  critical to older driver safety, especially occupant protection. The CarFit program also provides information
  and materials on community-specific resources that could enhance their safety as drivers, and/or increase
  their mobility in the community. Each training course culminated in a CarFit event for senior drivers.
- A Seniors on the MOVE training was conducted to enable more CTSP coordinators and others to more
  readily adopt and implement the program. Representatives from Johns Hopkins University, the AAA
  Foundation for Traffic Safety, and Kids in Safety Seats led the training, which also incorporated training on
  the CarFit program.
- An estimated 6,000 pieces of educational material were distributed as a part of the Seniors on the MOVE and CarFit programs, as well as a part of other local traffic safety outreach programs. Materials included

driver self-assessments, personalized CarFit customer reports, Driving Safely While Aging Gracefully booklets, and Family Conversations magazines produced by The Hartford.

While no new general audience radio PSAs were produced, the MHSO Older Driver coordinator appeared
on WHAG-TV and WJEJ radio to promote awareness of older driver safety and of the Seniors on the MOVE
and CarFit programs.

## **Young Driver Safety**

Young driver crashes, injuries, and fatalities are on a generally declining trend; however, young driver issues remain a concern in many communities across the state. The focus of traffic safety programs goes well beyond traditional driver education to involve young people and their parents, law enforcement, and schools in addressing this persistent traffic safety issue.

Total young driver crashes declined for the fifth consecutive year, down from 19,857 in 2006 to 18,993 in 2007, the fewest number of young driver crashes since before 1998. The number of injuries decreased from 12,565 in 2006 to 11,666 in 2007, the lowest level since 2000. While the number of fatal crashes declined from 102 in 2006 to 98 in 2007, the number of fatalities increased slightly from 111 in 2006 to 112 in 2007.

Existing young driver programs focus on four major areas: driving skill and decision-making, occupant protection, impaired driving, and the Maryland graduated driver licensing (GDL) system. However, more programs focusing on on-the-road decision-making and situational awareness are needed. A wide variety of high school-based programs have been implemented to address impaired driving, including mock crashes, impaired driving simulators, Fatal Vision goggles simulation exercises, and promotion of alcohol-free after-Prom parties. Maryland high schools also participate in the Pacesetters program in partnership with local law enforcement to promote safety belt use in those schools. To see further reductions in teen auto fatalities, innovative technologies and approaches to young driver safety need to be explored to augment other interventions for young drivers.

## **Objectives**

- Reduce annual crashes involving young drivers from 20,882 in 2004 to 20,283 in 2010
- Reduce annual fatalities involving young drivers by from 122 in 2004 to 100 in 2010.
- Reduce annual injuries involving young drivers from 13,927 in 2004 to 9,643 in 2010.

- The comprehensive young driver program, I AM, completed its pilot test at Owings Mills High School in Baltimore County. The program includes and intensive kick-off week of driver safety programs and follow-up programs will be delivered to students and parents later in the year. Before and after surveys were compared to a control high school that did not receive the program at the conclusion. The intervention showed that the program increased awareness of risk, particularly the risk associated with carrying passengers. The program is being refined and reevaluated as a part of the Baltimore County young driver initiative.
- A new pilot program was initiated in the Southern Maryland region to evaluate *DriveCam*, an in-car video capture system, for its effect on young driver behavior and parental involvement in young driver monitoring. One hundred thirty-five families have enrolled in the program. Half of these families will receive immediate feedback using the video capture system; half of the families will not received feedback during the first part of the evaluation so that the results from the two groups can be compared. This initiative has received extensive earned media attention across the state and in other states.
- The Superintendent of Public Schools in St. Mary's County, with the active support of the CTSP coordinator, launched an aggressive young driver safety campaign that requires high school parking permit holders and their parents to sign a safe driver code of conduct. Drivers who receive citations for unsafe driving are subject to progressive sanctions, including the potential loss of parking privileges. A kickoff event was held in August, and it received extensive media coverage in the region.

- Alcohol Compliance Enforcement actions targeting underage drinking were conducted across the state, with particular focus on the period of April through June – the high school Prom and Graduation season.
   Montgomery County maintained the most active enforcement, with Howard and Harford Counties also maintaining active programs.
- MHSO and CTSP coordinators distributed an estimated 54,000 pieced of educational material to young
  drivers and their parents, to law enforcement officers, and to others. These materials included young driver
  law summaries, MVA Rookie Driver materials, *DriveCam* promotional materials, assessment tools, and
  topical flyers and brochures on key young driver issues, including alcohol risk awareness, occupant
  protection, and aggressive driving.
- MHSO convened four meetings of the Young Driver Task Force to promote promising practices and programs and to ensure coordination among local programs. The SHSP Young Driver Safety Emphasis Area team also convened five meetings including regional outreach meetings in southern Maryland, western Maryland, and the eastern shore.

## **Emergency Medical Services - EMS**

EMS is a critical component of the Maryland Highway Traffic Safety Program. Recent studies indicate that 59 percent of fatal collisions occur on rural highways. Many factors contribute to the grim statistics, including weather, geography, highway design and maintenance, lack of safety devices, response time of emergency personnel, and the transport distance to a properly equipped medical facility. The impact of allocating highway safety grant funds to the Maryland Institute for Emergency Medical Services Systems (MIEMSS) has been instrumental in saving lives in each of the five MIEMSS Regions. The Statewide Emergency Medical Services Advisory Committee is responsible for making sure that each local jurisdiction and municipality's Expression of Interest (EOI) is reviewed based on the needs of the department. In 2008, there were a total of 75 EOI's submitted to the MIEMSS Regional Office. There were 31 EOI's approved to receive funding from the MHSO. The total amount of the project was \$417,516. Grant funds from MHSO totaled \$150,000 and each jurisdiction supplied a 64% match. The breakdown for this amount is a follows: \$103,631 for highway extrication and rescue equipment, \$33,369 for at-scene safety, and \$13,000 for training equipment and supplies.

As part of the comprehensive EMS program, the Bystander Care Program was developed to specifically train motorists who frequently travel rural highways, with knowledge, skills, and confidence to act in the event they are first on the scene of a roadside emergency. Classes were sponsored by six different businesses and government agencies. A total of 17 classes were held and 143 students were trained. Five Train-the-trainer sessions were completed with 29 instructors successfully completed the training. In addition to the Bystander Care Program, five Highway Scene Safety for First Responder Seminars were held across the state. More than 175 emergency responders attended the course..

#### **Objectives**

- Reduce the number of crashes from 104,103 in 2004 to 99,981in 2010.
- Reduce the number of fatalities from 643 in 2004 to 608 in 2010.
- Reduce the number of injuries from 53,753 in 2004 to 43,069 in 2010.

- To conduct 25 training programs to promote the Bystander Care Program. The Administrative Object was not met but, 17 classes were hosted to introduce the Bystander Care program.
- The Administrative Objective to Recruit 100 businesses by the end of the grant year was not met.
- The Administrative Object to conduct five train-the-trainers was met and exceeded the amount of instructors certified during the grant year.

# Fiscal Summary

Program	402	405	410	406	408	2010	2011	Total	% of Total
Aggressive Driving	4 100 100	Ć t	•	, CC + C7 +	, t	( <del>(</del>	•	7	7000
:	\$28,7U7	O.₽	O#	\$2/1/24	0\$	O A	0	\$030,43I	7.69%
Inattentive Driving									
	\$81,121	\$0	\$0	\$2,557	\$0	\$0	\$0	\$83,678	1.02%
Impaired Driving									
	\$87,421	0\$	\$1,350,330	\$2,726	\$0	\$0	\$0	\$1,440,477	17.57%
Motorcycles									
	\$72,345	0\$	\$0	\$0	\$0	\$121,098	\$0	\$193,443	2.36%
Occupant Protection									
	\$82,186	\$583,405	\$0	\$26,604	\$0	\$0	\$0	\$692,195	8.44%
Pedestrian & Bicycle									
	\$317,675	0\$	0\$	0\$	0\$	\$0	0\$	\$317,675	3.88%
Safety Programs									
	\$564,853	\$0	\$0	\$173,732	\$0	\$0	\$0	\$738,585	9.01%
Diversity									
	\$103,419	0\$	\$26,393	\$0	\$0	\$0	\$0	\$129,812	1.58%
Data Analysis									
	\$280,845	\$0	\$0	\$3,497	\$343,376	\$0	\$0	\$627,718	7.66%
Community Programs	\$1.649.285	O\$	4453.891	4356 991	O#	Ŭ ¥	€	\$2.460.167	30.01%
Enforcement*		-			+	+	-		
	\$413,503	\$0	\$0	\$12,713	\$0	\$0	\$0	\$426,216	5.20%
Emergency Medicine									
	\$111,845	\$0	\$0	\$31,097	\$0	\$0	\$0	\$142,942	1.74%
Planning & Administration	\$296,201	0\$	0\$	\$18,351	0\$	0\$	0\$	\$314,552	3.84+%
Total									
	\$4,119,406	\$583,405	\$1,830,614	\$1,199,992	\$343,376	\$121,098	\$0	\$8,197,891	100.00%

## **Traffic Safety Outlook**

The Maryland Highway Safety Office is the State's leading voice for highway safety. It has a treasured history of improving the lives of Maryland citizens and motorists. Engaged, proactive involvement with numerous agencies and partners has been critical to achieving this success. Maryland has and will continue to emphasize activities to be carried out through the established network of local CTSPs, enforcement agencies, state and local governmental agencies, community-based groups, non-profit and not-for-profit organizations, associations, hospitals, institutions of higher education, and the private sector. In addition, recent programmatic efforts have afforded the State of Maryland the opportunity to foment partnerships with communities and organizations outside the state borders. One such example includes the addition in 2008 of new partner law enforcement agencies in New Jersey into the highly successful regional *Smooth Operator* Program, designed to reduce the number of aggressive driving instances on our roadways. The *Smooth Operator* Program has received numerous accolades from regional, national, and international organizations for its creativity and as a model traffic safety program.

As stewards of federal highway safety funds, and ultimately of taxpayer dollars, the MHSO has always looked to achieve maximum efficiency and maximum benefits from the programs it funds. In order to continue and sustain this stewardship, the recent collaborative development of the SHSP was facilitated by the MHSO. Adopted in 2006, the extensive process of developing the SHSP included buy-in from traditional and unique partners, the identification of critical highway safety issues, the development of strategies to address those problems, and the culmination of long term goals that would benefit all Marylanders. 2007 marked the first year for which these lofty goals could be put to the test. While Maryland remains, in some areas, a distance from achieving those goals, many programmatic strategies are beginning to pay off. One such example is Maryland's 93.3% belt usage rate for 2008. While not exclusively an MHSO accomplishment, it does indicate that the "Click-It or Ticket" and other messages are being communicated by MHSO partners and received by residents of Maryland. Another example is the inclusion of non-traditional stakeholders in highway safety related initiatives. 2008 witnessed the emergence of new players into the field of highway safety, including local boards of education, community colleges, sport bike riders, and an increasing number of professional public health organizations. MHSO will continue to work with these groups and stimulate a lasting, effective relationship.

The MHSO continues to be heavily involved with the Governors Highway Safety Association (GHSA). The GHSA is a non-profit association representing the highway safety offices of states, territories, the District of Columbia, and Puerto Rico. The GHSA provides leadership and representation for the states and territories to improve traffic safety, influence national policy, and enhance program management. The Maryland Highway Safety Coordinator and MHSO Chief was recently elected GHSA Chairman. While the volunteer position may create an extra workload, the benefits are immense. Access to federal highway safety activities and other highway safety coordinators in other states, and their corresponding policies and practices is an immeasurable benefit to the MHSO and to the State of Maryland.

The MHSO's ultimate objective is to reduce motor vehicle crashes, deaths, and associated injuries on Maryland's roads. The MHSO maintains a firm commitment to Maryland's traffic safety needs and it is staunchly dedicated to its partnership with NHTSA. Maryland will continue to work to strengthen the State's traffic safety relationships with other states, particularly those in the Region III, to save lives throughout Maryland and beyond.

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## **List of Acronyms**

AAA American Automobile Association
CODES Crash Outcome Data Evaluation System

CIOT Click It or Ticket
CPS Child Passenger Safety
CPSF Checkpoint Strikeforce

CTSP Community Traffic Safety Program
DA&TC Data Analyst and TRCC Coordinator

**DC** District of Columbia

**DHMH** Department of Health and Mental Hygiene

DRE Drug Recognition Expert
DSWW Drive Safely Work Week

**DTF** Diversity in Traffic Safety Task Force

DUI Driving Under the Influence
DWI Driving While Intoxicated
EC Executive Council
Emergency Department

ED Emergency Department
EMS Emergency Medical Services

F&PMS Financial and Program Monitoring Specialist

FARS Fatality Analysis Reporting System

FFY Federal Fiscal Year

FHWA Federal Highway Administration

FISS Finance and Information Systems Section
FMIS Financial Management Information System

GAS Grant Applicant Seminar

GHSA Governors Highway Safety Association

GMS Grants Management System

**HSCRC** Health Services Cost Review Commission

HSP Highway Safety Plan IDC Impaired Driving Coalition

MAARS Maryland Automated Accident Reporting System

MCFSBUMaryland Committee for Safety Belt UseMCPAMaryland Chiefs of Police AssociationMDOTMaryland Department of TransportationMHSOMaryland Highway Safety Office

MIEMSS Maryland Institute for Emergency Medical Services Systems

MSP Maryland State Police

MVA Motor Vehicle Administration

NHTSA National Highway Traffic Safety Administration
NSC National Study Center for Trauma and EMS

**OOTS** Office of Traffic and Safety

PD Police Department

**PSA** Public Service Announcement

SAFETEA-LU Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users

SHA Maryland State Highway Administration

SHSOState Highway Safety OfficeSHSPStrategic Highway Safety PlanSOTFSmooth Operator Task Force

SRTS Safe Routes to School

**TF** Task Force

TRCC Traffic Records Coordinating Committee

TRTCC Traffic Records Technical Coordinating Committee

**T-SAFE** Traffic-Safety Awareness For Employers UMCP University of Maryland at College Park

US United States

VMT Vehicle Miles Traveled

WRAP Washington Regional Alcohol Program

**YDTF** Young Driver Task Force