The Maryland Strategic Highway Safety Plan

2006-2010

Destination: Saving Lives

MARYLAND

Destination – Saving Lives

Maryland Strategic Highway Safety Plan

MARYLAND STRATEGIC HIGHWAY SAFETY PLAN 2006 - 2010

September 2006

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Executive Summary

When the American Association of State Highway Transportation Officials (AASHTO) led the development of a strategic highway safety plan in 1997, targeting the nation's most serious highway safety problems, Maryland was one of the few states in the country to rise to the challenge and develop their own multiagency statewide plan in 2003. The passage of The Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) provided the states with an opportunity to improve their strategic highway safety plans (SHSP) through a data-driven, comprehensive approach for all public roads with the buy-in and support of a wide variety of stakeholders.

Maryland has made significant progress in reducing motor vehicle fatalities and injuries despite increases in population and vehicle miles of travel. There are, however, reasons for concern. The positive trends evident in many of Maryland's safety measures have plateaued over the past five years and have, in some cases, shown disturbing increases. From 1996 to 2005 more than 6,000 have died on Maryland roads and highways, and over 600,000 were injured at a cost of more than $4.5 billion annually. These figures clearly show the need for the new approach adopted by the state in this SHSP process.

Three principles guided Maryland's SHSP development efforts:

- Inclusion,
- Ownership, and
- Accountability

The embodiment of these principles was possible because many agencies and organizations accepted the challenge of participating in the development of the SHSP and decided to take responsibility for plan elements that relate to their agency's or organization's function. The development process was led by an Executive Committee comprised of twenty-three federal and state agencies and private sector organizations and supported by a fifty-five member Steering Committee which oversaw the selection of plan emphasis areas, measurable objectives and priority strategies.

A review of data describing the nature and extent of the highway safety problem in Maryland resulted in the selection of the following emphasis areas:

- Reduce Impaired Driving
- Improve Information and Decision Support Systems
- Eliminate Hazardous Locations
  - — Keep Vehicles on the Roadway
  - — Improve Safety at Intersections
  - — Create Safer Work Zones
  - — Make Walking and Crossing Streets Safer

- Increase Occupant Protection
- Improve Driver Competency
  - — Reduce Distracted Driving
  - — Enhance Safe Driving for Older Drivers
  - — Develop Safe Young Drivers
  - — Improve Motorcycle Safety
  - — Make Truck and Bus Travel Safer
- Curb Aggressive Driving
- Improve Emergency Response System

To generate interest and enthusiasm, Maryland convened a Traffic Safety Summit where over 320 people with diverse backgrounds and interests provided input on appropriate strategies for each of the emphasis areas. These participants generated over 168 strategies, which were then refined by the Executive and Steering Committees to a final list of 69 strategies. Data guided the process and enabled participants to select strategies that, when implemented, will save lives.

As a result of these efforts, Maryland established a goal to eliminate motor vehicle fatalities and serious injuries on Maryland roads and highways. To track progress, the state's SHSP set the following measurable objectives:

- To reduce annual motor vehicle fatalities to fewer than 550 by 2010, which would represent slightly more than a 10 percent reduction from the 614 fatalities in 2005 and which would meet the national goal of 1.0 or fewer fatalities per 100 million vehicle miles of travel (VMT).

- To reduce annual motor vehicle injuries to fewer than 50,000 by 2010, which would represent nearly a 10 percent reduction from the 55,303 injuries in 2005.

Emphasis area teams have committed to stay involved after approval of the SHSP and participate in implementation activities including developing action steps for each strategy; identifying needed resources including funding, legislative approval, staffing, etc., and identifying agencies and organizations with the responsibility for implementing the specified requirements. The result of these activities will be the Maryland Strategic Highway Safety Action Plan (SHSAP)

When completed the Maryland SHSAP will be a guiding document that will be reviewed and modified by both the Steering and Executive Committees with final approval granted by the Executive Committee. These committees will continue to meet periodically to track effectiveness and make changes as needed. The active involvement of both committees will ensure effective implementation by providing top-down support. The safety partnerships established during the plan development process will carry on throughout the five-year life of the plan to make sure that Maryland applies the best solutions to its transportation safety problems.

Preface

Motor vehicle crashes are the leading cause of death in the United States for those between six months and 45 years of age. Because these deaths disproportionately strike the young, motor vehicle crashes are the leading cause of lost years of productive life. In 2005, NHTSA estimates 43,200 people died and 2.68 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 roadways during the current decade at a cost of nearly two trillion dollars. The majority of motor vehicle crashes are predictable and preventable; we can do better.

Introduction

"Do not take a path that's clear. Make a new path and leave a trail." – Ralph Waldo Emerson

Maryland is on a journey to "Destination – Saving Lives," and the vehicle is the Strategic Highway Safety Plan (SHSP). The impetus for taking this journey is clear. From 1996 to 2005 more than 6,000 have people died on Maryland roads and highways, and over 600,000 were injured at a cost of more $4.5 billion annually. In the words of the Maryland Secretary of Transportation, "We cannot accept the deaths and injuries inflicted by motor vehicle crashes as collateral damage for a mobile society."

While reaching that destination will be a challenge, the reason for the journey is relatively simple – a critical need to reduce the human suffering caused by motor vehicle fatalities and injuries. Every journey requires leaders, pathfinders, problem solvers, and visionaries. To find these people and achieve the goal of saving lives, the state enlisted Federal, state and local agencies, private sector organizations, and concerned citizens.

This is not the first time Maryland has undertaken the task of developing a strategic highway safety plan. When the American Association of State Highway Transportation Officials (AASHTO) led the development of a strategic highway safety plan in 1997, targeting the nation's most serious highway safety problems, Maryland was one of the few states in the country to rise to the challenge and develop their own multiagency statewide plan in 2003.

In 2006, Maryland began the process recommended in the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005 to develop a five-year statewide coordinated safety plan with a comprehensive framework for reducing highway fatalities and serious injuries on *all* public roads. By following the guidance provided in SAFETEA-LU, the state worked to obtain buy-in and support from a wide variety of stakeholders. It ensured the plan was data driven, based on problem identification and countermeasure analysis, and addressed solutions involving engineering (planning, operations, etc.), education, enforcement, and emergency medical services components.

Maryland Facts

- *In 2005, the population of Maryland was 5,600,388, which is 5.5 percent higher than 2000.*
- *There were 3,820,114 licensed drivers in 2004, of which 226,559 (5.9 percent) were young people between the ages of 16-20 and 497,038 (13.0 percent) were people older than 65.*
- *There are 4,562,129 registered vehicles and 93,035 registered motorcycles in Maryland.*
- *Maryland's transportation network includes a total of 31,634 miles of roads. 16.5 percent of them (5,235 miles) are in the state system and 83.5 percent (25,399 miles) are local roads outside of the state system.*
- *In 1995, vehicles traveled 44.9 billion miles. In 2005, the annual vehicle-miles of travel (VMT) had increased to 56.7 billion, a twenty-six percent increase over ten years.*

The Maryland Highway Safety Problem

"The significant problems we have cannot be solved at the same level of thinking with which we created them." – Albert Einstein

Even though population and vehicle miles of travel have been increasing, Maryland has made significant progress in reducing motor vehicle fatalities and injuries. As shown in Figure 1, the number of individuals killed on Maryland highways has dropped from a high of 661 in 2001 to 614 in 2005, a seven percent reduction. Injuries, shown in Figure 2, have dropped 20 percent from 69,052 in 1996 to 55,303 in 2005. This decrease is probably due primarily to an increase in safety belt use.

Figure 1. Statewide Motor Vehicle Fatalities
1996-2005

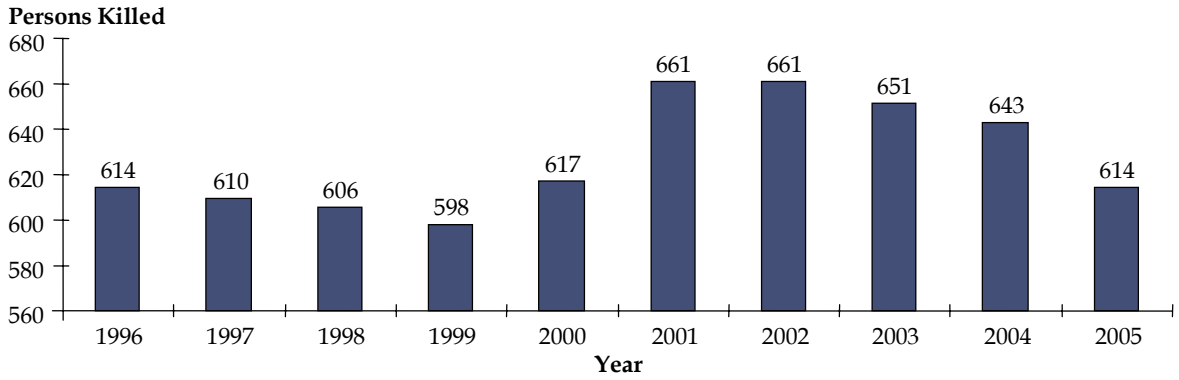
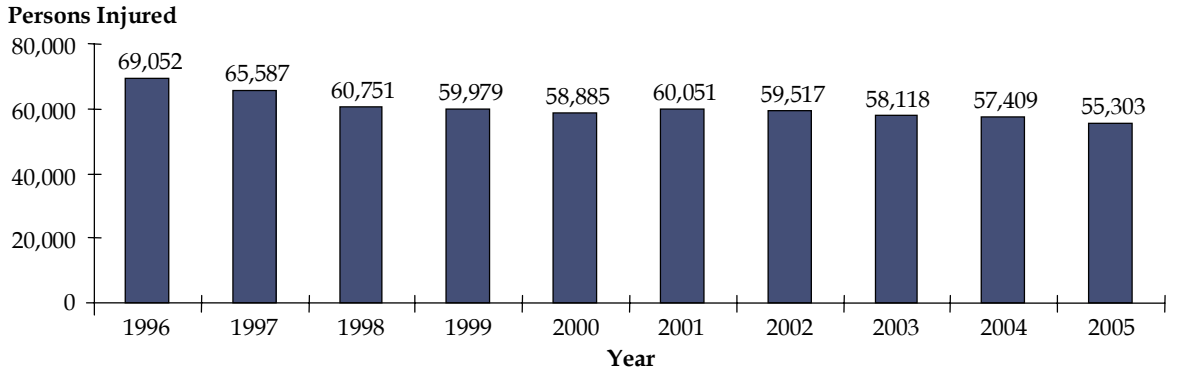


Figure 2. Statewide Motor Vehicle Injuries
1996-2005



Despite these improvements there is reason for concern. The positive trends evident in many of Maryland's highway safety measures have plateaued over the past five years and have, in some cases, shown disturbing increases.

The SHSP Process

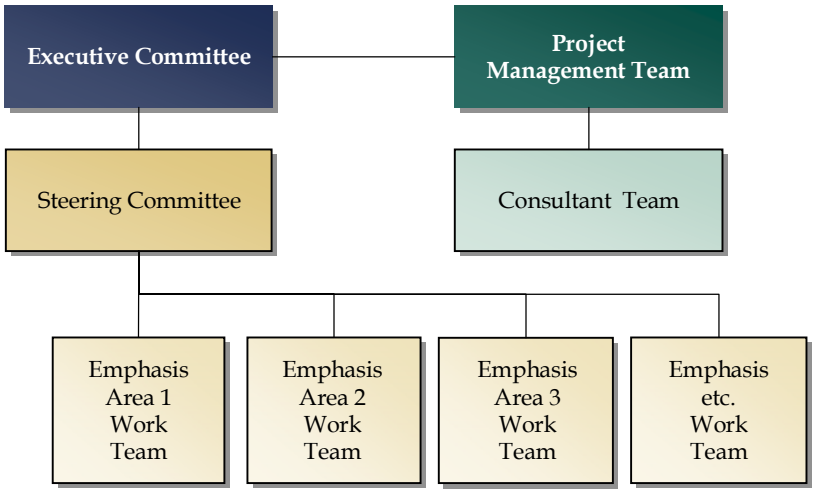
"Man's mind, once stretched by a new idea, never regains its original dimensions." – Oliver Wendell Holmes

Three principles guided Maryland's SHSP development efforts – inclusion, ownership and accountability. The embodiment of these principles was possible because of the many agencies and organizations that accepted the challenge of participating in the development of the SHSP and decided to take responsibility for plan elements that relate to their agency's or organization's function. To have the greatest possible impact on the highway safety problem the support and action of a broad range of state agencies and other organizations is required. One agency acting alone cannot have the same impact as multiple agencies working together.

Management Structure

The process began in February 2006 when the Governor identified the State Highway Administration (SHA) as the lead agency for the project. SHA assigned the Maryland Office of Traffic and Safety (OOTS) to facilitate the process. As indicated in Figure 3, the management structure includes an Executive Committee, a Steering Committee, and multiple emphasis area work teams.

Figure 3. Maryland SHSP Management Structure



Executive Committee

To recruit agencies and organizations, especially nontraditional entities, for involvement in the SHSP Executive Committee, the Secretary of Transportation declared "traffic safety is public safety," which helped these groups understand their role in the SHSP development process. The role of Executive Committee is to:

- Lead the development and implementation of the SHSP;
- Determine the priority emphasis areas;
- Hold a Traffic Safety Summit;
- Incorporate appropriate elements of the strategic highway safety plan into their agency business plans; and
- Champion the highway safety cause.

A critical step was approval of a Memorandum of Understanding (MOU) which commits each member "to make every reasonable good faith effort to contribute to and see through to successful completion the projects identified by the SHSP." A copy of the MOU appears in the Appendix along with the Executive Committee member organization list.

Steering Committee

The Steering Committee was assigned to review the available data, make recommendations on which priority emphasis areas to include in the plan and give preliminary approval to the SHSP. Steering Committee members also served as facilitators for the emphasis area teams. The following list outlines the responsibilities of this group:

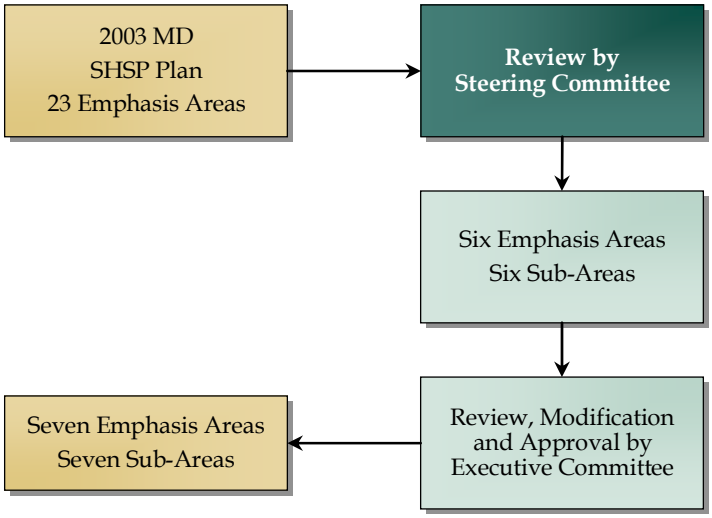
- Recommend the priority emphasis areas to include in the SHSP;
- Help recruit a broad base of stakeholders for the safety summit;
- Lead, support and participate in the work of the emphasis area teams;
- Encourage department heads to adopt common highway safety goals as part of their business plans;
- Champion the SHSP and recruit others to support it; and
- Participate in SHSP implementation efforts and track progress after the initial plan is developed.

The Steering Committee member list appears in the Appendix.

Emphasis Area Selection

During the seven-month development process two Executive Committee meetings and four Steering Committee meetings were held. The 23 emphasis areas within the 2003 Maryland Strategic Highway Safety Plan were used as a starting point for the emphasis area selection process illustrated in Figure 4.

Figure 4. Emphasis Area Selection



An initial review by the Steering Committee resulted in the selection of six emphasis areas, which were increased to seven by the Executive Committee. The final list of emphasis areas include the following:

- Reduce Impaired Driving
- Improve Information and Decision Support Systems
- Eliminate Hazardous Locations
  - Keep Vehicles on the Roadway
  - Improve Safety at Intersections
  - Create Safer Work Zones
  - Make Walking and Crossing Streets Safer
- Increase Occupant Protection
- Improve Driver Competency
  - Reduce Distracted Driving

  - Enhance Safe Driving for Older Drivers
  - Develop Safe Young Drivers
  - Improve Motorcycle Safety
  - Make Truck and Bus Travel Safer
- Curb Aggressive Driving
- Improve Emergency Response System

Since each subtopic area has a unique set of safety issues and challenges associated with it the Steering Committee decided to establish separate emphasis area teams for each of them.

Traffic Safety Summit

The purpose of the Traffic Safety Summit was to bring together a broad-based group of safety stakeholders to develop an effective plan that will save lives and reduce injuries on Maryland's roadways. Nearly 320 people from many diverse backgrounds and interests attended the event held on July 12, 2006.

Participants were assigned to one of the 14 emphasis area teams based on their stated interests and knowledge. Considerable effort was made to assign people with expertise in the "4E's" (Enforcement, Education, Engineering, Emergency Medical Services) to the teams. Each team was charged with developing measurable objectives and identifying effective strategies for achieving them. Sample strategies tailored to each emphasis area were provided to help foster discussion within the teams. These included a list of strategies currently in place or planned for implementation in Maryland, strategies recommended by the National Cooperative Highway Research Program (NCHRP) in their Report 500 series and strategies outlined in the Governors Highway Safety Association's (GHSA) publication "Countermeasures That Work – A Highway Safety Countermeasure Guide for State Highway Safety Offices." Following the work session, the teams reported their findings to the larger group.

Follow Up Meetings

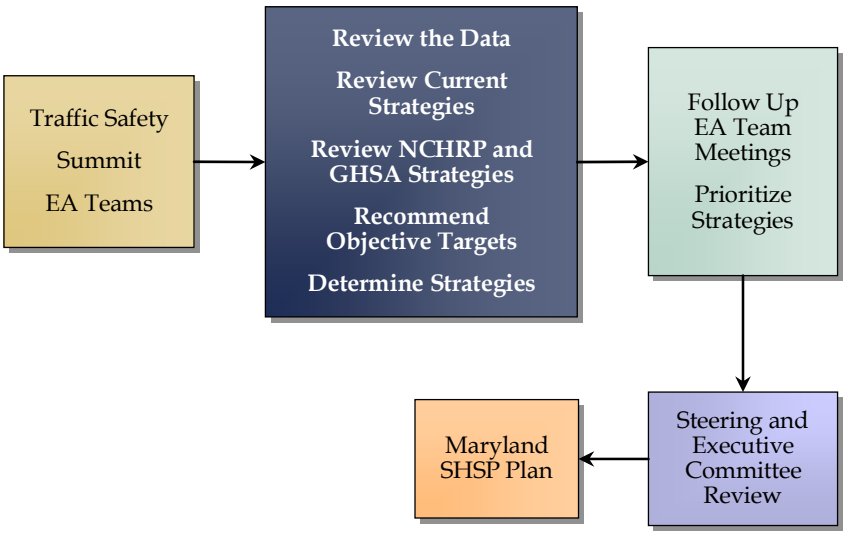
A total of 168 strategies were developed at the Summit. The emphasis area teams met a second time to review their work and rank their strategies. During these subsequent meetings, each team reviewed additional data and program information; combined, changed, added, or removed strategies as needed, prioritized them based on their impact (e.g., reductions in fatalities and injuries), and the perceived availability of required resources.

The information from the emphasis area teams was assembled by the Management Team and a draft SHSP was prepared. The Executive and Steering Committees reviewed the

information, recommended changes and endorsed the plan, which was subsequently approved by the Governor.

Figure 5 shows the process that was used to develop the objectives and strategies for the Maryland SHSP.

Figure 5. SHSP Plan Development Process



■ Outreach and Marketing

"Many a small thing has been made large by the right kind of advertising." – Mark Twain

Maryland developed a number of marketing techniques to get the word out and generate enthusiasm for the SHSP, including the following:

- A flyer distributed by Executive and Steering Committee members promoting the Summit;
- A power point script and slides designed to educate state agencies and organizations and to recruit participants;
- A handout to promote the SHSP development process to agency heads and executives; and
- A brochure for distribution at conferences and other meetings.

In addition to these materials, Maryland hosted a press conference at the Traffic Safety Summit that featured remarks from transportation officials and a ceremony where the MOU was signed by Executive Committee members or their representatives. The event was well covered by newspaper, radio and television reporters.

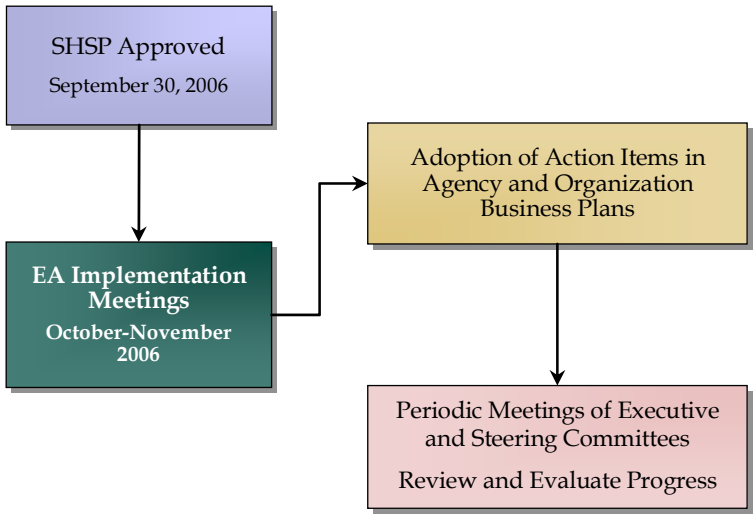
The Future: Next Steps

"Change is the process by which the future invades our lives." – Alvin Toffler

Emphasis area teams are committed to remain involved after the approval of the SHSP by participating in implementation activities. To this end they have established a schedule to work on detailed action plans during October and November 2006. These plans will include action steps for each strategy; identification of needed resources including funding, legislative approval, staffing needs, etc., and identification of agencies or organizations with the responsibility for implementing the specified requirements.

When completed the Maryland Strategic Highway Safety Action Plan will be reviewed by the Steering and Executive Committees to ensure continued buy-in and support. These committees will also continue to meet periodically to track effectiveness and make changes as needed. The safety partnerships established during the plan development process will carry on throughout the five-year life of the plan to ensure that the best possible solutions are applied to Maryland's transportation safety problems. Figure 6 shows the process to be used for the SHSP implementation.

Figure 6. SHSP Implementation Plan



Strategic Highway Safety Plan

"Coming together is an accomplishment, staying together is progress, working together is a success." Henry Ford

The goal for the Strategic Highway Safety Plan is the following:

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

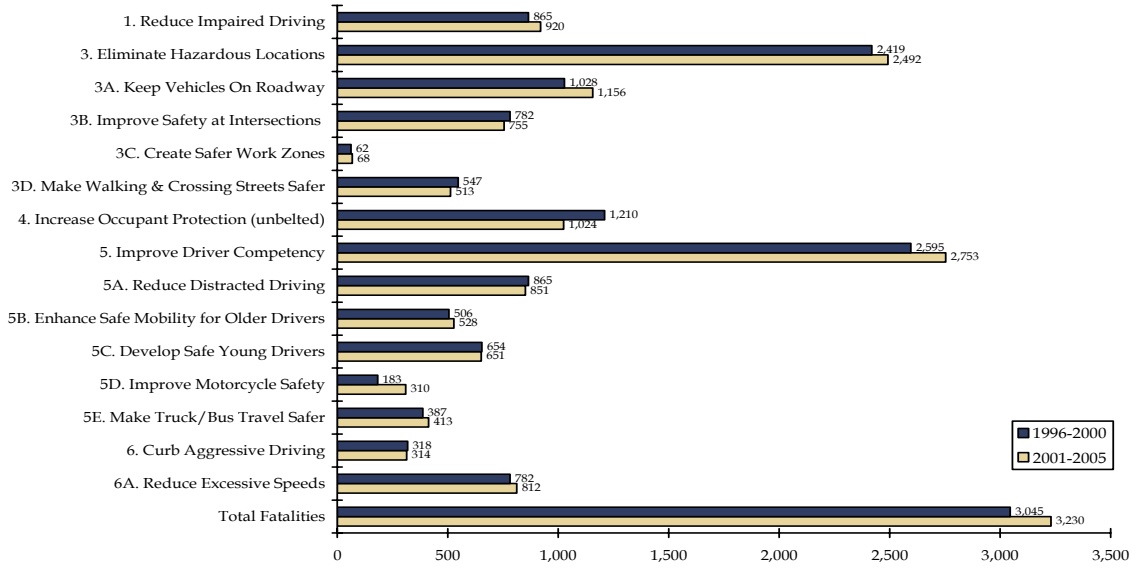
The overall measurable objectives for the plan are as follows:

- To reduce annual motor vehicle fatalities to fewer than 550 by 2010, which would represent slightly more than a 10 percent reduction from the 614 fatalities in 2005 and which would meet the national goal of 1.0 or fewer fatalities per 100 million vehicle miles of travel (VMT).

- To reduce annual motor vehicle injuries to fewer than 50,000 by 2010, which would represent nearly a 10 percent reduction from the 55,303 injuries in 2005.

The measurable objectives and strategies for each area are designed to accomplish this overall goal. Because the Maryland SHSP is data driven, emphasis area teams used charts comparing the relative severity of fatalities and injuries among the various areas. The comparison in Figure 7, showing two five-year segments (1996 to 2000 and 2001 to 2005), illustrates which types of crashes are resulting in increased death and injury, as well as which crash types are showing progress. For instance, fatalities associated with Driver Competency increased from 1996 to 2005.

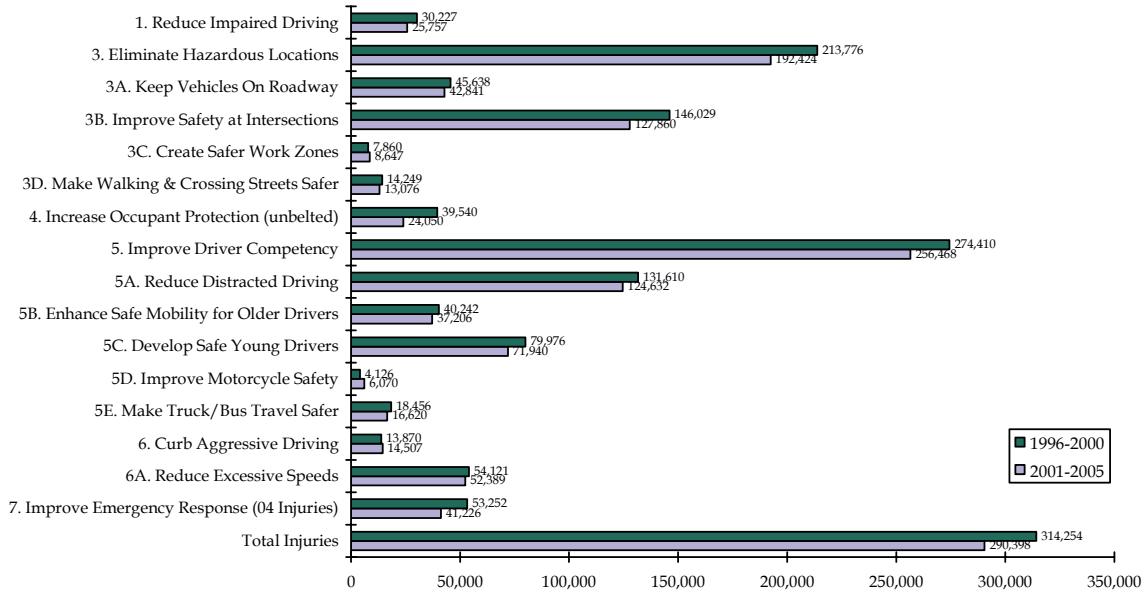
Figure 7. Maryland Traffic Fatalities by Emphasis Area



* Note: 4. Includes Drivers and Passengers, excludes drivers and passengers of motorcycles & mopeds. Safety Equipment considered none: None, Harness Only, Air Bag Only and Other.

Figure 8 shows a similar comparison for injuries. The emphasis areas of Driver Competency and Hazardous Locations are the largest contributing factors in crashes involving an injury. Hazardous Locations includes the subareas of Keep Vehicles on the Roadway, Improve Safety at Intersections, Create Safer Work Zones, and Make Walking and Crossing Streets Safer.

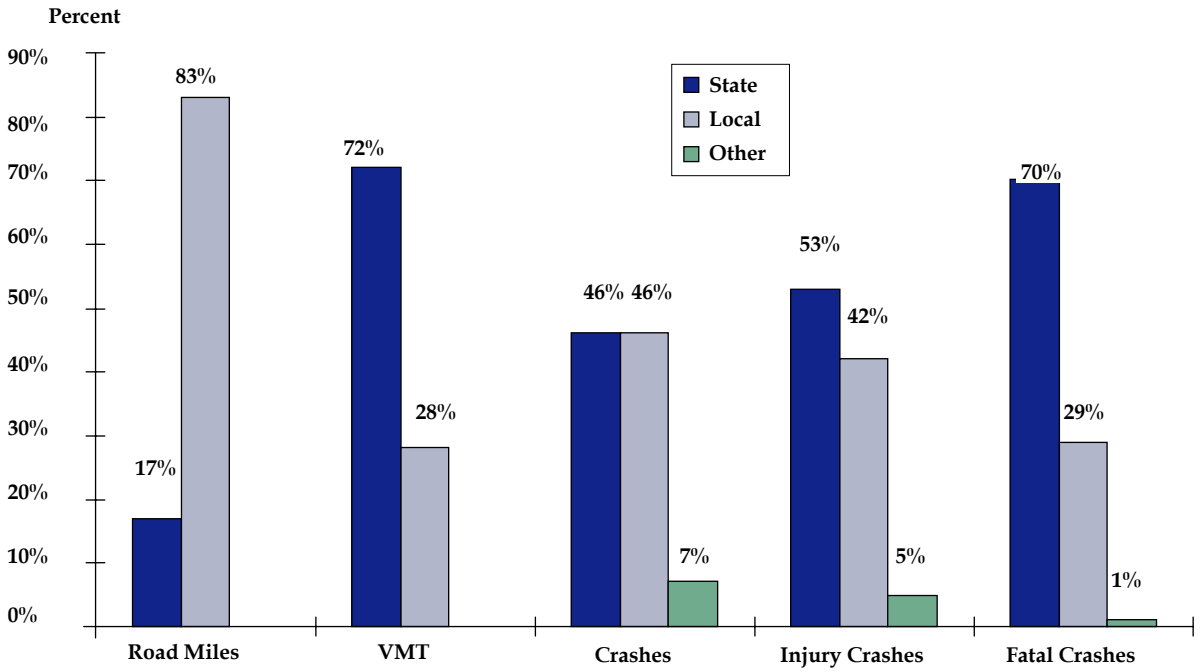
Figure 8. Maryland Traffic Injuries by Emphasis Area



During the emphasis area team deliberations, a number of cross-cutting strategies were identified, including the need for judicial education and swift and sure consequences for individuals who violate traffic safety laws. In addition, almost every team identified the need for increased public information and education efforts and several teams targeted the need to improve the driver education curriculum. Finally, each team indicated a need for improved data collection and analysis, particularly in terms of crash causation and identification of high-crash locations.

One area where the issue of traffic safety data is critically important is the number and severity of motor vehicle crashes that occur on local roads. As required by SAFETEA-LU, this plan must apply to all public roads. As shown in Figure 9, 83 percent of all road miles in Maryland are local roads; 17 percent are state-owned. While the number of crashes are the same on both local and state roads (46 percent), 53 percent of injury crashes and 70 percent of fatal crashes occur on state roads which is consistent with the greater number of vehicle miles of travel on state roads (72 percent).

Figure 9. Local & State Road Mileage, VMT & Crashes



■ Emphasis Area #1 – Reduce Impaired Driving

Although major efforts nationally and within Maryland over the past two decades have been successful in reducing the incidence of driving while impaired by alcohol or other drugs, such behavior remains a significant safety problem. The percentage of traffic fatalities has decreased from 57 percent in 1981 to 38 percent in 2005. Moreover the number of alcohol-involved fatalities has been cut nearly in half from 454 in 1991 to 235 in 2005. However, after several years of decline, alcohol-related fatalities have risen and injuries have leveled off at an unacceptable level, indicating that further reductions have been difficult to achieve.

Maryland Data

Figure 10 shows alcohol-related fatalities have increased from 213 in 1996 to 235 in 2005. Figure 11 shows impaired driving injuries have decreased from 7,117 in 1996 to 4,852 in 2005. The objectives and strategies developed by the emphasis area team relate to a need for further reductions in fatalities and a push to move injury figures down from the 4800 plateau that Maryland has experienced for the last three years.

Figure 10. Alcohol Related Fatalities from FARS

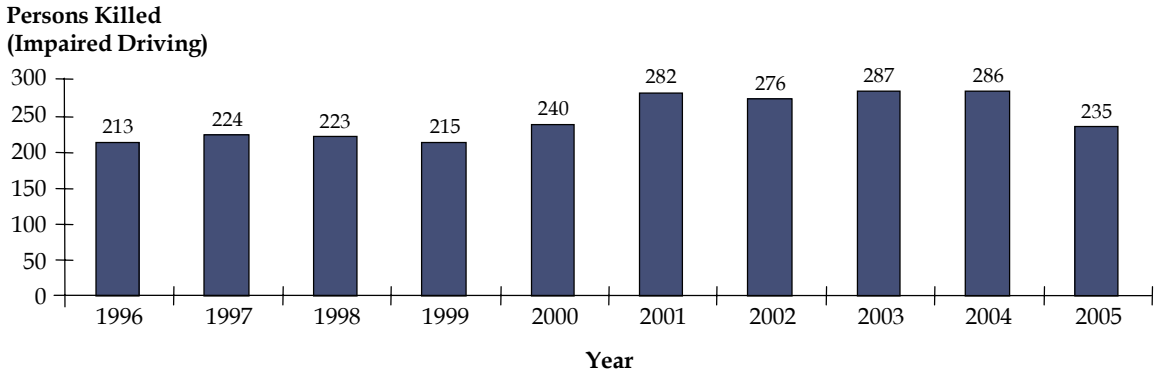
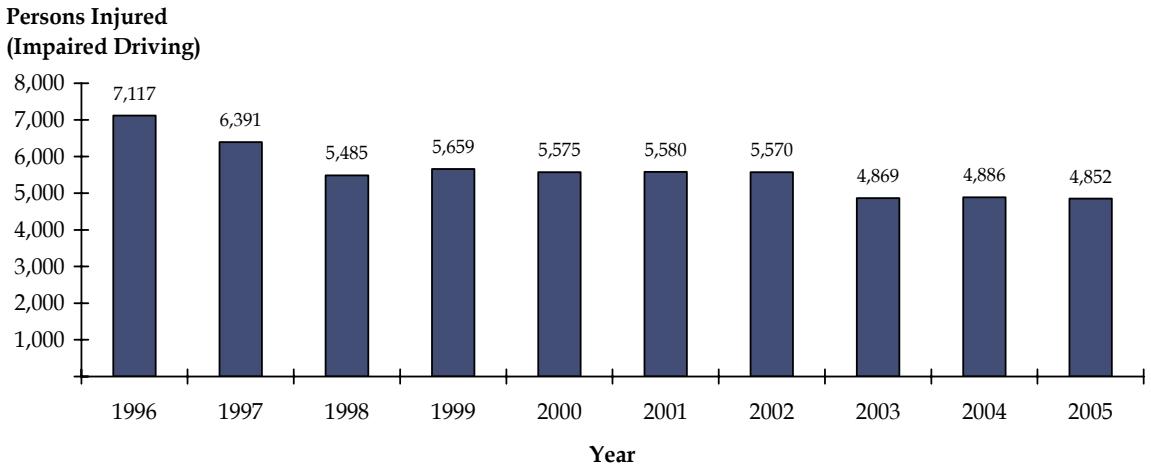


Figure 11. Impaired Driving Injuries



Objectives

- Reduce annual alcohol-related fatalities from 235 in 2005 to 200 or fewer in 2010 (a 15 percent reduction) .
- Reduce annual impaired driving injuries from 4,852 in 2005 to fewer than 4,600 in 2010 (a five percent reduction).

Priority Strategies

- Increase the number and effectiveness of sobriety checkpoints and saturation patrols.
- Strengthen the post-arrest scenario by expanding and enhancing DUI (Driving Under the Influence) courts and educating the judiciary.
- Enact stronger and more effective legislation such as mandatory ignition interlocks for first time offenders.
- Develop educational programs targeting specific audiences, including 18 to 34 year olds and elementary and middle school students.
- Create effective paid media campaigns and generate more earned media opportunities.

Emphasis Area #2 – Improve Information and Decision Support Systems

Maryland recognizes that to fulfill its mission for safer highways, highway safety information must be treated as a vital resource. Highway safety information systems provide the data critical to the development of policies and programs that maintain the safety and efficiency of Maryland's highway network. Yet at a time when reliance on these systems is increasing, many factors challenge the ability of these systems to provide high-quality information. Police departments and other agencies responsible for collecting much of this information are faced with competing resource demands. Many state and local organizations, for which this information is directly relevant, continue to experience difficulty in using these information resources to the fullest extent.

Many of the data challenges facing Maryland will be addressed through the state's Traffic Information System Improvement Strategic Plan, managed by the Traffic Records Coordinating Committee (TRCC). The SHSP Improve Information and Decision Support Systems Emphasis Area team will coordinate with the TRCC as well as focus on data issues not identified in the strategic data plan, particularly those referenced by SAFETEA-LU, i.e., the identification of hazardous locations on all public roads.

Objective

- Improve information availability and analysis capability to allow for better decision-making that will reduce fatalities and injuries by 2010.

Priority Strategies

- Develop infrastructure and policies that increase appropriate access to timely, accurate, and complete highway safety-related data.
- Develop an impaired driving tracking system through citation, disposition, and treatment.
- Revise the policy and crash analysis system to identify hazardous locations and identify appropriate safety improvements on all public roads.
- Develop a uniform, standardized accident reporting threshold requirement that more adequately addresses safety needs and improvements.
- Develop systems to identify, assess, and evaluate roadway elements, intersections, spots, sections, corridors, and routes on all road systems (including rural roads) that exhibit abnormal numbers and/or rates of crashes. Particularly those resulting in death or serious injury or that otherwise constitute a danger to road users.

■ Emphasis Area #3: Eliminate Hazardous Locations

Although traffic crashes may appear to be random events, they occur more frequently under certain circumstances than others and at certain locations more than others. Even after accounting for traffic volumes, some locations have higher crash rates than others. It is important for a jurisdiction to be able to identify those spots, sections, and routes having poorer than expected crash histories, determine the appropriate remedial measures, and make the necessary improvements. For purposes of the SHSP, the hazardous locations emphasis area includes run-off-the road crashes, intersection and work zone crashes, and crashes involving pedestrian fatalities and injuries. While there has been a decrease in the number of hazardous location fatalities since 2002, serious injuries have remained fairly constant; decreasing only slightly from 2004 to 2005.

Maryland Data

Figure 12 shows the number of individuals killed in run-off-the road, intersection and work zone crashes along with pedestrian fatalities. These fatalities have remained fairly consistent over the last 10 years at the 470-500 level except, in 2002, when they increased to over 530. Figure 13 shows the number of individuals who have been injured in run-off-the road, intersection and work zone crashes along with pedestrian injuries has decreased by nearly 10,000 in the last 10 years from 47,702 in 1996 to 36,277 in 2005.

Figure 12. Hazardous Location Fatalities

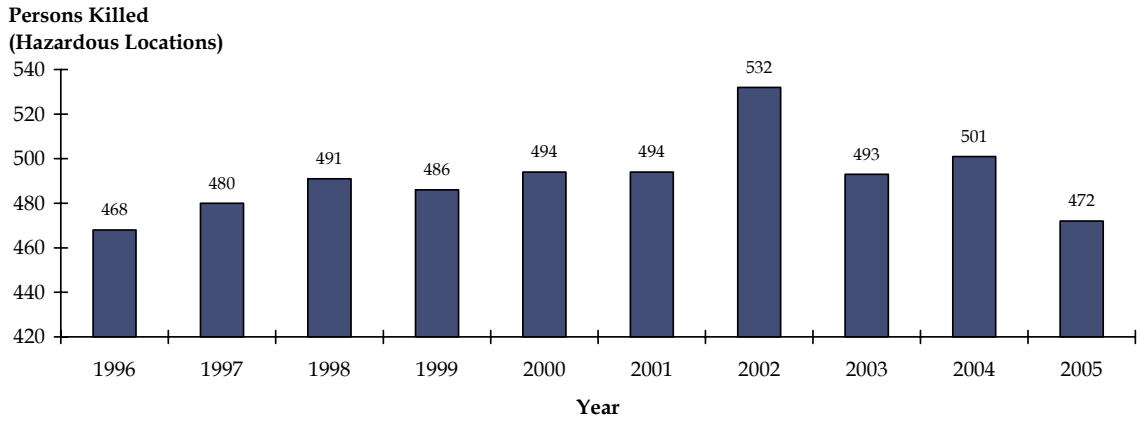
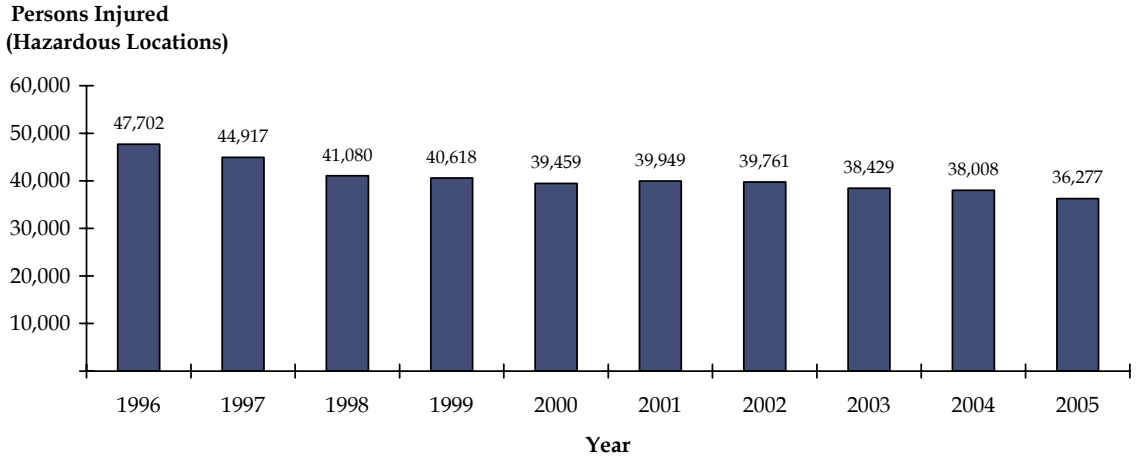


Figure 13. Hazardous Location Injuries



Priority Strategies

During work in the teams that make up the Eliminate Hazardous Locations Emphasis Area, several cross-cutting strategies were identified. They include the following:

- Conduct a public information and education campaign targeting the various aspects of hazardous locations.
- Identify best practices and innovative enforcement techniques to eliminate hazardous locations in high-crash pedestrian locations and in work zones.
- Conduct road safety audits targeting high-risk pedestrian and intersection locations to determine the contributing crash factors and identify effective countermeasures.
- Develop and implement projects to reduce or eliminate safety hazards or otherwise to enhance safety for road users.

■ Emphasis Area #3a – Keep Vehicles on the Roadway

When a vehicle leaves the roadway and its shoulders, the result is frequently disastrous. Nearly one-third of fatalities occur during such events. The situation is of particular concern in rural areas, where overturning or striking a fixed object is an even greater risk. Implementation of successful methods to keep vehicles on the roadway and to minimize the consequences once vehicles leave the roadway will have a significant beneficial impact on highway safety.

Maryland Data

In reviewing the data, the emphasis area team found the average number of run-off-the road fatalities (Figure 14) over the last ten years is 218, a figure that has been exceeded in three of those years (2001, 2002 and 2004). Injuries (Figure 15) have remained at a fairly consistent level for the past eight years. A further review of the data showed that a large proportion of those killed or injured in run-off-the road crashes are under the age of 24 and that there are a high number of passenger deaths. Of the run-off-the road crashes reported in the data, alcohol is involved in over 13 percent of them; most occur at vehicle speeds of less than 40 miles per hour; approximately 33 percent occur on county roads, and over 21 percent involve pedestrians.

Figure 14. Run-Off-the Road Fatalities

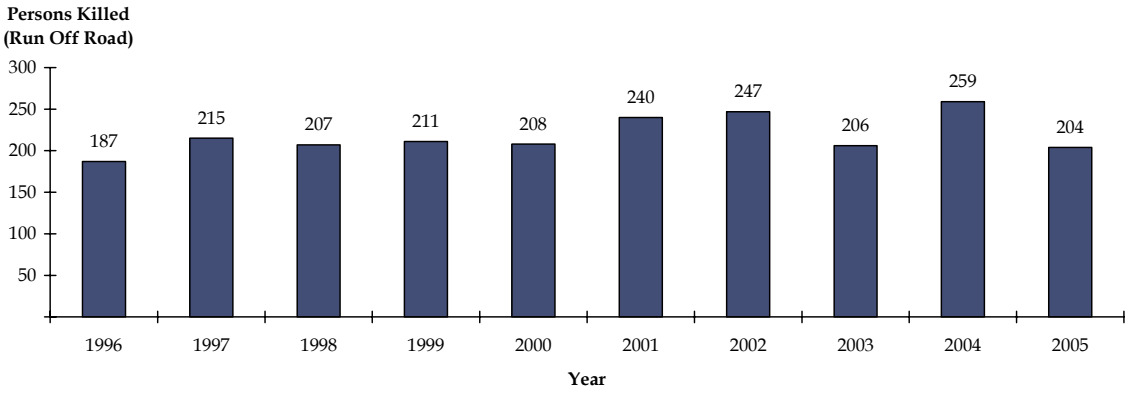
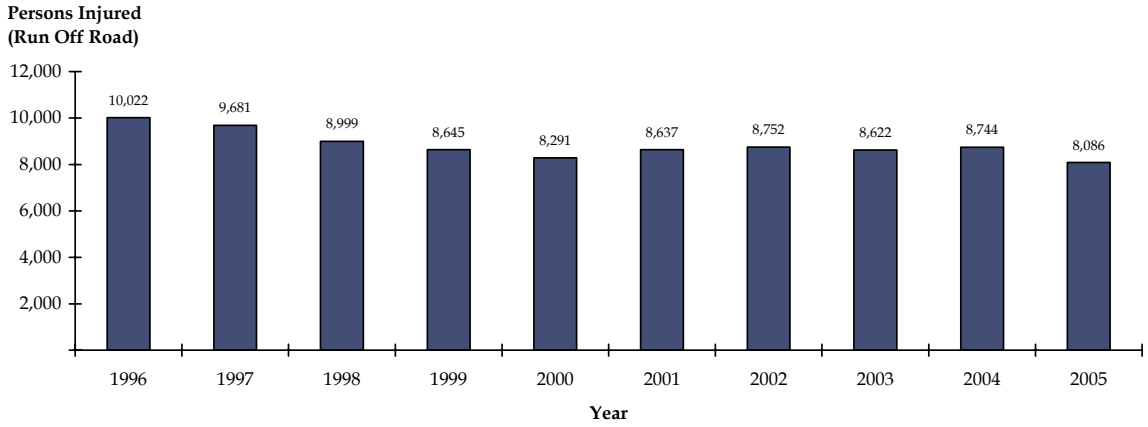


Figure 15. Run-Off-the Road Injuries



Objectives

- Reduce annual run-off-the road fatalities from 204 in 2005 to 200 or fewer in 2010 (a two percent reduction).
- Reduce annual run-off-the road injuries from 8,086 in 2005 to fewer than 7,400 in 2010 (an eight percent reduction).

Priority Strategies

- Improve data collection and analysis for fatal and injury run-off-the road crashes to provide critical information to transportation planners and engineers.
- Evaluate pavement strategies to reduce speed and increase friction (e.g., pavement type, pavement application method, pavement marking spacing).
- Improve traffic control strategies to provide positive guidance to keep vehicles on the road.
- Implement forgiving roadway designs that mitigate the impact of cars leaving the road.
- Implement stricter law enforcement of motor vehicle laws and increase fines for serious violations that result in run-off-the road crashes (e.g., speeding too fast for conditions).

`■ Emphasis Area #3b – Improve Safety At Intersections

A significant portion of highway crashes occur at intersections because of the high frequency of potential vehicle/vehicle and vehicle/pedestrian conflict points. About one-fourth of fatal crashes and over one-third of all crashes occur at intersections. According to the data, the majority of intersection crashes involve vehicles traveling between 25 and 40 miles per hour, involve angle crashes, and occur most often on Fridays during the evening rush hour. Inattention is most often cited as the contributing factor in these crashes.

Maryland Data

In reviewing the data, the emphasis area team found the average number of fatalities (Figure 16) over the last 10 years is 154, which has been exceeded in four of those years (1998, 2000, 2002, and 2003). Most disturbing to the team was the 13 percent increase that occurred from 2004 to 2005. In regard to injuries (Figure 17), the team wanted to continue the downward trend which has seen a 26 percent decrease from 1996 to 2005.

Figure 16. Intersection-Related Fatalities

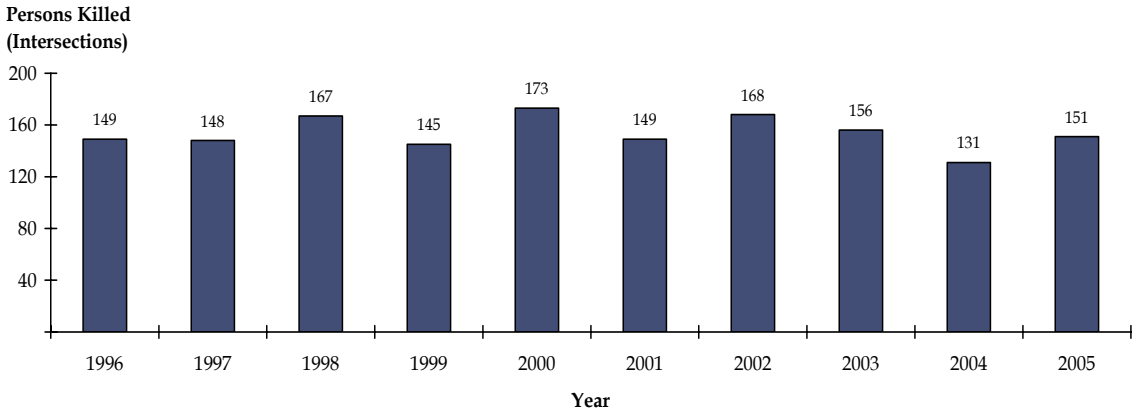
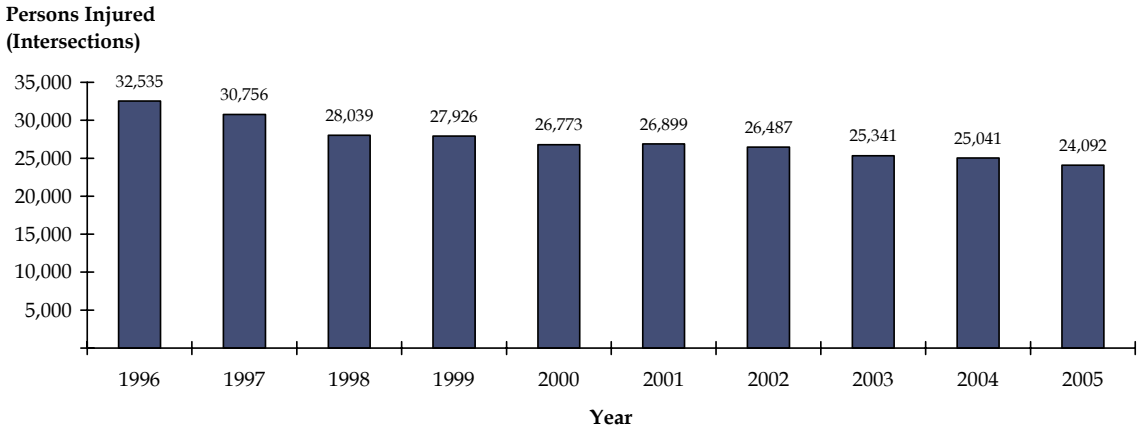


Figure 17. Intersection-Related Injuries



Objectives

- Reduce annual intersection-related fatalities from 151 in 2005 to 120 or fewer in 2010 (a 20 percent reduction).
- Reduce annual intersection-related injuries from 24,092 in 2005 to fewer than 19,000 in 2010 (a 21 percent reduction).

Priority Strategies

- Reduce the number of conflict points and provide better guidance for motorists at intersections.
- Develop a system to track and evaluate countermeasure effectiveness at high-crash intersections.
- Encourage more multidisciplinary collaboration at the state and local level on intersection safety.
- Create intersection safety checklists for existing conditions and new design.

■ Emphasis Area #3c – Create Safer Work Zones

Highway work zones, also referred to as temporary traffic control zones, create unique safety concerns for motorists and place those who work on or along the highway at significant risk. Drivers often are subjected to unfamiliar and unusual situations which require special care. On the average, about 3,000 traffic crashes in work zones are reported annually. These resulted in over 1,400 injuries and 16 deaths in 2005. Rear-end collisions occur more than twice as frequently as any other collision type. Over half the work zone crashes occur along state maintained highways.

Maryland Data

The Work Zone Emphasis Area team was concerned about the relatively consistent number of fatalities (Figure 18) which have been at 16 in four of the last ten years and a figure that has remained unchanged from 2004 to 2005. Injuries (Figure 19) reached their lowest levels in 1998 (1298 injuries) and 1999 (1274 injuries). The team set an objective and strategies to decrease injuries to that 1280 level over the five year life of the plan.

Figure 18. Work Zone Fatalities

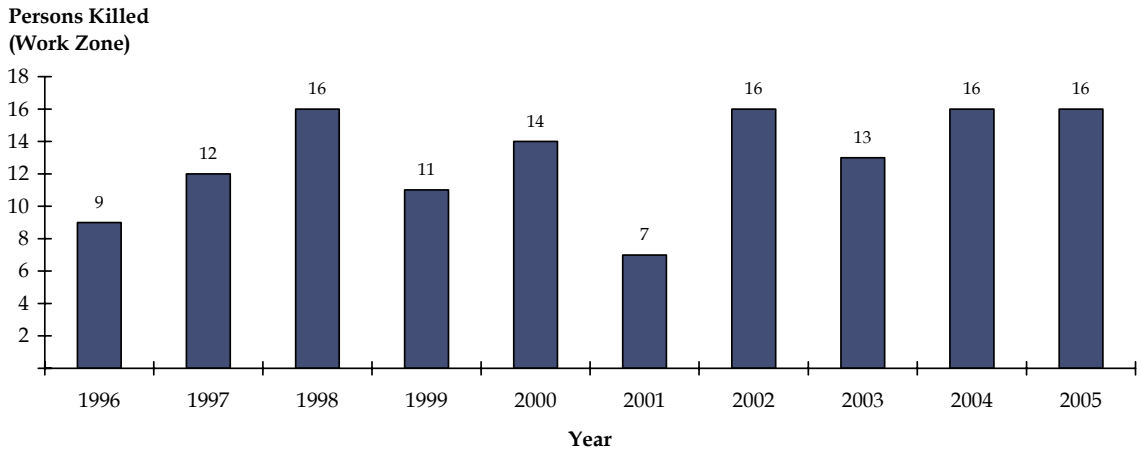
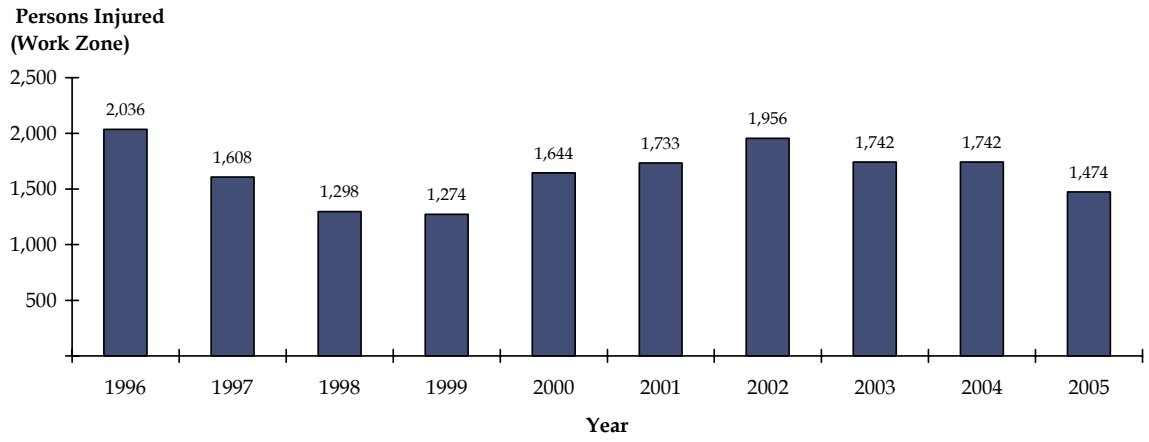


Figure 19. Work Zone Injuries



Objectives

- Reduce annual work zone fatalities from 16 in 2005 to 11 or fewer in 2010 (a 31 percent reduction).
- Reduce annual work zone injuries from 1,474 in 2005 to fewer than 1,300 in 2010 (a 12 percent reduction).

Priority Strategies

- Develop, implement, and evaluate improved work zone planning.
- Heighten the visibility of workers, vehicles, equipment, and traffic control devices in work zones to enhance driver awareness.
- Ensure that changeable message signs, static signs, and other work zone devices display information that is accurate and timely.
- Use Intelligent Transportation Systems (ITS) for advanced warning of work zones and communication of alternate routes.
- Improve state and local collaboration and communication on work zone safety.
- Increase speed enforcement in work zones.

■ Emphasis Area #3d – Make Walking and Crossing Streets Safer

Typically, between 95 and 110 pedestrians are fatally injured on Maryland's streets and highways each year. Pedestrian fatalities comprise about 20 percent of all traffic deaths. About 12 percent of fatally injured pedestrians are 15 years or younger and another 19 percent are 65 years or older. Nearly 3,000 pedestrians are injured annually, more than one-third of which occur in Baltimore City and more than another one-third of which occur in Baltimore, Montgomery, and Prince George's Counties. Pedestrians 15 years of age and younger are particularly vulnerable to being injured – over 30 percent of injured pedestrians are in this age group. Many adult fatally injured pedestrians are alcohol impaired.

Maryland Data

The emphasis area team found that the majority of pedestrian crashes and incidents in Maryland occur in five jurisdictions; Baltimore City, Baltimore County, Prince George's County, Montgomery County and Anne Arundel County. A large proportion of the crashes occur during the afternoon rush hour and the majority do not happen in intersections. The majority of pedestrians who are injured or killed are between 21 and 49 years of age while the majority of at-fault drivers are males between 12 and 39 years of age. While the data show that fatalities (Figure 20) have decreased from 123 in 1996 to 101 in 2005, pedestrian injuries (Figure 21) have remained fairly constant at the 2,500 level.

Figure 20. Pedestrian Fatalities

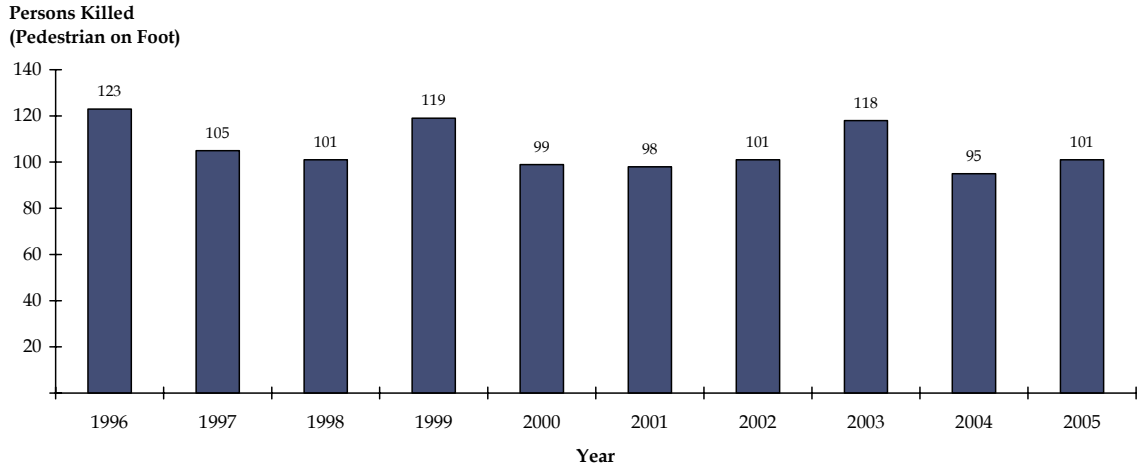
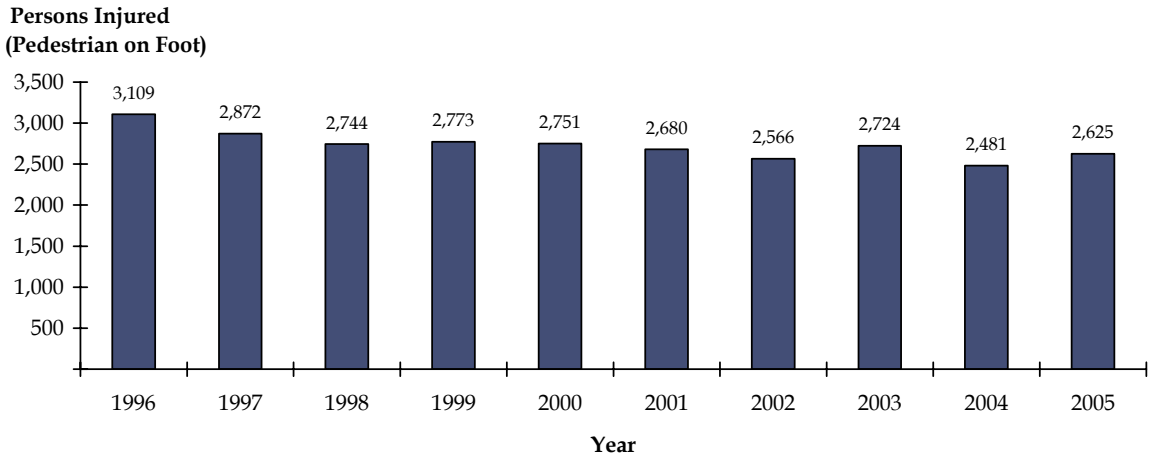


Figure 21. Pedestrian Injuries



Objectives

- Reduce annual pedestrian fatalities from 101 fatalities in 2005 to 85 or fewer in 2010 (a 16 percent reduction).
- Reduce annual pedestrian injuries from 2,625 in 2005 to fewer than 2,300 by 2010 (a 14 percent reduction

Priority Strategies

- Conduct periodic assessment of locations with growing traffic and pedestrian volumes and conduct road safety audits at those locations at greatest risk for pedestrian fatalities and injuries and share information with state and local partners.
- Implement effective countermeasures for problem areas as determined by safety assessments and road safety audits.
- Educate the judiciary on the importance of penalties for violation of pedestrian laws.

■ Emphasis Area #4 – Increase Occupant Protection

The effectiveness of occupant restraints in reducing the likelihood of death or serious injury to a vehicle occupant involved in a crash is well established. Although safety belt use in Maryland, surveyed to be 91.1 percent in 2005, is among the highest in the nation, more than 40 percent of the fatally injured vehicle occupants were unbelted at the time of the crash. Similarly, child safety seat use is high; however, these devices are frequently used improperly.

Maryland Data

While increased safety belt use has reduced the number of unrestrained fatalities (Figure 22) from 286 in 1996 to 181 in 2005 and unrestrained injuries (Figure 23) from 10,923 in 1996 to 4082 in 2005, the team felt a 3.7 percent increase in safety belt use could reduce those numbers even further and have a positive impact on other aspects of highway safety. In addition to the fatality and injury figures, the team also found from the data that those least likely to wear safety belts include 16 to 20 year old males, pickup truck drivers and passengers, back seat passengers, 21 to 34 year olds generally, and minority populations.

Figure 22. Unrestrained Fatalities

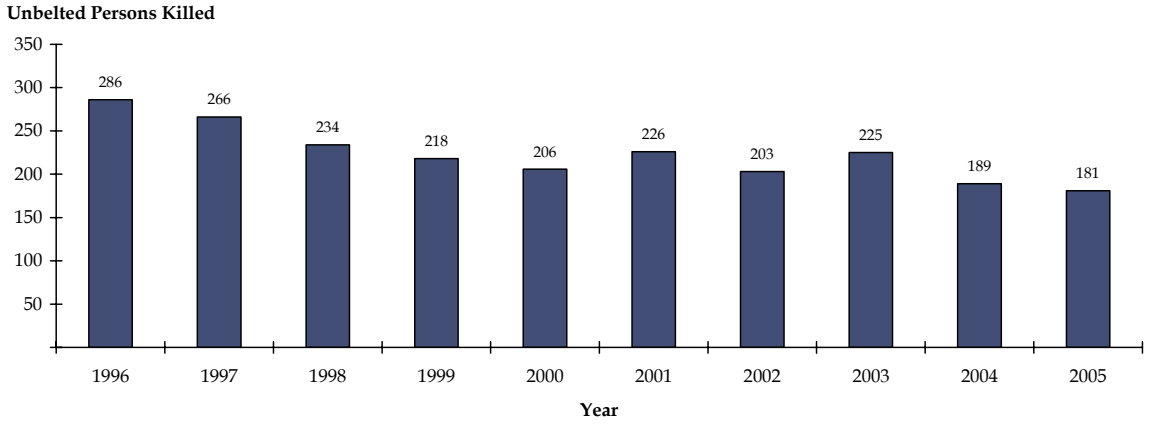
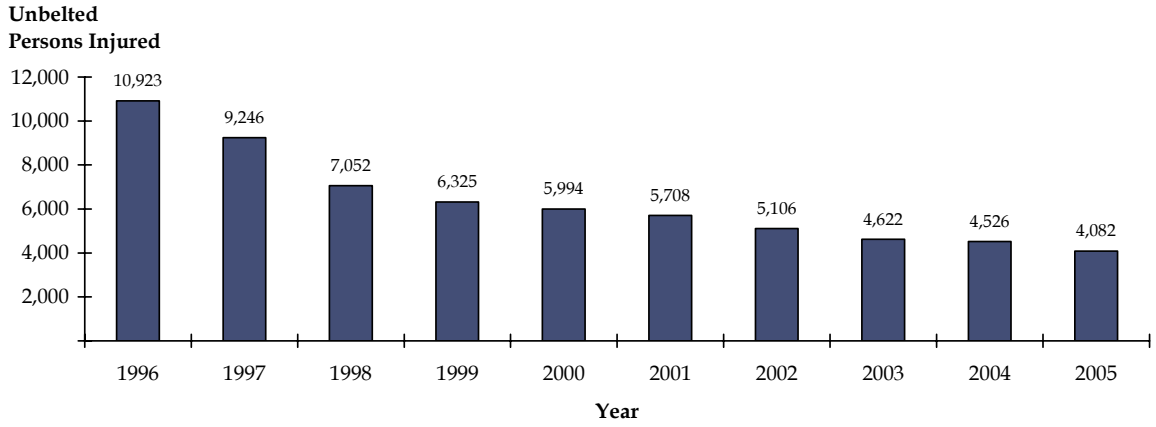


Figure 23. Unrestrained Injuries



Objectives

- Increase safety belt use from 91.1 percent in 2005 to 95 percent or greater in 2010 (a four percent increase).
- Reduce annual unrestrained fatalities from 181 in 2005 to fewer than 130 in 2010 (a 28 percent reduction).
- Reduce annual unrestrained injuries from 4,082 in 2005 to fewer than 3,000 in 2010 (a 27 percent reduction).

Priority Strategies

- Develop an incentive/recognition program for law enforcement efforts.
- Conduct an enforcement program that targets pickup truck drivers and passengers.
- Conduct sustained high-visibility enforcement initiatives.
- Continue current best practice enforcement and education programs(e.g.., Chiefs' Challenge, Click It or Ticket).
- Provide more paid media in highly populated metropolitan areas.
- Conduct outreach to teens.

■ Emphasis Area #5 – Improve Driver Competency

Ignorance of and inappropriate attitudes about traffic laws and traffic safety issues by drivers are commonplace. Although these are difficult to quantify, it is clear that many drivers fail to understand the seriousness and potential adverse consequences of unsafe driving behavior. To improve driver competency throughout the state, the SHSP focuses on increasing the safe driving behavior of young drivers, older drivers, and motorcyclists, reducing distracted driving, and increasing truck and bus safety.

Maryland Data

Figure 24 shows the number of people killed in crashes involving distracted driving, older persons (65 and older), younger persons (16 to 20), motorcycles, and heavy trucks. Figure 25 shows the number of people injured in crashes involving distracted driving, older persons (65 and older), younger persons (16 to 20), motorcycles, and heavy trucks.

Figure 24. Fatalities Involving Distracted Driving, Older Persons, Young Persons, Motorcycles and Heavy Trucks

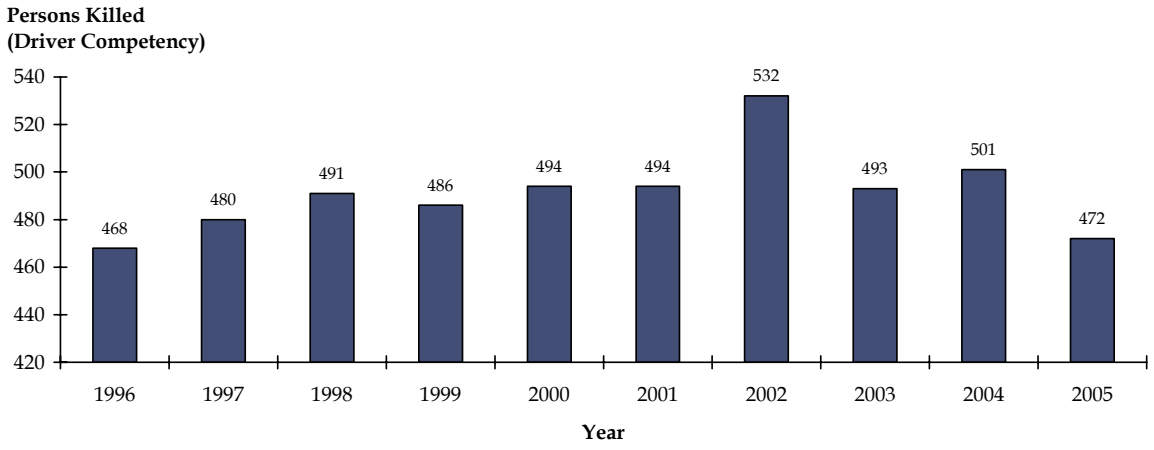
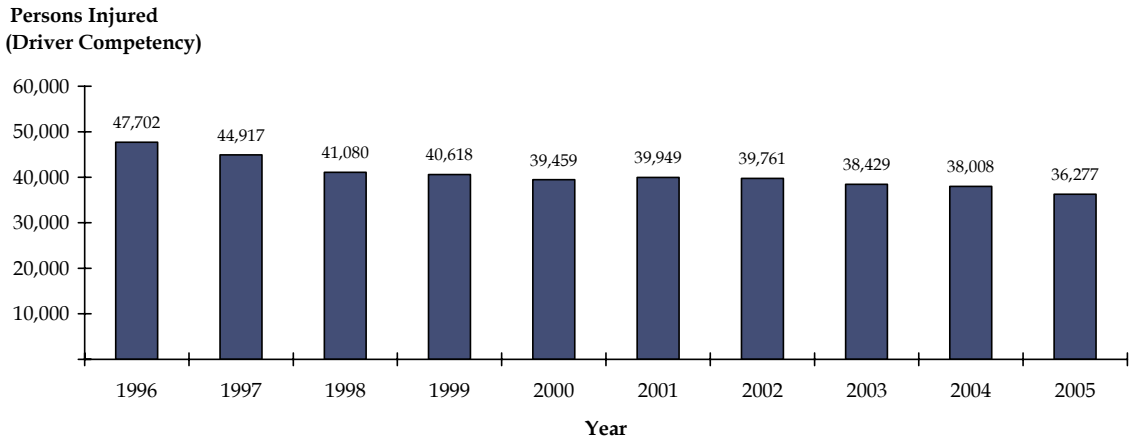


Figure 25. Injuries Involving Distracted Driving, Older Persons, Young Persons, Motorcycles and Heavy Trucks



Priority Strategies

During work sessions involving the teams that make up the Improve Driver Competency Emphasis Area two cross-cutting strategies were identified. They are:

- Develop and implement a public awareness and education campaign aimed at distracted driving, older drivers, young drivers, and motorcyclists to encourage responsible driving and riding.
- 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.

■ Emphasis Area #5a – Reduce Distracted Driving

Driving is a risky activity. Research indicates that in more than 50 percent of all crashes, driver inattention was a contributing factor. Cell phones, DVD players, radios, passengers, and packages are distracting and can prevent the driver from paying proper attention to the task at hand. Driver instructors estimate that a driver makes 200 decisions for every mile of driving. For experienced drivers these are often automatic. However, if a driver is mentally solving business or family problems, talking on the phone, reading something, or looking at a map, the total cognitive workload adds up.

Maryland Data

One of the strategies developed by the emphasis area team, after their data review, was a need for a definition of distracted driving that would result in more accurate reporting of this behavior. Fatalities (Figure 26) dropped by 61 percent from 187 in 2004 to 73 in 2005 and injuries (Figure 27) decreased by 34 percent from 26,523 in 2004 to 17,405 in 2005 due mainly to changes in police reporting practices.

Figure 26. Distracted Driving Fatalities

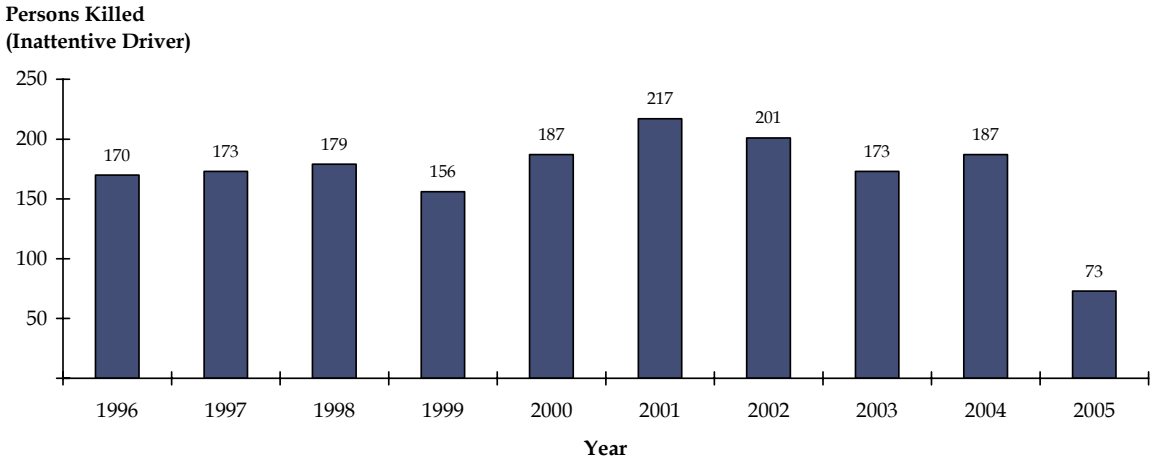
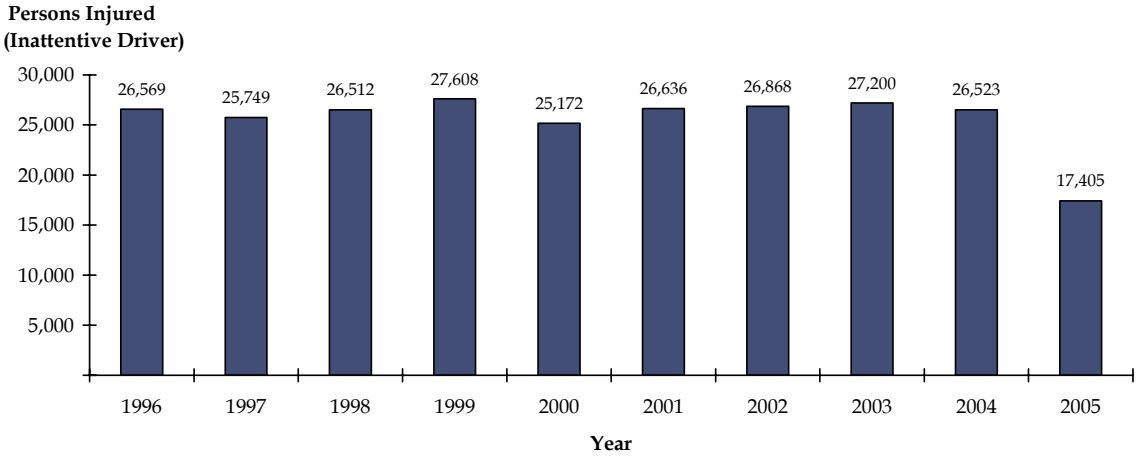


Figure 27. Distracted Driving Injuries



Objectives

- Reduce annual distracted driving fatalities from 73 fatalities in 2005 to 64 or fewer in 2010 (a 12 percent reduction).
- Reduce annual distracted driving injuries from 17,405 in 2005 to 15,800 or fewer in 2010 (a nine percent reduction).

Priority Strategies

- Develop a definition of distracted driving that results in more accurate reporting of such behavior.
- Reduce roadside distractions.
- Pass and enforce legislation that specifically penalizes distracted driving, including making distracted driving a subsection of negligent driving.
- Increase 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.

■ Emphasis Area #5b – Enhance Safe Driving for Older Drivers

The driving population, as with the population in general, continues to age. Nationally it is estimated that the number of older drivers increased nearly 50 percent over a recent 10-year period. As the huge "baby boomer" population ages, it will swell the ranks of older drivers. As with younger drivers, a distinct set of safety issues are associated with these drivers. These safety issues need to be addressed in order to stem the growth in the numbers of these drivers involved in crashes. As individuals age, cognition and processing slows and cognitive skills and visual ability diminish to the point where they become unsafe drivers well before death occurs. Drivers 65 years and older, who comprise 13 percent of all registered drivers in Maryland, are nearly 20 percent more likely to be deemed at fault in crashes than are younger drivers. Older persons are also more likely than their younger counterparts to be killed or seriously injured in a crash.

Maryland Data

Maryland and national data indicate that due to continuing demographic trends, the number of older drivers will continue to grow and that the number of female older drivers will grow faster than the number of male older drivers. Based on research and focus groups, older drivers tend to stay away from high-speed roads. Data from the MVA indicate that seniors tend to avoid left-hand turns and anecdotal information indicates that work zones pose special problems for older drivers because of the increased cognitive and visual demands required for driving in unfamiliar environments. The team discussed these issues and determined that the continuing decline in fatalities (Figure 28), which show a 16 percent decrease from 1999 to 2005, and injuries (Figure 29) that indicate a 19 percent decrease from 1996 to 2005, should be expanded over the next five years.

Figure 28. Fatalities Involving Drivers 65 Years of Age or Older

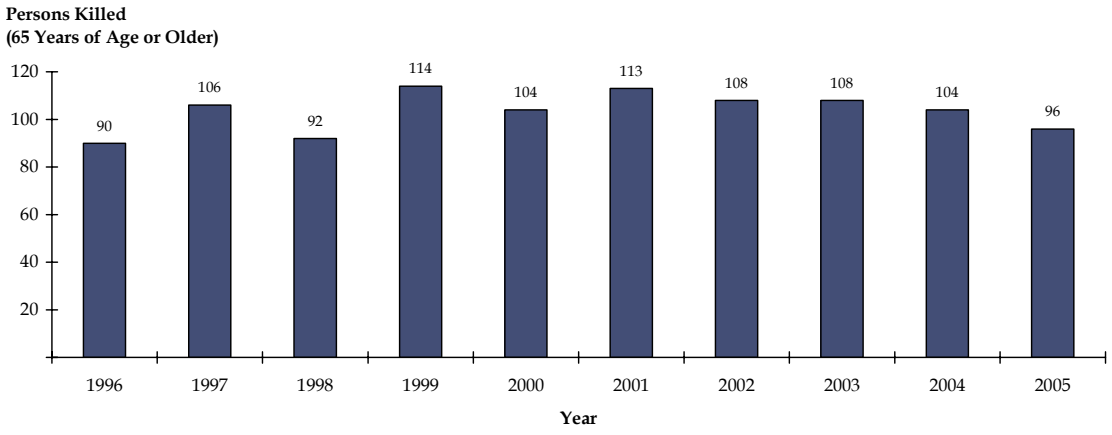
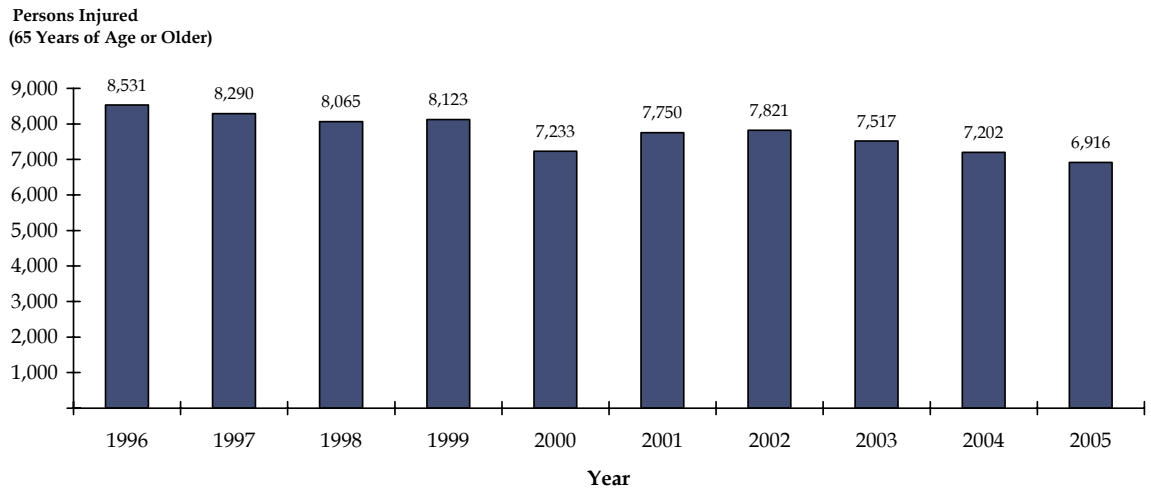


Figure 29. Injuries Involving Drivers 65 Years of Age or Older



Objectives

- Reduce annual fatalities involving drivers 65 years or older from 96 fatalities in 2005 to fewer than 85 in 2010 (an 11 percent reduction).
- Reduce annual injuries involving drivers 65 years or older from 6,916 in 2005 to fewer than 5,100 in 2010 (a 26 percent reduction).

Priority Strategies

- Develop effective methods to identify at risk older drivers.
- Develop enhanced training for EMS personnel on the proper assessment and triage of older persons at crash scenes.
- Incorporate the FHWA Older Driver and Pedestrian Guidelines into the Maryland design guidelines.

■ Emphasis Area #5c – Develop Safe Young Drivers

Newly licensed drivers with less than a year's experience, particularly young people, have the highest crash rate of any driver group. Young drivers between the ages of 16 and 20 years have the highest fatality rate per mile driven. A lack of driving experience, immaturity, youthful drinking, and a propensity for risk taking contribute to the higher crash statistics for young drivers. In light of these facts, it is necessary to apply special measures tailored to these drivers.

Maryland Data

A review of the data showed a decline in young driver fatalities (Figure 30) from a high of 156 in 1999 to 113 in 2005 and a 21 percent decrease in injuries (Figure 31) from 16,888 in 1996 to 13,281 in 2005. The Develop Safe Young Drivers Emphasis Area team want these trends to continue and developed objectives and strategies to accomplish that goal as well as strategies that focus on some of the contributing factors (e.g., a majority of young driver crashes are rear end collisions and the major contributing factor is failure to pay attention).

Figure 30. Fatalities Involving Young Drivers, 16 to 20

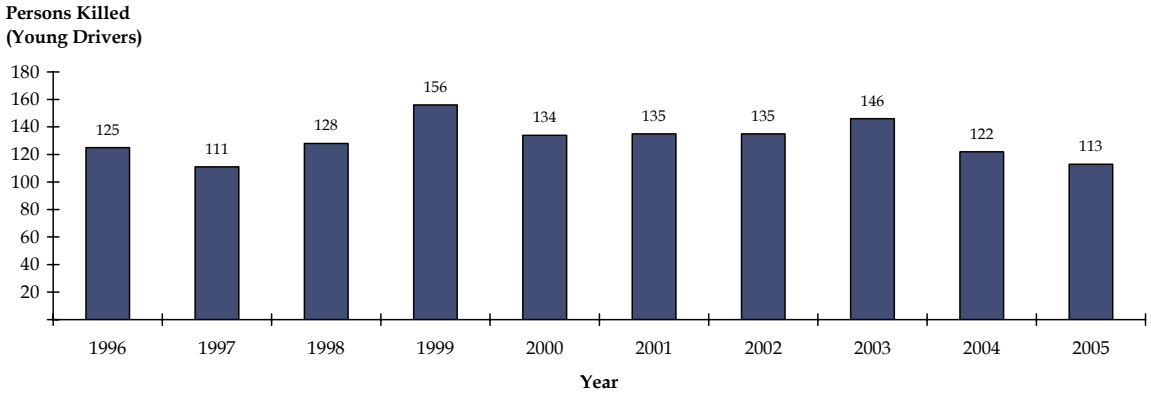
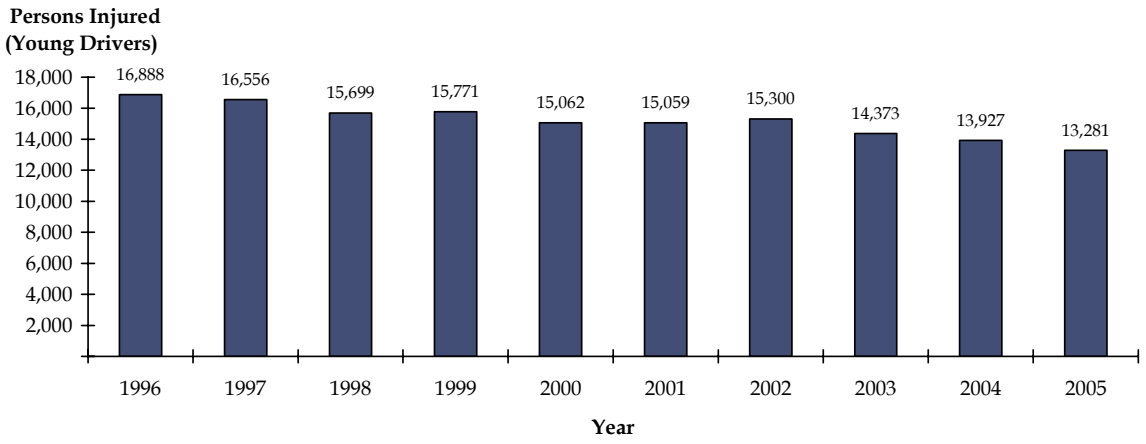


Figure 31. Injuries Involving Young Drivers, 16 to 20



Objectives

- Reduce annual fatalities involving young drivers by from 113 in 2005 to 93 or fewer in 2010 (an 18 percent reduction).
- Reduce annual injuries involving young drivers from 13,281 in 2005 to fewer than 8,000 in 2010 (a 40 percent reduction).
- Reduce annual fatalities involving at-fault young drivers from 73 in 2005 to 44 or fewer in 2010 (a 40 percent reduction).

Priority Strategies

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

■ Emphasis Area #5d – Improve Motorcycle Safety

Although motorcycle crashes and fatalities decreased substantially following the 1992 reimposition of Maryland's helmet use law for adults, fatalities have increased in eight of the last 10 years. Over 90 percent of crash-involved motorcyclists are male and over 60 percent are between the ages of 21 and 39 years. Crashes are evenly divided between those involving only the motorcycle and those involving another motor vehicle. Of those involving another vehicle, rear-end and right-angle collisions were the most frequent. Inattention leads the list of contributing circumstances. Drivers of other vehicles that collide with motorcycles frequently report not observing the motorcycle prior to the collision. In spite of the statewide helmet law, less than two-thirds of motorcyclists involved in crashes were wearing a helmet.

Maryland Data

A review of the data show a dramatic increase in both motorcyclist fatalities (Figure 32) and motorcyclist injuries (Figure 33). Since 1996, fatalities have increased 69 percent and injuries have increased 49 percent prompting the emphasis area team to develop objectives and strategies to reduce this trend and to identify and remedy the causes of these crashes.

Figure 32. Motorcyclist Fatalities

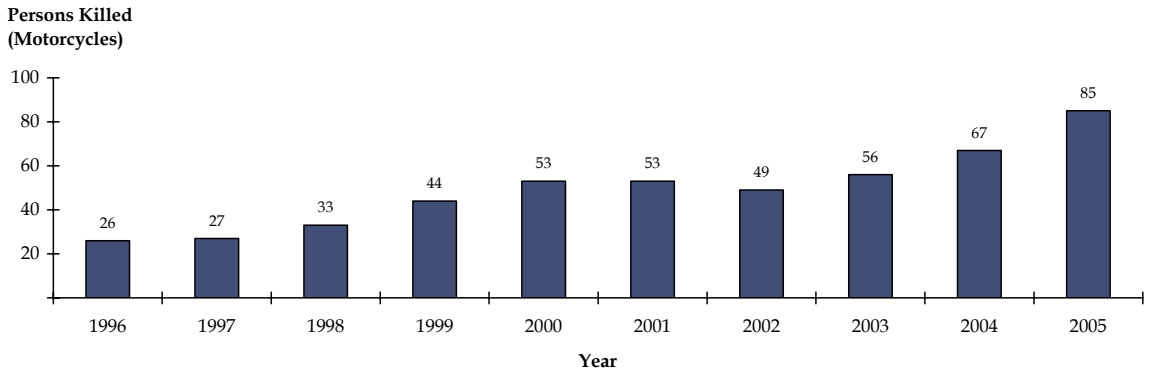
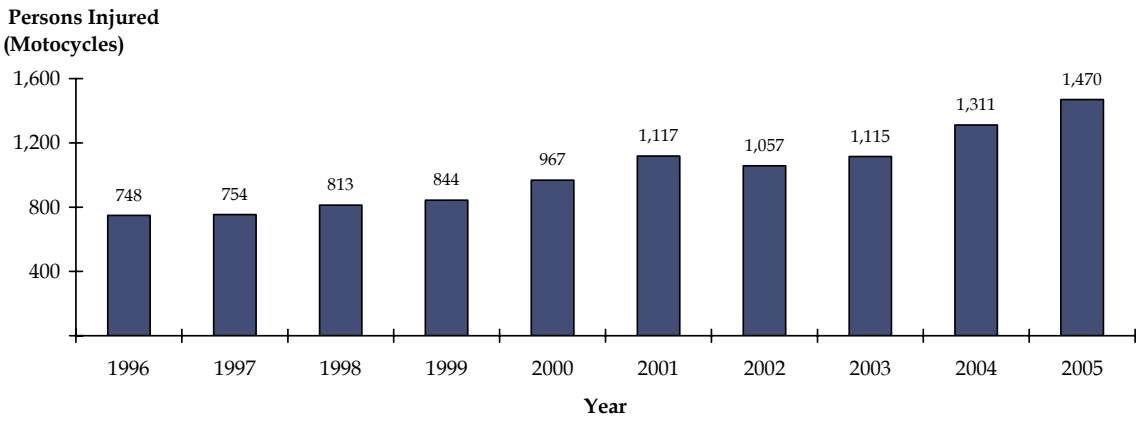


Figure 33. Motorcyclist Injuries



Objectives

- Reduce annual motorcyclist fatalities from 88 in 2005 to 65 or fewer in 2010 (a 26 percent reduction).
- Reduce annual motorcyclist injuries from 1,599 in 2005 to fewer than 1,350 in 2010 (a 16 percent reduction).

Priority Strategies

- Develop effective approaches for law enforcement and for the judicial system to address the lawful operation of motorcycles and other motor vehicles.
- Create and administer a comprehensive training program that provides formal and informal learning opportunities for new, existing, and returning motorcycle drivers.
- Implement motorcycle licensing procedures that effectively evaluate motorcycle operator entry level knowledge and skills.

■ Emphasis Area #5e – Make Truck and Bus Travel Safer

Heavy trucks and buses, which comprise 11 to 12 percent of motor vehicle travel in Maryland, comprise fewer than five percent of the vehicles involved in reported crashes and eight percent of the vehicles involved in fatal crashes. However, when heavy trucks are involved, crashes typically are more severe. In multiple vehicle crashes, the occupants of other vehicles are more often the ones killed. Major concerns include driver fatigue, the safety condition of these large vehicles, particularly braking systems, steering systems and tires, and the failure of other drivers to recognize and accommodate the unique operating characteristics of these vehicles.

Maryland Data

A review of the data show the average number of fatalities (Figure 34) over the last ten years is 80, a figure that has been exceeded in four of those years. The emphasis area team wants to reverse a general upward trend and have proposed to decrease annual fatalities in 2010 to 11 percent lower than the 2001–2005 average, which represents a four percent reduction from 2005 fatalities. Injuries (Figure 35) have remained fairly constant at the 3,200 level during the same time frame, a trend the team also wants to change.

Figure 34. Fatalities Involving Heavy Trucks and Buses

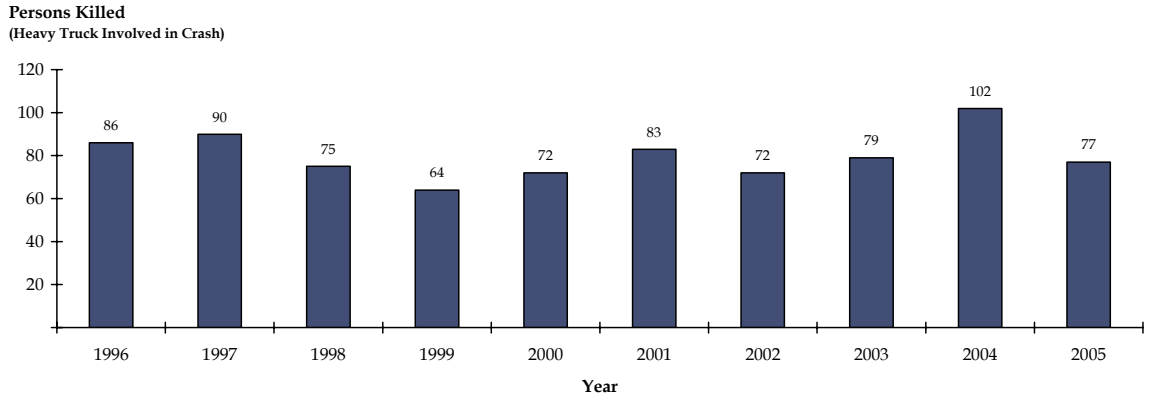
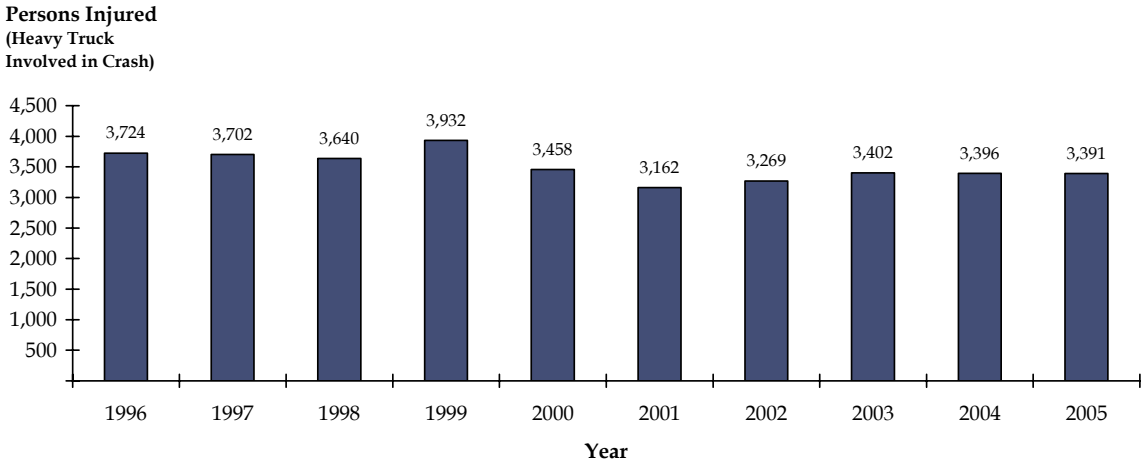


Figure 35. Injuries Involving Heavy Trucks and Buses



Objectives

- Reduce annual fatalities involving heavy trucks and buses from 77 in 2005 to 74 or fewer by 2010 (a four percent reduction).
- Reduce annual injuries involving heavy trucks and buses from 3,391 in 2005 to fewer than 3,000 by 2010 (an 11 percent reduction).

Priority Strategies

- Expand awareness and understanding of the "No Zone" among the general public and law enforcement personnel, especially at the local level.
- Reduce the need for trucks to park on high-speed highways.
- Increase in-terminal truck enforcement activities and conduct more enforcement in high-crash locations.
- Establish virtual weigh stations.
- Educate the judiciary and the legislature on the safety risks associated with trucks and buses.
- Enact legislation to enable the use of innovative enforcement tools, especially in areas where traditional enforcement techniques are difficult to perform due to the lack of shoulder space and high-traffic volumes.

■ Emphasis Area #6 – Curb Aggressive Driving

Aggressive driving, as the term generally is understood, often manifests itself in coincidental, discourteous, and unsafe driving behavior. Although aggressive driving is not new, its prevalence and threat to safety on our highways has increased dramatically during recent years. Special efforts to curb such behavior are warranted. Because speed is often associated with aggressive driving, it is included in this emphasis area.

Maryland Data

Aggressive Driving

While the number of aggressive driving fatalities (Figure 36) has decreased from a high of 77 in 1999 to 62 in 2005; aggressive driving injuries (Figure 37), fatalities involving excessive speed (Figure 38) and injuries involving excessive speed (Figure 39) have increased over the last 10 years. These data prompted the emphasis area team to propose a five percent reduction over the next five years in aggressive driving fatalities and injuries and in fatalities and injuries involving excessive speed.

Figure 36. Aggressive Driving Fatalities

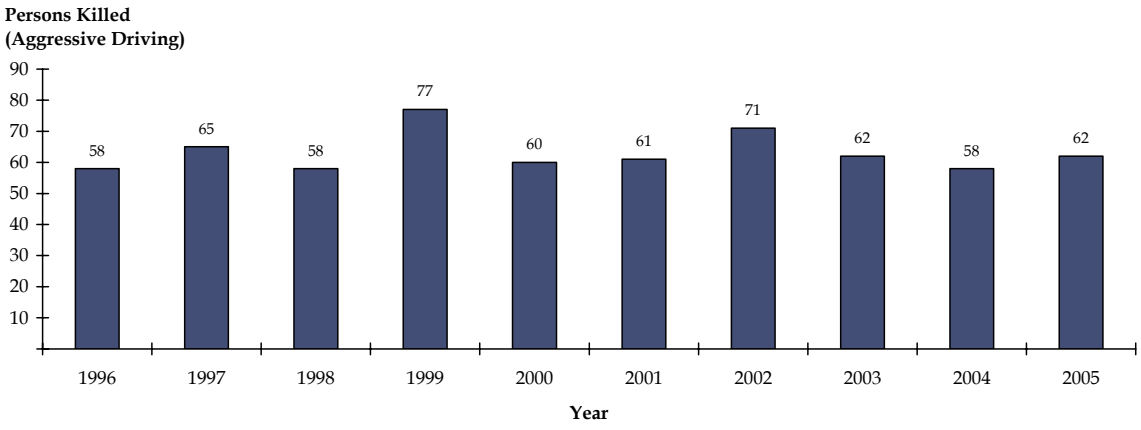
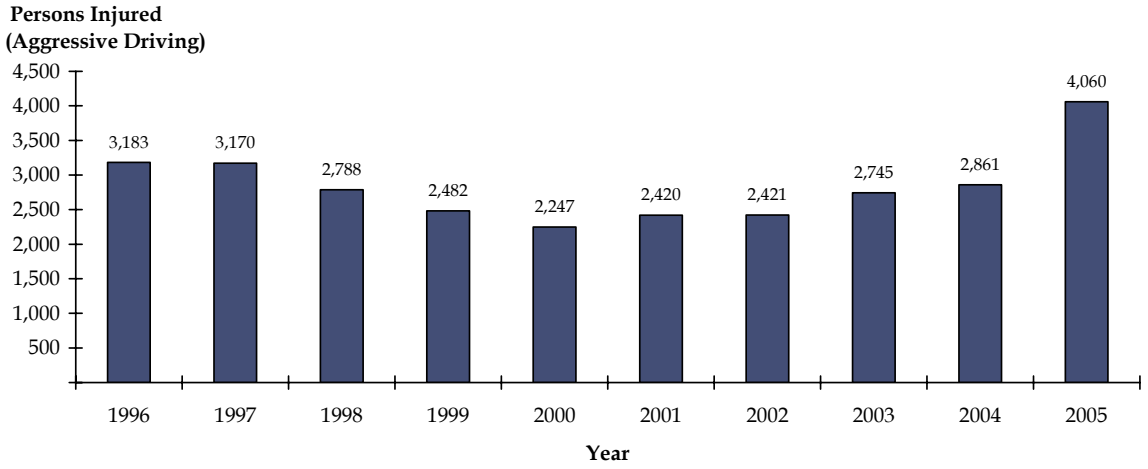


Figure 37. Aggressive Driving Injuries



Speed Involved

Figure 37 shows the number of fatalities involving excessive speed has increased from 136 in 1996 to over 170 in 2005. Figure 38 shows the number of injuries involving excessive speed has increased from 9,710 in 2000 to over 11,000 in 2005.

Figure 38. Fatalities Involving Excessive Speed

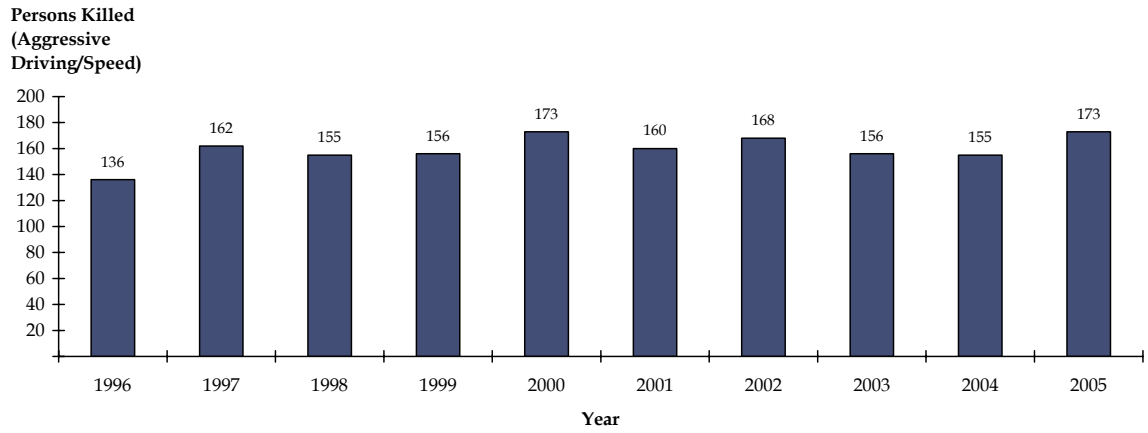
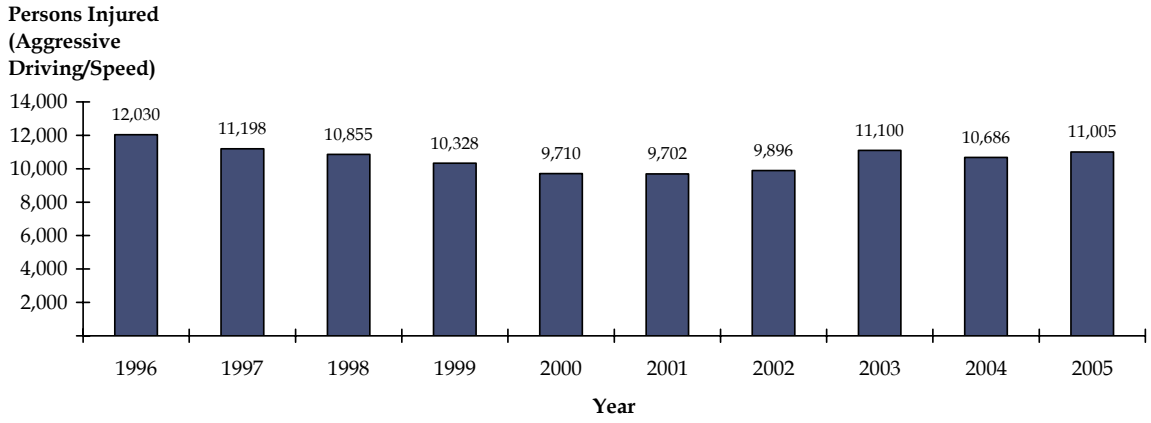


Figure 39. Injuries Involving Excessive Speed



Objectives

- Reduce annual aggressive driving fatalities from 62 in 2005 to 59 or fewer in 2010 (a five percent reduction).
- Reduce annual aggressive driving injuries from 4,060 in 2005 to fewer than 3,800 in 2010 (a six percent reduction).
- Reduce annual fatalities involving excessive speed from 173 in 2005 to fewer than 164 in 2010 (a five percent reduction).
- Reduce annual injuries involving excessive speed from 11,005 in 2005 to fewer than 10,400 in 2010 (a five percent reduction).

Priority Strategies

- Change the driving culture by conducting and supporting public education and outreach activities that elevate the awareness of the dangers of aggressive driving.
- Educate the judiciary and elected officials on the risk associated with aggressive driving.
- Communicate the factors associated with aggressive driving to the transportation engineering and planning communities.
- Increase aggressive driving enforcement.

■ Emphasis Area #7 – Improve Emergency Response System

EMS is widely regarded as including the full spectrum of emergency care, including recognition of the emergency, telephone access to the system, provision of prehospital care, and care in the hospital and rehabilitation. The more traditional definition of EMS is limited to prehospital health care for patients with real or perceived emergencies from the point of the emergency telephone access until arrival and transfer of care to the hospital. Given that crashes will continue to occur, it is important to understand how best to care for the crash victims. The minutes directly following traumatic injury are often critical to saving the victim's life or minimizing the long-term effects of injury. In addition, ambulances and fire trucks responding to emergencies can be involved in crashes resulting in death and serious injury. It also is important to manage a highway incident so as not to endanger others at or approaching the scene. Maryland is fortunate to have one of the premier statewide EMS and trauma systems that includes the world renowned R. Adams Crowley Shock Trauma Center at the University of Maryland Medical Center in Baltimore.

Maryland Data

Figure 40 shows the number of fatalities that have occurred statewide and Figure 41 shows the number of statewide incapacitating injuries. These are the victims that could benefit from improved emergency response.

Figure 40. Statewide Fatalities

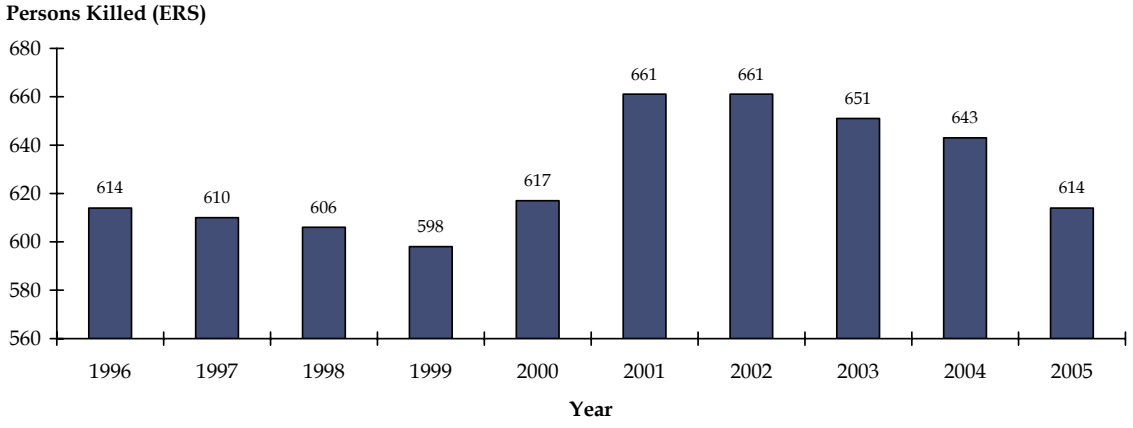
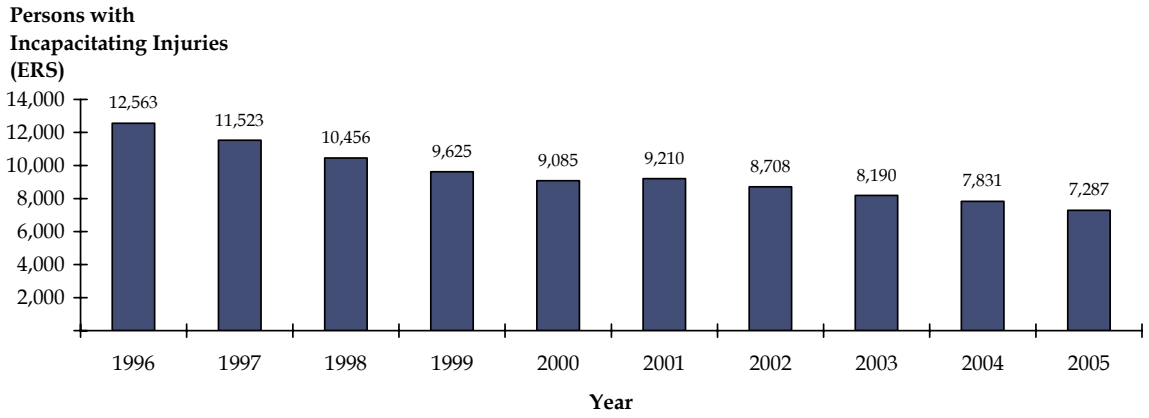


Figure 41. Statewide Incapacitating Injuries



Objectives

- Reduce crash injury mortality measure by 10 percent or greater by 2010.
- Reduce the annual number of fire and EMS vehicles involved in crashes from 347 in 2005 to fewer than 260 in 2010 (a 25 percent reduction).

Priority Strategies

- Improve electronic data and voice communications for emergency response.
- Improve resource deployment for EMS response.
- Develop a safer, faster EMS response.
- Improve crash scene safety.
- Improve patient care.

Appendices

EXECUTIVE COMMITTEE

Maryland Department of Transportation	Secretary Robert L. Flanagan*
Maryland Department of State Police	Secretary Thomas E. Hutchins*
Maryland Department of Aging	Secretary Jean W. Roesser
Maryland Department of Education	Secretary Nancy S. Grasmick
Maryland Department of Health & Mental Hygiene	Secretary S. Anthony McCann
Maryland Department of Juvenile Services	Secretary Kenneth C. Montague, Jr.
Maryland Department of Natural Resources	Secretary C. Ronald Franks
Maryland Department of Public Safety & Correctional Services	Secretary Mary Ann Saar
Maryland Department of the Environment	Secretary Kendl P. Philbrick
Maryland District Courts	Chief Judge Ben C. Clyburn
Maryland Institute for Emergency Medical Services	Dr. Robert Bass
Maryland Insurance Administration	R. Steven Orr
Maryland Motor Vehicle Administration	John Kuo
Maryland Office of Homeland Security	Dennis R. Schrader
Maryland Office of the Treasury	Kay Senator
Maryland State Highway Administration	Neil J. Pedersen
Maryland State Highway Administration	Tom Hicks
Maryland State Highway Administration	Valerie Burnette Edgar
Maryland Transportation Authority	Trent R. Kittleman
City of Baltimore	Colonel Al Foxx
Federal Highway Administration	Nelson Castellanos
Federal Motor Carrier Safety Administration	Barbara Webb-Edwards
Maryland Association of Counties	George Cardwell
Maryland Motor Trucks Association	Anne Ferro
Maryland Municipal League	Dennis Brady
National Highway Traffic Safety Administration Mid-Atlantic Region	Dr. Elizabeth A. Baker

* *Indicates Committee Co-chair*

STEERING COMMITTEE MEMBERS

Maryland Highway Safety Office	Vern Betkey Chair
American Traffic Safety Services Association	Drew Kramer *
Baltimore City CTSP	Jewell Johnson *
Baltimore Metropolitan Council	Bala Akundi *
Chesapeake Region Safety Council	David Madaras *
City of Baltimore Department of Transportation	Mike Rice
Federal Highway Administration	Kwame Arhin
Federal Highway Administration	Esther Strawder *
Federal Motor Carrier Safety Administration	Lee Zimmerman
Maryland Committee for Safety Belt Use	Barbara Beckett
Maryland Department of Education	Edward Beck
Maryland Department of Health & Mental Hygiene	Joyce Dantzler
Maryland Department of Health & Mental Hygiene	Wayne Kempse
Maryland Department of Juvenile Justice	Stephen Moyer
Maryland Department of Labor and Licensing – OSHA	Mischelle Vanruesel
Maryland Department of Natural Resources	Jordan Loran
Maryland Department of Transportation	Paul Oberle
Maryland District Courts	Diane Pawlowicz
Calvert County Traffic Safety Council	Debbie Jennings *
Baltimore County Police Department	Ernie Lehr
Maryland Institute for Emergency Medical Services	James Brown *
Maryland Insurance Administration	Pamela Randi Johnson *
Maryland Motor Truck Association	Craig Talbott *
Maryland Motor Vehicle Administration	Andrew Krajewski *
Maryland Motor Vehicle Administration	Dr. Carl Soderstrom *
Maryland Municipal League	Ron Goff
Maryland Operation Lifesavers	Richard Ratcliffe
Maryland Sheriff's Association	Donald Belfield
Maryland Sheriff's Association	Steven Burrows
Maryland State Police	A.J. McAndrew *
Maryland Traffic Engineers Council	James Schroll
Maryland Transportation Authority	Laureen Billmeyer
Metropolitan Washington Council of Governments	Andrew Meese *
National Highway Traffic Safety Administration Mid-Atlantic Region	Stephanie Hancock *
National Study Center, University of Maryland at Baltimore	Cynthia Burch
National Study Center, University of Maryland at Baltimore	Tim Kerns
Office of the State Treasurer	Sharon Barry
State Highway Administration	John Concannon
State Highway Administration	Robert Herstein
State Highway Administration	Erin Kuhn *
State Highway Administration	David Malkowski
State Highway Administration	Lora Rakowski
State Highway Administration	Catherine Rice

State Highway Administration	John Rotz *
State Highway Administration	Lee Starkloff *
University of Maryland at College Park	Kenneth Beck
Washington Regional Alcohol Program (WRAP)	Kurt Erickson

** Indicates an individual that served as a leader or co-leader of an Emphasis Area Team.*

MANAGEMENT TEAM

Maryland Highway Safety Office, Office of Traffic and Safety, State Highway Administration	Vern Betkey Project Manager
Maryland Office of Traffic and Safety, State Highway Administration	Ron Lipps
Maryland Highway Safety Office, Office of Traffic and Safety, State Highway Administration	Fran Counihan
Office of Planning and Preliminary Engineering, State Highway Administration	Mary Deitz

Consultants

Cambridge Systematics	Robert Padgette
Cambridge Systematics	Susan Herbel
Cambridge Systematics	Patricia Hendren
Cambridge Systematics	Pam Beer
Cambridge Systematics	Jon Schermann

Strategic Highway Safety Plan Executive Committee

MEMORANDUM OF UNDERSTANDING

by and between

MEMBER ORGANIZATION OF THE
MARYLAND STRATEGIC HIGHWAY SAFETY PLAN
EXECUTIVE COMMITTEE

THIS MEMORANDUM OF UNDERSTANDING (MOU) executed in twenty-one (21) originals and made effective this 12th day of July 2006, by and among representatives from each of the following member agencies and associations, hereinafter referred to as the Strategic Highway Safety Plan (SHSP) Executive Committee: City of Baltimore, Federal Highway Administration (FHWA), Federal Motor Carrier Safety Administration (FMCSA), Governor's Office of Homeland Security (GOHS), Maryland Association of Counties (MACo), Maryland Department of Aging (MDOA), Maryland Department of Education (MSDE), Maryland Department of the Environment (MDE), Maryland Department of Health and Mental Hygiene (DHMH), Maryland Department of Juvenile Services (DJS), Maryland Department of Labor and Licensing (MDLL), Maryland Department of Natural Resources (DNR), Maryland Department of Public Safety and Correctional Services (DPSCS), Maryland Department of State Police (MSP), Maryland Department of Transportation (MDOT), Maryland Institute for Emergency Medical Services Systems (MIEMSS), Maryland Insurance Administration, Maryland Motor Truck Association (MMTA), Maryland Motor Vehicle Administration (MVA), Maryland Municipal League (MML), Maryland State Highway Administration (SHA), Maryland State Treasurer's Office (STO), Maryland Transportation Authority (MdTA) and the National Highway Traffic Safety Administration (NHTSA).

WHEREAS, Motor vehicle crashes in the State of Maryland over the past five years total 517,250 resulting in 3,231 deaths and 287,743 associated injuries with a total economic impact of more than $44 billion, and

WHEREAS, this highway carnage, human suffering, and economic loss is unacceptable to the citizens of Maryland, and

WHEREAS, the State of Maryland will undertake the process of developing a Strategic Highway Safety Plan (SHSP) that will include goals and strategies that federal, state and local officials and private sector organizations can stand behind to reduce motor vehicle crashes, deaths, and associated injuries on Maryland highways, and

WHEREAS, the impetus for the plan is the number of crashes, deaths, and associated injuries, the new Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) law requires each state to develop an SHSP that is based on accurate and timely safety data, consultation with safety stakeholders, and performance-based goals that address infrastructure and behavioral safety problems on all public roads and provides sanctions failing to do so, and

WHEREAS, states without an SHSP by September 30, 2006, may only use their Highway Safety Improvement Program funds for eligible railway-highway crossings or hazard elimination projects, and

WHEREAS, states without an by SHSP September 30, 2006, will have all subsequent Highway Safety Improvement Program funds frozen at 2007 levels and may only use their Highway Safety Improvement Program funds for eligible railway-highway crossings or hazard elimination projects, and

WHEREAS, states with an approved SHSP may obligate Highway Safety Improvement Program funds for intersection improvements, roadway and structure improvements, roadside improvements, pedestrian and bicycle improvements and other improvements such as improving safety conscious planning, the collection and analysis of crash data on any public road or any publicly owned bicycle/pedestrian pathway, and

WHEREAS, states with an approved SHSP are eligible to spend up to 10 percent of Highway Safety Improvement Program funds for other safety projects such as education, enforcement and emergency medical services, and

WHEREAS, SAFETEA-LU recommends involving a broad, diverse group of stakeholders, and

THEREFORE, IT IS AGREED THAT, the Maryland Strategic Highway Safety Plan Executive Committee, an interagency, intergovernmental committee is established with a membership from the following:

City of Baltimore	
Federal Highway Administration	(FHWA)
Federal Motor Carrier Safety Administration	(FMCSA)
Governor's Office of Homeland Security	(GOHS)
Maryland Association of Counties	(MACo)
Maryland Department of Aging	(MDOA)
Maryland Department of Education	(MSDE)
Maryland Department of the Environment	(MDE)
Maryland Department of Health and Mental Hygiene	(DHMH)
Maryland Department of Juvenile Services	(DJS)
Maryland Department of Labor and Licensing	(MDLL)
Maryland Department of Natural Resources	(DNR)
Maryland Department of Public Safety and Correctional Services	(DPSCS)
Maryland Department of State Police	(MSP)

Maryland Department of Transportation	(MDOT)
Maryland Institute for Emergency Medical Services Systems	(MIEMSS)
Maryland Insurance Administration	
Maryland Motor Truck Association	(MMTA)
Maryland Motor Vehicle Administration	(MVA)
Maryland Municipal League	(MML)
Maryland State Highway Administration	(SHA)
Maryland State Treasurer's Office	(STO)
Maryland Transportation Authority	(MdTA)
National Highway Traffic Safety Administration	(NHTSA)

Additionally, the SHSP Executive Committee shall utilize the Maryland Judiciary - District Court in an advisory role, and

WHOSE membership shall meet on an as needed basis, and

WHOSE responsibilities related to the state's SHSP will include, but not be limited to:

- Oversee the strategic highway safety planning process
- Select the final priority emphasis areas that will serve as the goals of the Strategic Highway Safety Plan
- Identify a representative from each Executive Committee agency or organization who will serve on the Strategic Highway Safety Plan Steering Committee
- Request appropriate individuals in each agency/organization to attend the Strategic Highway Safety Summit
- Consider appropriate elements of the strategic highway safety plan in their agency's business plan.
- Serve as champions for the goals, objectives and strategies in Maryland's Strategic Highway Safety Plan, and

WHOSE administrative support for committee activities shall be provided by the SHA/MHSO, and

WHOSE reporting, research, development, monitoring and evaluation support for committee activities shall be provided by the SHSP Steering Committee, and

WHOSE recommendations, based on a majority vote of SHSP Steering Committee members, will be presented to the SHSP Executive Committee to be composed of the top officials of the agencies and organizations who have signed this MOU, and following the approval of these recommendations by the SHSP Executive Committee, will be implemented by the member agencies and organizations, subject to appropriations and regulations, and that

AGREEMENT to the nature and intent of this MOU shall be demonstrated by a representative signature from each of the following member agencies and organizations and each person signing this MOU agrees to make every reasonable good faith effort to contribute to and see through to successful completion the projects identified by the SHSP:

THE TERMS OF THIS AGREEMENT shall remain in effect, as written, until a majority of member agencies mutually agree in writing to change terms or terminate the entire Agreement.

_____	_____
Signature	Name - Print
_____	_____
Agency/Organization	Title
_____	
Date	