**Acknowledgments**

Any loss or injury on our roadways is one too many. The Massachusetts’ Highway Safety Performance Plan recognizes that traffic crashes are preventable, and that Massachusetts is committed to reducing the number of fatalities, injuries, and economic loss resulting from these crashes.

I acknowledge the contributions and thank the staff of the Governor’s Highway Safety Bureau, a program of the Executive Office of Public Safety, for their efforts in the development and implementation of the Highway Safety Performance Plan:

Jessica Hanley, Director

Brook Chipman, Senior Program Manager

Caroline Hymoff, Senior Program Manager Jenny Barron, Program Coordinator Rebecca Donatelli, Program Coordinator Denise Veiga,

Fiscal Specialist

Susan Burgess-Chin, Fiscal Specialist

The hard work and dedication by the Governor’s Highway Safety Bureau staff to the issues of highway safety have resulted in safer roadways in Massachusetts, including a three-year increase in safety belt use.

Edward A. Flynn
Secretary
Executive Office of Public Safety
TABLE OF CONTENTS

ACKNOWLEDGMENTS

HIGHWAY SAFETY PLANNING PROCESS CALENDAR

ORGANIZATIONAL CHART

MISSION STATEMENT

EXECUTIVE SUMMARY

HIGHWAY SAFETY PROBLEM IDENTIFICATION
Problem Identification Process
Data for Problem Identification
Massachusetts Characteristics
Massachusetts Crash Statistics
Program Area Identification.

PROGRAM AREAS INCLUDING GOALS AND DESCRIPTIONS
I. OCCUPANT PROTECTION
II. IMPAIRED DRIVING
III. POLICE TRAFFIC SERVICES
III. SPEED
IV. SPECIAL USERS: PEDESTRIAN SAFETY, BICYCLE SAFETY,
    MOTORCYCLES, YOUNGER AND OLDER DRIVERS
V. TRAFFIC RECORDS
VI. TRAFFIC ENGINEERING
VI. PLANNING AND ADMINISTRATION

COST SUMMARY- FORM 217

STATE CERTIFICATIONS AND ASSURANCES
**HSPP Program Planning Calendar**

January  
Debrief FF05 programs with staff and review state and federal documents to set FFY06 goals.

February  
Review NHTSA regional response to the FF04 Annual Report and applicable state and federal documents, including NHTSA Assessments.

March  
Review spending patterns and revenue estimates.

April-June  
Conduct series of strategic planning/listening sessions with staff and key stakeholders to create specific plans and projects within each program area.

June -July  
Draft the Performance Plan for review and approvals.

August  
Submit the final Performance Plan to NHTSA and FHWA.

September  
Conduct Bidders Conferences and issue Requests for Responses and Applications for Grants Funding.

October  
Implement grants and contracts. Begin work on the FFY 05 Annual Report.
Massachusetts
Governor's Highway Safety Bureau

Jessica Hanley
Director, Governor's Highway Safety Bureau

- Brook Chiroman
  Senior Program Manager
- Caroline Hymoff
  Senior Program Manager
- Jenny Barron
  Program Coordinator
- Rebecca Donatelli
  Program Coordinator

- Traffic Records Coordinator TBD
- Grant Manager TBD
Mission Statement

The mission of the GHSB is to reduce fatalities, injuries, and economic losses from motor vehicle crashes on Massachusetts roadways.

Executive Summary

Within the Commonwealth of Massachusetts, the Governor’s Highway Safety Bureau (GHSB), a program of the Executive Office of Public Safety (EOPS), is the entity responsible for planning, implementing, and evaluating highway safety projects with federal funds. The GHSB also works to coordinate the efforts of federal, state, and local organizations involved in highway safety in Massachusetts.

This Massachusetts Highway Safety Performance Plan (HSPP) for Federal Fiscal Year 2006 serves as the Commonwealth of Massachusetts’s application to the National Highway Traffic Safety Administration (NHTSA) for federal funds available to it under Section 402 of the Transportation Equity Act for the 21st Century (TEA 21) and its successor the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). This HSPP also reflects programs that will be conducted with grant funds under Sections 163, 164, 405, 411, and 2003b. Other funding sources include EOPS/GHSB contracts with NHSTA for the FARS and CODES projects as well as with the Federal Highway Administration (FHWA) for the Commercial Motor Vehicle Crash Data and the Older Road Users Programs. The GHSB receives additional funding from the Office of Juvenile Justice Delinquency Prevention (OJJDP) to enforce underage drinking laws and to conduct underage alcohol education programs.

The GHSB uses strategic planning and management to accomplish its mission. The HSPP outlines the problem identification process and data sources used to identify and prioritize the highway safety program areas to be addressed by the GHSB in FFY 06. Based on this analysis, the HSPP presents in detail the highway safety program areas as well as the program management function the GHSB will use to address these challenges. For each program area there is specific problem identification information in addition to program goals, objectives and related performance measures, strategies and related tasks. Budget information as well as State Certifications and Assurances are at the end of the HSPP.

FFY 2005 HIGHLIGHTS

- The Romney Administration filed “Melanie’s Bill” to toughen the Commonwealth’s laws against repeat drunk drivers.
- Support for the passage of the primary safety belt bill may bring this critical safety legislation closer to passage during late 2005.
- The June 2005 statewide safety belt survey showed Massachusetts not only retained its highest ever one year increase in safety belt use – an 11 percent increase between 2002 and 2003 – we added an additional two percentage points to reach a rate of 65 percent.
• The GHSB worked closely with a growing number of federal, state, and local partners towards the successful implementation of its statewide Click It or Ticket (CIOT), You Drink & Drive. You Lose. (YD&DYL), and Road Respect (RR) Campaigns.

• The GHSB achieved an all time record of traffic enforcement and/or education and equipment grant awards with 265 out of 351 municipal and campus police departments participating in its CIOT, YD&DYL, and RR. An additional 69 departments signed-up to support these campaigns on a voluntary basis.

• To ensure it was adequately addressing the problem of speeding and aggressive driving on a statewide level, the GHSB expanded the Road Respect campaign initially in partnership with the State Police to include grants to 254 municipal police departments in FFY05.

• To assist its campaign efforts, the GHSB expanded its Law Enforcement Liaison (LEL) Program, selected new contractors for its paid and earned media efforts, and enhanced its impact of diverse populations. The latter effort saw our banners and literature printed in Spanish and Portuguese as well as English.

• Several new initiatives expanded the reach of our Youth Program, in particular with colleges and universities.

• To evaluate the state’s impaired driving countermeasures program, the GHSB requested and participated in the NHTSA Impaired Driving Assessment in July 2005. The Assessment findings will be reviewed with key stakeholders prior to implementation.

• To recognize state and local law enforcement traffic safety efforts and accomplishments, the GHSB initiated the first annual Massachusetts Law Enforcement Challenge. The Massachusetts State Police and the Town of Brookline achieved the honor of third highest awards in their categories in the International Association of Chiefs of Police 2005 National Challenge.

**FFY 2006 HIGHLIGHTS**

• The GHSB conducted a series of strategic planning/listening sessions with state and local law enforcement, youth-based organizations, judiciary, traffic safety advocacy groups, and other key stakeholders to assist with our development of the HSPP.

• Increasing the safety belt use rate to 67 percent by the year 2006 is a key strategy for reducing the state’s overall death and injury rate.

• The GHSB will continue to expand our partnerships with a growing number of federal, state, and local organizations toward greater implementation of its statewide CIOT, YD&DYL, and RR Campaigns.

• GHSB and MassHighway will start work on a Strategic Highway Safety Plan for Massachusetts, based on the AASHTO model, for FFY 2007.

• To assist in the campaign efforts, the GHSB will expand the Law Enforcement Liaison Program and the statewide Law Enforcement Challenge in partnership with the Massachusetts Chiefs of Police Association and the State Police.

• New initiatives will expand the reach of our Youth Program, in particular with colleges and universities.

• The GHSB will review the findings of the NHTSA Alcohol Assessment conducted in July 2005 for implementation.

• The Traffic Safety Resource Prosecutor GHSB-funded position at the Massachusetts District Attorneys Association will expand to full-time status.
HIGHWAY SAFETY PROBLEM IDENTIFICATION

Problem Identification Process

The GHSB used a variety of data sources to pinpoint areas of concern warranting attention from Massachusetts highway safety professionals in FFY 06. This process is outlined below.

1. **General Problem Identification.** This step draws on the expertise and experience of highway safety stakeholders across the Commonwealth to identify general areas of concern. Additionally, program areas identified by NHTSA and other federal agencies are considered. The areas identified in this step are then used as the basis for subsequent analyses.

2. **Selection of Program Areas.** This step uses a multi-disciplinary data analysis approach to examine crash-related data to support the information gathered in the first step. By using non-traditional data sources not specifically associated with traffic safety programming, a diverse knowledge-base is created. The latter effort supplements the understanding of each program area as a part of the larger statewide traffic safety challenge as well as quantifying a need for attention to specific problems under an area. The data sources for this step are described in Table 1.

3. **Problem Area Analysis.** During this step, analyses are conducted on available data for each program area and specific areas are identified for programming within each program area. Non-traditional data sources provide additional depth to the analysis.

4. **Determination of Goals, Objectives and Performance Measures, and Strategies and Tasks.** This step ensures the GHSB sets reasonable goals and allocates resources where they can be best applied. In addition to using the above described data and analysis, this effort requires a deep knowledge of the demographics, laws, policies, and partnering opportunities and limitations that exist in the Commonwealth.

Data for Problem Identification

The GHSB was committed to using as many data sources as feasible to prepare this HSPP. During 2005, however, the GHSB had a lengthy process to reprocure the traffic records contract. A contractor was not in place in time to provide updated data collection and analyses. This process also impacted work on the GHSB CODES grant. Yet information provided by our CODES work and from the Massachusetts Department of Public Health’s Injury Surveillance Program for last year’s HSPP was utilized for this HSPP. Table 1 outlines the types of data used, data sources, and years examined for the problem identification portions of this HSPP.

Table 1: Data used for FFY 2006 HSPP Problem Identification.

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Data Set</th>
<th>Source/Owner</th>
<th>Year(s) Examined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatality</td>
<td>Fatality Analysis Reporting System (FARS)</td>
<td>National Highway Traffic Safety Administration (NHTSA)</td>
<td>2002-2004</td>
</tr>
<tr>
<td>Crash and Injury</td>
<td>Massachusetts Crash Data System (CDS)</td>
<td>Massachusetts Registry of Motor Vehicles (RMV)</td>
<td>2002</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2003 – fatals only</td>
</tr>
<tr>
<td>Violation</td>
<td>Massachusetts citation data</td>
<td>Massachusetts RMV/Merit Rating Board</td>
<td>2002</td>
</tr>
<tr>
<td>Hospital Charges</td>
<td>Inpatient discharge data (linked to crash data through the Crash Outcome Data Evaluation)</td>
<td>Massachusetts Division of Health Care Finance and Policy</td>
<td>2000</td>
</tr>
</tbody>
</table>
**Massachusetts Characteristics**

Massachusetts is the 44th largest state with a land area of approximately 10,555 square miles and 351 cities and towns. Despite its small geographic size, Massachusetts is the 13th most populated state with a projected 2002 population of 6,427,801, resulting in a population density of approximately 820 persons per square mile of land. Massachusetts is the most populous of the six New England states. The highest concentrations of population are in the eastern third of the state. In addition to the high concentration around the state capital and most populous city in the east, Boston, smaller pockets of population density also exist around the second and third largest cities of Worcester, in the center, and Springfield in the west, respectively. Greater than 72 percent of the Massachusetts population were licensed drivers in 2002 – a total of 4,638,204 Massachusetts licensed drivers.

Seventy-six percent of the population is over 17 years compared with 74 percent nationally. Non-Caucasians account for 15.6 percent; 19.3 percent speak a foreign language other than English in the home, with 13.7 percent of the population being foreign born.

Massachusetts’ economy has become more reliant on service, academic/research, high-tech and financial sectors and much less on manufacturing. Tourism is the third largest industry, with major summer destinations on Cape Cod and the Berkshires. Over 120 public and private colleges and universities also play a significant role in the economy as well as increasing the population during the academic year.

County government is virtually non-existent. Communities are now granted the right to form their own regional compacts for sharing services. In general, at the local level, administrative and legislative powers rest with mayors and city councils, town councils and boards of selectmen.

To accommodate the travel demands of this population, Massachusetts is serviced by a roadway infrastructure consisting of over 38,400 miles of roadway, including portions of 13 Interstates with 566 miles. The major roadways are presented in Figure 1, and include Interstates 90 (the Massachusetts Turnpike), 95, 495, and 91. In 2002, motorists traveled over 500,000 million miles.

---

<table>
<thead>
<tr>
<th>System - CODES)</th>
<th>Hospital Discharge</th>
<th>Inpatient discharge data</th>
<th>DHFCP and Department of Public Health (DPH)</th>
<th>State FY 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death Certificate Information</td>
<td>Death certificate data</td>
<td>(linked to crash data through CODES)</td>
<td>Massachusetts Registry of Vital Statistics, DPH</td>
<td>2000</td>
</tr>
<tr>
<td>Safety Belt</td>
<td>Massachusetts Safety Belt Data</td>
<td>GHSB</td>
<td>2003 - 2005</td>
<td></td>
</tr>
<tr>
<td>Injury Surveillance</td>
<td>Emergency Department Injury Surveillance Data</td>
<td>DPH</td>
<td>State FY 2001</td>
<td></td>
</tr>
</tbody>
</table>
Massachusetts Crash Statistics
Historically, Massachusetts has had one of the lowest fatality crash rates in the nation. In 2002, the crash rate was 0.86 fatalities per 100 million VMT; only Vermont had a lower rate. For fatalities per 100,000 population, Massachusetts had the lowest rate in the nation at 7.35 in 2002. NHTSA has set a national goal of one fatality per 100 million VMT.

The difference between a fatality and serious injury is often the time required to receive medical attention. In Massachusetts, this time tends to be short because of the small size of the state and the high number of hospital and care facilities spread throughout the state. For these reasons, the primary measures for prioritizing programming are based on the combination of crash fatalities and incapacitating injuries and not solely on fatalities.
In 2002, 139,038 police-reported motor vehicle crashes occurred along Massachusetts roadways resulting in 459 fatalities and 5,278 incapacitating injuries. Figure 2 presents the rate of incapacitating injuries and fatalities per 100 thousand population in communities in 2002. Figure 2 shows that when accounting for varied levels of exposure, the injury crash problem is scattered throughout the Commonwealth, not just clustered around the highly populated eastern portion. This demonstrates the need for comprehensive statewide traffic safety initiatives.

Figure 2: Rate of incapacitating injury and fatalities per 100 thousand population, 2002. Additional crash and injury statistics for 2003 are summarized in Table 2 – Crash Data/Trends.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatilities (Actual)</td>
<td>440</td>
<td>444</td>
</tr>
<tr>
<td>Fatality Rate (100 million VMT)</td>
<td>0.94</td>
<td>0.92</td>
</tr>
<tr>
<td>Serious/Incapacitating Injuries (Actual)</td>
<td>4,732</td>
<td>4,960</td>
</tr>
<tr>
<td>Fatality &amp; Serious/Incapacitating Injury Rate (100 million VMT)</td>
<td>11.01</td>
<td>11.00</td>
</tr>
<tr>
<td>Fatality Rate/100K Population</td>
<td>7.20</td>
<td>7.31</td>
</tr>
<tr>
<td>Fatal &amp; Serious/Incapacitating Injury Rate/100K population</td>
<td>85.75</td>
<td>87.00</td>
</tr>
<tr>
<td>Alcohol Related Fatalities (Actual)</td>
<td>212</td>
<td>193</td>
</tr>
<tr>
<td>Proportion of Alcohol Related Fatalities</td>
<td>0.48</td>
<td>0.43</td>
</tr>
<tr>
<td>Alcohol Related Fatality Rate (100 million VMT)</td>
<td>0.45</td>
<td>0.40</td>
</tr>
<tr>
<td>Percent of Population Observed Using Safety Beltsa</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>Pedestrian and Pedalcyclist Fatalities (Actual)</td>
<td>94</td>
<td>92</td>
</tr>
<tr>
<td>Pedestrian and Pedalcyclist Fatality Rate (100 million VMT)</td>
<td>0.20</td>
<td>0.19</td>
</tr>
<tr>
<td>Pedestrian and Pedalcyclist Serious/Incapacitating Injuries (Actual)</td>
<td>374</td>
<td>370</td>
</tr>
<tr>
<td>Pedestrian and Pedalcyclist Fatality &amp; Serious/Incapacitating Injury Rate (100 million VMT)</td>
<td>1.00</td>
<td>0.96</td>
</tr>
<tr>
<td>Pedestrian and Pedalcyclist Fatality Rate (100K Population)</td>
<td>1.56</td>
<td>1.51</td>
</tr>
<tr>
<td>Pedestrian and Pedalcyclist Fatality Rate &amp; Serious/Incapacitating Injury Rate (100K population)</td>
<td>7.78</td>
<td>7.61</td>
</tr>
<tr>
<td>Motorcycle Fatalities (Actual)</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>Motorcycle Fatality Rate (100 million VMT)</td>
<td>0.06</td>
<td>0.07</td>
</tr>
<tr>
<td>Motorcycle Serious/Incapacitating Injuries (Actual)</td>
<td>213</td>
<td>170</td>
</tr>
<tr>
<td>Motorcycle Fatality &amp; Serious/Incapacitating Injury Rate (100 million VMT)</td>
<td>0.52</td>
<td>0.43</td>
</tr>
<tr>
<td>Motorcycle Fatality Rate (100K Population)</td>
<td>0.50</td>
<td>0.46</td>
</tr>
<tr>
<td>Motorcycle Fatality Rate &amp; Serious/Incapacitating Injury Rate (100K population)</td>
<td>4.03</td>
<td>3.41</td>
</tr>
<tr>
<td>Speed Fatalities (Actual)</td>
<td>92</td>
<td>103</td>
</tr>
<tr>
<td>Speed Fatality Rate (100 million VMT)</td>
<td>0.20</td>
<td>0.21</td>
</tr>
<tr>
<td>Speed Fatality Rate 100K Population</td>
<td>1.53</td>
<td>1.70</td>
</tr>
<tr>
<td>Young Drivers involved in Fatal Crashes (Actual)</td>
<td>149</td>
<td>138</td>
</tr>
<tr>
<td>Young Drivers in Fatal Crashes (100 Million VMT)</td>
<td>0.32</td>
<td>0.29</td>
</tr>
<tr>
<td>Young Drivers in Serious/Incapacitating Injury Crashes (Actual)</td>
<td>1,687</td>
<td>1,678</td>
</tr>
<tr>
<td>Young Drivers in Fatal &amp; Serious Injury Crashes (100 million VMT)</td>
<td>3.74</td>
<td>3.78</td>
</tr>
</tbody>
</table>

a Due to a mid-year change in the crash report form and the potential associated change in reporting only total crashes can be examined.
b A change in the police reported crash form occurred between 2001 and 2002. Injury crash definitions and the ability to report multiple injuries changed which does not allow a direct comparison between current and previous injury statistics.
c The observed safety belt use rate for 2004 was 67%.
d Young drivers are defined as age 16 to 24.

All Vehicle Miles Traveled (VMT) data are obtained from the Massachusetts Highway Department.
All population data are obtained from the US Census Bureau.
Some numbers reported for the 2004 Annual Report may differ slightly from the same numbers reported in previous report due to changes in data availability and data quality improvements.
Crashes Involving Incapacitating Injuries: General Characteristics

Specific characteristics for Massachusetts crashes involving an incapacitating injury were analyzed and the results, summarized in Table 3, provide a general overview of all Massachusetts crashes involving an incapacitating injury.

Table 3: Characteristics of Massachusetts crashes involving an incapacitating injury, 2002.

| Month                  | The number of crashes involving an incapacitating injury were relatively evenly distributed across months of the year. |
|                       | Each month accounted for seven to 10 percent of all crashes involving an incapacitating injury. |
|                       | May had the highest number of crashes involving an incapacitating injury while September had the lowest number of crashes involving an incapacitating injury. |
| Day of Week           | The number of crashes involving an incapacitating injury was relatively evenly distributed across days of the week, with a slightly higher number on Fridays and Saturdays. |
|                       | Each day accounted for 14 to 15 percent of all crashes involving an incapacitating injury. |
| Time of Day           | Highest number of crashes involving an incapacitating injury (20 percent) occurred between the hours of 3:00 pm and 5:59 pm. |
|                       | Lowest number of crashes (four percent) involving an incapacitating injury occurred between the hours of 3:00 am and 5:59 am. |
| Weather Condition     | Over 67 percent of crashes involving an incapacitating injury, where weather condition was reported, occurred on clear days. |
|                       | Thirteen percent occurred on days with rain, snow, sleet, or hail. |
| Light Condition       | Sixty-two percent of crashes involving an incapacitating injury, where light condition was recorded, occurred during daylight. |
|                       | Thirty-three percent occurred during darkness. |
| Traffic Control Device| Of crashes involving an incapacitating injury, where traffic control device was reported, approximately one-third occurred where there was a traffic control device. |
|                       | Forty-eight percent were at a traffic control signal and 39 percent were at a stop sign. |
| Manner of Collision   | One-third of crashes involving an incapacitating injury, where manner of collision was reported, were single vehicle crashes. |
|                       | Of those that were not single vehicle crashes, 45 percent were angle crashes and 33 percent were rear-end crashes. |
| Traffic Way           | Most crashes involving an incapacitating injury (61 percent), where traffic way descriptor was recorded, occurred on undivided two-way traffic ways. |
|                       | Thirty-four percent occurred on divided two-way traffic ways. |
| First Harmful Event   | The highest number of crashes involving an incapacitating injury (60 percent), where first harmful event was recorded, occurred in collisions with motor vehicles in traffic. |
|                       | Twenty-five percent involved a fixed object, while 12 percent involved a pedestrian, cyclist, or animal. |
| Speed Limit           | Fifty-three percent of crashes involving an incapacitating injury, where speed limit was recorded, occurred in areas where the speed limit was 30 mph or less. |
|                       | The speed limit was unknown in 28 percent of crashes involving an incapacitating injury. |
**Program Area Identification**

The GHSB closely monitors on an on-going basis national traffic safety trends to ensure its priorities are in line with NHTSA’s, unless state specific data shows the need for a different approach. Based on the above data and analyses of the highway safety challenges facing Massachusetts, as well as the more program area specific data and analyses to follow, the GHSB will prioritize its FFY 2006 work based on the following program areas:

- Occupant Protection
- Impaired Driving
- Speeding
- Other Users: Pedestrian Safety, Bicycle Safety, Younger and Older Drivers
- Traffic Records.

The overall goal of the GHSB’s FFY 06 work is to reduce the Massachusetts fatality rate per 100 million vehicle miles traveled (VMT) from 0.86 in 2003 to 0.83 in 2006.

In support of these program areas, the GHSB will conduct appropriate fiscal and program management to ensure the proper use and maximum value of the federal funds it is entrusted with.
I. OCCUPANT PROTECTION

Occupant protection refers to the use of safety belts, booster seats, and child safety seats by motor vehicle drivers and passengers. Based on 2002 data, there would be on an annual basis an estimated additional 88 lives saved, 6,009 injuries prevented, and $660.2 million in economic costs saved if Massachusetts could achieve 100 percent safety belt use. Because safety belts remain the single most effective means of preventing death or injury in the result of a crash, and the Massachusetts belt use rate remains so low, the GHSB will continue to make occupant protection a major highway safety program area in FFY 06.

Goal

- Increase safety belt use from 65 percent in 2005 to 67 percent in 2006.

Problem Identification and Analysis

Massachusetts has historically had one of the lowest statewide safety belt use rates in the country. In FFY 2003, the application of NHTSA’s full *Click It or Ticket* (CIOT) model enabled Massachusetts to increase its safety belt use by 11 percent to 62 percent – the highest statewide rate ever recorded. This increase included a 22 percent conversion rate of non-users. Still, the Commonwealth was 17 percentage points below the 2003 national average of 79 percent as shown in Figure 3.

In FFY 04, the GHSB and its partners continued to apply the full CIOT model. The 2004 statewide safety belt observational survey showed that Massachusetts had increased its belt use rate to 63 percent. In FFY 05, the GHSB expanded the full CIOT model to 265 cities and towns and the usage rate increased to 65 percent (officially 64.8 percent).

GHSB programming to increase safety belt use in Massachusetts continues to face a significant challenge in the form of Massachusetts’s weak secondary safety belt law. Yet by continuing to aggressively apply the full CIOT model, the GHSB is confident the Commonwealth will see an increase in safety belt use in FFY 06. It is estimated the passage of a primary safety belt law would annually save 20 lives and prevent approximately $183 million in economic loss in Massachusetts.

**Figure 3: Massachusetts and US safety belt use rate.**

**Observed Safety Belt Use Rate**

With data from the Massachusetts 2004 statewide safety belt observational survey, belt use in the Commonwealth and nationwide are compared in Table 4. It is important to note that with the
exception of overall belt use, rates for Massachusetts are unweighted. This is true for all Massachusetts safety belt use data presented in this HSPP unless otherwise noted.

Table 4: Safety Belt Use Rates for Massachusetts and U.S., 2004

<table>
<thead>
<tr>
<th></th>
<th>U.S. (%)</th>
<th>MA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERALL Safety Belt Use</td>
<td>80</td>
<td>63</td>
</tr>
<tr>
<td>Drivers</td>
<td>81</td>
<td>64</td>
</tr>
<tr>
<td>Passengers</td>
<td>76</td>
<td>64</td>
</tr>
<tr>
<td>Passenger cars</td>
<td>81</td>
<td>68</td>
</tr>
<tr>
<td>Light trucks (including pick-up trucks, vans, minivans and SUVs)</td>
<td>77</td>
<td>63</td>
</tr>
<tr>
<td>SUVs and Vans</td>
<td>83</td>
<td>70</td>
</tr>
<tr>
<td>Pick-up Trucks</td>
<td>70</td>
<td>48</td>
</tr>
<tr>
<td>Vans</td>
<td>NA</td>
<td>72</td>
</tr>
</tbody>
</table>

The low use rate for Massachusetts is found in fatal crashes as well. Figure 4 presents belt use status for fatally injured vehicle occupants and survivors of fatal crashes for both the U.S. and Massachusetts in 2002. While more than 60 percent of survivors of fatal crashes at the national level were belted, only 40 percent of fatal crash survivors in Massachusetts were belted. In a similar, though less noticeable difference, people sustaining fatal injuries in Massachusetts were not belted more frequently than fatally injured people at the national level.

Figure 4: Belt use for vehicle occupants involved in fatal crashes in 2002.
Changes in Belt Use, 2002 to 2005
In an effort to further understand why Massachusetts has difficulty achieving a higher belt use rate, data collected during the statewide observational surveys in between 2002 and 2005 were analyzed. Figure 5 shows the divisions used to analyze belt use based on geographic regions (MassHighway Districts). A summary of the information from these surveys is outlined in Table 5.

![Figure 5: MassHighway Districts.](image)

Table 5: Massachusetts belt use rates, 2002-2005

<table>
<thead>
<tr>
<th>Belt Use Rate (%)</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Belt Use</td>
<td>75</td>
<td>79</td>
<td>80</td>
<td>NA</td>
</tr>
<tr>
<td>Primary Law States</td>
<td>80</td>
<td>83</td>
<td>84</td>
<td>NA</td>
</tr>
<tr>
<td>Secondary Law States</td>
<td>69</td>
<td>75</td>
<td>73</td>
<td>NA</td>
</tr>
<tr>
<td>Massachusetts Belt Use (*weighted)</td>
<td>51</td>
<td>62</td>
<td>63</td>
<td>65</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>46</td>
<td>57</td>
<td>57</td>
<td>59</td>
</tr>
<tr>
<td>Female</td>
<td>63</td>
<td>72</td>
<td>73</td>
<td>73</td>
</tr>
<tr>
<td>Age Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teen</td>
<td>49</td>
<td>58</td>
<td>60</td>
<td>57</td>
</tr>
<tr>
<td>Adult</td>
<td>53</td>
<td>63</td>
<td>64</td>
<td>65</td>
</tr>
<tr>
<td>Elder Adult</td>
<td>61</td>
<td>71</td>
<td>71</td>
<td>73</td>
</tr>
<tr>
<td>Occupant Role</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driver</td>
<td>54</td>
<td>64</td>
<td>64</td>
<td>66</td>
</tr>
<tr>
<td>Front seat passenger</td>
<td>54</td>
<td>61</td>
<td>64</td>
<td>63</td>
</tr>
<tr>
<td>Front seat occupants</td>
<td>54</td>
<td>64</td>
<td>64</td>
<td>65</td>
</tr>
<tr>
<td>Vehicle Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passenger</td>
<td>58</td>
<td>67</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>SUV</td>
<td>54</td>
<td>65</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>Commercial Vehicle</td>
<td>24</td>
<td>35</td>
<td>34</td>
<td>39</td>
</tr>
<tr>
<td>Pick-up Truck</td>
<td>34</td>
<td>48</td>
<td>48</td>
<td>53</td>
</tr>
<tr>
<td>Van</td>
<td>59</td>
<td>70</td>
<td>72</td>
<td>73</td>
</tr>
<tr>
<td>Roadway Classification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highway (*weighted)</td>
<td>60</td>
<td>64</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Non-Highway (*weighted)</td>
<td>46</td>
<td>60</td>
<td>59</td>
<td>61</td>
</tr>
<tr>
<td>State of vehicle registration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Massachusetts</td>
<td>53</td>
<td>63</td>
<td>64</td>
<td>65</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>56</td>
<td>61</td>
<td>59</td>
<td>64</td>
</tr>
<tr>
<td>Out of State</td>
<td>70</td>
<td>75</td>
<td>75</td>
<td>73</td>
</tr>
<tr>
<td>Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region 1</td>
<td>59</td>
<td>64</td>
<td>61</td>
<td>71</td>
</tr>
<tr>
<td>Region 2</td>
<td>59</td>
<td>68</td>
<td>69</td>
<td>65</td>
</tr>
<tr>
<td>Region 3</td>
<td>57</td>
<td>68</td>
<td>67</td>
<td>71</td>
</tr>
<tr>
<td>Region 4</td>
<td>52</td>
<td>62</td>
<td>62</td>
<td>64</td>
</tr>
<tr>
<td>Region 5</td>
<td>51</td>
<td>59</td>
<td>61</td>
<td>63</td>
</tr>
</tbody>
</table>

* MA belt use is weighted by population, roadway classification and roadway type.
Non-Traditional Analysis of Belt Use
Further analysis of the 2003 safety belt data was completed using non-traditional analysis variables. Specifically, belt use rates were determined for communities based upon the following: community education level (defined as the percentage of residents with greater than some college), community median income, and population density. The analysis resulted in some generalized trends:

- Belt use was observed to increase as the percentage of a community’s population with greater than some college increased.
- Although belt use was greatest in communities with the highest median income, belt use was similar in all other communities when grouped by median income.
- With respect to population density, belt use tended to decrease as a community’s population density increased.

Reported Safety Belt Use Rate
Each year for the last four years, phone interviews have been conducted to determine awareness of and attitudes on safety belts among Massachusetts licensed drivers. Table 6 summarizes some of the survey findings.

Table 6: Safety-Belt related telephone survey results.

<table>
<thead>
<tr>
<th></th>
<th>August 2002</th>
<th>June 2003</th>
<th>June 2004</th>
<th>June 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stricter Enforcement of Safety Belt Law</td>
<td>Strongly Favor</td>
<td>37%</td>
<td>40%</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>Favor</td>
<td>37%</td>
<td>31%</td>
<td>38%</td>
</tr>
<tr>
<td>Likelihood Unbelted Adults Will be Ticketed by Police</td>
<td>Very Likely</td>
<td>n/a</td>
<td>31%</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>Somewhat Likely</td>
<td>n/a</td>
<td>27%</td>
<td>30%</td>
</tr>
<tr>
<td>Mass. Residents Aware of Safety Belt Law</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>81%</td>
<td>85%</td>
<td>93%</td>
<td>91%</td>
</tr>
<tr>
<td>Police Ticketing Those Unbelted Impact on Safety Belt Use Decision</td>
<td>Much More Likely</td>
<td>60%</td>
<td>48%</td>
<td>42%</td>
</tr>
<tr>
<td></td>
<td>Somewhat More Likely</td>
<td>17%</td>
<td>18%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Safety Belt Violations
In 2003, police issued 96,236 safety belt and child safety seat violations along Massachusetts roadways as compared to 84,652 safety belt and child safety seat violations in 2004. During the first six months of 2005, violations numbered 39,757.

Children
Child passenger safety is measured by the number of fatal and serious injuries to children ages five and under. In 2002, two children under the age of five (both motor vehicle occupants) were fatally injured in motor vehicle crashes. Incapacitating injuries to children under age five accounted for less than one percent of all such injuries. The middle years of childhood, ages six to 16, provide interesting challenges for occupant restraint use, in particular how to encourage the use of booster seats. In 2002, 15 children age six to 16 were killed in motor vehicle crashes; eleven of these were vehicle occupants.
Conclusions
Despite a 14 percent increase in safety belt use between 2002 and 2005, Massachusetts continues to have a belt use rate well below the national average, including that of other secondary belt law states. The low safety belt use rate across all groups indicates the need to continue to implement the full CIOT model so as to impact the entire state population. However, there are specific populations in need of special programming: younger males and females ages 16 to 24; diverse populations, especially those with limited English abilities; those of lower educational and economic status; commercial vehicle and pick-up truck drivers; residents of urban areas; and all residents of southeastern Massachusetts. Programming that reflects these findings about occupant protection use will be incorporated into the Massachusetts CIOT Campaign.

Objectives

1. Increase belt use by populations with below the statewide average.
   Performance Measures:
   - Increase belt use among teen drivers (57 to 60 percent).
   - Increase belt use among commercial vehicle drivers and pick-up trucks (39 and 53 percent, respectively, to 42 and 55 percent).
   - Increase belt use among residents of southeastern Massachusetts (63 to 65 percent).

2. Improve attitudes towards enforcement of safety belt law.
   Performance Measures:
   - Licensed driver respondents to telephone survey who think it is very likely for a motorist to be ticketed for not being belted (16 to 30 percent).
   - Licensed driver respondents to telephone survey who strongly favor stricter enforcement of the seat belt law (53 to 55 percent).

3. Increase law enforcement support for promoting safety belt and child safety seat use.
   Performance Measures:
   - Number of local law enforcement grant partners (250 departments)
   - Number of enforcement grant partners conducting safety belt educational initiatives (200)
   - Number of employer partners (minimum of 5).
   - Increase high schools with mini-grants (150 schools, up from 100).
   - Number of colleges with mini-grants (minimum of 25, up from 10).

4. Maintain or reduce fatality and incapacitating injury rates for children age five and under through programming focused on the use of child passenger safety restraints. Performance Measures:
   - Fatal and incapacitating injuries to children age five and under (no increase).
   - Number of trainings and recertifications of certified child passenger safety technicians (18 trainings, up from eight) and checkpoints to 15.
   - Number of child passenger safety technician instructors (maintain current).
   - Number of CPS equipment mini-grant awards for police and fire departments and health care providers (maximum of 100).
   - Annual child passenger safety conference (500 attendees)
II. IMPAIRED DRIVING
Impaired driving continues to be an area of great concern at both the national, state, and local levels. NHTSA has set a goal of 0.53 alcohol-related fatalities per 100 million VMT by 2005. In 2003, this rate for Massachusetts was 0.39 while the national rate was 0.59. Yet the percentage of all Massachusetts crash fatalities that are alcohol-related was 47 percent in 2003, significantly higher than the national rate that year of 40 percent. In 2002, 5,012 crashes on Massachusetts roadways included the issuance of an alcohol-related violation. An additional 12,911 alcohol-related violations were issued to motorists on Massachusetts roadways where a crash did not exist. The number of alcohol-related crashes and the proportion of alcohol-related fatalities in Massachusetts warrant the GHSB continuing to treat impaired driving as a major highway safety program area in FFY 06. Efforts in this area will also address drowsy driving.

Goals
• Reduce the rate of alcohol-related fatalities per 100 million VMT from .39 in 2003 to 0.37 in 2006.
• Reduce the percentage of alcohol-related fatalities from 43 percent in 2004 to 41 percent in 2006

Problem Identification and Analysis
Starting in December 2002, the GHSB implemented the full You Drink & Drive. You Lose. (YD&DYL) model developed by NHTSA. The initial evaluation of this effort to date has been positive. Massachusetts saw a reduction in alcohol-related fatalities as a percentage of all motor vehicle-related fatalities between 2002 and 2004, from 49 percent to 43 percent. There was also a reduction in our alcohol-related fatalities per 100 million VMT between 2002 and 2003, from 0.42 to 0.39. Despite the early successes of its YD&D YL Campaign, Massachusetts needs to strengthen its impaired driving laws and related judicial processes, especially those that apply to repeat drunk drivers.

There are limited data available for use in the analysis of alcohol-related crashes in Massachusetts. Additionally, while the new crash report form used in Massachusetts is a vast improvement over the previous form, quality of the alcohol-data collected in 2002 does not allow for the examination of impaired driving through the analysis of crash data. This limitation also prohibits the analysis of impaired driving from an injury perspective.

For these reasons, alcohol-related crashes in this HSPP are examined solely through the analysis of violations. Impaired driving was studied both in terms of all violations issued as well as violations issued where a crash occurred.

An alcohol-related violation involves one of the following Massachusetts General Laws:
• Drink Open Container (90 241);
• DWI Alcohol Program (90 24D);
• DWI Liquor (90 24DI);
• DWI Serious Injury (90 24L);
• Liquor Possession By Minor (13834C NS); or
• Liquor Transported by Minor (13834C LQ).
Alcohol-Related Crash Violations by Community

Figure 6 shows a community level breakdown of how many crash violations issued were the result of an alcohol offense. The communities with the highest percent of alcohol-related crash violations are spread throughout the state, indicating a need for statewide alcohol-related programming. There are small pockets of high percentage communities in the northeast corner of the state and throughout the central and western regions.

![Map showing percentage of all crash violations that were alcohol-related by community, 2002.](image)

**Figure 6: Percentage of all crash violations that were alcohol-related by community, 2002.**

Driver Age and Sex

Alcohol-related crash violations were examined by age and sex. While the number of licensed drivers is relatively evenly divided in half for each sex (males and females each account for roughly 50 percent of licensed drivers in each age group), the percentage of alcohol-related crash violations indicates that males in all age groups accounted for a much higher percentage (70 to 100 percent) of alcohol-related crash violations than females in the same age group.

When examining alcohol-related crash violations by age and sex, for cases where age was reported, a similar trend is identified. Males of all age groups had a higher percentage of alcohol-related crash violations than females, as shown in Figure 7. For males, the percent of all crash violations that were alcohol-related peak at the 25 to 29 year-old age group. For females, the percent of all crash violations that were alcohol-related peak at ages 45 to 49. It is also interesting to note that the peak for males is more pronounced than the peak for females. The low percentage of alcohol-related crash violations for very young drivers and older drivers is also visible in Figure 7.
Figure 8 shows the breakdown of alcohol-related crash violations for males and females by weekends and weekdays. Weekends are defined as lasting from Friday at 6 pm to Monday at 5:59 am; weekdays are Monday 6 am to Friday 5:59 pm. The distribution of alcohol-related crash citations issued to males and females was relatively even for both weekends and weekdays. Males received a little more than half of their alcohol-related crash violations on weekends while females received a little more than half of their alcohol-related crash violations on weekdays. This indicates that alcohol-related crash violations are not just a “weekend problem.”
When considering day of week for alcohol-related crash violations there was a marked difference between males and females, as shown in Figure 9. Males had a much higher number of alcohol-related crash violations on weekend days (Saturday and Sunday) while females were more evenly distributed throughout the week, with a small peak on weekend days. When considering time of day, there was less difference between males and females as both peak in the 9 pm to midnight time period; it should be noted, though, that the peak for males in this time period is more substantial than that for females.
Alcohol-related crash violations were also examined by month; the percent of all crash violations that were alcohol-related remained relatively constant throughout the year.

**Impaired Driving Enforcement**

When examining alcohol violations by time of day and day of week from an enforcement and crash perspective, four of the five time periods with the highest percentage of alcohol-related violations were the same time periods with the highest percentage of alcohol-related crash violations. The time periods when the most violations were written for alcohol offenses—both crash-related and general—were very similar.

![Figure 11: Alcohol-related violations and alcohol-related crash violations by time of day and day of week.](image)

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midnight - 2:59 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00 AM to 5:59 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:00 AM to 8:59 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:00 AM to 11:59 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noon to 2:59 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00 PM to 5:59 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:00 PM to 8:59 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9PM to Midnight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Highest percentage of alcohol-related crash violations.

Highest percentage of alcohol-related violations.

Highest percentage of both alcohol-related violations and alcohol-related crash violations.
Support of impaired driving enforcement is strong among licensed drivers in Massachusetts as outlined in Table 7 which describes the impaired driving related results of GHSB telephone surveys conducted in 2002, 2003, 2004, and 2005.

Table 7: Impaired driving related telephone survey results.

<table>
<thead>
<tr>
<th></th>
<th>August 2002</th>
<th>June 2003</th>
<th>June 2004</th>
<th>June 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stricter Enforcement of Impaired Driving Laws</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Favor</td>
<td>57%</td>
<td>78%</td>
<td>73%</td>
<td>79%</td>
</tr>
<tr>
<td>Favor</td>
<td>36%</td>
<td>18%</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Sobriety Checkpoints to Apprehend Drunk Drivers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Favor</td>
<td>44%</td>
<td>51%</td>
<td>45%</td>
<td>57%</td>
</tr>
<tr>
<td>Favor</td>
<td>35%</td>
<td>27%</td>
<td>28%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Likelihood that Drunk Drivers Will be Stopped by Police</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Likely</td>
<td>44%</td>
<td>47%</td>
<td>43%</td>
<td>45%</td>
</tr>
<tr>
<td>Somewhat Likely</td>
<td>33%</td>
<td>36%</td>
<td>37%</td>
<td>35%</td>
</tr>
</tbody>
</table>

**Young Drivers**

For the analysis of alcohol-related crash citations and younger drivers, younger drivers were divided into three categories: 16 to 18 year-olds, 19 to 20 year-olds, and 21 to 24 year-olds. Figure 12 below shows licensed drivers within each age group by sex and alcohol-related crash violations within each age group by sex. While males and females each account for roughly half of the licensed drivers in each age group, males account for a noticeably higher percentage of alcohol-related crash violations in each age group (84 to 100 percent).

![Figure 12: Percent of all licensed drivers and all alcohol-related crash violations for younger drivers.](image-url)
Conclusions
Although current data to analyze alcohol-related crashes may be limited, the data that are available provide valuable information about impaired driving in Massachusetts. This data analysis shows there are important differences between sexes and different age groups. Males were over-represented in alcohol-related crash violations and had the highest percentage of alcohol-related crash violations among 25 to 29 year-olds. Females were under-represented and had the highest percentage of alcohol-related crash violations among 45 to 49 year-olds. Within the young driver category, males were considerably over-represented for alcohol-related crash violations. Additionally, temporal patterns (time of day and day of week) were different between the sexes. Programming that reflects these findings about impaired driving will be incorporated into the Massachusetts YD&D YL Campaign.

Objectives

1. Decrease the rate of drivers ages 16 to 29 involved in alcohol-related crashes.
   Performance Measure:
   - Rate of alcohol-related crash violations issued to drivers age 16 to 29 per 100 thousand licensed drivers age 16 to 29 (204.9 alcohol-related crash violations per 100 thousand licensed drivers, down from 215.7 alcohol-related crash violations per 100 thousand licensed drivers in 2002.)

2. Improve attitudes towards enforcement of impaired driving laws.
   Performance Measures:
   - Licensed driver respondents to telephone survey who think it is very likely for a motorist to be stopped for impaired driving (47 percent, up from 45 percent in 2005).
   - Licensed driver respondents to telephone survey who strongly favor stricter enforcement of the impaired driving laws (81 percent, up from 79 percent in 2005).
   - Work with law enforcement and judiciary to stream-line the arrests and prosecution stages of impaired driving violations.

3. Increase participation of traffic safety stakeholders in combating impaired driving.
   Performance Measures:
   - Number of local law enforcement partners (250 departments)
   - Number of employer partners (minimum of 5).
   - Increase high schools with mini-grants (150 schools, up from 100).
   - Number of colleges and universities with mini-grants (minimum of 25).
III. SPEEDING

Speed-related crashes are a significant highway safety problem overshadowed in recent years by the high-
profile attention given to occupant protection and impaired driving both at the national and state level. In
Massachusetts, 34 percent of crash fatalities were speed-related in 2003; this was higher than the national
rate of 31 percent. In 2002, 4,322 crashes included the issuance of a speed violation in Massachusetts.
There was an additional 354,376 non-crash speed violations issued along our roadways. The high speed
involvement in fatal crashes in Massachusetts, as well as the significant level of speed violations issued,
indicate the GHSB must continue to treat speeding as a major highway safety program area in FFY 2006.
Efforts in this area will also address aggressive and distracted driving.

Goals

- Reduce the percentage of speed-related fatalities from 34 in 2003 to 30 percent in 2006.
- Reduce the rate of speed-related fatalities per hundred thousand population from 2.8 in 2002 to
  2.4 in 2006.

Problem Identification and Analysis

In April 2004, the GHSB reintroduced a speeding and aggressive driving campaign it had conducted in the
late 1990's called “Road Respect.” This campaign follows the NHTSA model for CIOT and YD&D YL.
The campaign was conducted only on roadways patrolled by the Massachusetts State Police. In April 2005,
the campaign expanded to include roadways under the jurisdiction of 252 local police departments. Initial
evaluation of Road Respect has been positive, but more needs to be done to determine its effectiveness.

There are limited data available for use in the analysis of speed-related crashes in Massachusetts. For this
reason, speed-related crashes in 2002 were examined primarily through the analysis of speed-related
violations with a specific focus on violations issued when a crash occurred. A speed-related violation
includes one of the following Massachusetts General Laws:

- Mass Pike Speed (730400 SP, 730500 SP, and 730707 SP);
- MDC Way Speeding (350401 SP);
- Speed Metal Tires City (85 31 CT);
- Speed County Bridge (85 20);
- Speed Drag Racing (90 1 7B);
- Speed Metallic Tires (85 31);
- Speeding (730708 SP, 7401100 SP, 7402100 SP, 740300 SP, 90 17, and 90 18);
- Speeding Overweight (90 17 OW);
- Sum/Cal Tunnel Speed (730300 SP)
Speed-Related Crash Violations by Community

Figure 13 shows the percent of all crash violations that were speed-related by community in 2002. The communities found to have the highest percent of speed-related crash violations were primarily those clustered in the western half of the state. These western communities are the most rural Massachusetts communities supporting the idea that statewide speeding could be reduced by focused efforts in rural communities where lack of congestion, long stretches of straight roadways, and lack of environmental indicators of traveling too fast (passing signs and buildings quickly) create situations that encourage speeding.

Driver Age and Sex

Speed-related crash violations in 2002 were examined by age and sex. While the number of licensed drivers is relatively evenly divided in half for each sex (males and females each account for roughly 50 percent of licensed drivers in each age group), males accounted for noticeably higher percentages of speed-related crash violations in each group than females (65 to 84 percent). The gender gap was smallest for drivers age 70 or older.

When examining speed-related crash violations by age and sex, for those cases where age was reported, the percentage of licensed drivers for each age group by sex follows a bell-shape curve with middle-aged adults comprising most of the licensed driver population, as shown in Figure 14. However, the percent of speed-related crash violations peaks for drivers age 18 to 24 for both sexes; the peak for males is far more pronounced than that for
females. For both sexes, the percent of speed-related crash violations approaches zero for older drivers (females age 55 or older and males age 65 or older).

Figure 14: Percent of all licensed drivers and all speed-related crash violations across age groups by sex.

Temporal Factors
Figure 19 shows the breakdown for speed-related crash violations in 2002 for males and females by weekends and weekdays. Weekends are defined as lasting from 6 pm Friday to 5:59 am Monday; weekdays are 6 am Monday to 5:59 pm Friday. For both males and females, more speed-related crash citations were issued on weekends than on weekdays.
When examining speed-related crash violations in 2002 by day of week, both males and females were higher on weekends (Saturday and Sunday) than weekdays. However, the increase for males on weekends was more pronounced than for females; the increase for females is slight.

Figure 15: Speed-related crash violations by sex for weekends and weekdays.

Figure 16: Speed-related crash violations by day of week and sex.
When examining speed-related crash violations by time of day in 2002, there are pointed differences between males and females. Males peak between the hours of midnight and 2:59 am with the hours immediately preceding having a high number of speed-related crash violations as well. Females, however, show a less noticeable peak with the number of speed-related crash violations being slightly higher between midnight and 2:59 am and 3:00 pm and 5:59 pm.

Figure 17: Speed-related crash violations by time of day and sex.

Speed-related crash violations were also examined by month; the percent of all crash violations that were speed-related varied throughout the year with no discernable trend.

**Speeding Enforcement**

Figure 18 shows speed violations in 2002 by time of day and day of week. The times of day/day of week with the highest percentage of speed-related crash violations and highest percentage of speed-related violations overlaps only on Fridays from 9 am to 11:59 am. The other times of day/day of week with the highest percentage of speed-related crash violations were the early morning hours (12 am to 2:59 am) on Friday, Saturday, and Sunday. The other times of day/day of week with the highest percentage of speed-related violations were weekdays from 9 am to 11:59 am.
Support of speed-related enforcement is relatively strong among licensed drivers in Massachusetts, as outlined in Table 8 which describes the speed-related results of a telephone survey conducted in 2002, 2003, 2004, and 2005.

Table 8: Speed-related telephone survey results.

<table>
<thead>
<tr>
<th>Stricter Enforcement of Speeding Laws</th>
<th>August 2002</th>
<th>June 2003</th>
<th>June 2004</th>
<th>June 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Favor</td>
<td>43%</td>
<td>48%</td>
<td>43%</td>
<td>55%</td>
</tr>
<tr>
<td>Favor</td>
<td>40%</td>
<td>36%</td>
<td>36%</td>
<td>30%</td>
</tr>
<tr>
<td>Likelihood that Speeders Will be Stopped by Police</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Likely</td>
<td>39%</td>
<td>48%</td>
<td>43%</td>
<td>50%</td>
</tr>
<tr>
<td>Somewhat Likely</td>
<td>36%</td>
<td>36%</td>
<td>37%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Conclusions
Although data available to analyze speed-related crashes may be limited, the data that are available provide valuable information. This data analysis shows there are important differences between sexes and different age groups. Males are over-represented in speed-related crash violations and have the highest percentage of speed-related crash violations when they are 18 to 20-years old. Females have the highest percentage of speed-related crash violations between 18 to 20 and 21 to 24 years old. Speed-related crash violations are a greater area of concern in the western half of Massachusetts where communities are largely rural. Additionally, temporal patterns (time of day and day of week) are different between sexes. If enforcement efforts are to be focused around the times when the most speed-related crash violations occur, enforcement should occur during weekend late night/early morning hours. Programming that reflects these findings on speeding will be incorporated into the Road Respect Campaign.

Objectives
1. Decrease the rate of drivers age 16 to 29 involved in speed-related crashes.
   Performance Measure:
• Rate of speed-related crash violations issued to speed-related crash violations per 100 thousand licensed drivers, 290.7 speed-related crash violations per 100 thousand licensed drivers, down from 306.0 speed-related crash violations per 100 thousand licensed drivers in 2002.)

2. Improve attitudes towards enforcement of speeding and aggressive driving laws.
   Performance Measures:
   • Licensed driver respondents to telephone survey who think it is very likely for a motorist to be stopped for speeding (55 percent, up from 50 percent in 2005).
   • Licensed driver respondents to telephone survey who strongly favor stricter enforcement of the speeding laws (60 percent, up from 55 percent in 2005).

3. Improve quality of speed enforcement.
   Performance Measures:
   • Number of police departments trained to collect and use local-level speed data in enforcement program design (minimum of 50 departments).

4. Increase participation of traffic safety stakeholders in efforts to reduce speeding and aggressive driving.
   Performance Measures:
   • Number of local law enforcement partners (250 departments)
   • Number of employer partners (minimum of 5).
   • Increase high school with mini-grants (150 schools, up from 100).
   • Number of colleges and universities with mini-grants (minimum of 25).

IV. SPECIAL USERS
The significant presence of some special users in Massachusetts crash, fatality, and injury statistics, as well as the need to improve the data used to examine these groups, indicates the need to address special users as a highway safety program area in FFY 06. In Massachusetts, these populations have been identified as young drivers, older drivers, motorcyclists, and pedestrians. Under this area the GHSB will also address the safety of bicyclists and school bus occupants.

Goals
• Reduce the rate of young drivers ages 16 to 24 involved in fatal and incapacitating injury crashes per 100,000 licensed drivers from 367.6 in 2002 to 325 in 2005.
• Obtain baseline information on factors involved in older driver crashes.
• Reduce the rate of pedestrian fatalities and incapacitating injuries per 100,000 population from 5.5 in 2002 to 5.1.
• Reduce the rate of motorcycle fatalities and incapacitating injuries per 100,000 licensed motorcyclists from 142 in 2002 to 137.
Problem Identification and Analysis

**YOUNG DRIVERS**

Young drivers lack the experience and judgment to operate a motor vehicle as safely as more experienced drivers. Motor vehicle crashes are the leading cause of death nationwide for people between the ages of 15 and 20. Additionally, there was a 12 percent increase in the number of 15 to 20 year-olds involved in fatal crashes in the nation between 1992 and 2002. The proportion of fatal and incapacitating injuries from crashes involving younger drivers (16 to 20 year-olds) are above these same rates for all drivers in Massachusetts. Specifically, the rate of 16 to 20 year-olds involved in a fatal crash per 100,000 licensed drivers is 36.2 compared to 13.5 per 100,000 licensed drivers for all Massachusetts drivers. Additionally, 16 to 20 year-old drivers account for 5.6 percent of licensed drivers and nearly 14 percent of the drivers involved in fatal or incapacitating injury crashes.

To better understand the Massachusetts younger driver problem, the GHSB divides younger drivers into three age groups: 16 to 17, 18 to 20, and 21 to 24. These divisions were selected because of differences in exposure and programming opportunities for each age group. Additionally, regulations that are intended to limit young driver exposure to risky situations, such as graduated licensing and underage drinking and driving laws, can be better understood through the use of these age groups.

Figure 19 shows the percent of the total population of each Massachusetts community that was ages 15 to 24 in 2000. Communities with the highest percentage of young people are around Boston and major roadways such as Interstate 90 (Massachusetts Turnpike) and Interstate 91. Pockets of communities with high percentages of young people are found in the southeast region of the state and in the central region of the state along the northern border.
Driver Sex
While the percentage of licensed drivers and drivers in crashes involving an incapacitating injury by sex are similar for 16 to 17 year-olds, 18 to 20 year-olds and drivers of all ages, the difference between males and females is most noticeable among drivers age 21 to 24. For drivers age 21 to 24, males and females each accounted for roughly half of the licensed drivers for the age group. However, males accounted for nearly two-thirds of drivers in crashes involving an incapacitating injury.

Manner of Collision
All three young driver age groups were most frequently involved in angle collisions in 2002, as were drivers of all ages. Younger drivers varied from drivers of all ages in that they were more frequently involved in single vehicle collisions and less frequently involved in rear-end collisions. This was true for all three younger driver age groups with 16 to 17 year-olds showing notably higher involvement in single vehicle crashes than drivers of all ages including the other two younger driver groups.

Contributing Factors
The most common contributing factors for female young drivers age 16 to 24 are very similar to the contributing factors for drivers of all ages. This is not the case, however, for male drivers age 16 to 24. The percentage of young male drivers who were reported with a contributing factor of “exceeded authorized speed limit” was three times higher than for drivers of all ages.
Figure 20 shows the percent of young drivers in crashes involving an incapacitating injury with a reported contributing factor of “exceeding lawful speed.” The bars indicate the percent of younger drivers by age and sex, while the dashed line indicates the same percent for drivers of all ages. While younger drivers of both sexes are generally higher than all drivers, this is especially true for younger male drivers. Speeding was also the most common violation issued to drivers ages 16 to 24 involved in a crash.

**Time of Day and Day of Week**

While the number of drivers of all ages in crashes involving an incapacitating injury was highest on weekends and was spread across both daytime and nighttime hours, the number of young drivers involved in incapacitating injury crashes was higher during daytime, weekday hours. When examining young drivers broken down into the three age groups, crash and violation patterns differ only slightly with all having a high concentration of both violations and involvement in crashes involving an incapacitating injury immediately after school (3:00 pm to 5:59 pm) and late night/early morning weekend hours.

**Inpatient Charges for Young Drivers**

Using 2000 crash and inpatient discharge charge data, linked probabilistically using the Crash Outcome Data Evaluation System (CODES), Table 9 summarizes crash injury charges by injury severity for young drivers, in this case defined as drivers between the ages of 16 and 21. Young drivers were more likely to be in a serious visible injury crash than adult drivers or older drivers. However, young drivers had the lowest percentage of fatalities. Young drivers also had the lowest minor visible injury and complaints of pain average inpatient hospital charges.

<table>
<thead>
<tr>
<th>Young Drivers</th>
<th>Total Incidents</th>
<th>% by Age group</th>
<th>Total Inpatient Charges</th>
<th>Average Inpatient Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Killed</td>
<td>2</td>
<td>1.43%</td>
<td>$28,736.00</td>
<td>$14,368.00</td>
</tr>
<tr>
<td>Serious Visible</td>
<td>85</td>
<td>60.71%</td>
<td>$3,382,007.00</td>
<td>$39,788.32</td>
</tr>
<tr>
<td>Minor Visible</td>
<td>34</td>
<td>24.29%</td>
<td>$525,739.00</td>
<td>$15,462.91</td>
</tr>
<tr>
<td>Complaints of pain</td>
<td>19</td>
<td>13.57%</td>
<td>$208,202.00</td>
<td>$10,958.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>140</td>
<td>100.00%</td>
<td>$4,144,684.00</td>
<td>$29,604.89</td>
</tr>
</tbody>
</table>
**Previous Highway Safety Record**

Previous highway safety record for young drivers involved in fatal crashes was compared to previous highway safety record for drivers of all ages. Young drivers age 18 to 20 and 21 to 24 had a considerably higher percentage of previous crash and previous speeding convictions than drivers of all ages. Drivers age 16 to 17 had lower percentages for all driving history factors; this may be because they have had less time in which to accrue these types of violations/convictions.

**Conclusions**

Young drivers lack the experience of other drivers on the road, and this becomes evident when examining crash-related data for this age group. While the age group of drivers from 16 to 24 differs from the general population, it is important to understand the differences between the three age groups examined within that young driver population: 16 to 17, 18 to 20, and 21 to 24. Generally speaking, younger drivers are involved in crashes on weekday afternoons and have a high incidence of speeding. Additionally, there is a remarkable difference between male and female drivers, with an over-representation of male drivers in incapacitating injury crashes, especially for 18 to 24 year-olds.

**OLDER DRIVERS**

As the population ages, both nationally and in Massachusetts, there has been an increase in the efforts applied to improving traffic safety around older drivers. Nationally, older people (age 70 and older) were 12 percent of all traffic fatalities and 17 percent of pedestrian fatalities in 2002. In 2002, approximately 700 drivers over the age of 65 were involved in fatal or incapacitating injury crashes in Massachusetts.

Figure 26 shows the percent of the total population of each Massachusetts community that is age 65 or older. Cape Cod, the western portion of Massachusetts, and communities around Boston have the highest concentrations of older residents. The central, northeast, and southeast regions have lower concentrations of older residents.
While census projections indicate a steady decline in the percentage of all Massachusetts residents that are age 65 or older, the percentage of licensed drivers who were age 65 or older has remained relatively constant in the last few years. The percentage of licensed drivers in Massachusetts who are 65 or older has also been consistently higher than the percentage of the population that is 65 or older. While the older population may be decreasing, the number of older licensed drivers is a clear indication that older drivers will continue to populate Massachusetts roadways.

**Driver Sex**
Drivers age 65 or older are similar to all drivers in that while the division of male and female each represent almost exactly one-half of licensed drivers, males are over-represented for the percent of drivers in crashes involving an incapacitating injury. However, that over-representation is greater for all drivers than for older drivers. The gender gap closes when considering drivers age 85 or older.

**Manner of Collision**
The percent of drivers in crashes involving an incapacitating injury that were in angle collisions increases as the age of the drivers increases. The reverse is true for rear-end crashes; as driver age increases, the percent of drivers in crashes involving an incapacitating injury that were in rear-end crashes decreases.

**Description of Violations Resulting from a Crash**
While failure to stop accounts for only eight percent of violations issued to drivers of all ages involved in a crash, it accounts for 15 percent of violations issued to drivers age 65 or older.
involved in a crash, and 22 percent of violations issued to drivers ages 85 or older involved in a crash.

**Time of Day and Day of Week**
The number of older drivers involved in incapacitating injury crashes was highest during daytime, weekday hours. These times correlate with the notion that older drivers tend to drive during daytime hours because they understand their limitations and because many of the destinations attracting older drivers are active during the day.

**Inpatient Charges for Older Drivers**
Using 2000 crash and inpatient discharge charge data, linked probabilistically using CODES, Table 10 summarizes crash injury charges by injury severity for older drivers, age 65 or older. Older drivers had the lowest average inpatient hospital charge; however, they had the highest proportional fatality rate. Older driver fatalities also had the highest fatal average inpatient hospital charge of all age groups. Older drivers had the highest minor visible injury average inpatient hospital charge.

**Table 10: Older driver injury severity percents and inpatient hospital charges, 2000.**

<table>
<thead>
<tr>
<th>Older Drivers</th>
<th>Total Incidents</th>
<th>% by Age group</th>
<th>Total Inpatient Charges</th>
<th>Average Inpatient Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Killed</td>
<td>19</td>
<td>5.96%</td>
<td>$969,549.00</td>
<td>$51,028.89</td>
</tr>
<tr>
<td>Serious Visible</td>
<td>110</td>
<td>34.48%</td>
<td>$4,251,173.00</td>
<td>$38,647.03</td>
</tr>
<tr>
<td>Minor Visible</td>
<td>96</td>
<td>30.09%</td>
<td>$2,084,089.00</td>
<td>$21,709.26</td>
</tr>
<tr>
<td>Complaints of pain</td>
<td>94</td>
<td>29.47%</td>
<td>$1,183,706.00</td>
<td>$12,592.62</td>
</tr>
<tr>
<td>TOTAL</td>
<td>319</td>
<td>100.00%</td>
<td>$8,488,517.00</td>
<td>$26,609.77</td>
</tr>
</tbody>
</table>

**Previous Highway Safety Record**
Previous highway safety record for older drivers involved in fatal crashes was compared to previous highway safety record for drivers of all ages. Unlike drivers of all ages, no older drivers involved in fatal crashes had a previous DWI conviction or a previous suspension or revocation. The percent of older drivers involved in fatal crashes who had been involved in a previous crash was almost identical to that for drivers of all ages in fatal crashes.

**Conclusions**
Older drivers are unique from other drivers in many ways. Their involvement in crashes tends to be during daytime weekday hours, unlike the general driving population. They are involved in a higher percentage of angle crashes than drivers of all ages. Safety for older drivers when considering sex mimics the larger driving population. Yet as drivers age (85 or older) the differences between male and female drivers become less evident. Older drivers had the lowest average inpatient charge of all age groups; however, they had the highest fatal and minor injury inpatient charges. While the available data provides some insight into older driver safety issues, there is not as detailed an understanding of the differences between older driver behavior and the behavior of all drivers as there is for younger drivers. Further information on older driver safety beyond what is available in crash-related data could provide additional insight into potential program areas for older driver safety. This is
especially true when considering issues of mobility in combination with safety for older drivers.

**PEDESTRIANS**

Pedestrian safety has become a growing issue of concern both at the national and state levels. Thirteen percent of traffic fatalities in 2002 were pedestrians (11 percent) and bicyclists (two percent). In Massachusetts, pedestrians accounted for six percent of all fatal and incapacitating injuries in 2002, while bicyclists accounted for two percent of the total. There has been ongoing discussion about the differences between pedestrian injury occurrences in health data and pedestrian injury occurrences in crash data in Massachusetts. The focus on pedestrian safety in general, and questions about the true state of pedestrian safety in Massachusetts, warrant further investigation of this problem.

**Pedestrian Age and Sex**

Figure 22 shows the rate of incapacitating injuries to pedestrians in Massachusetts in 2002 per 100,000 population. The highest rates of pedestrian incapacitating injuries were among 16 to 24 year-olds and those age 65 or older. Within the younger age group, for 16 to 17 year-olds, the rate was higher for females than males while for 18 to 24 year-olds, the rate was higher for males than for females. For the older age group the rate is higher for females age 65 to 69 but higher for males age 70 or older.

![Figure 22: Pedestrian incapacitating injuries per 100,000 population, Massachusetts, 2002.](image)
Pedestrian-Related Violations
Less than one percent of all violations issued were for pedestrian-related offenses. Pedestrian-related offenses are “yield to a pedestrian” and “yield to a blind person.” Twenty-one to 24 year-olds and 25 to 29-year olds are the two age groups with the greatest over-representation in terms of the percent of all violations that are pedestrian-related; drivers over the age of 70 are the age group with the greatest under-representation.

Temporal Factors
The days of week and time of day with the highest percentage of all pedestrian incapacitating injuries are weekdays between 6:00 pm and 8:59 pm. Winter was the season with the highest percentage of all incapacitating injuries that were pedestrians.

MOTORCYCLES
There has been a multi-year increase in the number of motorcyclist fatalities across the nation. Nationally, motorcyclists were 26 times more likely than vehicle occupants to be killed in a crash and five times more likely to be injured. In 2003, motorcyclists were 7.5 percent of Massachusetts crash-related fatalities. Motorcyclists present a unique challenge for highway safety professionals in that they are so vulnerable to other vehicles and the roadway environment as compared to automobile, truck, and bus occupants. This and other reasons have led the GHSB to be concerned about any weakening of the commonwealth's universal motorcycle helmet law. Fortunately, Massachusetts continues to have a high quality statewide rider training program operated by the Registry of Motor Vehicles.

Motorcyclist Injury Severity
Motorcyclists were six percent of vehicle occupants suffering incapacitating injuries and 13 percent of crash fatalities in Massachusetts in 2002. While motorcycles accounted for only two percent of all registered vehicles in Massachusetts in 2002, they were 10 percent of all vehicles involved in fatal crashes. Eighteen percent of motorcycles involved in a crash were involved in incapacitating injury crashes; this number was only three percent for all vehicles.

Helmet Use
Ninety-one percent of motorcyclists killed in Massachusetts in 2002 were wearing a helmet. All motorcycle passengers killed in Massachusetts in 2002 were wearing helmets.

Motorcyclist Age and Sex
When examining motorcycle incapacitating injuries per 100,000 licensed motorcycle drivers in Massachusetts in 2002, young motorcyclists are suffering incapacitating injuries at a much higher rate than older motorcyclists. Using this rate, motorcyclists ages 16 and 17 were nearly four times more likely to be injured than 18 to 20 year-old drivers. There is little variation between age groups for motorcyclists age 25 or older. Licensed drivers were used for normalizing motorcyclists since most motorcyclists are drivers and using licensed motorcyclists for normalizing provides a more focused base population.

Temporal Factors
Fifty-seven percent of motorcycle fatalities in Massachusetts in 2002 occurred on the weekend. The weekend is defined as Friday 6:00 pm to Monday 5:59 am.
Objectives

1. Reduce the rate of young drivers 16 to 24 involved in fatal and incapacitating injury crashes.
   Performance Measure:
   • Reduction in the percent of young driver crash violations that are speed-related (seven percent of young driver crash violations that are speed related, down from 10 percent)

2. Gather information on the current state of older driver issues in Massachusetts and examples of “best practices” from across the nation to apply in the Commonwealth.
   Performance Measures:
   • Create list of available resources (baseline)
   • Create list of potential projects to address older driver safety (baseline)
   • Conduct presentations to older populations.
   • Continue work on FHWA Work Zone-Elder Grant.

3. Reduce the rate of pedestrian, bicyclist, motorcyclist, and school bus related fatalities and incapacitating injuries.
   Performance Measures:
   • Improve understanding of data resources available to analyze pedestrian safety.
   • Sponsor or participate in conferences and working groups on younger drivers, pedestrian-bicycle safety, and motorcycle safety.
   • Award grants to police departments to address pedestrian safety issues through enforcement and education.
   • Ensure school bus professionals have the most current safety information and training.

V. TRAFFIC RECORDS

The GHSB and its partners collect and use traffic safety data through three processes:

• Traffic records coordination;
• Continued updating and growth of the Massachusetts Data Warehouse and Interactive Data Retrieval System;
• Data-driven program planning, implementation, and evaluation.

Traffic records coordination brings data owners and traffic safety stakeholders together to work towards a statewide network of data collection and sharing that is comprehensive and effective. The Massachusetts Data Warehouse and Interactive Data Retrieval System will provide a central storage point for the collected data and allows access to the data for traffic safety stakeholders throughout the Commonwealth. Leading by example, the GHSB will utilize a data-driven approach to program planning, implementation, and evaluation to encourage others to use data and traffic records in this manner. The reauthorization of TEA 21 - SAFETEA-LU - will enhance the role played by data and traffic records within highway safety, requiring traffic records to be a highway safety program area for the GHSB in FFY 06.
Goals

- Continue implementation of the 2005 Massachusetts Strategic Plan for Traffic Records in close collaboration with an active Traffic Records Coordinating Committee (TRCC).
- Ensure GHSB and MassHighway will develop a Strategic Highway Safety Plan for Massachusetts, based on the AASHTO model, for FFY 2007.
- Expand use of on-line traffic records data among law enforcement and highway safety construction professionals.

Problem Identification and Analysis

In January 2002, a new Massachusetts crash report form was fully implemented allowing officers to collect more and better information at the crash scene. Additionally, the systems for collecting, storing and sharing the data have been improved to meet the demands of the new crash report form as well as to meet the increasing interest of traffic safety stakeholders seeking to plan, implement, and evaluate programs. To date, Massachusetts has been successful in the following areas of improving traffic records:

- Using the Traffic Records Coordinating Committee (TRCC) and other avenues to establish and foster relationships among data owners to encourage the sharing of crash-related data;
- Creating single point of storage for crash-related data, the Massachusetts Data Warehouse;
- Understanding data quality issues for crash-related data in Massachusetts and using the knowledge to improve data quality as it is entered into the Data Warehouse;
- Expanding beyond traditional crash report form data and including other crash-related data in the Data Warehouse; and
- Providing better access to the Data Warehouse through the use of a web-based tool, the Interactive Data Retrieval System.

In FFY 2006 there are several areas which warrant further consideration: ensuring data quality of current contents of Data Warehouse as well as future data set additions; presenting data to stakeholders through the Interactive Data Retrieval System so as to minimize user confusion or error; gaining faster access to key data sets for the Data Warehouse; preparing Interactive Data Retrieval System for full release.

Objectives

1. Improve access to data for traffic safety stakeholders throughout the Commonwealth.
   Performance Measures:
   - Inclusion of most recent available year of data for all data sets currently stored in Massachusetts Data Warehouse.
   - Number of new organizations provided with access to Interactive Data Retrieval System (one hundred).
• Increase in number of queries run on Interactive Data Retrieval System (five percent increase over previous year).
• Transfer of Interactive Data Retrieval System from beta test phase to full release.

2. Provide data analysis assistance to traffic safety stakeholders.
   Performance Measures:
   • Presentations and trainings on use of Interactive Data Retrieval System and crash-related data in program planning and evaluation (five to seven).
   • Prepare FFY 2005 Annual Report and FFY 2007 HSP.

3. Improved data collection and coordination involving traffic records.
   Performance Measures:
   • Monthly meetings of Traffic Records Coordinating Committee (TRCC).
   • Regular meetings of TRCC’s Data Quality subcommittee.

**VI. PLANNING AND ADMINISTRATION**
Under the direction of the Executive Office of Public Safety, the GHSB will use staff and funding for planning, implementing, monitoring, and evaluating programs and projects within the above five highway safety program areas of the FFY 2006 HSP as well as for the preparation of the FFY 2005 Annual Report and the FFY 2007 HSP.

**Goals**
• To administer the FFY 2006 HSP in accordance with state and federal guidelines by providing the necessary fiscal and program management.
OCCUPANT PROTECTION PROGRAM AREA

Goal:
- Increase safety belt use from 65 percent in 2005 to 67 percent in 2006.

Project Number: OP-06-01
Project Title: Click It or Ticket (CIOT) Paid and Earned Media

Project Description:
- Develop and implement a statewide paid and earned media plan for the following CIOT Mobilization periods: November 2005 and May 2006. Based on latest data analysis, a third CIOT Mobilization may be conducted August-September 2006. This media effort will educate the public on the benefits of safety belt and child safety seat use as well as the Commonwealth’s occupant protection laws.
- Primary target audience will be males and females ages 16 to 49, with secondary audiences of males and females ages 16 to 24, diverse populations, commercial vehicle and pick-up truck occupants, urban residents, and Southeastern Massachusetts residents.
- Develop partnerships with Massachusetts employers as well as sports venues with assistance of TEAM Coalition to better reach younger adults.

Staff Person: Brook Chipman

Project Number: OP-06-02
Project Title: CIOT Community Educational and Equipment Initiatives

Project Description:
- Level II: Provide funding for law enforcement equipment and materials as an incentive for more than 150 police departments receiving overtime enforcement grants. Departments must complete three out of six GHSB-recommended community-based safety belt educational initiatives to support the May 2006 Mobilization. Signage and materials will be developed in Spanish and Portuguese to address diverse populations.
- Level III: Provide funding for law enforcement equipment and materials as an incentive to a minimum of 50 departments to complete three out of six GHSB-recommended community-based safety belt educational initiatives to support the May 2006 Mobilization. Departments would be required to participate in community-based initiatives and provide statistics on non-GHSB funded local enforcement mobilization efforts in May 2006 and August-September 2006.
- Fund development and purchase of educational incentives and promotional materials including but not limited to banners, safety belt survey signs, safety belt cruiser signs, and print materials for CIOT campaign. Banners and educational materials would be made available to all 351 cities and towns in the Commonwealth.
• Conduct series of regional program workshops for police departments on implementation of Level II and Level III educational initiatives.
• Prior to each CIOT Mobilization, provide state and local police, health care organizations, and other campaign partners with Mobilization kick-off meetings and materials to encourage maximum support.
• Conduct outreach efforts to increase impact of CIOT Mobilizations on diverse populations. Provide banners and materials in Spanish and Portuguese, as well as English.
• Expand CIOT Community Website Photo Album on the state website to promote safety belt initiatives conducted by Level II and Level III police departments.

Staff Person: Caroline Hymoff

Project Number: OP-06-03
Project Title: CIOT Enforcement Campaign

Project Description:
• Award overtime enforcement grants to the State Police and 250 local police departments to participate in November 2005 and May 2006 Mobilizations. Based on latest data analysis, a third Mobilization may be conducted August-September 2006. This effort will focus on greater compliance with the Commonwealth’s occupant protection laws.
• Conduct regional bidders’ conferences, grant orientation meetings, and workshops to ensure maximum participation and compliance with grant requirements.
• Utilize team of Law Enforcement Liaisons (LEL) under the direction of the Municipal Police Institute of the Massachusetts Chiefs of Police to increase participation in mobilizations by local police departments.

Staff Person: Caroline Hymoff (municipal police and LEL); Brook Chipman and Jenny Barron (State Police)

Project Number: OP-06-04
Project Title: CIOT and Occupant Protection Technical Assistance

Project Description:
• Prior to each CIOT Mobilization, the GHSB will provide law enforcement, health care organizations, employers, and other campaign partners with Mobilization kick-off meetings and materials to encourage maximum support.
• Conduct outreach efforts to increase impact of CIOT Mobilizations on diverse populations.
• Maintain and expand web-based community safety belt initiatives used by local police departments, in particular those seeking incentive funding for law enforcement equipment as part of the CIOT Campaign, as well as high schools, and colleges with GHSB mini-grants.
• Conduct GHSB bidders’ conference and regional meetings for local departments with CIOT grants, as well as assist with development of grant applications, requests for proposals, fact sheets, literature reviews and presentations.

• Increase occupant protection use by launch of statewide program to provide on-line access to traffic records information for law enforcement personnel by spring 2006.

**Staff Persons:** Caroline Hymoff, Brook Chipman, Jenny Barron

---

**Project Number:** OP-06-05  
**Project Title:** Occupant Protection Evaluation  
**Project Description:**

• Before May 2006 Mobilization, conduct sub-sample observational safety belt survey.

• After May 2006 Mobilization, conduct annual statewide safety belt observational survey using established NHTSA protocols to determine safety belt usage rate.

• Conduct safety belt observations in a maximum of 150 high schools and middle schools participating in the GHSB mini-grant program and produce summary report.

• After May 2006 Mobilization, conduct annual statewide telephone survey to determine whether there has been an improvement in Massachusetts residents’ perception of the safety belt law, enforcement of that law, and the impact of the media campaign.

• Evaluate performance of paid and earned media contractors and produce summary report.

• Conduct evaluation of CIOT safety belt educational initiatives conducted by Level II and Level III departments.

• Conduct NHTSA-approved evaluation of Massachusetts child passenger safety program.

**Staff Persons:** Brook Chipman, Caroline Hymoff, Jenny Barron

---

**Project Number:** OP-06-06  
**Project Title:** Youth Programs  
**Project Description:**

• With contractor(s) expand school-based mini-grant program on occupant protection, safety belts, speed and aggressive driving from 100 high schools in FFY 005 to a minimum of 150 high schools in FFY 06. Special emphasis will be placed on Mobilizations, prom and graduation season, and back-to-school period.

• Develop fact sheets with state and community-level data on occupant protection, impaired driving, and speed to assist schools receiving mini-grants with problem identification, programming and evaluation.

• Create and manage a media campaign targeted at parents and caregivers and focus on problem of low safety belt usage and impaired driving.
• Recruit corporate partners to sponsor promotional prizes and gain earned media coverage for program.
• With contractor(s) offer a multi-media presentation to elementary schools, middle schools, high schools, colleges and universities statewide covering topics from adolescent identity issues to the power of youth to make positive choices.
• Provide training to be conducted in elementary and middle schools by local law enforcement.
• Conduct a statewide conference engaging students from grades eight to 12 in community-wide activities for increasing safety belt use and for reducing underage drinking and impaired driving.
• Identify and contract with a maximum of 10 individuals to implement a program and/or presentation on impaired driving, safety belts, speed and aggressive driving.

Staff Person: Jenny Barron

Project Number: OP-06-07
Project Title: Child Passenger Safety Program

Project Description:
• Contract statewide CPS program that retains existing child passenger safety technicians and instructors as well as trains new technicians and instructors. Organize up to 10 trainings. Conduct up to eight recertification trainings and update classes. Promote availability of technicians to public.
• Contract with up to 17 certified CPS instructors to assist in conducting program.
• Implement a CPS equipment mini-grant program for a maximum of 100 police and fire departments and health care providers.
• Distribute CPS videos and literature.
• Conduct outreach efforts to increase impact of program on diverse populations.
• Conduct and sponsor a maximum of 15 child passenger safety checkpoints statewide with emphasis on low income and rural areas.
• Conduct an Annual Child Passenger Safety Conference for up to 500 attendees.

Staff Person: Jenny Barron

Project Number: OP-06-08
Project Title: Law Enforcement and Judicial Trainings

Project Description:
• Contract with a maximum of 10 Traffic Occupant Protection Strategies instructors to conduct trainings to local and state police and fire personnel.
• Conduct up to three instructor trainings in Traffic Occupant Protection Strategies.
• Conduct a maximum of 15 four-hour trainings in Traffic Occupant Protection Strategies.
• Conduct clerk magistrate trainings of occupant protection issues through The Judicial Institute of the Massachusetts Trial Court.

Staff Persons: Jenny Barron and Caroline Hymoff

---

Project Number: OP-06-09
Project Title: Network of Employers for Traffic Safety (NETS) Program

Project Description:
• Rebuild NETS program by establishing a minimum of five partners, initially by encouraging employer support of Mobilizations to increase safety belt use as well as reduce aggressive and impaired driving and speeding. Special emphasis will be placed on health care employers and those with fleets of commercial vehicles.
• Conduct outreach efforts to increase impact of program on diverse populations.

Staff Person: New Staff Person
IMPAIRED DRIVING PROGRAM AREA

Goals:

- Reduce the rate of alcohol-related fatalities per 100 million VMT from .39 in 2003 to .37 in 2006.
- Reduce the percentage of alcohol-related fatalities from 43 percent in 2004 to 41 percent in 2006.

Project Number: AL-06-01
Project Title: You Drink & Drive. You Lose (YD&DYL) Paid and Earned Media

Project Description:

- Develop and implement a statewide paid and earned media plan for the following YD&DYL Mobilization periods: December 2005-January 2006, and July 2006, and if determined by data, August-September 2006. Also provide earned media support to the State and Local Police Sobriety Checkpoint Partnership. This media effort will educate the public on the dangers and costs of impaired driving.
- Primary target audience will be males ages 16 to 34, with a secondary audience of diverse populations and residents of Southeastern Massachusetts.
- Develop partnerships with Massachusetts employers as well as sports venues with assistance of TEAM Coalition to better reach younger adults.

Staff Person: Brook Chipman

Project Number: AL-06-02
Project Title: YD&DYL Enforcement Campaign

Project Description:

- Award overtime enforcement grants to the State Police and 250 municipal departments to encourage participation in the December 2005-January 2006 and July Mobilizations and, if determined by data, a September 2006 Mobilization. This enforcement effort will focus on apprehending impaired drivers during high-risk days of the week and times of day – Wednesday through Sunday, 2 p.m. to 7 a.m. Emphasis will also be placed on enforcement of occupant protection laws.
- Conduct regional bidders’ conferences and grant orientation meetings and workshops to ensure maximum participation and compliance with grant requirements.
- Utilize team of Law Enforcement Liaisons (LEL) to increase mobilization participation by municipal police departments.

Staff Persons: Caroline Hymoff (Municipal Police, Conferences, LEL), Brook Chipman and Jenny Barron (State Police)
Project Number: AL-06-03  
Project Title: State and Local Police Sobriety Checkpoint Partnership

Project Description:
- Provide funding for sobriety checkpoints with the State Police and top 20 local police departments based on OUI arrests per 100,000 licensed drivers. Local departments would work in conjunction with new State Police Breath Alcohol Test System mobile unit.

Staff Persons: Caroline Hymoff (Municipal Police), Brook Chipman and Jenny Barron (State Police)

Project Number: AL-06-04  
Project Title: Breath Test Unit Upgrade

Project Description: To provide funding for the State Police to upgrade Breath Alcohol Test Units provided by the GHSB to all Massachusetts cities and towns and training facilities. Police departments would be required to provide software, hardware and technical services to maintain units. Funding would be available for departments documenting financial hardships and technical assistance.

Staff Person: Caroline Hymoff

Project Number: AL-06-05  
Project Title: Breath Alcohol Test Mobile Unit

Project Description: To provide additional funding for the Breath Alcohol Test System mobile unit to support state and local police sobriety checkpoints.

Staff Person: Jenny Barron

Project Number: AL-06-06  
Project Title: Youth Programs

Project Description:
- Develop a mini-grant program with a minimum of 25 universities and colleges to allow for their development and implementation of education and awareness initiatives geared towards alcohol prevention programming.
- Contractor will assist GHSB to conduct a paid and earned media campaign in close coordination with state and local level underage drinking enforcement within communities with high-risk high schools and colleges.
• Create and manage a media campaign targeted at adults and focus on problem of underage drinking.
• Develop fact sheets with state and community-level data on impaired driving, safety belts, and speeding to assist schools receiving mini-grants with problem identification, programming and evaluation.
• Recruit corporate sponsors to sponsor promotional prizes and gain earned media coverage for program.
• Conduct a statewide conference engaging students from grades eight to 12 in community-wide activities for reducing underage drinking and impaired driving.
• Conduct underage drinking prevention programming training for youth in elementary and middle schools.
• With contractor(s) expand school-based mini-grant program on impaired driving, safety belts, speed and aggressive driving from 100 high schools in FFY 05 to 150 high schools and middle schools in FFY06. Special emphasis focused on high risk target audiences, mobilizations, prom and graduation season, back-to-school period.
• Identify and contract with up to 10 individuals to implement a program or presentation on impaired driving, safety belts, speeding and aggressive driving.
• Conduct outreach efforts to increase impact of program on diverse populations.
• Implement Massachusetts Drug Impairment Trainings for Educational Professionals (DITEP) for community and school systems. Target high-risk audiences; coordinate with Youth Programs. Contract with up to 10 Massachusetts Drug Recognition Experts to provide these trainings.

**Staff Persons:** Jenny Barron; Rebecca Donatelli (OJJDP); Caroline Hymoff (DITEP)

---

**Project Number:** AL-06-07  
**Project Title:** Impaired Driving Technical Assistance  

**Project Description:**

- Maintain and expand web-based community initiatives used by high schools and colleges with GHSB mini-grants.

**Staff Person:** To be determined

---

**Project Number:** AL-06-08  
**Project Title:** Statewide and Community Alcohol/Underage Drinking Enforcement  

- Provide 10 grants to local law enforcement agencies and state liquor enforcement agency to reduce violations of state alcohol laws with special focus on preventing underage drinking. Require agencies to conduct in-kind community education and earned media in coordination with GHSB paid media. Agencies will coordinate their efforts with high schools and colleges receiving GHSB mini-grants. Special emphasis on YD&DYL mobilizations, prom and graduation season and back-to-school period.
Staff Person: Rebecca Donatelli

Project Number: AL-06-09
Project Title: Network for Employers for Traffic Safety (NETS) Program Project
Description:
- Rebuild NETS Program by establishing a minimum of five partners, initially by encouraging employer support of mobilizations to increase safety belt use as well as reduce aggressive and impaired driving and speeding. Special emphasis will be placed on health care employers and those with fleets of commercial vehicles.

Staff Person: New Staff Person

Project Number: AL-06-10
Project Title: Evaluation

Project Description:
- To conduct an evaluation of GHSB-funded alcohol education programming for local colleges and universities.
- After September 2006 Mobilization, conduct telephone survey to determine whether there has been an improvement in Massachusetts’ residents perception of the impaired driving laws, enforcement of those laws, and the impact of the media campaign.
- Evaluate performance of paid and earned media contractors and produce summary report.

Staff Persons: Brook Chipman, Rebecca Donatelli

Project Number: AL-06-11
Project Title: Impaired Driving and Community Technical Assistance

Project Description:
- Prior to each YD&DYL Mobilization, provide state and local police, health care organizations, employers and other campaign partners with Mobilization kick-off, meetings, and materials to encourage maximum support.
- Conduct outreach efforts to increase impact of YD&DYL Mobilizations on diverse populations.
- Maintain and expand web-based community initiatives used by high schools and colleges with GHSB mini-grants.
- Support GHSB bidders’ conferences and regional meetings for local police departments with YD&DYL grants, as well as assist with development of grant applications, requests for proposals, fact sheets and literature reviews.

Staff Persons: Caroline Hymoff, Brook Chipman, Jenny Barron, Rebecca Donatelli
Project Number: AL-06-12
Project Title: Officer and Judicial Training

Project Description:

- Conduct judicial trainings on impaired driving through the Judicial Institute of the Massachusetts Trial Court.
- Conduct trainings and conferences for district attorneys and prosecutors on impaired driving through the state District Attorneys Association (DAA).
- Provide funding for full-time Traffic Safety Prosecutor for coordination of GHSBDAA projects through the Massachusetts DAA.
- Conduct specialized training for local police officers in SFST, Drugs That Impair Driving, and other courses through the Massachusetts Municipal Police Training Committee (MPTC).
- Conduct statewide training program on Drug Evaluation and Classification to improve detection and prosecution of impaired driving by state and local police officers. Conduct Call-Out Policy Program for Drug Recognition experts.
- Provide resources for part-time coordination of Drug Recognition Expert for Drug Evaluation and Classification Program.
- Review implementation of pilot program for drug courts mini-grant initiative.
- Co-sponsor Massachusetts judges, prosecutors, probation and law enforcement to attend annual New England Association of Drug Court Professionals Conference.

Staff Person: Caroline Hymoff; Rebecca Donatelli (MPTC)
POLICE TRAFFIC SERVICES PROGRAM AREA

Goals:

- Increase the level of traffic enforcement by law enforcement agencies.
- Encourage and assist law enforcement agencies with traffic safety awareness initiatives.

Project Number: PT-06-01
Project Title: Massachusetts Law Enforcement Challenge

Project Description:

- Conduct the Second Annual Massachusetts Law Enforcement Challenge, in cooperation with the Massachusetts Chiefs of Police and the Massachusetts State Police. The Challenge provides an opportunity for law enforcement agencies to showcase traffic safety programs. The goal will be to increase participation from 12 applicants in FFY 05 to 25 in FFY 06.
- Conduct award ceremony for all participants and recognize traffic safety accomplishments conducted during calendar year 2005.

Staff Person: Caroline Hymoff

Project Number: PT-06-02
Project Title: Law Enforcement Liaison

Project Description:

- Contract with Municipal Police Institute (MPI) of the Massachusetts Chiefs of Police Association to serve as law enforcement liaison to assist the GHSB's efforts to conduct traffic enforcement and safety initiatives with Massachusetts municipal police agencies. Program would provide three retired Chiefs of Police and the Executive Director of MPI.

Staff Person: Caroline Hymoff

Project Number: PT-06-03
Project Title: Law Enforcement Conference

Project Description:

- To conduct a one-day statewide law enforcement conference aimed at increasing participation and support for CIOT, YD&DYL, and RR Mobilizations and other GHSB initiatives.

Staff Person: Caroline Hymoff
SPEED PROGRAM AREA

Goals:

- Reduce the percentage of speed-related fatalities from 34 in 2003 to 30 percent in 2006.
- Reduce the rate of speed-related fatalities per hundred million VMT from 0.29 in 2003 to 0.27 in 2006.

Project Number: SC-06-01
Project Title: Road Respect (RR) Paid and Earned Media

Project Description:

- Develop and implement a statewide paid and earned media plan for the April 2006 RR Mobilization. This media effort will educate the public on the dangers of speeding and aggressive driving, including the failure to yield right of way, following too closely, unsafe passing or lane use, and disregarding traffic controls such as red light running.
- Primary target audience will be males ages 16 to 34 with a secondary audience of diverse populations and residents of Southeastern Massachusetts.
- Develop partnerships with Massachusetts employers as well as sports venues with assistance of TEAM Coalition to better reach younger adults.

Staff Person: Brook Chipman

Project Number: SC-06-02
Project Title: RR Enforcement Campaign

Project Description:

- Award overtime enforcement grant to State Police to participate in an October Mobilization for Columbus Day holiday weekend. This enforcement effort will focus on speeding and aggressive driving, including the failure to yield right of way, following too closely, unsafe passing or lane use, and disregarding traffic controls, such as red light running.
- Award overtime grants to 250 municipal police departments to participate in the April 2006 Mobilization. Special efforts will be made to recruit departments in Western Massachusetts because of higher speed-related fatal crashes.
- Award funds to State Police for new speed measurement equipment including speed boards, LiDAR and radar to enhance Road Respect efforts.
- Award overtime enforcement grants for pilot project partnering State Police and up to 10 municipal departments to reduce drag racing. An emphasis will also be placed on enforcement of occupant protection laws.

Staff Persons: Caroline Hymoff (Municipal Police), Brook Chipman and Jenny Barron (State Police)
Project Number: SC-06-03
Project Title: RR Community and Speed Technical Assistance

Project Description:
- Prior to the RR Mobilizations, provide state and local police, health care organizations, employers, and other campaign partners with a mobilization kick-off meeting and materials and banners to encourage maximum support.
- Conduct outreach efforts to increase impact of RR mobilization on diverse populations.
- Maintain and expand web-based speed initiatives used by local police departments, as well as high schools and colleges with GHSB mini-grants.
- Provide support for GHSB bidders’ conferences and regional meetings for local police departments with RR grants, as well as assist with development of grant applications, requests for proposals, fact sheets, literature reviews, and presentations.

Staff Persons: Caroline Hymoff, Brook Chipman, Jenny Barron

Project Number: SC-06-04
Project Title: Community Spot Speed Surveys

Project Description:
- Through a contractor deliver two GHSB training courses on conducting spot survey studies for a minimum of 50 police departments. Course will be based on program developed and piloted by GHSB in FFY 05. Studies will provide communities with evidence to support or refute complaints of excessive neighborhood speeds.
- Develop web page that provides detailed instructions on conducting spot speed studies for grantee communities.

Staff Person: Caroline Hymoff

Project Number: SC-06-05
Project Title: Speed Evaluation

Project Description:
- After April 2006 RR Mobilization, conduct annual statewide phone survey to determine whether there has been an improvement in Massachusetts residents’ perception of aggressive driving and speeding laws, enforcement of these laws, and the impact of the media campaign.
- Evaluate performance of paid and earned media contractors and produce summary report.

Staff Person: Brook Chipman
Project Number: SC-06-06 Project
Title: Youth Programs

Project Description:

- With contactor expand school-based mini-grant program on impaired driving, protection, safety belts, speed and aggressive driving from 100 schools in FFY 06 to a minimum of 150 high schools specifically in support of Mobilizations, prom and graduation season and back-to-school period.
- Develop fact sheets with state and community-level data on safety belts, impaired driving, and speed to assist schools receiving mini-grants with problem identification, programming and evaluation.
- Recruit corporate partners to sponsor promotional prizes and gain earned media coverage for the program.
- Conduct outreach efforts to increase impact of program on diverse populations.
- Identify and contract with up to 10 individuals to implement a program and presentation on impaired driving, safety belts, speed, and aggressive driving.
- With contractor(s) offer a multi-media presentation to elementary schools, middle schools and high schools throughout Massachusetts covering topics from adolescent identity issues to the power of youth to make positive choices.
- Provide outreach to schools with GHSB mini-grants as well as non-participating schools.

Staff Person: Jenny Barron
PEDESTRIAN AND BICYCLE SAFETY PROGRAM AREA

Goal:

- Reduce the rate of pedestrian fatalities and incapacitating injuries per 100,000 population to 5.1.
- Reduce the number of bicycle-related incapacitating injuries.

Project Number: PS-06-01
Project Title: Statewide Bicycle Helmet Program

Project Description:

- Expand the GHSB Statewide Bicycle Helmet Distribution program through police and fire departments, service clubs, and community organizations from 224 grant awards in FFY 2005 to 250 grant awards in FFY 2006. Provide bicycle helmet informational cards, helmet pledge cards and helmet law posters statewide. Print cards and posters in other languages to target diverse populations. The program aims to reduce the number of bicycle-related injuries.

Staff Person: Caroline Hymoff

Project Number: PS-06-02
Project Title: Statewide Pedestrian and Bicycle Safety Conference

Project Description:

- Co-sponsor the Annual Pedestrian and Bicycle Conference with the Executive Office of Transportation, MassHighway, Department of Public Health, and other state partners. Anticipate 200 attendees representing public health, law enforcement, highway planners, traffic safety advocates, and highway engineers.

Staff Person: Caroline Hymoff

Project Number: PS-06-03
Project Title: Pedestrian Enforcement and Education Program

Project Description:

- Based on problem identification, award up to 10 grants to police departments to conduct enforcement and education aimed at reducing the incidences of pedestrian fatalities and injuries.
- Develop, print and distribute pedestrian safety handcards in languages other than English to target diverse populations.

Staff Person: Caroline Hymoff
Project Number: PS-06-04
Project Title: Safest Route to School Project

Project Description:
  • Continue to serve on the Safest Route to School Advisory Committee for statewide program implementation.

Staff Person: Caroline Hymoff
MOTORCYCLE SAFETY PROGRAM AREA

Goal:

• Reduce the rate of motorcycle fatalities and incapacitating injuries per 100,000 population from 5.33 in 2003 to 3.75 in 2006.

Project Number: MS-06-01
Project Title: Evaluation

Project Description:

• Provide evaluation of communications portion of Registry of Motor Vehicles’ motorcycle safety program, through use of a telephone survey.

Staff Person: Brook Chipman
SCHOOL BUS SAFETY PROGRAM AREA

Goal:

- Ensure school bus professionals have the most current safety information and training.

Project Number: SB-06-01  
Project Title: Trainings for Safety Restraints on School Buses

Project Description:

- Contractor will conduct up to three train-the-trainer workshops for child passenger safety instructors and technicians on the proper restraint of children on school buses. Trainings will then be provided to school bus company drivers operating buses outfitted with safety belts.
- Print training manuals and materials to be used in workshops and for statewide distribution.

Staff Person: Jenny Barron

Project Number: SB-06-02  
Project Title: School Bus Driver Training

Project Description:

- Update curriculum, print and distribute school bus driver and instructor manuals.
- Partner with School Transportation Association of Massachusetts and other identified school bus organizations.

Staff Person: Jenny Barron
SPECIAL USERS AREA

Goals:

- Reduce the rate of young drivers’ ages 16 to 24 involved in fatal and incapacitating injury crashes per 100,000 licensed drivers.
- Obtain baseline information on factors involved in older driver crashes.
- Provide improved safety, comfort, ease of use, and operations, for older road users.

Project Number: SU-06-01 Project
Title: Driver Education

Project Description:

- Partner with the Registry of Motor Vehicles (RMV) to provide funding assistance to print and distribute newly developed educational materials for drivers’ education programs throughout the Commonwealth.

Staff Person: Jenny Barron

---

Project Number: SU-06-02
Project Title: Elder Driving Program

Project Description:

- Partner with the RMV to expand and update older driver program. Provide funding assistance for contractors to expand program.
- Develop a traffic safety presentation to be conducted by law enforcement and fire department personnel to assisted living and elder communities. Contract with up to 10 individuals to conduct presentations.

Staff Person: Jenny Barron

---

Project Number: SU-06-02 Project
Title: Older Road Users

Project Description: With dedicated grant funds, demonstrate and evaluate the effectiveness of FHWA guidelines in providing improved safety and operations in work zones for older road users.

Staff Person: Rebecca Donatelli
TRAFFIC RECORDS PROGRAM AREA

Goals:

• Continue implementation of the 2005 Massachusetts Strategic Plan for Traffic Records in close collaboration with an active Traffic Records Coordinating Committee (TRCC).

• Ensure GHSB and its highway safety partners work to develop a Strategic Highway Safety Plan for Massachusetts, based on the American Association of State Highway Traffic Organizations (AASHTO) model, by FFY 2007.

• Expand use of on-line traffic records tools among law enforcement and highway construction professionals for enhanced program planning and evaluation.

Project Number: TR-06-01
Project Title: Traffic Records Coordinating Committee

Project Description:

• Define and implement phase one of the 2005 Massachusetts Strategic Plan for Traffic Records in close collaboration with other TRCC members.

• Support on-going work of TRCC, in particular to enable it to hold annually eight to ten meetings as well as four to five meetings of its Data Quality sub-committee.

• Work with TRCC members to conduct audit of current Massachusetts crash report.

Staff Persons: Brook Chipman, Rebecca Donatelli, and New Staff Position

Project Number: TR-06-02
Project Title: Fatal Analysis Reporting System (FARS)

Project Description: Provide NHTSA through the Registry of Motor Vehicles with required fatal crash data for FARS. Support NHTSA’s FastFARS initiative in early 2006.

Staff Person: New Staff Position

Project Number: TR-06-03
Project Title: Data Warehouse and Interactive Data Retrieval System

Project Description:

• Acquire, load, house, and integrate the most current available data related to traffic safety as well as maintain existing contents of data warehouse.

• Maintain and enhance the user-friendly navigation system of the data warehouse, the Interactive Data Retrieval System.
• Respond to requests for assistance from GHSB, TRCC, data owners, and other highway safety partners on the optimum use of the content of the data warehouse as well as the Interactive Data Retrieval System.

• Hold between six and eight regional trainings on the Interactive Data Retrieval System and its use for enhanced program planning and evaluation for law enforcement and highway construction professionals.

• Provide on an on-going basis to GHSB reports, literature reviews, and fact sheets, presentation materials to ensure optimum use of the data warehouse contents as well as other transportation databases and research. Provide similar support as feasible to GHSB partners.

Staff Persons: Brook Chipman, Rebecca Donatelli, and New Staff Position

Project Number: TR-06-04
Project Title: CODES: Crash Outcome Data Evaluation System

Project Description:
• Continue linkages of statewide crash and injury data to track people involved and injured in motor vehicle crashes through the healthcare system to determine consequences of injury crashes.

• Generate linked statewide crash and injury data with the newest years of data available and use these data to evaluate Massachusetts highway safety problems. Additional statewide data such as driver licenses, vehicle registrations, citation/conviction records, census information, and insurance claims will be used, as available and accessible.

• Develop reports and fact sheets useful to the traffic safety and injury control communities at the state, local, and national levels.

• Mentor new CODES states and states interested in developing data linkage capabilities by providing technical assistance

Staff Persons: Brook Chipman, Rebecca Donatelli, and New Staff Position

Project Number: TR-06-05
Project Title: Strategic Planning and Management

Project Description:
• Provide traffic safety data and analyses necessary to support the GHSB’s FFY 07 HSP and FFY 05 Annual Report.

• Secure additional highway safety grant funding.

• Work with TRCC and other highway safety partners work to develop a Strategic Highway Safety Plan for Massachusetts, based on the AASHTO model, by FFY 2007.

• With TRCC and other highway safety partners hold annual statewide Safety Conscious Planning Forum.
• Maintain web page on key initiatives of the GHSB and its highway safety partners, in particular those involving traffic records and the Strategic Highway Safety Plan for Massachusetts.

Staff Persons: Brook Chipman, Rebecca Donatelli, New Staff Position

Project Number: TR-06-05
Project Title: Commercial Vehicle Data Management System

Project Description:
• Improve commercial vehicle traffic records through a commercial motor vehicle safety database to include commercial vehicle crash data, commercial vehicle inspection data, and violation data.
• Provide commercial vehicle analysis technical assistance to commercial vehicle safety professionals such as State Police Commercial Vehicle Enforcement Team.
• Implement causation study to further understanding of the nature of commercial vehicle crashes so as to identify issues and trends in Massachusetts’ crashes.

Staff Person: Rebecca Donatelli
TRAFFIC ENGINEERING SERVICES PROGRAM AREA

Goal:
  • Improve safety and highway operations through highway upgrades.

Project Number: TR-06-01
Project Title: Hazardous Elimination

Project Description:
  • To provide funding to MassHighway for statewide hazardous elimination and safety improvement projects.

Staff Person: Caroline Hymoff
PLANNING AND ADMINISTRATION

Goal:

• Administer the FFY 06 HSP in accordance with state and federal guidelines by providing the necessary fiscal and program management.

Project Number: PA-06-01
Project Title: Administration of Statewide Traffic Safety Program

Project Description:

• Plan, implement, monitor, and evaluate programs and projects for the FFY 06 HSP. Provide required staff salaries, professional development, travel funds, office space, equipment, materials, and fiscal support.
• Produce FFY 05 Annual Report and FFY 07 HSP.
# U.S. Department of Transportation National Highway Traffic Safety Administration

State: Massachusetts  
Highway Safety Plan Cost Summary  
Page: 1  
2006-HSP-1  
Report Date: 08/30/2005  
For Approval

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Project Description</th>
<th>Prior Approved Program Funds</th>
<th>State Funds</th>
<th>Bal.</th>
<th>Previous Balance</th>
<th>Current Balance</th>
<th>Share to Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHTSA</td>
<td>Planning and Administration</td>
<td>$0.00 $140,000.00</td>
<td>$0.00 $140,000.00</td>
<td>$140,000.00</td>
<td>$0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning and Administration</td>
<td>PA-2006-00-00-00</td>
<td>$0.00 $140,000.00</td>
<td>$0.00 $140,000.00</td>
<td>$140,000.00</td>
<td>$0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$0.00 $140,000.00</td>
<td>$0.00 $140,000.00</td>
<td>$140,000.00</td>
<td>$0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>AL-2006-00-00-00</td>
<td>$0.00 $100,000.00</td>
<td>$0.00 $230,000.00</td>
<td>$230,000.00</td>
<td>$140,000.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alcohol Total</td>
<td>$0.00 $100,000.00</td>
<td>$0.00 $230,000.00</td>
<td>$230,000.00</td>
<td>$140,000.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycle Safety</td>
<td>MC-2006-00-00-00</td>
<td>$0.00 $170,000.00</td>
<td>$0.00 $65,000.00</td>
<td>$65,000.00</td>
<td>$0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motorcycle Safety Total</td>
<td>$0.00 $170,000.00</td>
<td>$0.00 $65,000.00</td>
<td>$65,000.00</td>
<td>$0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupant Protection OP-2006-00-00-00</td>
<td>$0,000.00</td>
<td>$500,000.00</td>
<td>$0,000.00</td>
<td>$1,774,500.00</td>
<td>$1,774,500.00</td>
<td>$940,000.00</td>
<td></td>
</tr>
<tr>
<td>Occupant Protection Total</td>
<td>$0,000.00</td>
<td>$500,000.00</td>
<td>$0,000.00</td>
<td>$1,774,500.00</td>
<td>$1,774,500.00</td>
<td>$940,000.00</td>
<td></td>
</tr>
<tr>
<td>Program Area</td>
<td>Project</td>
<td>Prior Approved Description</td>
<td>Program</td>
<td>State Bal.</td>
<td>State Funds</td>
<td>Incre/(Decre)</td>
<td>Current Balance</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------</td>
<td>----------------------------</td>
<td>---------</td>
<td>------------</td>
<td>-------------</td>
<td>---------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Pedestrian/Bicycle Safety</td>
<td>PS-2006-00-00-00</td>
<td>$0.00</td>
<td>$50,000.00</td>
<td>$0.00</td>
<td>$159,500.00</td>
<td>$159,500.00</td>
<td>$126,500.00</td>
</tr>
<tr>
<td>Police Traffic Services</td>
<td>PT-2006-00-00-00</td>
<td>$0.00</td>
<td>$25,000.00</td>
<td>$0.00</td>
<td>$167,500.00</td>
<td>$167,500.00</td>
<td>$102,500.00</td>
</tr>
<tr>
<td>Traffic Records</td>
<td>TR-2006-00-00-00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,430,000.00</td>
<td>$1,430,000.00</td>
<td>$1,065,000.00</td>
</tr>
<tr>
<td>Community Traffic Safety Project</td>
<td>CP-2006-00-00-00</td>
<td>$0.00</td>
<td>$200,000.00</td>
<td>$0.00</td>
<td>$1,200,000.00</td>
<td>$1,200,000.00</td>
<td>$1,065,000.00</td>
</tr>
<tr>
<td>Community Traffic Safety Project</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$.00 $200,000.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$.00 $1,200,000.00 $1,200,000.00 $1,065,000.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>SB-2006-00-00-00</td>
<td>Speed Control</td>
<td>$0.00</td>
<td>$10,000.00</td>
<td>$0.00</td>
<td>$65,000.00</td>
<td>$65,000.00</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------------------</td>
<td>---------------</td>
<td>-------</td>
<td>------------</td>
<td>-------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>School Bus Total</td>
<td>$0.00</td>
<td>$10,000.00</td>
<td>$0.00</td>
<td>$65,000.00</td>
<td>$65,000.00</td>
<td>$65,000.00</td>
<td></td>
</tr>
<tr>
<td>Speed Control</td>
<td>$0.00</td>
<td>$200,000.00</td>
<td>$0.00</td>
<td>$951,000.00</td>
<td>$951,000.00</td>
<td>$415,000.00</td>
<td></td>
</tr>
<tr>
<td>SC-2006-00-00-00</td>
<td></td>
<td>$200,000.00</td>
<td>$0.00</td>
<td>$951,000.00</td>
<td>$951,000.00</td>
<td>$415,000.00</td>
<td></td>
</tr>
<tr>
<td>Speed Control Total</td>
<td>$0.00</td>
<td>$200,000.00</td>
<td>$0.00</td>
<td>$951,000.00</td>
<td>$951,000.00</td>
<td>$415,000.00</td>
<td></td>
</tr>
<tr>
<td>Paid Advertising</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM-2006-00-00-00</td>
<td>$0.00</td>
<td>$350,000.00</td>
<td>$0.00</td>
<td>$700,000.00</td>
<td>$700,000.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>Paid Advertising Total</td>
<td>$0.00</td>
<td>$350,000.00</td>
<td>$0.00</td>
<td>$700,000.00</td>
<td>$700,000.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>NHTSA 402 Total</td>
<td>$0.00</td>
<td>$1,745,000.00</td>
<td>$0.00</td>
<td>$6,882,500.00</td>
<td>$6,882,500.00</td>
<td>$2,854,000.00</td>
<td></td>
</tr>
<tr>
<td>405 Occupant Protection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J2-2006-00-00-00</td>
<td>$0.00</td>
<td>$5,875,000.00</td>
<td>$0.00</td>
<td>$1,468,750.00</td>
<td>$1,468,750.00</td>
<td>$785,000.00</td>
<td></td>
</tr>
<tr>
<td>405 Occupant Protection Total</td>
<td>$0.00</td>
<td>$5,875,000.00</td>
<td>$0.00</td>
<td>$1,468,750.00</td>
<td>$1,468,750.00</td>
<td>$785,000.00</td>
<td></td>
</tr>
<tr>
<td>411 Data Program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J9-2006-00-00-00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$200,000.00</td>
<td>$200,000.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>411 Data Program Total</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$200,000.00</td>
<td>$200,000.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>157 Incentive Funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>157OP-2006-00-00-00</td>
<td>$0.00</td>
<td>$37,500.00</td>
<td>$0.00</td>
<td>$150,000.00</td>
<td>$150,000.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>157 Occupant Protection Total</td>
<td>$0.00</td>
<td>$37,500.00</td>
<td>$0.00</td>
<td>$150,000.00</td>
<td>$150,000.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>157 Community Traffic Safety Projec</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>157CP-2006-00-00-00</td>
<td>$0.00</td>
<td>$77,500.00</td>
<td>$0.00</td>
<td>$310,000.00</td>
<td>$310,000.00</td>
<td>$310,000.00</td>
<td></td>
</tr>
<tr>
<td>157 Community Traffic Safety Projec Total</td>
<td>$0.00</td>
<td>$77,500.00</td>
<td>$0.00</td>
<td>$310,000.00</td>
<td>$310,000.00</td>
<td>$310,000.00</td>
<td></td>
</tr>
<tr>
<td>157 Incentive Funds Total</td>
<td>$0.00</td>
<td>$115,000.00</td>
<td>$0.00</td>
<td>$460,000.00</td>
<td>$460,000.00</td>
<td>$310,000.00</td>
<td></td>
</tr>
<tr>
<td>Program Area</td>
<td>Project</td>
<td>Description</td>
<td>Prior Approved Program Funds</td>
<td>State Funds</td>
<td>Previous Bal.</td>
<td>Incre/(Decre)</td>
<td>Current Balance</td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>-------------</td>
<td>-------------------------------</td>
<td>-------------</td>
<td>--------------</td>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>157 Innovative Funds 2005</td>
<td>IPM5-2006-00-00-00</td>
<td>$0.00</td>
<td>$150,000.00</td>
<td>$0.00</td>
<td>$300,000.00</td>
<td>$300,000.00</td>
<td>$300,000.00</td>
</tr>
<tr>
<td>157 Innovative Paid Media FY 2005 Total</td>
<td>157 Innovative Funds 2005 Total</td>
<td>$0.00</td>
<td>$150,000.00</td>
<td>$0.00</td>
<td>$300,000.00</td>
<td>$300,000.00</td>
<td>$300,000.00</td>
</tr>
<tr>
<td>164 Transfer Funds</td>
<td>1 64PA-2006-00-00-00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
</tr>
<tr>
<td></td>
<td>164 Planning and Administration Total</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>164 Alcohol</td>
<td>1 64AL-2006-00-00-00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$3,584,171.00</td>
<td>$3,584,171.00</td>
<td>$1,824,450.00</td>
</tr>
<tr>
<td></td>
<td>164 Alcohol Total</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$3,584,171.00</td>
<td>$3,584,171.00</td>
<td>$1,824,450.00</td>
</tr>
<tr>
<td>164 Paid Media</td>
<td>1 64PM-2006-00-00-00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$800,000.00</td>
<td>$800,000.00</td>
<td>$800,000.00</td>
</tr>
<tr>
<td></td>
<td>164 Paid Media Total</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$800,000.00</td>
<td>$800,000.00</td>
<td>$800,000.00</td>
</tr>
<tr>
<td>164 Hazard Elimination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Description</th>
<th>1 64HE-2006-00-00-00</th>
<th>Hazard Elimination Total</th>
<th>Transfer Funds Total</th>
<th>NHTSA Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$0.00</td>
<td>$0.00 $12,196,025.00</td>
<td>$12,196,025.00</td>
<td>$0.00</td>
<td>$0.00 $12,196,025.00 $12,196,025.00 $0.00 $0.00 $12,196,025.00 $12,196,025.00 $0.00</td>
</tr>
<tr>
<td></td>
<td>$0.00</td>
<td>$0.00 $12,196,025.00</td>
<td>$12,196,025.00</td>
<td>$0.00</td>
<td>$0.00 $16,610,196.00 $16,610,196.00 $1,824,450.00</td>
</tr>
<tr>
<td>NHTSA Total</td>
<td>$0.00 $7,885,000.00</td>
<td>$0.00 $25,921,446.00</td>
<td>$25,921,446.00</td>
<td>$0.00</td>
<td>$0.00 $25,921,446.00 $25,921,446.00 $5,773,450.00</td>
</tr>
<tr>
<td>Total</td>
<td>$0.00 $7,885,000.00</td>
<td>$0.00 $25,921,446.00</td>
<td>$25,921,446.00</td>
<td>$0.00</td>
<td>$0.00 $25,921,446.00 $25,921,446.00 $5,773,450.00</td>
</tr>
</tbody>
</table>
STATE CERTIFICATIONS AND ASSURANCES

Failure to comply with applicable Federal statutes, regulations and directives may subject State officials to civil or criminal penalties and/or place the State in a high risk grantee status in accordance with 49 CFR § 18.12.

Each fiscal year the State will sign these Certifications and Assurances that the State complies with all applicable Federal statutes, regulations, and directives in effect with respect to the periods for which it receives grant funding. Applicable provisions include, but not limited to, the following:

- 23 U.S.C. Chapter 4 - Highway Safety Act of 1966, as amended;

- 49 CFR Part 18 - Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments

- 49 CFR Part 19 - Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals and Other Nonprofit Organizations

- 23 CFR Chapter II - (§§1200, 1205, 1206, 1250, 1251, & 1252) Regulations governing highway safety programs

- NHTSA Order 462-6C - Matching Rates for State and Community Highway Safety Programs

- Highway Safety Grant Funding Policy for Field-Administered Grants

Certifications and Assurances

The Governor is responsible for the administration of the State highway safety program through a State highway safety agency which has adequate powers and is suitably equipped and organized (as evidenced by appropriate oversight procedures governing such areas as procurement, financial administration, and the use, management, and disposition of equipment) to carry out the program (23 USC 402(b) (1) (A));
The political subdivisions of this State are authorized, as part of the State highway safety program, to carry out within their jurisdictions local highway safety programs which have been approved by the Governor and are in accordance with the uniform guidelines promulgated by the Secretary of Transportation (23 USC 402(b) (1) (B));

At least 40 per cent of all Federal funds apportioned to this State under 23 USC 402 for this fiscal year will be expended by or for the benefit of the political subdivision of the State in carrying out local highway safety programs (23 USC 402(b) (1) (C)), unless this requirement is waived in writing;

The State will implement activities in support of national highway safety goals to reduce motor vehicle related fatalities that also reflect the primary data-related crash factors within the State as identified by the State highway safety planning process, including:

- National law enforcement mobilizations,
- Sustained enforcement of statutes addressing impaired driving, occupant protection, and driving in excess of posted speed limits,
- An annual statewide safety belt use survey in accordance with criteria established by the Secretary for the measurement of State safety belt use rates to ensure that the measurements are accurate and representative,
- Development of statewide data systems to provide timely and effective data analysis to support allocation of highway safety resources.

The State shall actively encourage all relevant law enforcement agencies in the State to follow the guidelines established for vehicular pursuits issued by the International Association of Chiefs of Police that are currently in effect.

This State's highway safety program provides adequate and reasonable access for the safe and convenient movement of physically handicapped persons, including those in wheelchairs, across curbs constructed or replaced on or after July 1, 1976, at all pedestrian crosswalks (23 USC 402(b) (1) (D));

Cash drawdowns will be initiated only when actually needed for disbursement, cash disbursements and balances will be reported in a timely manner as required by NHTSA, and the same standards of timing and amount, including the reporting of cash disbursement and balances, will be imposed upon any secondary recipient organizations (49 CFR 18.20, 18.21, and 18.41). Failure to adhere to these provisions may result in the termination of drawdown privileges;

The State has submitted appropriate documentation for review to the single point of contact designated by the Governor to review Federal programs, as required by Executive Order 12372 (Intergovernmental Review of Federal Programs);

Equipment acquired under this agreement for use in highway safety program areas shall be used and kept in operation for highway safety purposes by the State; or the State, by formal agreement with appropriate officials of a political subdivision or
State agency, shall cause such equipment to be used and kept in operation for highway safety purposes (23 CFR 1200.21);

The State will comply with all applicable State procurement procedures and will maintain a financial management system that complies with the minimum requirements of 49 CFR 18.20;

The State highway safety agency will comply with all Federal statutes and implementing regulations relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin (and 49 CFR Part 21); (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps (and 49 CFR Part 27); (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-61 6), as amended, relating to nondiscrimination on the basis of alcohol abuse of alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§ 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§ 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

The Drug-free Workplace Act of 1988 (49 CFR Part 29 Sub-part F): The

State will provide a drug-free workplace by:

a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

b) Establishing a drug-free awareness program to inform employees about:

1) The dangers of drug abuse in the workplace.

2) The grantee's policy of maintaining a drug-free workplace.

3) Any available drug counseling, rehabilitation, and employee assistance
programs.

4) The penalties that may be imposed upon employees for drug violations occurring in the workplace.

c) Making it a requirement that each employee engaged in the performance of the grant be given a copy of the statement required by paragraph (a).

d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will --

1) Abide by the terms of the statement.

2) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction.

c) Notifying the agency within ten days after receiving notice under subparagraph (d) (2) from an employee or otherwise receiving actual notice of such conviction.

f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d) (2), with respect to any employee who is so convicted -

1) Taking appropriate personnel action against such an employee, up to and including termination.

2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.

g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f) above.

Massachusetts Policy attached at the end of HSPP

BUY AMERICA ACT

The State will comply with the provisions of the Buy America Act (23 USC 101 Note) which contains the following requirements:

Only steel, iron and manufactured products produced in the United States may be purchased with Federal funds unless the Secretary of Transportation determines that such domestic purchases would be inconsistent with the public interest; that such
materials are not reasonably available and of a satisfactory quality; or that inclusion of domestic materials will increase the cost of the overall project contract by more than 25 percent. Clear justification for the purchase of non-domestic items must be in the form of a waiver request submitted to and approved by the Secretary of Transportation.

**POLITICAL ACTIVITY (HATCH ACT).**

The State will comply with the provisions of 5 U.S.C. §§ 1501-1508 and implementing regulations of 5 CFR Part 151, concerning "Political Activity of State or Local Offices, or Employees".

**CERTIFICATION REGARDING FEDERAL LOBBYING**

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-award at all tiers (including subcontracts, sub grants, and contracts under grant, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.
RESTRICTION ON STATE LOBBYING

None of the funds under this program will be used for any activity specifically designed to urge or influence a State or local legislator to favor or oppose the adoption of any specific legislative proposal pending before any State or local legislative body. Such activities include both direct and indirect (e.g., "grassroots") lobbying activities, with one exception. This does not preclude a State official whose salary is supported with NHTSA funds from engaging in direct communications with State or local legislative officials, in accordance with customary State practice, even if such communications urge legislative officials to favor or oppose the adoption of a specific pending legislative proposal.

CERTIFICATION REGARDING DEBARMENT AND SUSPENSION

Instructions for Primary Certification

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meaning set out in the Definitions and coverage sections of 49 CFR Part 29. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the list of Parties Excluded from Federal Procurement and Non-procurement Programs.

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

(1) The prospective primary participant certifies to the best of its knowledge and belief, that its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of record, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

(2) Where the prospective primary participant is unable to certify to any of the Statements in this certification, such prospective participant shall attach an explanation to this proposal.

Instructions for Lower Tier Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

4. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definition and Coverage sections of 49 CFR Part 29. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.

5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, declared ineligible, or
6. The prospective lower tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. (See below)

7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 CFR Part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.