State of Maine

Department of Public Safety

Bureau of Highway Safety

Federal Fiscal Year 2014 Annual Highway Safety Report

Paul R. LePage, Governor
John E. Morris, Commissioner
Lauren V. Stewart, Director

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Contents

A Message from the Director

December 23, 2014

The mission of the Department of Public Safety, Bureau of Highway Safety Office is to save lives and reduce injuries on the state's roads and highways through leadership, innovation, facilitation, project and program support, and working in partnership with other public and private organizations. Our efforts are based on the concept that any death or injury is one too many and that traffic crashes are not accidents, but are preventable.

I am pleased to submit this Annual Report for Federal Fiscal Year 2014. This report fulfills the Section 402 grant requirements with the National Highway Traffic Safety Administration (NHTSA) and highlights the many achievements and accomplishments of the State Highway Safety Office. The project activities represented in this annual report were approved by NHTSA in our 2014 Highway Safety Plan as countermeasures that would help Maine achieve its stated goals to reduce overall traffic fatalities, injuries, and property damage.

I would like to thank the staff of the Highway Safety Office for all of their efforts to improve highway safety and for their assistance in grant application and report development. I would also like to thank our many partners in highway safety: those in federal and state departments as well as municipal and county law enforcement, fire and EMS departments and numerous not-for-profit agencies. We work together to represent the public in addressing our highway safety priorities.

Lauren V. Stewart, Director

Maine Bureau of Highway Safety

Partner Organizations

AAA of Northern New England
Alliance Sports Marketing
American Association of Retired People (AARP)
Atlantic Partners, EMS
Department of Health and Humans Services—Elder Service
Federal Highway Administration (FHWA)
Federal Motor Carrier Safety Administration (FMCSA)
Ford Driving Skills for Life (DSFL)
Governor's Highway Safety Association (GHSA)
Health Environmental Testing Lab (HETL)
Maine Bicycle Coalition
Maine Bureau of Labor Standard
Maine Bureau of Motor Vehicles (BMV)
Maine CDC's Injury and Violence Prevention
Maine Chiefs of Police Association
Maine Criminal Justice Academy (MCJA)
Maine Department of Education
Maine Department of Public Safety (DPS)
Maine Department of Transportation (MeDOT)
Maine Driver Education Association
Maine Emergency Medical Services (EMS)
Maine Motor Transport Association
Maine Municipal Association
Maine Principals Association
Maine Secretary of State's Office
Maine Sheriff's Association
Maine State Police
Maine Substance Abuse Mental Health Services
Maine Turnpike Authority
Maine Violations Bureau
Motorcycle Rider Education of Maine Inc.
National Highway Traffic Safety Administration (NHTSA)
NL Partners Marketing
Safety and Health Council of Northern New England (SHCNNE)
United Bikers of Maine (UBM)
University of Southern Maine (USM)

Acronyms

APD	Auburn Police Department
ARIDE	Advanced Roadside Impaired Driver Enforcement
ASM	Alliance Sports Marketing
BAC	Blood Alcohol Content
BAT	Blood Alcohol Testing
BMV	Bureau of Motor Vehicle
CDC	Centers for Disease Control and Prevention
CODES	Crash Outcome Data Evaluation system
CPS	Child Protection Safety
DDACTS	Data-Driven Approaches to Crime and Traffic Safety
DITEP	Drug Impairment Training for Educational Professionals
DOT	Department of Transportation
DRE	Drug Recognition Expert Program
EMS	Emergency Medical Services
FARS	Fatality Analysis Reporting System
FY	Fiscal Year
GDL	Graduated Driver License
GHSA	Governor's Highway Safety Association
HETL	Health and Environment Testing Lab
IACP	International Association of Chiefs of Police
LEA	Law Enforcement Agency
MCJA	Maine Criminal Justice Academy
MCRS	Maine Crash Reporting System
MDD	Maine Driving Dynamics
MeBHS	Maine Bureau of Highway Safety
NHTSA	National Highway Traffic Safety Administration
NTZ	No Text Zone
OPET	Occupant Protection Enforcement Team
OUI	Operating Under the Influence
PD	Police Department
PSA	Public Service Announcement
RIDE	Regional Impaired Driving Enforcement
RQS	Request for Qualification Statements
SAFE	Strategic Area Focused Enforcement
SFST	Standardized Field Sobriety Testing
TDSC	Teen Driver Safety Committee
TSI	Traffic Safety Institute

Introduction

The Maine Bureau of Highway Safety (MeBHS), established in accordance with the Highway Safety Act of 1966, is the focal point for highway safety in Maine and is the only agency in Maine with the sole responsibility to promote safer roadways. The MeBHS is a Bureau within the Maine Department of Public Safety. The MeBHS currently consists of seven full-time employees all dedicated to ensuring safe motor transportation for everyone traveling on Maine roads and highways. The MeBHS provides leadership and state and federal financial resources to develop, promote and coordinate programs designed to influence public and private policy, make systemic changes and heighten public awareness of highway safety issues.

The overall goal of the MeBHS is to reduce the rate of motor vehicle crashes in Maine that result in death, injuries, and property damage. Through the administration of federal funding from the National Highway Traffic Safety Administration, the Federal Highway Administration and State Highway funds, the MeBHS impacted each of the major NHTSA priority program areas in Federal Fiscal Year 2014:

- Impaired Driving
- Occupant Protection
- Child Passenger Safety
- Traffic Records
- Police Traffic Services

Through additional programs developed after extensive state data analysis, we also impacted the areas of motorcycle safety, speed, teen drivers, and driver distraction.

We believe that through committed partnerships with others interested in highway safety, through a data driven approach to program planning, through public information and education, and with coordinated enforcement activities, we can achieve our goal to reduce fatalities and injuries.

This Annual Report reflects our efforts to impact traffic safety in areas including occupant protection, impaired driving, child passenger safety, motorcycles, public education and information, and traffic records for Federal Fiscal Year 2014 (October 1, 2013 – September 30, 2014).

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Report Submitted: December 23, 2014

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Executive Summary

Federal Fiscal Year 2014 Noteworthy Countermeasures

- **Child Passenger Safety Inspection Stations and Distribution Sites**
  The Maine Child Safety Seat Program is unique in that it partners with agencies throughout the state to distribute car seats to families who meet income eligible guidelines, thus providing an important service to local communities. From October 1, 2013 to September 30, 2014, a total of 950 child safety car seats, including car bed harness and pad kits, were ordered by MeBHS and sent directly to distribution sites around the state.

- **Click It or Ticket/Buckle Up. No Excuses! Enforcement and Education**
  The MeBHS offered Maine law enforcement agencies sub-grant awards to participate in this year's May and June Click It or Ticket/Buckle Up. No Excuses! Enforcement and Education Campaign. This year a total of 76 agencies participated in the campaign, including the Maine State Police, County Sheriff's departments, and city and town police departments. Over 4,100 seatbelt tickets and warnings were issued during this two-week campaign that ran in conjunction with the national crackdown period.

- **"Drive Sober, Maine!" High Visibility Impaired Driving Enforcement Program**
  In 2014, MeBHS offered a year-long High Visibility Impaired Driving Enforcement program which began on December 13, 2013 and ended on September 5, 2014. This program required participating Maine law enforcement departments to join in two national impaired driving crackdowns while also allowing the department the flexibility to schedule overtime details during the months when OUI is a problem in their jurisdictions.

- **"Drive Sober or Get Pulled Over" High Visibility Impaired Driving Crackdown Program**
  This program allowed participating Maine law enforcement departments to join two national "Drive Sober or Get Pulled Over" impaired driving crackdown periods of December 14, 2013 to January 1, 2014 and August 15, 2014 to September 1, 2014.

- **Maine Driving Dynamics**
  The state's defensive driving course, Maine Driving Dynamics, is a five hour defensive driving course that offers drivers the opportunity to improve their defensive driving abilities. Over 1,500 students took the class between October 2013 and September 2014.

- **Regional Impaired Driving Enforcement (RIDE) Team**
  The Regional Impaired Driving Enforcement (RIDE) Team was continued in the year 2013-2014. This program recruited selected volunteers from state, county, and municipal agencies within Cumberland County who demonstrated an expertise in the detection, apprehension and prosecution of impaired drivers. The team exists to raise awareness, educate the public, and make the roadways safer for citizens through the strict enforcement of Maine's impaired driving statutes.

❖ Convincer & Rollover Education Program

An estimated 5,000 plus people of all ages were provided with safety belt information through a variety of events where MeBHS's two Seatbelt Convincer units and one Rollover Simulator were on display.

❖ Statewide Observational Study

The MeBHS contracted with the University of Southern Maine, Muskie School of Public Service for the 2013 occupant protection observational seatbelt usage survey. The surveys were conducted from July 22 to July 31, 2014, about six weeks after the Nationwide "Click It or Ticket/Buckle Up. No Excuses" seatbelt enforcement campaign in May and June 2014. The 2014 seatbelt usage rate is 85%.

❖ Teen Driver Awareness Program

The Teen Driver Awareness Program is designed to educate pre-permitted teens, newly permitted teens, and their parents in the areas of graduated driver licenses, seat belt usage, impaired driving, distracted driving, and parental involvement in the learning to drive process. During the 2013-2014 school year used MeBHS's two driving simulators to instruct approximately 2,300 Maine drivers. In addition, personnel from the MeBHS were invited to make presentation at various workplaces.

Federal Fiscal Year 2014 Challenges

❖ Young Drivers and Mature Drivers

Young and mature drivers accounted for 23% and 22% respectively of Maine's driver fatalities. Each of these groups has its own challenges; therefore, the MeBHS has championed a Teen Driver Safety Committee and participates in an Older Driver Safety Committee. MeBHS increased their in school education program in FFY2014 and plans to develop other educational tools in FFY2015.

❖ Lane Departure Crashes

Lane departure crashes continue to account for 70% of Maine crashes. Lane departure crashes are defined as occurring when vehicles either run off the road (left or right) or when head-on crashes occur. Since many factors such as speed, inattentive driving, and impaired driving contribute to lane departure crashes, many efforts have been made within our agency and partner agencies to decrease these crashes. With MeBHS focusing on the behavioral aspect of lane departure crashes such as impaired, distracted and speed enforcement the MaineDOT focuses on engineering countermeasures to decrease this number and legislature to detour these habits are also utilized.

❖ Unbelted Fatalities

Despite Maine's primary enforcement law for seat belt compliance, 37.5% of occupants in fatal motor vehicle crashes in 2013 were unbelted. However, Maine improved its observed seat belt rate to 85% in FFY2014. This is the highest percentage on record.

❖ Pedestrian Fatalities

The State of Maine experienced an increase in pedestrian fatalities in FFY2014 with 11 deaths. Although an increase was experienced pedestrian fatalities accounted for only 7% of the overall fatalities. Pedestrian countermeasures are administered through the MaineDOT who administers the Safe Routes to School program designed to educate kids on best practices when

walking to school. Additional program and project development is facilitated through the Maine Strategic Highway Safety Plan working group and MaineDOT.

Performance Goals

In 2009, the NHTSA and the GHSA released a minimum set of performance measures to be used by states and federal agencies in the development and implementation of behavioral highway safety plans and programs. The minimum set of performance goals contains 14 measures: ten core outcome measures, one core behavior measure, and three activity measures. In addition, Maine has included a number of attitudinal measures related to impaired driving, seatbelts, and speeding.

The measures cover the major areas common to state highway safety plans and use existing state data systems. The Core Outcome Measures reported in this year's Annual Report represent the measures established for Maine for Federal Fiscal Year 2014.

Core Outcome Measure Goals

C-1) Traffic Fatalities

To decrease traffic fatalities by 5% from the 5 year average of 155 for 2008-2012 to 147 by December 31, 2014

Performance Review: Maine ended the year 2013 with 144 Traffic Fatalities which achieved our goal of a 5% decrease.

Maine had experienced 125 Traffic Fatalities in 2014 at the time of report submission.

C-2) Serious Traffic Injuries

To decrease serious traffic injuries by 5% from the 5-year average of 843.4 for 2008-2012 to 801.23 by December 31, 2014

Performance Review: Maine ended the year 2013 with 863 serious traffic injuries and was unable to meet its goal.

Maine had experienced 763 Serious Traffic Injuries in 2014 at the time of report submission.

C-3a) Mileage Death Rate

To decrease the mileage death rate by 5% from the 5-year average of 1.09 for 2007-2011 to 1.04 by December 31, 2014

Up to date numbers were not available at the time of report submission

Performance Review: Maine ended the year 2013 with a 1.01 mileage death rate which achieved its goal of a 5% decrease.

C-3b) Rural Mileage Death Rate

To decrease the rural mileage death rate by 5% from the 5-year average of 1.26 for 2007-2011 to 1.20 by December 31, 2014

Performance Review: Maine ended the year 2013 with a 1.1 rural mileage death rate which achieved its goal of a 5% decrease.

Up to date numbers were not available at the time of report submission.

C-3c) Urban Mileage Death Rate

To decrease the urban mileage death rate by 5% from the 5-year average of 0.56 for 2007-2011 to 0.53 by December 31, 2014

Performance Review: Maine ended the year 2013 with a .78 urban mileage death rate. This goal was unmet.

Up to date numbers were not available at the time of report submission

C-4) Unrestrained Passenger Vehicle Occupant Fatalities

To decrease unrestrained passenger vehicle occupant fatalities by 5% from the 5-year average of 55 for 2008-2012 to 52.25 by December 31, 2014

Performance Review: Maine experience 56 unrestrained fatalities during 2013. This goal was unmet.

Maine had experienced 38 unrestrained fatalities in 2014 at the time of report submission.

C-5) Alcohol Impaired Driving Fatalities

To decrease alcohol impaired driving fatalities by 5% from the 5 year average for 2008-2012 of 37.8 to 35.91 by December 31, 2014.

Performance Review: Maine experienced 35 impaired driving fatalities during 2013 and was able to meet its goal of 35.91.

Maine had experienced 23 impaired driving fatalities in 2014 at the time of report submission.

C-6) Speeding Related Fatalities

To decrease speeding related fatalities by 5% from the 5 year average of 68.8 for 2008-2012 to 65.36 by December 31, 2014.

Performance Review: Maine experienced 49 speeding related fatalities in 2013 and was able to meet its goal of 65.36.

Maine had experienced 36 speeding related fatalities in 2014 at the time of report submission.

C-7) Motorcyclist Fatalities

To decrease motorcyclist fatalities by 5% from the 5 year average of 19.6 for 2008-2012 to 18.62 by December31, 2014.

Performance Review: Maine experienced 14 Motorcyclist fatalities in 2013 and was able to meet its goal of 18.62.

Maine had experienced 11 Motorcyclist fatalities in 2014 at the time of report submission.

C-8) Unhelmeted Motorcyclist Fatalities

To decrease unhelmeted motorcyclist fatalities by 5% from the 5 year average of 13.2 for 2008-2012 to12.54 by December 31, 2014.

Performance Review: Maine experienced 11 unhelmeted motorcyclist fatalities in 2013. This goal was unmet.

Maine had experienced 4 unhelmeted motorcyclist fatalities in 2014 at the time of report submission.

C-9) Drivers Age 20 or Younger Involved in Fatal Crashes

To decrease drivers age 20 or younger involved in fatal crashes by 5% from the 5 year average of 21 for2008-2012 to 19.95 by December 31, 2014.

Performance Review: Maine experienced 18 drivers age 20 or younger that were involved in fatal crashes in 2013 and was able to meet its goal of 19.95.

Maine had experienced 14 drivers age 20 or younger in 2014 that were involved in fatal crashes at the time of report submission.

C-10) Pedestrian Fatalities

To reduce pedestrian fatalities by 10% from the 5 year average of 11 for 2008-2012 to 9.9 by December 31, 2014.

Performance Review: Maine experienced 11 pedestrian fatalities in 2013 and was unable to meet its goal of 9.9.

Maine had experienced 6 pedestrian fatalities in 2014 at the time of report submission

C-11) Bicyclist Fatalities

To maintain bicyclist fatalities at the 2009-2013 5 year average of 2 for December 31, 2015.

Performance Review: Maine experienced 4 Bicyclist fatalities in 2013.

Maine had experienced 2 bicyclist fatalities in 2014 at the time of report submission.

Behavior Measure Goals

B-1) Seat Belt Usage Rate

To increase statewide seat belt compliance by 2% from the 2012 survey results from 84% to 86% by December31, 2014. Performance Review

Maine experienced a statewide seat belt compliance rate of 85%. This goal was ummet.

Activity Performance Measures

ACTIVITY MEASURES			2010	2011	2012	2013	2014
A-1	# of Seat Belt Citations Issued During Grant –Funded Enforcement Activities	Annual	9,856	3,332	2,796	3,485	3,639
		Moving Average	7,501.0	6,458.8	5,726.2	5,223.8	4,621.6

A-2	# of Impaired Driving Arrests Made During Grant-Funded Enforcement Activities	Annual	456	503	230	550	540
		Moving Average	502.3	502.5	448.0	456.8	455.8
A-3	# of Speeding Citations Issued During Grant-Funded Enforcement Activities	Annual	11,732	2,382	1,232	4,853	8,157
		Moving Average	6,860.7	5,741.0	4,839.2	5,017.2	5,671.2

Attitudinal Measure Goals[1]

Impaired Driving

A-1) In the past 60 days, how many times have you driven a motor vehicle within 2 hours after drinking alcoholic beverages?

A-2) In the past 30 days, have you read, seen, or heard anything about alcohol impaired driving (or drunk driving) enforcement by police?

A-3) What do you think the chances are of someone getting arrested if they drive after drinking?

Safety Belts

B-1) How often do you use safety belts when you drive or ride in a car, van, sports utility vehicle or pick up?

B-2) In the past 60 days, have you read, seen, or heard anything about seat belt law enforcement by police?

B-3) What do you think the chances are of getting a ticket if you don't wear your safety belt?

Speeding

S-1) On a local road with a speed limit of 30 mph, how often do you drive faster than 35 mph (most of the time, half the time, rarely, never)?

S-2) In the past 30 days, have you read, seen or heard anything about speed enforcement by police?

S-3) What do you think the chances are of getting a ticket if you drive over the speed limit?

[1] See APPENDIX A for full survey report.

Planning and Administration

Funding Area, Funding Source, and Expended Funds

General Planning and Administration

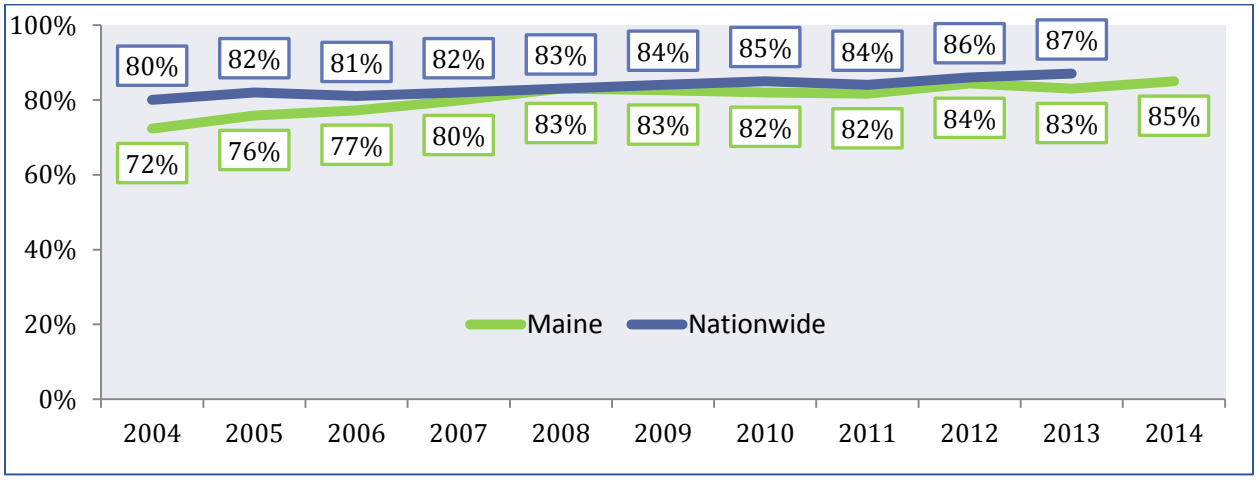
Funds were expended to cover the costs associated with the administration of the MeBHS office in its efforts to meet the highway safety plan performance goals. These costs included salaries, operational, training, and travel expenses; expenses associated with accounting audits; and upgrades.

FUNDING SOURCE 402: $159,991.09

Occupant Protection

Problem

The 2014 annual observational seat belt survey was conducted in June of 2014 following the national high visibility seat belt enforcement campaign. The observed seatbelt use rate for 2014 was 85%—the highest rate of seatbelt use to date. While Maine's rate remains slightly below the national rate of 87% (last measured in 2013), Maine is nevertheless closing the gap.[2] In 2004, Maine lagged behind the nation by 12 percentage points; by 2013, that gap had closed to 4 percentage points.

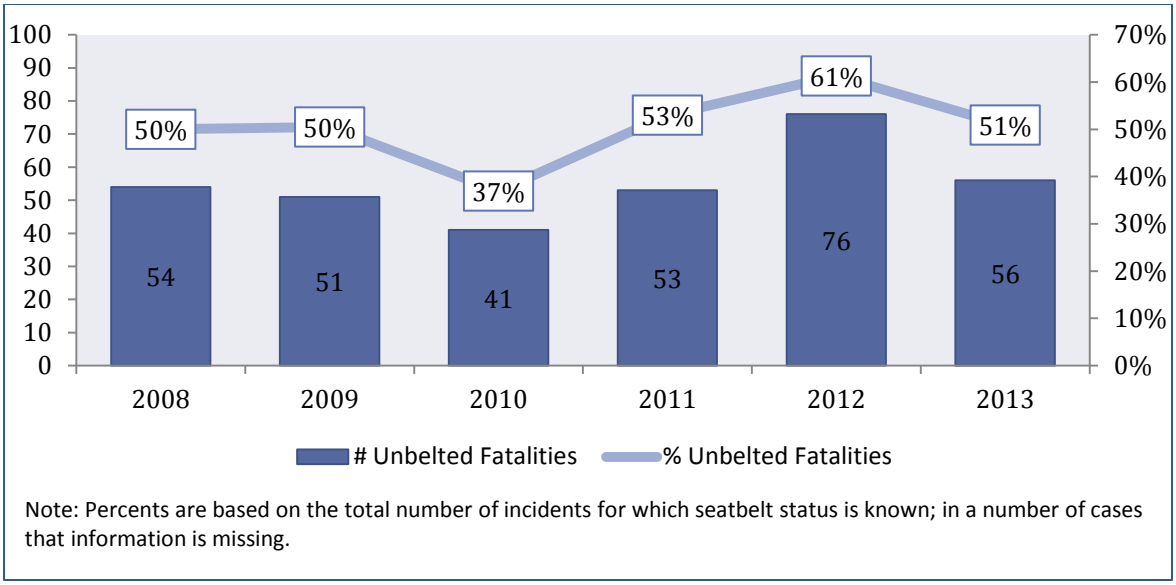


Source: State Data Files

In 2013, there were 144 occupant fatalities involving passenger vehicles. Unrestrained vehicle occupants made up approximately 51% of these fatalities (n=56).[3] The number of unrestrained vehicle occupant fatalities decreased significantly, both in percentage and number, in 2013 compared to 2012.

[2] Source: Pickrell, T. M., & Ye, T. J. (2014, January). *Seat Belt Use in 2013 – Overall Results. (Traffic Safety Facts Research Note, Report # DOT HS 811 875)*. Washington, DC: National Highway Traffic Safety Administration. National statistic is based on survey results; state rate is based on observation study.

[3] Percents are based on the total number of incidents for which seatbelt status is known; in a number of cases that information is missing.



Note: Percents are based on the total number of incidents for which seatbelt status is known; in a number of cases that information is missing.

Source: State Data Files

Objective

The objective of Maine's Occupant Protection Program is to increase safety belt use for all occupants, thereby decreasing deaths and injuries resulting from unrestrained motor vehicle crashes.

Goals & Progress

#1 *Goal*

To increase statewide seat belt compliance by 2% from the 2012 survey results from 84% to 86% by December 31, 2014.

Progress

This goal was unmet: The statewide seat belt compliance rate for 2014 was 85.0%.

#2 *Goal*

To decrease unrestrained passenger vehicle occupant fatalities by 5% from the 5-year average of 55 for 2008-2012 to 52.25 by December 31, 2014

Progress

The number of unrestrained passenger vehicle occupant fatalities for 2013 was 56.

Maine had experienced 38 unrestrained fatalities in 2014 at the time of report submission.

Countermeasures & Expended Funds

Program Management and Operations

Project Number: OP14-001

Project Description

Costs under this program area include salaries, travel (examples include TSI training courses, in state travel to monitor sub-grantees, LEA Chief committee meetings) for highway safety coordinators and/ or program managers, clerical support personnel and operating costs (printing, supplies, state indirect rate, and postage) directly related to this program, such as program development, coordination, monitoring, evaluation, public education and marketing, auditing and training.
FUNDING SOURCE: $149,778.64 S.402

GRANTEE: MEBHS

Click it or Ticket HVE Campaign - Buckle Up - No Excuses!

Project Number: Numbers listed below

Project Description

The annual "Buckle Up. No Excuses!" seat belt education and enforcement campaign ran in conjunction with the national enforcement period from May 19 to June 1, 2014. This year, 76 law enforcement agencies participated. Participating agencies included 59 local police departments, 9 county sheriff offices, and 8 troops from the Maine State Police

During the enforcement period, officers stopped a total of 8976 vehicles over 4675 hours (approximately 1.92 stops per hour). A total of 4,127 seatbelt summons were issued during these hours. During the 2720 nighttime enforcement hours, 1651 seatbelt summons were issued. In addition to seatbelt summons, additional charges were made for speeding (228), operating under the influence of alcohol/drugs (17), operating after suspension (115), drugs (72), and warrants (49).

Agency	Grant Number	Funding/Source
Augusta PD	OP14-010	$3,000.00 S405S
Rumford PD	OP14-011	$2,805.00 S405S
Sagadahoc County SO	OP14-012	$3,000.00 S405S
York PD	OP14-013	$3,000.00 S405S
Westbrook PD	OP14-014	$3,000.00 S405S
Biddeford PD	OP14-015	$2,955.12 S405S
Waterville PD	OP14-016	$3,000.00 S405S
Lincoln County SO	OP14-017	$1,984.80 S405S
Fort Fairfield PD	OP14-018	$2,051.00 S405S
Caribou PD	OP14-019	$2,644.04 S405S
Wells PD	OP14-020	$2,883.04 S405S
Bath PD	OP14-021	$2,888.52 S402 $51.48 S405S
Dixfield PD	OP14-022	$2,812.50 S405S
Old Town PD	OP14-023	$1,594.88 S405S
Orono PD	OP14-024	$2,121.08 S402
Hancock County SO	OP14-025	$1,361.52 S402
Oakland PD	OP14-026	$3,000.00 S402
Hampden PD	OP14-027	$2,831.17 S402
Gorham PD	OP14-028	$2,961.88 S402
Monmouth PD	OP14-029	$2,205.00 S402
Mechanic Falls PD	OP14-030	$2,657.08 S402
Old Orchard Beach PD	OP14-031	$2,933.49 S402
Kennebunkport PD	OP14-032	$1,980.40 S402

Lisbon PD	OP14-033	$1,370.92 S402
Auburn PD	OP14-034	$2,800.00 S402
Sabattus PD	OP14-035	$3,000.00 S402
Franklin SO	OP14-036	$2,534.55 S402
Cape Elizabeth PD	OP14-037	$2,793.72 S402
Knox County SO	OP14-038	$2,790.00 S402
Ellsworth PD	OP14-039	$2,632.00 S402
South Portland PD	OP14-040	$2,415.59 S402
Brunswick PD	OP14-041	$1,731.24 S402
Kennebunk PD	OP14-042	$1,733.20 S402
Wilton PD	OP14-043	$2,584.00 S402
Eliot PD	OP14-044	$2,512.32 S402
North Berwick PD	OP14-045	$3,000.00 S402
Sanford PD	OP14-046	$3,000.00 S402
Livermore Falls PD	OP14-047	$3,000.00 S402
Rockland PD	OP14-048	$2,751.84 S402
Gardiner PD	OP14-049	$1,995.00 S402
Veazie PD	OP14-050	$2,940.00 S402
Farmington PD	OP14-051	$2,744.56 S402
Mexico PD	OP14-052	$3,000.00 S402
Paris PD	OP14-053	$1,122.16 S402
Berwick PD	OP14-054	$2,963.68 S402
Portland PD	OP14-055	$1,877.00 S402
Windham PD	OP14-056	$2,633.70 S402
Saco PD	OP14-057	$2,239.01 S402
Dover Foxcroft PD	OP14-058	$3,000.00 S402
Aroostook County Sheriff's Office	OP14-059	$2,198.56 S402
Newport PD	OP14-060	$1,483.76 S402
Cumberland PD	OP14-061	$2,673.45 S402
Skowhegan PD	OP14-062	$2,255.00 S402
Topsham PD	OP14-063	$1,817.60 S402
Jay PD	OP14-064	$2,045.16 S402
Cumberland County Sheriff's Office	OP14-065	$2,520.00 S402
Madawaska PD	OP14-066	$2,750.64 S402
Maine State Police	OP14-067	$22,302.18 S402
Milbridge PD	OP14-068	$2,240.00 S402
Houlton PD	OP14-069	$2,800.00 S402
Scarborough PD	OP14-070	$3,000.00 S402
Androscoggin County SO	OP14-071	$2,548.00 S402
Winslow PD	OP14-072	$3,000.00 S402
Lewiston PD	OP14-073	$2,530.46 S402
Bridgton PD	OP14-074	$3,000.00 S402
Dexter PD	OP14-075	$1,880.52 S402
Kennebec County SO	OP14-076	$2,640.00 S402

Norway PD	OP14-077	$2,775.20 S402
Boothbay Harbor PD	OP14-078	$1,351.45 S402

FUNDING SOURCE: $157,916.61 S.402, $35,797.06 S.405S

Observation Studies and Driver Survey

Statewide Safety Belt Use Observation Study[4]

Project Number: OPB14-002

Project Description

Since 1986, the MeBHS Safety has initiated a number of observations studies of safety belt use in Maine to determine the level of compliance. In 2014, the Survey Research Center at the Muskie School of Public Service, University of Southern Maine, with assistance from the Preusser Research Group of Trumbull, Connecticut, conducted the study and produced a report of the findings.

The 2014 study incorporated the standardized design requirements that were developed by NHTSA in an effort to ensure reliability and comparability of findings among states. These requirements specify that observation sites must be located in counties that account for 85% of the state's fatalities. Maine's 2014 study involved 127 observations sites located in 28 cities/towns in 12 of the state's 16 counties. An observation schedule was structured to capture variations in seat belt use by time and day of week. Observations were made for a total of 45 minutes at each location.

Findings from the 2014 study include the following:

- Overall compliance: The overall seat belt use rate was 85.0%. This was an increase from the previous year's rate of 83%.
- Gender: Approximately 89% of female occupants were restrained, compared to 79% of males.
- Seating position: Approximately 82% of passengers were restrained, compared to 86% of drivers. (Note: Passengers were more likely to be female, and females were more likely to use safety belts—this may explain a portion of the difference between passengers and drivers. In fact, male passengers were *less* likely than male drivers to be restrained)
- Driver/passenger correlation: As in all prior studies, buckling up is a friend and family affair. When drivers use their safety belts, other occupants of the vehicle are more than two and half times as likely to use their belts as they are when the driver is not using a belt, 93.0% vs. 33.6%
- Urban/rural: The belt use rate in rural locations is now higher than that of urban locations, at 86.7% and 84.7% respectively.

[4] Full study can be found in APPENDIX A.

- Vehicle type: While drivers of cars, SUVs, and vans had higher restraint use rates the seat belt rate for those drivers of pickup trucks was considerably lower at 73.9%.

- Time of day: Safety belt use varies throughout the day. The highest rates from from 9:00 am to 10:59 am. (87.9%). The lowest rates occur between 11:00 am and 1:29 am (83.0%). Time of day rates have also varied from year to year.

- Weather: Good weather conditions prevailed throughout most of the study period. As a result, most observation were conducted in sunny and clear weather this year. Overall, 71.1% of vehicles were observed in sunny and clear weather and 23.5% while it was cloudy. Sunny weather had 85.8% use but cloudy weather saw 86.1% use, while light rain had 84.8%.

Nighttime Belt Use Survey[5]

Data from the NHTSA's Fatality Analysis Reporting System (FARS) show that fatalities are disproportionately frequent during nighttime hours. In 2007, for example, about 25% of crash fatalities occurred between 10 PM and 4 AM, despite the decrease in traffic volume during these hours. NHTSA's data also indicate that seatbelt usage among fatally injured vehicle occupants declines during nighttime hours, likely contributing to the number of fatalities.

The nighttime portion of this year's observation study found that the rate of nighttime seatbelt use was 87.2%. This is not statistically significantly different from last year's rate of 87.6%. It is, however, higher than the rate of daytime seatbelt use. The study also found differences by vehicle type, gender, and occupant position. In summary:

- Vehicle type: While drivers of cars, SUVs, and vans had restraint use rates of 84.8%, 92.4%, and 81.9% respectively, drivers of trucks had a significantly lower use rate of 70%.

- Gender: Approximately 88.6% of female occupants were restrained, compared to 80.9% of male occupants.

- Occupant position: Approximately 86.9% of passengers were restrained, compared to 83.6% of drivers. Passengers were more likely to be restrained regardless of gender.

- Lowest rate: The lowest rate of seatbelt use, 70%, was observed for pickup truck drivers.

Attitudinal Survey[6]

In addition to observations studies, which attempt to answer questions about actual use rates, a survey was conducted in eight Bureau of Motor Vehicle offices in July 2014. The purpose of this survey was to measure people's behavior, awareness, and the perception of consequences related to three separate subject areas—seatbelt use, drinking and driving, and speeding. In summary:

[5] Full study can be found in APPENDIX B.
[6] Full study can be found in APPENDIX A.

- Seatbelt Use
  - Approximately 83.3% of respondents reported "always" using seatbelts, while another 10.5% reported "nearly always" using them. These rates are not statistically different from last year's rates.
  - Approximately 68% of respondents reported that their current seatbelt use was "about the same" as it was in the last couple of years. Less than 1% each said that their use was "much less often" or "less often." Approximately 12.9% said their current use was "more often" or "much more often" than it was in the last couple of years.
  - Approximately 52% of respondents reported seeing or hearing about extra law enforcement efforts around seatbelt compliance in the last 60 days.
  - Approximately 39.3% of respondents reported that they thought it likely they would "sometimes" get a ticket if they did not buckle up. Another 22.5% thought it likely they would "always" get a ticket, and 17.4% thought it likely they would "nearly always" get one.
- Drinking and Driving
  - Approximately 87% of respondents reported "never" having driven a vehicle within 2 hours of drinking an alcoholic beverage within the past 60 days.
  - Approximately 71% of respondents reported seeing or hearing about extra law enforcement efforts around drinking and driving in the last 60 days.
  - Approximately 45.6% of respondents reported that they thought it likely they would "sometimes" get arrested if they drove within 2 hours of drinking. Another 27.3% thought it likely they would "nearly always" get arrested, and 21.7% thought it likely they would "always" get arrested. Approximately 5% thought it would "seldom" happen, and 1% thought it would "never" happen.
- Speeding
  - Approximately 45% of respondents reported "sometimes" driving more than 35 miles per hour (mph) in a 30-mph speed zone. Another 32.8% reported "seldom" doing so, while 12.7% reported "never" doing so. Approximately 8% reported "nearly always" doing so, while 2.7% reported "always" doing so.
  - Approximately 53% of respondents reported seeing or hearing about extra law enforcement efforts around speeding in the last 60 days.
  - Approximately 59% of respondents reported that they thought it likely they would "sometimes" get a ticket if they drove over the speed limit. Another 22% thought it likely they would "nearly always" get a ticket, and 8.9% thought it likely they would "always" get one.

FUNDING SOURCE: $126,083 S.405B

GRANTEE: UNIVERSITY OF SOUTHERN MAINE MUSKIE SCHOOL

2014 Seat Belt Educator – Atlantic Partners EMS

Project Number: OP14-002

Project Description

This full-time position allows for seat belt education and outreach to individuals of all ages through the use of convincer and roll-over simulator demonstrations and public presentations this includes: Convincer demonstrations (riders and people watching); Rollover demonstrations (though the rollover was not used as much as in previous because it is in need of repair); and the use of the Highway Safety Display at colleges, health fairs, and community centers etc. This program reached close to 5,000 Maine citizens in FFY2014 and provided education to all Maine school grades K-12, private business and state agencies. The position is evaluated each year to determine effectiveness based on the number of Maine citizens educated on the use of seat belts and the number of requests that we receive for this service.

Funding Source: $59,799.93 S.402

Grantee: Atlantic Partner, EMS

Convincer, Rollover, and CPS Trailer Operations & Maintenance (2014 BHS OP Equipment Maintenance)

Project Number: OP14-003

Project Description

Costs associated with the use, purchase, and maintenance of highway safety vehicles and equipment used in the promotion of education.

Summary

The general maintenance of the convincer and roll-over simulator are vital to the success of the Seat Belt Educator program. This project helps to keep the tools MeBHS uses to educate its youth on seat belt safety running smooth.

FUNDING SOURCE: $6,266.51 S.402

Grantee: MeBHS

Unbelted Teen Enforcement Project

Project Number

Project Description

Project numbers will be assigned after contracts with LEA's are awarded. Grant funds will be awarded to Law Enforcement agencies to enforce the Primary Belt Law day and night in areas where teens congregate. Maine has continued to see an increase in unbelted young driver (16-24) fatalities. Maine experienced an all-time low in 2012 with only 3 out of the 28 young drivers killed in car crashes wearing their seat belt. Young driver seat belt compliance also continues to be a problem throughout the country with a compliance rate of 80% in 2008 (NHTSA). MeBHS has

teamed with the MaineDOT and the Maine Violations Bureau to focus on unbelted young drivers. The intention will be to determine areas in the State of Maine with the lowest young driver seat belt compliance and higher unbelted fatalities. MeBHS will grant Teen Seat Belt enforcement funds to LEA's that respond to our RFP. This is a proven countermeasure to increase teen belt compliance. This enforcement plan requires continuous follow up. It is the intention of MeBHS to monitor the successes of the grant as it is being conducted to conclude if any modifications need to be implemented in order to have a successful grant period in which the LEA is producing results.

FUNDING SOURCE: Project was not implemented in FFY2014 due to Law Enforcement Agencies struggling with high vacancies and lack of resources.

Parental Education Program

Project Number

Project Description

Includes education to parents regarding teen seat belt usage. Research shows that parental involvement and influence is still a major factor in teen decision making. In partnership with the Teen Driver Safety Committee (comprised of members from agencies throughout the State of Maine including Maine Department of Health and Human Services, Maine Bureau of Highway Safety, Maine Bureau of Motor Vehicles, MaineDOT, and The Maine State Police) and Alliance Sports Marketing the Parental Education Program has been developed in order to increase a parents role in their young child's driving habits. A parent's role in teaching and managing young drivers has been outlined in the "Countermeasures That Work Seventh Edition" as an effective way to teach and educate young drivers. In collaboration with Alliance Sports Marketing an electronic survey designed to measure parent's awareness of young driver safety issues in the State of Maine has been developed to be utilized at Alliance Sports Marketing events. After completing the survey parents will be given an informational handout highlighting young driver safety issues in the State of Maine and ways they can help decrease young driver fatalities and injuries on Maine roads. The survey will gauge the effectiveness of the project allowing us to determine how many individual parents were touched.

Funding Source: Project was not implemented as a separate project, as described. However, parental involvement is a key component of all of our educational programs. A parental survey was developed and used at Sports Marketing events throughout the year. MeBHS is hoping to gain valuable knowledge from the survey, so that resources can be developed to aid parents in driver education.

Future Countermeasures

- Continue to provide grant funding to Maine law enforcement agencies to participate in the May "Click It Or Ticket" national safety belt high visibility enforcement crackdown periods with grant funding provided for dedicated overtime safety belt enforcement details and public education
- In conjunction with the University of Southern Maine's Muskie School of Public Service, conduct observational and attitudinal surveys to determine safety belt use in Maine
- Establish a Regional Occupant Protection Enforcement team (ROPE), modeled after the RIDE Team concept, in Kennebec County to conduct patrols and checkpoints for the purpose of enforcing occupant protection laws

Child Passenger Safety

Problem

According to the Centers for Disease Control and Prevention (CDC), motor vehicle crashes are the leading cause of death for children between the ages of 1 and 19.[7] In 2010, the most recent year for which statistics are available, 25% of all fatalities in this age group were due to motor vehicle crashes. A number of these deaths might have been prevented. Studies show that when age appropriate child safety restraints are used, the risk of death decreases by 71% for infants and 54% for toddlers.[8] According to Safe Kids Worldwide, 33% of children under the age of 12 who died in crashes in 2011 were unrestrained.[9]

While studies show that the proper use of child restraint systems reduces the chance of injury and death, other studies indicate that child restraint systems are often improperly used. According to one such study, the rate of critical misuse is 73%.[10] Critical misuse, according to the researchers, is misuse of safety systems that could reasonably be expected to increase the likelihood of injury or death. These findings highlight the importance of proper installation and use of child safety systems.

One way in which Maine has addressed this issue is through legislation. Maine's Child Passenger Safety (CPS) law is one of the strongest in the country. The law requires that:

- Children who weigh less than 40 lbs. ride in a child safety seat;
- Children who weigh at least 40 lbs., but less than 80 lbs. and are less than 8 years old, ride in a federally approved child restraint system;
- Children who are more than 8 years old and less than 18 years old and more than 4 feet 9 inches in height be properly secured in a safety belt and;
- Children under 12 years old and who weigh less than 100 lbs. be properly secured in the back seat of the vehicle, if possible.

Objective

The objective of the Child Passenger Safety Program is to provide leadership in the area of child passenger safety by supplying resources and undertaking activities that promote child passenger safety throughout the state of Maine.

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[7] Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS). *Unintentional injuries, ages 13-19, all races, both sexes.* Retrieved from http://webappa.cdc.gov/sasweb/ncipc/leadcaus10_us.html

[8] U.S. Department of Transportation, National Highway Traffic Safety Administration. (2013, May). *Traffic Safety Facts, 2011 Data.* Retrieved from http://www-nrd.nhtsa.dot.gov/Pubs/811767.pdf

[9] Safe Kids Worldwide. Retrieved from http://www.safekids.org/infographic/your-kid-buckled-every-ride

[10] Statistics taken from: Safe Kids Worldwide. (2013). Motor Vehicle Safety Fact Sheet. Retrieved from http://www.safekids.org/sites/default/files/documents/2013%20Motor%20Vehicle.pdf

Goals

- Educate the public on the importance of proper child passenger safety restraint use
- Reduce the rate of child passenger safety seat misuse

Countermeasures & Expended Funds

Child Passenger Safety Activities[11]

The CPS coordinator provided leadership and coordination of CPS activities throughout the state to promote child passenger safety. Activities of the coordinator for this grant period included, some but not all, of the following activities:

- Coordinated the statewide CPS program
- Conducted site visits to meet technicians/instructors, review forms and procedures, answer questions, and address any needs or concerns
- Developed formal site agreements with distribution sites and inspection stations
- Updated forms as needed for CPS activities
- Planned and executed the first CPS conference offering all recertification components
- Held four CPS certification courses
- Partnered with locations for seat check events in northern, eastern, southern, and western regions
- Provided financial support to technicians to provide education at the community level through local health fairs and other events
- Provided a roving instructor to assist technicians with seat sign-offs
- Drafted and mailed thank you letters to all host locations that offered training and seat check opportunities around the state
- Carried on discussions with representatives from facilities regarding the future potential of facilities to be distribution sites
- Attended Lifesavers Conference 2014 in Denver to obtain necessary training and knowledge to fulfill the duties entailed in the coordinator position
- Attended Kidz-in-Motion CPS Conference 2014 in New Mexico to obtain continuing education
- Managed statewide CPS program resources
- Ensured that CPS information and updates were shared as appropriate

Child Safety Seats & Distribution

Project Number: CR14-001

Child Safety Seat Purchases

Funds were expended to cover the costs associated with providing child safety seats to approximately 30 distribution sites located throughout Maine. These sites placed monthly orders with the MeBHS. During FFY14, a total of 950 child safety seats (including car bed harnesses and pad kits) were purchased by the MeBHS and sent directly to distribution sites. The child safety seats distributed included the following:

[11] The CPS coordinator is the program manager.

- Evenflo AMP
- Evenflo Titan
- Evenflo Tribute
- Evenflo Big Kid
- Evenflo Secure Kid
- Evenflo Embrace
- Evenflo Maestro
- Angel Ride Car bed

In addition Angel Ride pad and harness kits were distributed and car seat levelers (noodles) were available for site technicians.

FUNDING SOURCE: $60,664.03 S402

Child Passenger Safety Technician and Instructor Training and Education

Project Number: CP14-001

Child Passenger Safety Training Certification Classes

Successful completion of the NHTSA National Standardized CPS training course results in certification as a CPS technician for two years. In order to successfully complete the training, students must pass both written and hands-on tests. They must also participate in a car seat check-up event on their final day of training.

Four classes were held during the FFY2014 grant period. The classes followed different course formats, but all three met the training requirement and included lectures, discussions, role playing, and hands-on practice with a wide variety of child safety seats and vehicle seat belt systems. A total of 61 students attended the intensive 3 -3.5 day trainings. 14 students attended the first training, held at the Knox County Emergency Management Agency in March. A second class of 19 students was held in Bangor at the Bangor Park and Recreation Building in May, the third class of 16 students was held in Skowhegan at the Margaret Chase Smith Library in July, and the last class of 12 students was held at Kaplan University in South Portland in September. One student did not pass the certification course and another student did not show; all other students passed the course.

In addition, for technicians whose certifications had expired, a one-day renewal training option was offered. Eight students attended that course, held at the Bureau of Highway Safety in December 2013, and all passed.

Inspection Site Program

Currently there are 29 inspection sites located through the state. These sites provide parents with education about how to keep their children safe when riding in cars through the correct use of child safety seats or safety belts. One-on-one lessons are offered by certified CPS technicians, who explain the correct use and installation child safety seats and safety belts.

Car Seat Check Events/Educational Booths

In addition to inspection stations, there were 10 car seat check events across the state and available to the public on set schedules. Events were held at the Brunswick Fire

Department, Camden Fire Department, Union Fire Department & Knox County Sherriff's Office, Bangor Sam's Club, Trenton IGA, Touch-a-Truck Chapter of March of Dimes and Coastal Kids Preschool, Dixfield Police Department, Presque Isle Fire Department, and Eliot Police Department.

Child Passenger Safety Technical Conference (Biennial Conference Planning)

The Conference Planning Committee has started meeting for conference preparation for the 2015 Maine CPS Conference. Given the excellent attendance for the 2013 Maine CPS Conference the planning committee is hoping to get 150 conference attendees for the next technical conference.

FUNDING SOURCE: $39,295 S2011

CPS Online Child Safety Seat Distribution Tracking Database

Project Number: --

Project Description

The CPS tracking database has been completed and implemented. The MeBHS contracted with University of Southern Maine, Muskie School of Public Service to work on this project.

FUNDING SOURCE: FUNDS TO SUPPORT THIS PROJECT WERE EXPENDED THROUGH PROJECT TR14-004.

Child Passenger Safety Roving Instructor Program

Project Number: --

Project Description

Funds support one instructor to travel to sites as needed to provide seat sign-offs for technicians who were unable to attend seat check events.

FUNDING SOURCE: FUNDS TO SUPPORT THIS PROJECT WERE EXPENDED THROUGH CHILD PASSENGER SAFETY TRAINING CERTIFICATION CLASSES EXPLAINED ABOVE.

Future Countermeasures

- Promote a dedicated outreach program to educate minority populations regarding the benefits of using safety belts and child restraints (may include production of print materials and paid media)
- Increase education to parents regarding child occupant protection/passenger safety for 8-12 age group
- Decrease the reliance on federal funds to fully support the Maine CPS program

Young Drivers

Problem

According to the CDC, motor vehicle crashes are the leading cause of deaths for teenagers in the United States. In 2010, 25% of all teen fatalities were attributed to motor vehicle crashes, while 16% were attributed to homicide and 15% to suicide.[12]

In Maine:

- There were 144 driver and passenger fatalities in 2013.
- Approximately 11% (n=16) of all motor vehicle fatalities were teens and young adults between the ages of 16 and 20.
  - In 75% of these cases (n=12), the young person was the driver.
  - In 25% of these cases (n=4), the young person was a passenger in a vehicle driven by a young driver.
  - 100% of young people between the ages of 16 and 20 who died in motor vehicle crashes died in vehicles operated by a 16- to 20-year-old driver.
- Approximately 12% (n=18) of all fatalities involved a 16- to 20-year old driver.
- Approximately 33% (n=4) of all deceased 16- to 20-year old drivers had a positive blood alcohol content (BAC).
- Approximately 33% (n=4) of all deceased 16- to 20-year old drivers were wearing seat belts. In a small number of cases it was not possible to establish whether drivers were wearing seat belts, but the proportion of fatalities not belted may be as high as 77%.

	2007	2008	2019	2010	2011	2012	2013
Number of Fatalities, Any Age	183	155	159	161	136	164	144
Number of Deceased 16- to 20-Year-Olds	28	15	17	22	17	21	16
Number of Deceased 16- to 20-Year-Old Drivers	13	12	11	16	14	13	12
Number of Fatalities Caused by 16- to 20-Year-Old Driver	28	18	16	27	19	22	18
Number of Deceased 16- to 20-Year Old Drivers with a Positive BAC	5	4	3	4	3	6	4
Number of Deceased 16- to 20-Year Old Drivers Using a Seat Belt	4	8	5	6	12	3	4

[12] Teen Drivers: Fact Sheet retrieved from http://www.cdc.gov/motorvehiclesafety/teen_drivers/teendrivers_factsheet.html

Objective

The objective of the Teen Drivers Program is to promote safe teen driving in Maine, continue integration of a statewide teen driver safety strategic plan, and implement community-based programs throughout the state.

Goals & Progress

#1 *Goal*

To decrease drivers age 20 or younger involved in fatal crashes by 5% from the 5 year average of 21 for2008-2012 to 19.95 by December 31, 2014.

Progress

The number of drivers age 20 or younger involved in fatal crashes for 2013 was 18.

Maine had experienced 14 drivers age 20 or younger in 2014 that were involved in fatal crashes at the time of report submission.

#2 *Goal**

To reduce young drivers (age 16 – 24) crash fatalities by 10.5% by 2016

**Goal #2 was established in the 2014 Maine Strategic Highway Safety Plan*[13]

Countermeasures & Expended Funds

Teen Driver Marketing Campaign: Radio Station

Project Number: --

Project Description

Teen drivers were involved in a disproportionate number of crashes and fatalities on Maine roads in recent years. Providing education to these teen drivers and their parents is one component of a successful program area comprehensive plan designed to decrease crashes and fatalities among this age group.

This project will fund the development, implementation, and evaluation of a multi-market radio station campaign. This campaign will target locations with high incidences of teen driver crashes and fatalities. The radio stations participating in this campaign were selected based on teen driver crash and fatality geographic locations and are the top teen station in each market. This campaign will feature messaging by teens and radio host personalities that encourages safe driving habits; branding and postings on participating radio stations' websites and Facebook and Twitter accounts; and promotional contests that engage teens in developing their own safe driving campaign (note: radio stations will be responsible for providing any promotional items or giveaways related to this project).

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[13] The 2014 Maine Strategic Highway Safety Plan is available online at http://www.themtsc.org/news/ckfinder/userfiles/files/2014%20SHSP%20102314_75.pdf

FUNDING SOURCE: Project was not implemented in FFY2014. Attempts were made, but MeBHS was unable to incorporate with our existing high school program.

Grantee: MeBHS w/NL Partners (Media Contractor)

Teen Driver Safety Mini Grants

Project Number – Numbers listed below

Project Description
Funds were used to support mini-grants for various teen driver programs and enforcement designed to educate new drivers on the dangers of operating vehicles on Maine's roadways. Funds will be made available to various organizations to educate young drivers.

Participant: Lisbon Police Department

Project Number: SA14-001

Project Description
Lisbon Police Department in partnerships with Lisbon High School's SADD (Students Against Destructive Decisions) produced and distributed a PSA in which teen impaired driving is specifically targeted. The PSA was presented to students in conjunction with the Teen Driver Awareness presentation during school assemblies, prior to prom and graduation activities, and at public safety events. The PSA was recognized by several media outlets and displayed on Facebook pages.

FUNDING SOURCE: $5,000.00 S402

Participant: Auburn Police Department

Project Number: SA14-002

Project Description
The Auburn Police Department in partnership with the many community partners conducted a mock fatal crash on May 7, 2014 as part of education for the prom and graduating season. Part of the mock crash initiated other activities such as conducting a distracted driving survey with licensed drivers at Edward Little High School and St. Dominic's Academy, students took part in a pledge not to drive while distracted and received a "Park Your Phone" bag as part of taking the pledge. The event was well received and made a large impact on the student body. After the mock crash concluded, students were invited to speak to safety professionals and tour vehicles used in the mock crash.

In partnership with Central Maine Community College, a 30 second PSA titled "Driving While Distracted Consequences" was produced and was shown as various school functions and distributed to local media outlets and social media. Press releases at various media outlets were shown to highlight the "Target Zero" goal, and other driving messages to keep young drivers safe during the prom and graduation season.

In addition to the above activities, Auburn Police Department conducted scheduled details to target young drivers and provide education on the risks of distracted driving, seat belt and speed, and will utilize fatal vision equipment at the annual "National Night Out Event", hosted by the Auburn Police Department.

FUNDING SOURCE: $5,000.00 S402

Participant: York Police Department

Project Number: SA14-003

Project Description

On August 26th two officers were assigned to teach driver's education with the York Driving School. The officers conducted a three hour education class on driver safety with the focus on graduated driver's licenses, speeding, impaired driving, distracted driving and occupant protection.

On September 24 & 25th, 2014, a safety fair was held at York High School. The safety fair was a tremendous success in educating young drivers about safe driving habits. The safety fair was comprised of several educational stations which included two golf cart driving courses focusing on the dangers of drinking and driving and texting and driving. The department also conducted seatbelt checks on the morning of the safety fair and out of the 216 drivers checked; only 3 were not wearing their seatbelts. The department concluded that students had a 98.6% usage rate.

The Bureau of Highway Safety also provided two driving simulators and a seat belt convincer.

The week following the safety fair, the school resource officer met with all the students that had attended the fair to reinforce our safety messages. The reaction to the safety fair was positive and students retained the information taught.

FUNDING SOURCE: $3,730.17 S402

Participant: Westbrook Police Department

Project Number: SA14-004

Project Description

Westbrook Police Department utilized funds to conduct targeted enforcement patrols aimed at identifying teen drivers engaging in distracted driving, OUI, speed/aggressive driving and seat belt violations. All efforts placed on this will be targeted toward teen drivers. Officers were successful with stopping young drivers for various offenses. Over 272 vehicles operated by young drivers were stopped.

Westbrook issued a press release in November 2013 outlining the department's efforts and statistics on teen drivers.

FUNDING SOURCE: $5,000.00 S402

Participant: Augusta Police Department

Project Number: SA14-005

Project Description

Augusta Police Department utilized funds to focus on a two-pronged approach by introducing two programs to Cony High School, The Teen Driving Awareness Program and Impaired Driving Awareness Program to educate young drivers on the dangers of teen driving. During February, April, August and September 2014, Augusta Police Department conducted multiple 4-hour details targeting underage impaired driving, distracted driving and seatbelt use. During the month of May in conjunction with prom, and graduation activities, officers focused on the educational efforts by introducing the Impaired Driving and Teen Driving Awareness program at Cony High School and the Vocational School. Officers presented a PowerPoint presentation focusing on distracted driving. The students were very engaged and asked lots of questions.

FUNDING SOURCE: $5,000.00 S402

Participant: Cumberland County Sheriff's Office

Project Number: SA14-006

Project Description:

The Cumberland County Sheriff's off took part in the 2013-2014 "Teen Driving Grant" this was accomplished by the use of their "Distracted Driving Golf Cart Program "formally known as the Fatal Experience program. The program was modified to encompass texting while driving which allowed young drivers to make their way through a variety of road hazards on a closed coned course. The participants were measured first navigating the course without the use of an electronic device, the participants are then put through the course a second time and are again measured on their response and the number of cones and traffic violations are measured. At the completion of the second time through the course, the participants were able to see the difference in there driving responses and reactions with the facilitator.

Event 1

The program was conducted at Windham High School on May 7, 2014 from 7 to 11 am and the presentation was observed by 200 students and staff members. 35 students were able to participate in the activity first hand and share the outcome with their classmates.

Event 2

The program was conducted at New Gloucester Center Fire Station Open House event On May 21, 2014 from 4 to 8 pm. The presentation was observed by 100 community members 25 were able to participate in the activity first hand and share the outcome attendees.

Event 3

The program was conducted at Raymond Center Fire Station Open House event On June 21, 2014 from 9 to 2 pm. The presentation was observed by 150 community members 40 were able to participate in the activity first hand and share the outcome attendees.

FUNDING SOURCE: $419.00 S402

Teen Driver Safety Committee

The Maine Teen Driver Safety Committee (TDSC) was convened in 2008 at the request of the MeBHS Director. The TDSC comprises individuals representing Maine state agencies, including the Department of Public Safety, MeBHS, Department of Transportation, Department of Health and Human Services, Bureau of Motor Vehicles, and organizations such as AAA Northern New England.

The Committee feels strongly that efforts to improve teen driver safety have a greater opportunity for success when they are implemented by community partners and stakeholders. The role of the Committee is to serve as partner—providing technical assistance when needed or requested and attending monthly meetings of the recently formed Underage Drinking Task Force, facilitated through the Office of Substance Abuse.

As part of its work, the TDSC has developed a teen driver safety strategic work plan. This plan is intended to be a guide for agencies interested in addressing teen driver safety issues at local, county, and statewide levels. The plan contains sample activities for each identified strategy and is intended to be one component of a comprehensive community-based effort to address teen driver safety issues.

Teen Driving Goal, Objectives and Strategies

Goal: Promote safe teen driving in Maine
Target Audience: 16-18 year old drivers

- Objective 1: Integrate a variety of partners and stakeholders to participate in the Teen Driver Safety Committee (TDSC) activities
  - Strategy 1.1: Recruit partners and stakeholders to implement the TDSC work plan
    - Activity: Create fact sheet describing the work of the TDSC
    - Activity: Create and maintain a partner and stakeholder distribution list
  - Strategy 1.2: Provide partners and stakeholders the most current research and evidence based teen driver safety focused programs
    - Activity: Develop a directory of the most current research and evidence based teen driver safety information and programs
    - Activity: Collect and distribute related crash data involving teens
  - Strategy 1.3: Create a Maine focused teen driving safety awareness toolkit for use and distribution at the local and state levels
    - Activity: Research other states for already developed toolkits
  - Strategy 1.4: Create an evaluation plan for the use of the TDS Awareness toolkit

- Objective 2: Increase parental involvement in developing a safe teen driver
  - Strategy 2.1: Provide parent-focused education regarding teen driver issues
    - Topics:
      - Current Graduated Driver License (GDL) and state laws

        - Modeling good driving habits
        - Setting rules and consequences for actions
        - Monitoring teen driver behaviors
    - Activity: Brainstorm various venues to promote parental education
    - Activity: Create parent-based website to include information listed above
    - Activity: Create fact sheets on the issues identified above

- Objective 3: Decrease teen driving related crashes, injuries and fatalities due to alcohol and other drugs
    - Strategy 3.1: Develop outreach and education for current and future drivers on the laws and risk pertaining to driving while under the influence of alcohol and drugs
    - Strategy 3.2: Develop outreach and education venues for family members and other influencers on the laws pertaining to driving while under the influence of alcohol and drugs
    - Strategy 3.3: Support an increase in law enforcement efforts
    - Strategy 3.4: Collaborate with court systems working with OUI and juveniles

- Objective 4: Decrease teen driving related crashes, injuries and fatalities due to unsafe speed
    - Strategy 4.1: Develop outreach and education for current and future drivers on the laws and risks pertaining to speeding
    - Strategy 4.2: Develop outreach and education venues for family members and other influencers on the laws and risk pertaining to speeding
    - Strategy 4.3: Support an increase in law enforcement efforts

- Objective 5: Decrease teen driving related crashes, injuries and fatalities due to lack of seatbelt use
    - Strategy 5.1: Develop outreach and education for current and future drivers on the laws and risks pertaining to driving unbelted
    - Strategy 5.2: Develop outreach and education venues for family members and other influencers on the laws and risk pertaining to driving unbelted
    - Strategy 5.3: Support an increase in law enforcement efforts

- Objective 6: Decrease teen driving related crashes, injuries and fatalities due to distractions
    - Strategy 6.1: Develop outreach and education for current and future drivers on the laws and risks pertaining to distracted driving
    - Strategy 6.2: Develop outreach and education venues for family members and other influencers on the laws and risk pertaining to distracted driving
    - Strategy 6.3: Support an increase in law enforcement efforts

- Objective 7: Decrease teen driving related crashes, injuries and fatalities due to late night driving
    - Strategy 7.1: Develop outreach and education for current and future drivers on the laws and risks pertaining to late night driving
    - Strategy 7.2: Develop outreach and education venues for family members and other influencers on the laws and risk pertaining to late night driving
    - Strategy 7.3: Support an increase in law enforcement efforts

Progress Related to the Strategic Plan

The TDSC carried out a number of activities related to Objectives 1 of the strategic plan.

- Objective 1: Integrate a variety of partners and stakeholders to participate in Teen Driver Safety Committee (TDSC) activities
  - The list of driver safety resources and links was updated to include additional teen safety resources, i.e., Governors Highway Safety Association (GHSA)
  - Kennebunk Police Department was funded to produce an anti-texting video involving teens. The video production would be similar to the "Point of No Return" video the Kennebunk PD created several years ago. A title for the movie/video hasn't been determined at the time this report was created.

FUNDING SOURCE: SALARY EXPENSES FOR HIGHWAY SAFETY COORDINATORS WHO PARTICIPATED IN THIS COMMITTEE WERE PAID WITH SECTION 402 FEDERAL FUND.

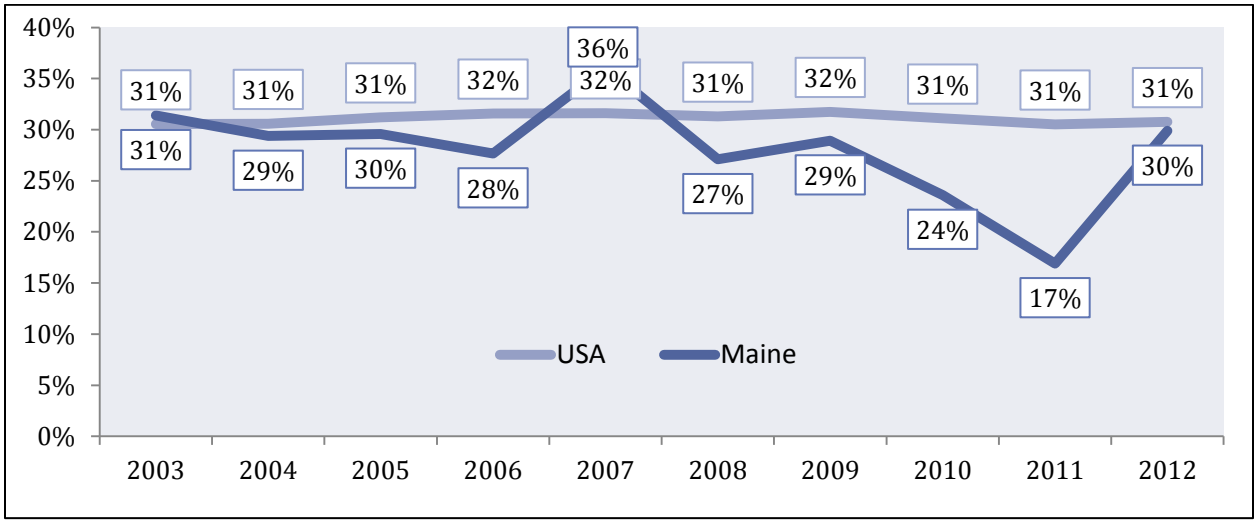
Future Countermeasures

- Develop, implement, and evaluate a multi-market radio station campaign targeting locations with high incidences of teen driver crashes and fatalities
- Develop, implement, and evaluate advertisement through Pandora Internet Radio, an automated music recommendation service available online and through mobile devices

Impaired Driving

Problem

Nationally, the percentage of fatalities that were alcohol-related hovered between 31% and 32% from 2003 to 2012 (the last year for which these data are available). In Maine, the proportion of fatalities that were alcohol-related exceeded the national rate for just one year, 2007, when the rate reached 36%. For the four years prior to 2007 (2003-2006), the average rate was close to the national rate, at 30%. For the five years following 2007 (2008-2012), the average rate was well below the national rate, at 25%. While the year 2012 showed an increase in rate compared to 2011, the rate was still below the national average.



Source: FARS

Alcohol related fatalities when analyzed in the state of Maine continue to point towards specific counties of concern. Cumberland and York County are the most heavily populated counties in the State of Maine, according to the most recent Maine census data, and continue to account for nearly 50% of the alcohol related crashes in the state. To combat this MeBHS currently have Regional Impaired Driving Enforcement Teams in both of these counties increase enforcement above and beyond are yearly Impaired Driving Enforcement Grants.

Objective

The objective of the Impaired Driving Program is to focus on reducing alcohol-related fatalities by targeting high crash locations. Using police crash data, the MeBHS identifies high crash locations and partners with law enforcement to increase patrols in those areas.

Goal & Progress

Goal

To decrease alcohol impaired driving fatalities by 5% from the 5 year average for 2008-2012 of 37.8 to 35.91 by December 31, 2014.

Progress

The number of alcohol-impaired driving fatalities in 2013 was 35.

Maine had experienced 23 impaired driving fatalities in 2014 at the time of report submission.

Countermeasures & Expended Funds

Program Management and Operations

Project Number: AL14-001

Project Description

Costs under this program area include salaries, travel (examples include TSI training courses, in state travel to monitor sub-grantees, LEA Chief committee meetings) for highway safety coordinators and/ or program managers, clerical support personnel and operating costs (printing, supplies, state indirect rate, and postage) directly related to this program, such as program development, coordination, monitoring, evaluation, public education and marketing, auditing and training.

FUNDING SOURCE: $28,412.99 S.402

S.410 Planning & Administration

Project Number: ALC14-001

Project Description

Costs under this program area include salaries, travel (examples include TSI training courses, in state travel to monitor sub-grantees, LEA Chief committee meetings) for highway safety coordinators and/ or program managers, clerical support personnel and operating costs (printing, supplies, state indirect rate, and postage) directly related to this program, such as program development, coordination, monitoring, evaluation, public education and marketing, auditing and training.

FUNDING SOURCE: $19,997.91 S.410

Zero Tolerance Enforcement

Project Number: None (Not implemented)

Project Description

Project numbers will be assigned after contracts with LEA's are awarded. Maine has a zero-tolerance law of .00 for drivers under the age of 21. Violators will have their drivers' license suspended or revoked. Zero-tolerance laws can be enforced on regular patrol or on special patrols directed at times and areas when young impaired drivers may be present. Enforcement will require moderate costs for appropriate training and publicity. This enforcement plan requires continuous follow up. It is the intention of MeBHS to monitor the successes of the grant as it is being conducted to conclude if any modifications need to be implemented in order to have a successful grant period in which the LEA is producing results. Maine data shows that:

Out of the 13 <21 drivers that lost their lives 46% were alcohol related in 2012.

Statistics from the Office of The Secretary of State shows more than 550 arrests between the ages of 15 and 20 for OUI

Enforcement and publication of zero tolerance laws have been proven effective in reducing underage drinking and driving.

FUNDING SOURCE: Project was not implemented in FFY2014 due to lack of law enforcement resources.

2014 Drive Sober or Get Pulled Over Impaired Driving Enforcement Campaign

Project Number: Listed below under funding source information

Project Description

In 2014, the MeBHS continued an impaired driving enforcement campaign. This campaign involved giving law enforcement agencies a choice between participating in a yearlong impaired driving enforcement grant or a crackdown period impaired driving enforcement grant, allowing LEAs to choose whichever campaigns best fit the impaired driving problems in their areas.

The yearlong impaired driving campaign gave overtime grants to 58 LEAs to conduct impaired driving enforcement details from December 13, 2013 to September 5, 2014. All grantees were required to perform at least four overtime details or one sobriety checkpoint during both of the high visibility enforcement periods, which run from December 14, 2013 to January 1, 2014 and from August 15, 2013 to September 1, 2014. Law enforcement officers worked a total of 9,761.5 hours of overtime and conducted 15,926 traffic stops (1.63 stops per hour). A total of 77 roadblocks were utilized, in addition 22,894 stops and 1,997.25 hours. These efforts resulted in a total of 515 arrests for operating under the influence. In addition, a number of tickets and warrants were issued for violations, including 262 speeding violations, 10 seatbelt violations, 302 drug violations, and 228 violations for operating after suspension.

The crackdown period impaired driving campaign gave overtime grants to 11 LEAs to conduct impaired driving enforcement details during the national crackdown periods, which run from December 14, 2013 to January 1, 2014 and from August 15, 2014 to September 1, 2014. Law

enforcement officers worked a total of 818.25 hours of overtime and conducted 1,418 traffic stops (1.59 stops per hour). These efforts resulted in a total of 25 arrests for operating under the influence, 17 operating under suspension, and 10 drug possession arrests.

Agency	*Grant Number*	*Funding/Source*
Westbrook PD	**AL14-010**	$9,332.19 S402
Biddeford PD	**AL14-011**	$10,000.00 S402
Aroostook County SO	**AL14-012**	$4,062.12 S410
Lincoln County SO	**AL14-013**	$9,450.00 S410
Knox County SO	**A:14-014**	$9,346.50 S410
Houlton PD	**AL14-015**	$3,286.94 S410 $6,588.06 S410
Bath PD	**AL14-016**	$9,975.00 S410
Wells PD	**AL14-017**	$8,970.27 S410
Scarborough PD	**AL14-018**	$10,000.00 S410
Franklin County SO	**AL14-019**	$5,709.60 S410
Sabattus PD	**AL14-020**	$9,050.00 S410
Rumford PD	**AL14-021**	$9,720.00 S410
Mexico PD	**AL14-022**	$10,000.00 S410
Augusta PD	**AL14-023**	$10,000.00 S410
Boothbay Harbor PD	**AL14-024**	$6,478.96 S410
Oakland PD	**AL14-025**	$8,920.00 S410
Farmington PD	**AL14-026**	$8,800.66 S410
Sagadahoc County SO	**AL14-027**	$9,480.09 S410
Richmond PD	**AL14-028**	$9,434.60 S410
Presque Isle PD	**AL14-029**	$6,347.97 S410
Hampden PD	**AL14-030**	$4,931.22 S410
Wilton PD	**AL14-031**	$5,680.89 S410
Waterville PD	**AL14-032**	$10,000.00 S410
Oxford County SO	**AL14-033**	$9,990.00 S410
Orono PD	**AL14-034**	$2,538.51 S410
Topsham PD	**AL14-035**	$4220.12 S402 $4,754.28 S410
Rockland PD	**AL14-036**	$7,310.08 S410
Eliot PD	**AL14-037**	$9,614.09 S410
Newport PD	**AL14-038**	$8,072.05 S410
York PD	**AL14-039**	$4,738.59 S410
Kennebunk PD	**AL14-040**	$9,926.41 S410
Androscoggin County SO	**AL14-041**	$8,771.00 S410
Bangor PD	**AL14-042**	$9,667.67 S410
Rockport PD	**AL14-043**	$3,180.27 S410
Windham PD	**AL14-044**	$3,762.93 S410
Machias PD	**AL14-045**	$2,903.97 S410

Jay PD	**AL14-046**	$2,616.56 S410
Portland PD	**AL14-047**	$4,351.06 S410
Monmouth PD	**AL14-048**	$2,292.50 S410
Caribou PD	**AL14-049**	$8,734.11 S410
North Berwick PD	**AL14-050**	$10,000.00 S410
Lisbon PD	**AL14-051**	$6,794.92 S410
Old Town PD	**AL14-052**	$8,733.92 S410
Sanford PD	**AL14-053**	$4,075.00 S410
Hancock County SO	**AL14-054**	$5,976.00 S410
Skowhegan PD	**AL14-055**	$3,536.99 S410
Auburn PD	**AL14-056**	$9,582.20 S410
Berwick PD	**AL14-057**	$9,976.15 S410
Norway PD	**AL14-058**	$7,767.06 S410
Kennebunkport PD	**AL14-059**	$2,048.00 S410
Lewiston PD	**AL14-060**	$9,885.01 S410
Gorham PD	**AL14-061**	$9,259.32 S410
Brunswick PD	**AL14-062**	$4,476.15 S410
Buxton PD	**AL14-063**	$1,004.73 S410
Ellsworth PD	**AL14-064**	$8,977.00 S410
Paris PD	**AL14-065**	$3,593.94 S410
Cumberland SO	**AL14-066**	$2,333.22 S402 $2211.78 S410
South Portland PD	**AL14-067**	$4,786.35 S410
Veazie PD	**AL14-068**	$2,545.00 S410
Falmouth PD	**AL14-069**	$5,000.00 S410
Dover Foxcroft PD	**AL14-070**	$9,891.07 S410
Fairfield PD	**AL14-071**	$3,528.00 S410
Bridgton PD	**AL14-072**	$10,000.00 S410
Saco PD	**AL14-073**	$522.86 S410
Oxford PD	**AL14-074**	$8,355.92 S410
Kittery PD	**AL14-075**	$2,110.00 S402
Dexter PD	**AL14-076**	$9,452.00 S410
Winslow PD	**AL14-077**	$9,664.88 S410
Kennebec County SO	**AL14-078**	$8,360.00 S410
Maine State Police	**AL14-079**	$10,293.22 S402 $32,612.21 S410

2014 LEO (Law Enforcement Officer) Specialized Trainings

Project Number: AL14-005

Project Descriptions

- ***Drug Recognition Expert Program (DRE)***

There are currently 70 active Drug Recognition Experts in Maine, down from 76 last year. We have our next school scheduled for January of 2015. The Department of Human Services Health and Environmental Testing Lab (HETL) has estimated that 223 urine samples have been received from DREs' for analysis as of the date of this report.

We continue to require DREs' to enter their evaluations in the National DRE Database. The database is very helpful in tracking individual DRE performance and allows us to process recertification applications more efficiently. NHTSA has recently taken over hosting the Sobrietytesting.org site.

In August of 2014, Sergeant Edwin Finnegan of the Rockland Police Department and Officer Theodore Hatch of the Gorham Portland Police Department attended the 20th Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving in Phoenix, Arizona. Upon their return, they assisted in the development and instruction of the 2014 mandatory DRE refresher training at the MCJA. The training was held on September 4th at the Academy. Presenters discussed MeBHS updates, conference updates, challenging evaluations, changes to the National Database and the resources available on the MeBHS web site. Steve Pierce answered questions related to the HETL. The class was very well attended with 39 DREs' and instructors participating.

- ***Standardized Field Sobriety Testing (SFST)***

The MCJA conducted or processed 10 full SFST student classes with 113 students attending. We processed 14 SFST (4 hour) Refresher classes statewide with 73 students attending. We ran 2 SFST Instructor Development classes in Bangor and Portland with 18 students attending. 59 SFST instructors have attended the mandatory instructor updates held at MCJA, Hampden PD and Cape Elizabeth PD this year.

- ***Drug Impairment Training for Educational Professionals (DITEP)***

The International Association of Chiefs of Police (IACP) sponsored program teaches educational professionals how to identify drug use in students. The second part of the program teaches key school staff how to conduct evaluations on students identified as being impaired. The goal of the program is to reduce drug use by students and keep drug impaired students off the roads. We offered 2 DITEP programs this year. We are working with DHHS to develop a 2-3 hour introductory program similar to DITEP which can be taught in the schools. The class is an introduction only and not considered the full DITEP class.

- ***Advanced Roadside Impaired Driver Enforcement (ARIDE)-***

The MCJA offered 2 ARIDE classes this year which were held at Saco PD and Bangor PD. A total of 37 students attended the two day training. The IACP has created an on-line version of the ARIDE training that is available to officers. We have not decided if we will endorse the on-line training until some issues have been worked out with the curriculum.

- **Intoxilyzer**

On January 1, 2014, about 500 Intoxilyzer certification cards, representing approximately one third of all operators were issued under our new recertification process. Now all operators expire at the end of the year in their three year cycle.

We ran a Breath Testing Device Instructor training class with 15 students attending. 13 of the 15 completed their certification during the fall BLETP Impaired Driving weeks. We also offered non-mandatory Intoxilyzer update meetings for instructors to get a chance to ask questions and meet with Bob Morgner and senior instructors. We had 33 instructors attend.

The MCJA Board of Trustees approved a new specification for Breath Testing Device Operator and Instructor. (attached) changes include several additional months to complete re-certification and the ability for on-line re-certification training when developed. The non-lapsing certification was not approved and instead new certification periods will not exceed 4 years

We have approached JPMA to look at development of an on-line Breath Testing Device Re-cert program. We will be meeting on 12-11-2014 to discuss options.

- **Prosecutors Conference DRE Training Expenses**

Funds will support the travel expenses (flight tickets, lodging, meals, transportation) of two instructors to the 2014 Maine Prosecutors Conference to provide DRE Training to Maine DRE prosecutors. The training will be organized with the National District Attorney Association, National Traffic Law Center, and New England Traffic Safety Resource Prosecutors.

FUNDING SOURCE: $6,881.73 S.402

Regional Impaired Driving Enforcement (RIDE)

Project Number: AL14-003

R.I.D.E. Team Checkpoint in Casco

Project Description

The Cumberland County RIDE Team concluded its third successful year of enforcement details. This program involved select officers from state, county, and municipal agencies within Cumberland County with demonstrated expertise in the detection, apprehension and prosecution of impaired drivers. The team comprises 1 trooper from the Maine State Police; 3 deputies from the Cumberland County Sheriff's Office; and 21 officers from the Scarborough, South Portland, Portland, Freeport, Falmouth, Windham, Cape Elizabeth, Gorham, Westbrook, Cumberland, Yarmouth, Bridgton, and Brunswick. These officers, their agencies, and the Chief Executive Officers have made a commitment to raise awareness, educate the public, and make the roadways of Cumberland County safer for citizens through the strict enforcement of Maine's Impaired Driving Statutes. From October to September, the team conducted 15 saturation patrols (277 traffic stops) and/or sobriety checkpoints, resulting in contact with 2,544 operators and leading to:

- 43 arrests for impaired driving;
- 74 warnings for impaired driving (BAC test <.08 or SFST);
- 9 citations for consumption, transportation or possession by minors;
- 11 arrests/citations for possession of drugs;
- 103 arrests/citations for various other offenses; and
- 375 warnings for various other offenses.

The York County RIDE Team, comprising 3 deputies from the York County Sheriff's Office and 11 officers from Kennebunkport, Saco, York, Kennebunk, Ogunquit and North Berwick conducted 5 Saturation Patrol details between October and August, resulting in 182 traffic stops resulting in:

- 9 arrests for impaired driving,
- 2 warnings for impaired driving,
- 1 citation for possession of drugs,
- 36 arrests/citations for various other offenses, and
- 172 warnings for various other offenses.

FUNDING SOURCE: $21,560.29 S.402, $50,000.00 S.410

Traffic Safety Resource Prosecutor

Project Number: AL14-002

Project Description

A Traffic Safety Resource Prosecutor (TSRP) facilitates a coordinated, multi-disciplinary approach to the prosecution of traffic crimes including alcohol/drug-impaired driving. The addition of a TSRP as a partner with the MeBHS would benefit prosecutors and law enforcement agencies throughout the state by providing training, education, and technical support in traffic crimes and safety issues.

Funds would support a full time TSRP who will assist Maine law enforcement and prosecutors in the prosecution of impaired driving-related crimes. The person in this position may be selected from the state's RFP process. MeBHS has discussed this position with the Maine Attorney General's Office, but the current state budget situation has prevented placement of an individual. MeBHS continues to explore opportunities for this position.

FUNDING SOURCE: Project was not implemented in FFY2014. TSRP has been hired and operations have begun in FFY2015

Grantee: MeBHS

Breath Alcohol Testing Vehicle

Project Number: --

Project Description

Funds will support the procurement of a new mobile command unit that will assist Maine law enforcement in their dedicated efforts to combat impaired driving. This mobile unit will work with the RIDE Teams. Procurement will be completed using the State procurement rules for capital equipment. No purchase will be made without written approval from NHTSA. Research has been completed by the Law Enforcement Liaison and MeBHS to ensure the best unit for our state.

FUNDING SOURCE: Project was not implemented in FFY2014 because the acquired unit was deemed unacceptable and MeBHS will be procuring a brand new BAT mobile in FFY2015.

2014 BHS Evidence Analyzer – Randox

Project Number: AL14-004

Project Description

The Maine Department of Health and Human Services' Health and Environmental Testing Laboratory is tasked with toxicology drug screening and testing for the detection of illicit or other drugs in OUI and forensic cases. Currently, blood drug tests must be performed out of state. The Evidence Investigator Analyzer Equipment uses a computerized process to test for many drugs at one time. The Evidence Investigator Analyzer Equipment would allow for more thorough, efficient, and reliable testing in state for drugs and alcohol in Maine, which could lead to an increase in successful prosecution of impaired driving cases and, therefore, could decrease the overall occurrence of impaired driving in Maine and the overall costs of out of state testing. No purchase will be made without written approval from NHTSA.

FUNDING SOURCE: $70,000.00 S.410

Grantee: MeBHS/MeDHHS

OUI Traffic Enforcement Equipment - 2014 BHS In Car Video Equipment Purchase Grant

Project Number: AL14-006

Project Description

Project numbers will be assigned after contracts with LEA's are awarded. Funding will support the procurement of in-cruiser video cameras to assist Law Enforcement in the detection and prosecution of impaired drivers. No equipment in excess of $5,000.00 will be purchased without approval in writing by NHTSA. Once MeBHS makes a decision on the specific in-cruiser video camera to be purchased the Bureau will relay that information to NHTSA. Participating LEA's provide a cash match.

MeBHS offered the Watchguard 4RE in-cruiser video camera to law enforcement agencies in Maine as a part of the FFY2014 Traffic Enforcement Equipment Grant. Each agency was offered up to two cameras and were required to provide 50% match. Overall 77 cameras were purchased during the FFY2014 grant period.

FUNDING SOURCE: $181,797.00 S.410

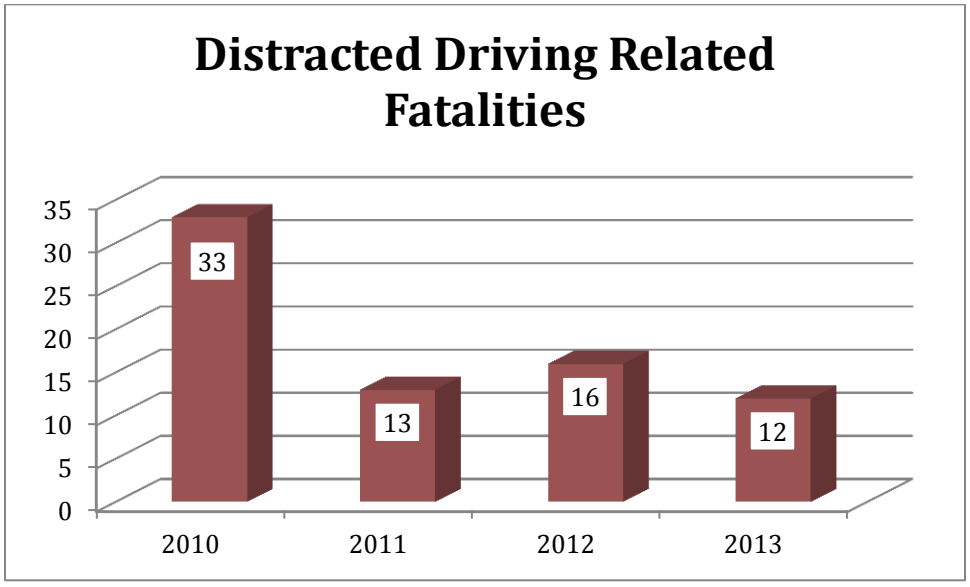
Distracted Driving

Problem

Distracted Driving has received heightened public and media attention recently with a general knowledge that driving does demand full time attention. As mobile technology evolves at a breakneck pace, more and more people rightly fear and recognize that distracted driving—texting, e-mails, phone calls, etc.—is a growing threat on the road.

In Maine it can be difficult to accurately collect this information at the crash scene because drivers will not always volunteer what led to the crash. Nonetheless we know from national data that driver inattention is a major contributor to highway crashes. The National Highway Traffic Safety Administration estimates that at least 25% of police-reported crashes involve some form of driver inattention.

In 2010 Maine altered the way in which distracted driving was reported in Maine Police Accident Report forms. This alteration caused the State of Maine to separate 2011 numbers from past distracted driving numbers. The goal of the 2014 Maine Strategic Highway Safety Plan is to reduce distracted driving-related fatalities by 10% from the 3 year average of 13.6 (2011-2013) to 12.2 by 2014 (Maine SHSP). Maine wanted to use data that had similar reporting formats, so this caused the use of data only from 2011-2013 in the creation of the three year average. The graph below displays distracted driving related fatalities from 2010.



Source: State Crash Data Files

Data show fatal distracted driving related crashes decreasing in recent years, but this is likely not a true reflection of the problem. As stated above, it is difficult to accurately collect distracted driving related crash information at the crash scene because drivers won't always volunteer if they were

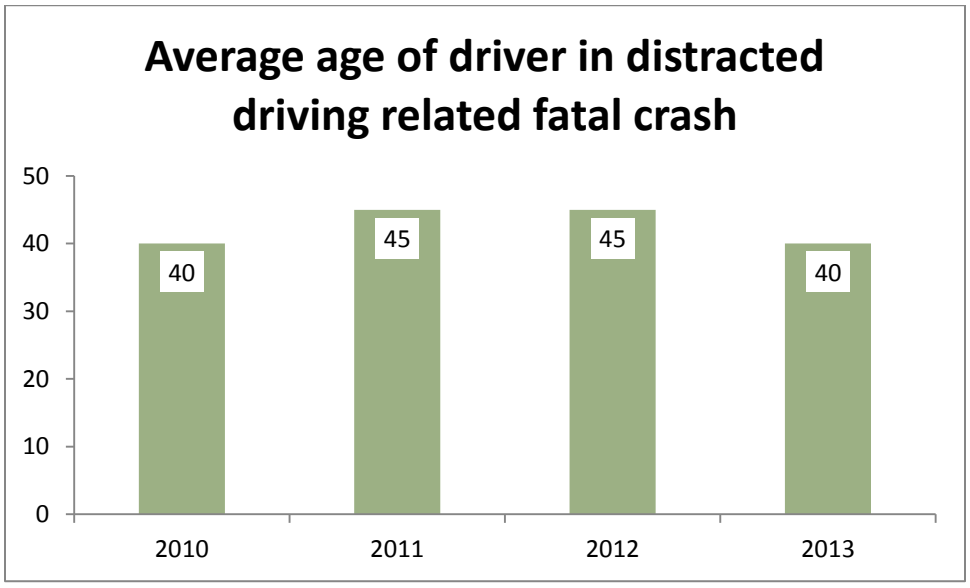
distracted because of the state of Maine's distracted driving laws. In 2009, Maine enacted a distracted driving law that includes this definition; "Operation of a motor vehicle while distracted" means the operation of a motor vehicle by a person who, while operating the vehicle, is engaged in an activity:

(1) That is not necessary to the operation of the vehicle; and

(2) That actually impairs, or would reasonably be expected to impair, the ability of the person to safely operate the vehicle

In addition to this legislation, in 2011, Maine passed a primary texting ban which states that people may not operate a motor vehicle while engaging in text messaging (Title 29A, 2119). According to AAA Northern New England, 94% of Maine drivers support these new laws banning texting and driving.

Drivers often tell officers they were not distracted at the time of the crash. Data on fatal accidents are more accurate, but with small number of fatal distracted driving related crashes it is hard to determine a particular target area. However, crash data from 2010 to 2013 has allowed the MeBHS to determine that the average age of drivers in distracted driving related fatal crashes are between the ages of 40 and 45.



Source: State Crash Data Files

In FFY2014 MeBHS developed some new media campaigns and introduced dedicated enforcement to combat distracted driving. The Maine State Police were awarded a distracted driving enforcement grant where they focused on distracted driving high crash locations such as schools zones and interstates. There enforcement plan can be read below under project number DD14-001 "2014 Distracted Driving Enforcement." MeBHS also began two new distracted driving media campaigns were delivery trucks were used as billboards to spread the "One Txt or Call Could Wreck it All" message to Mainers of all ages. MeBHS as a part of the distracted driving campaign developed brand new distracted driving radio media spots to educate drivers on the dangers of distracted driving.

Objective

The objective of the bureau is to raise public awareness of the dangers of distracted driving through education targeted to the state's high school via school safety resource officers, safety events, specialized enforcement and educational materials. MeBHS partners with the Maine State Police to enforce Maine's Distracted Driving Laws to decrease distracted driving related fatalities and crashes.

Goal & Progress

Goal

Reduce distracted driving-related fatalities by 10% from the 3 year average of 13.6 (2011-2013) to 12.2 by 2014 (Maine SHSP).

Progress

Distracted driving-related fatalities totaled 12 in 2013.

Maine had experienced 9 distracted driving related fatalities in 2014 at the time of report submission.

Countermeasures

Program Management and Operations

Project Number: DD14-004

Project Description:

Costs under this program area include salaries, travel (examples include TSI training courses, in state travel to monitor sub-grantees, LEA Chief committee meetings) for highway safety coordinators and/ or program managers, clerical support personnel and operating costs (printing, supplies, state indirect rate, and postage) directly related to this program, such as program development, coordination, monitoring, evaluation, public education and marketing, auditing and training.

FUNDING SOURCE: Costs were absorbed under P&A and other special revenue.

2014 Distracted Driving Enforcement

Project Number: DD14-001

Project Description:

Driver distraction is a major contributor to highway crashes. High visibility enforcement has been shown to change driver behavior through programs such as "Click It or Ticket". The Maine State Police were awarded funding to enforce Maine's Distracted Driving Laws. Their enforcement plan is listed below:

The State Police's goal is to reduce distracted driving related crashes by 5% over the next four grant years. We will monitor the distracted driving related crash rates in these areas periodically during the enforcement campaign to determine if the enforcement methods are effective and to make any necessary adjustments to the techniques we are using. Throughout the next 4 years and

again at the end of the 2017 grant year we will compare the distracted driving related crash rates in the target areas to measure the results of our efforts.

The money was used to fund overtime pay for troopers assigned to distracted driving enforcement details. All details were scheduled for no longer than 4 hours.

The details were conducted at various locations and times throughout the state in areas with a history of distracted driving crashes and violations as determined by our Crash Analysis Unit. This determination was determined by conducting a review of the reportable crashes contained in the Maine Crash Reporting System and other available resources.

The MSP used several different High Visibility Enforcement (HVE) approaches in order to impact as many distracted drivers as possible. These efforts will include, but not be limited to the following:

- Covertly posting troopers on overpasses in built up areas to observe motorists actions from an elevated vantage point and having 1 or more 'chase' vehicle(s) hidden from the view of approaching traffic to conduct the traffic stops. This technique will be used primarily on multi-lane roads in one or both directions.

- Covertly posting troopers on the side of the highway to observe motorists actions from an unsuspecting vantage point and having 1 or more 'chase' vehicle(s) hidden from the view of approaching traffic to conduct the traffic stops. This technique will be used primarily on two lane rural roads.

- Two troopers per team doing roving patrol in non-conventional unmarked vehicles. Vehicles will include, but not be limited to vans and SUV's. These higher vehicles have been successfully used in details on the Maine Turnpike and by the New York State Police. Being at a higher elevation than most motorists allows the passenger (spotter) trooper to more easily see into vehicles. This method allows the driver trooper to focus on driving safely and not become distracted by trying to drive and observe the violations at the same time. This technique will be used primarily on multi-lane roads in one or both directions.

- Spotter troopers riding in tractor trailers with volunteer trucking companies. This higher vantage point will allow the trooper to see inside almost all vehicles on the road and inconspicuously observe driver behavior. 1 or more 'chase' vehicle(s) hidden from the view of approaching traffic will be utilized to conduct the traffic stops. This technique will be used primarily on multi-lane roads in one or both directions.

- Troopers on roving patrol in unmarked cruisers during high volume traffic times. This technique will be closely monitored as these details are being conducted to determine if they are worthwhile. The details will only be conducted on multilane roads in at least one direction. If these details are determined to be unproductive other details will be utilized instead.

FUNDING SOURCE: $24,368.77 405E – Funding was provided to the Maine State Police as a pilot program to establish innovative ways to enforce distracted driving and to develop best practices. These ideas would then be shared with other police agencies that may be selected to participate in distracted driving enforcement. Also other law enforcement agencies were not selected because of lack of resources.

Distracted Driving Poster Project

Project Number: DD14-004

Project Description:
"Who's Next Don't Text" Posters were printed and distributed to local police departments, Maine State Police, middle and high schools, workplaces and community venues to educate the general public, new drivers and employees on the dangers of distracted driving. This idea was developed by a young driver from Maine who drafted the poster and asked the Maine State Police to utilize the poster for Distracted Driving education. The Maine State Police and The Bureau feel it is important to encourage our young drivers to be involved in the process of changing driver behavior and this fits the ultimate goal of changing driver behavior and reducing the number of serious and fatal crashes associated with driving while distracted.

Calendars and pens

The BHS purchased pens with the NHTSA messaging "One Text or Call Could Wreck It All", to promote distracted driving awareness at simulated distracted driving presentations to drivers' ages 16-24 years old. The BHS purchased mini daily calendars with the NHTSA messaging "One Text or Call Could Wreck It All", to promote distracted driving awareness at simulated distracted driving presentations to driver's ages 24-45 years old. Both items enabled staff the opportunity to get the attention of participants and discuss the dangers of distracted driving while also giving them the message to take home with them.

FUNDING SOURCE: $4,403.32 S.405e 1st Year Texting Ban

Distracted Driving Video Produced by Kennebunk Police Department

Project Number: Ford Driving Skills For Life Grant – Federal Funds were not used for this project

Project Description: Funds will support the production of an educational distracted driving video. This video will be produced by local teens and the Kennebunk Police Department to help combat and raise awareness of the dangers of distracted driving and young drivers.

FUNDING SOURCE: $10,000.00 Ford Driving Skills For Life GHSA

Simulated Distracted Driving Education

Project Number- N/A

Project Description
The TDAP has been up and running since August 2011. The program was launched utilizing grant funding from the Ford Motor Corporation and the Governors Highway Safety Association. Developed in conjunction with AAA

of Northern New England, the program is designed to educate pre-permitted teens, newly permitted teens, and their parents in the areas of graduated driver licenses, seat belt usage, impaired driving, distracted driving, and parental involvement in the learning to drive process. Additional training is provided to facilitators on underage drinking and enforcement of underage drinking laws.

To date, the MEBHS, along with AAA of Northern New England and the Maine Office of Substance Abuse, has presented 6 workshops around the state to train law enforcement officers to facilitate the program and use the program's two driving simulators. Currently 94 officers and school resource officers serve as program facilitators. During the 2013 -2014 school year, the following agencies have utilized the program and the simulators: Bath Police Department (PD); Kennebunk PD; Lewiston PD; Jay PD; Portland PD; Gorham PD; Lincoln County Sheriff's Office; Sabattus PD; Oakland PD; York PD; Skowhegan PD; Auburn PD; Kittery PD and Troop F, Maine State Police (2 times). Approximately 1,725 high school students have been instructed through presentations and the use of simulators during the 2013 - 2014 school year.

In addition, personnel from the MeBHS have been invited to make presentations at various schools, including York High School, Rockland High School, Falmouth High School, Oakhill High School, Oakland High School, Noble High School, Freeport High School, Madison High School, Telstar High School, Morse High School, Mt. Valley High School, and Maranacook High School, Jay High School, Falmouth High School, Old Orchard Beach High School, Rangeley High School, Winthrop High School, Edward Little High School Lisbon High School, Lewiston High School, Dexter High School, Bingham High School . In addition to presentations conducted at various high schools around the state, various employers, both private and state, and colleges have requested that BHS conduct presentations at their workplaces during annual safety and training days. Some of the workplaces include: Portland Press Herald, UNE Safety Fair, Penobscot Job Corps, Town Square Media, Maine Department of Transportation, and Central Maine Community College. These presentations have afforded the Bureau contact with over 575 people in workplace settings.

The Program continues to receive positive feedback and high acclaim from facilitators, students, parents and school administrators. The program is receives requests for use of the simulators by program facilitators as well as invitations for presentations from schools, state agencies and civic groups.

FUNDING SOURCE: NO FEDERAL FUNDS EXPENDED OUTSIDE OF PRIORITY AREA MANAGEMENT GRANTS

Noteworthy Distracted Driving Projects/Events

Distracted Driving Media Event

Project Description

The MeBHS joined with NL Partners to raise distracted driving and texting and driving awareness in the general driving population by holding a press release on April 11, 2014. The event was a kick-off to the summer driving enforcement that was conducted by the Maine State Police who received a grant from the MeBHS for $45,000 to conduct dedicated overtime details targeting drivers who are distracted while operating their motor vehicles. In attendance were: Colonel Robert Williams, Maine State Police, Lauren Stewart, Director, MeBHS, Keith Morin, Winthrop High School, and two pre-permitted teens from the Winthrop High School. All spoke about the efforts that they put forth to curb distracted driving. Also on display was the MeBHS distracted driving simulators which was used by the pre-permitted teens. A Newspaper article resulting from the media event is included below.

Maine Bureau of Highway Announces Press Conference Urging Teens to "Survive Your Drive"

AUGUSTA, ME – The National Safety Council has declared April to be "Distracted Driving Awareness Month." "To spread the importance of the dangers of distracted driving, the Maine Bureau of Highway Safety is promoting the message across the state, from the schools to the airwaves," said Lauren Stewart, Director of the Bureau. "This message is so important to get out there."

The Maine Bureau of Highway Safety has made distracted driving safety one of its main priorities, implementing several programs across the state, not only on the roadways, but in schools as well.

"An average text takes six seconds to type, equivalent to driving the length of a football field with your eyes closed," said Stewart. "We have a Distracted Driving Simulator we bring into schools to show the state's most inexperienced drivers how dangerous distracted driving actually is." The Bureau also has awarded Maine State Police a $45,000 grant to perform extra distracted driving patrols throughout the state.

The media is invited to attend a press conference featuring the efforts of the Maine Bureau of Highway Safety on Thursday, April 10th, at 11am in the Francis Perkins Conference Room at the Bureau headquarters. Speakers will include:

Colonel Robert Williams, Maine State Police

Lauren Stewart, Director, Maine Bureau of Highway Safety

Keith Morin, Principal, Winthrop High School

Two newly permitted teens from Winthrop High School

State Trooper(s)

There will be numerous opportunities for photos, video and interviews, as the Maine Bureau of Highway Safety's Distracted

Driving Simulator will also be on display. Reporters are greatly encouraged to try it for themselves. There will also be some teenage drivers in attendance who have recently taken part in simulator exercises.

Traffic Records

Future Countermeasures

- The MeBHS will work with the Maine Prosecutors Association and the National District Attorney's Association in order to educate around the topic of DREs.
- The MeBHS will provide funding to agencies to conduct Teen Impaired Driving Enforcement campaigns; grant funding will coincide with the prom/graduation season and continue into the summer.
- The MeBHS will continue with Cumberland and York RIDE Teams.

Problem

A complete traffic records program is necessary for planning (program identification), operational management or control, and evaluation highway safety activities. The MeBHS and its partners collect and use traffic records data to identify highway safety problems and problem areas, to select the best possible countermeasures, and to evaluate the effectiveness of these efforts. The role of traffic records in highway safety has been substantially increasing since the creation of the Federal Section 408 grant program under the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

Objective

The objective of the Traffic Records Program is to gather, process, and report all data pertaining to traffic safety activities in an accurate and timely fashion. The MeBHS relies on these data for the selection of projects and programs and the setting of policy. To accomplish its objective, the MeBHS has established a permanent Traffic Records Coordination Committee (TRCC).

Goal

The goal of Maine's TRCC is to continue to develop a comprehensive traffic records system that provides timely, complete, accurate and usable traffic records data so it can identify and address Maine's highest priority traffic safety issues.

Countermeasures & Expended Funds

Traffic Records Program Management

Project Number: TR14-001

Project Description

Costs for this program area included wages; travel expenses for highway safety coordinators and/or program managers (examples of travel include TSI training courses, in-state monitoring of sub-grantees, and law enforcement agency chief committee meetings); and operating costs directly

related to program development, coordination, monitoring, evaluation, public education, marketing, auditing, and training (costs include printing, supplies, state indirect rate, and postage).

FUNDING SOURCE: $506.29 S402

Traffic Records – Emergency Medical Services (EMS) Run Reporting Project

Project Description:

The EMS Run Reporting Project provides NEMSIS –compliant software, laptop computers, and training to EMS providers for submitting electronic EMS patient run reports.

Maine EMS continues its efforts on improving data quality and preparing for NEMSIS 3.0. EMS is also working with Maine Health Infonet to link EMS with hospital data which will allow hospital personnel to see EMS information as part of a patient's record. Maine is one of only a few states working on this linkage and the State's EMS system has over 1.6 million records in their database.

Open TR project, but no federal funds expended in FFY2014.

E-Citation Working Group and Projects

Project Description:

The E-Citation project is comprised of legislative efforts related to facilitate and authorized electronic citation, a TRCC Working Group to develop requirements and a data standard, an E-Citation Data Collection system, and an E-Citation Reporting system.

In FFY 2014, the TRCC Working Group has finalized E-Citations data collection requirements and an E-Citation data standard.

Open TR project, but no federal funds expended in FFY2014.

Maine Crash Reporting System (MCRS) Upgrade

Project Number: TRC14-001

Project Description

The Maine Crash Reporting System (MCRS) Upgrade project has updated the technical foundation of the system by upgrading the legacy MCRS system to the .NET architecture. Its goals are to increase MMUCC compliance of the data collected; and incorporate a common data schema for ease of data transfer between the variety of software programs and agencies that use crash data.

The system was fully deployed statewide in CY2011 and currently all but a handful of crash reports are submitted electronically to the statewide crash repository.

In FFY14 all crash software has been upgraded to the latest version of Visual Studio (.net) and has implemented FIPS Security Standard 140-2. Standard Reports have been added to the MCRS data collection client. A fix for an issue with Google maps has been implemented (Google implemented a new API for satellite images and discontinued the old API). Various other client enhancements have been made; Ambulance Code Favorites, License Endorsements and Restrictions audit rule added; client auto update enhanced, and BarCode Driver's Licenses has been upgraded. Various mapping improvements to assist officers in locating crashes have been completed.

The MCRS Website search abilities have been enhanced.

Funds allocated to this project area covered the costs associated with the TRCC-approved completion of MCRS upgrade projects.

FUNDING SOURCE: $268,000.00 S408

Traffic Records Data Analyst Position (or Contract)

Project Number: TR14-004

Project Description

Funds associated with this project covered the costs associated with procuring a full-time data analyst. MeBHS contracted with the University of Southern Maine, Muskie School of Public Service to perform data analysis. Duties included studying and analyzing the state's available data for crashes, fatalities, locations, EMS run information, Crash Outcome Data Evaluation System (CODES), and Data-Driven Approaches to Crime and Traffic Safety (DDACTS). Duties also included attendance at TRCC, CODES, EMS, and other data-related meetings and responsibility for the MeBHS' databases and Highway Safety Plan analysis.

In FFY2014 Muskie has worked to develop a fatality database for the Bureau of Highway Safety that will decrease our manual data entry. Muskie worked on a data analysis of 2009 - 2013 data in order to help with the writing of the state's FFY2015 Highway Safety Plan. Data analysis has continued in FFY2015 and Muskie will help to coordinate our upcoming FFY2016 Highway Safety Plan

FUNDING SOURCE: $103,647.00 S 402

Maine CODES Project

This project entailed the linkage of crash and fatality data.

FUNDING SOURCE: FUNDS WERE EXPENDED THROUGH THE TRAFFIC RECORDS DATA ANALYST CONTRACT (SEE ABOVE)

Public Access Reports

Project Description:

Maine crash information is only currently available on a queryable basis to select State of Maine employees. Some broad crash data reports are published on statewide basis, however specific crash data needs (location specific, trends, and maps) are created for outside requestors via individual inquiries and are custom created by state staff. Many such requests are handled by state agency representatives.

Full data queries are too complex for the casual user and if not developed properly, can easily lead to erroneous data findings. This project would create standard web-based data queries and mapping capabilities that would be structured to provide the public (and select advanced) users easy to access and accurate information. This project not only improves public access to highway safety information but can lessen the customized data requests now handled by various contacts in the state.

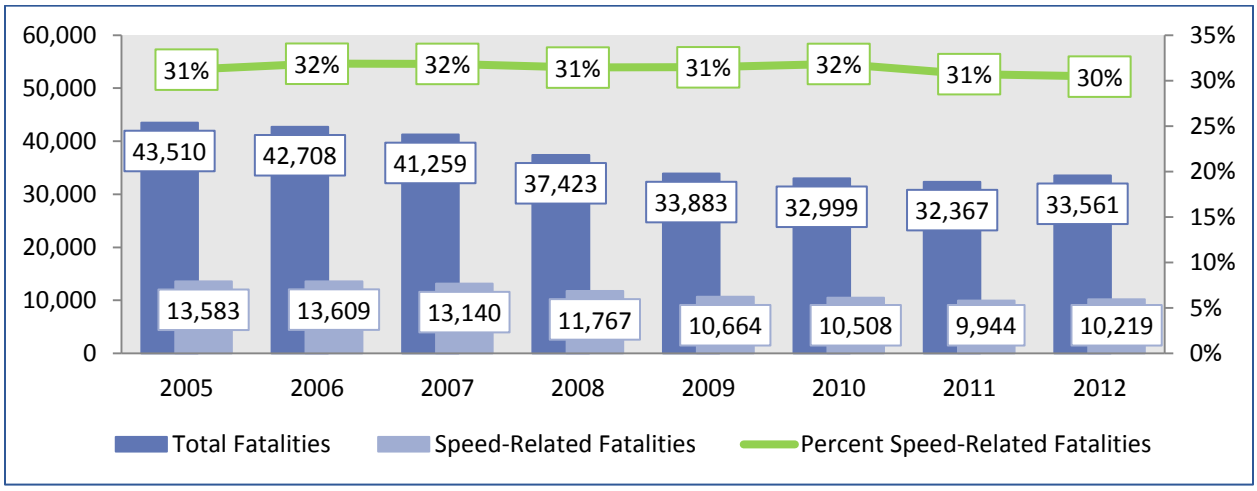
In FFY2014, project requirements were developed and tasking created to begin development of a public access website for crash information. Development is underway with expected completion in the first or second quarter of FFY2015.

Progress has been made on this project through MaineDOT, but no federal funds were expended on this project in FFY2014.

Police Traffic Services

Problem

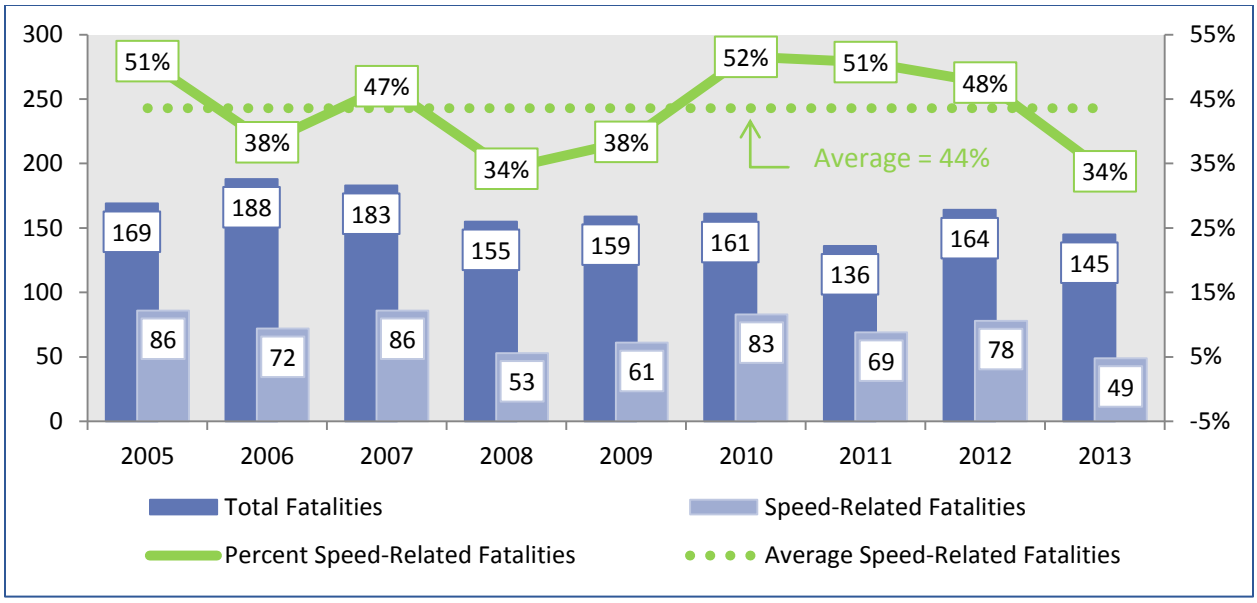
Nationally, speed is cited as a factor in approximately 31% of all crash fatalities.[14] Between 2006 and 2011, the overall number of speed-related fatalities decreased nationally and then increased in 2012. The proportion of all fatalities that were speed-related, however, dropped to 30% in 2012—the lowest rate of speed-related fatalities in the years from 2005 to 2012.



Source:FARS

In Maine, in the year 2013, speed was cited as a factor in approximately 34% of all crash fatalities. The proportion of speed-related fatalities has fluctuated over the years, but since 2010 the percentage has been declining. In part, this is due to the relatively small number of fatalities—when base numbers are small, minor fluctuations in the numerator can result in large changes in percent. However, the average proportion of speed-related fatalities from 2005 to 2013 is 44%, a rate that is substantially higher than the national rate of 31%. Maine has devoted portions of its funding since 2010 to combat speeding problems in the state. The Maine State Police SAFE program explained below has given funding to the Maine State Police to specifically target speeders on Maine roads. Maine State Police have utilized their air wing unit to conduct Aircraft details on the state's major interstates and freeways. In addition to the Maine State Police SAFE Program MeBHS has funded law enforcement agencies that have suffered from increased speed crashes. In FFY2014 the two campaigns yielded 6,940 speeding tickets which was an increase from FFY2013 campaign which yielded 4,212 speeding tickets. More emphasis has been devoted towards speed detection and our fatality numbers have been decreasing as stated before.

[14] National Highway Traffic Safety Administration. (May 2014). *Traffic Safety Facts, 2012 Data (Report # DOT HS 812 021).* Retrieved from www-nrd.nhtsa.dot.gov/Pubs/812021.pdf



Source: State Data Files

Objective

The objective of the Police Traffic Services Program is to work with Maine law enforcement agencies, funding dedicated overtime details in order to combat the number of speeders on Maine roads.

Goal & Progress

Goal

To decrease speeding related fatalities by 5% from the 5 year average of 68.8 for 2008-2012 to 65.36 by December 31, 2014.

Progress

Maine experienced 49 speed-related fatalities in 2013.

Maine had experienced 36 speeding related fatalities in 2014 at the time of report submission.

Countermeasures & Expended Funds

Program Management and Operations

Project Number: PT14-001

Project Description

Costs under this program area include salaries, travel (examples include TSI training courses, in state travel to monitor sub-grantees, LEA Chief committee meetings) for highway safety coordinators and/ or program managers, clerical support personnel and operating costs (printing, supplies, state indirect rate, and postage) directly related to this program, such as program

development, coordination, monitoring, evaluation, public education and marketing, auditing and training.

FUNDING SOURCE: *$12,122.23 S.402*

Speed Enforcement Campaign

Project Number: Listed Below

Project Description

According to the latest 2012 version of the Maine Strategic Highway Safety Plan speed-related crashes account for 19% of the total crashes and 42% of the total fatalities in the State of Maine and out of the 28,000 crashes we experience in Maine 6,100 crashes are cited with speed as a factor. Our data clearly highlights specific problem areas including Cumberland, Kennebec, Penobscot, York, Somerset, Waldo, and Washington counties. Our 2014 Speed Campaign focused on decreasing the speed-related crashes in those areas by partnering with law enforcement agencies from those counties. Other specific towns like Auburn PD, Augusta PD, Caribou PD, Ellsworth PD, Lewiston PD, Farmington PD, Presque Isle PD, Topsham PD, Waterville PD, Oxford County Sheriffs Office represent specific speed problems based on review of 2013 Maine speed-related crash data. Focusing our efforts in the areas of greatest concern allowed us to make the most significant difference in speed-related crashes. Agencies were awarded $10,000.00. Agencies had a tremendous year with speed enforcement. MeBHS added agencies to combat speed enforcement which resulted in an increase of grant funding speeding citations. Citations increased from 4,212 in the FFY2013 Campaign to 8,261 in the FFY2014 campaign.

FUNDING SOURCE: *$245,357.78 S.402*

Agency	Grant Number	Funding/Source
Ellsworth Police Department	PT14-010	$9,964.00 S402
Farmington Police Department	PT14-011	$9,949.56 S402
Gorham Police Department	PT14-012	$9,593.02 S402
Falmouth Police Department	PT14-013	$6,464.73 S402
York County Sheriff's Office	PT14-014	$9,149.76 S402
South Portland Police Department	PT14-015	$6,504.45 S402
Presque Isle Police Department	PT14-016	$3,631.61 S402
York Police Department	PT14-017	$7,179.42 S402
Kennebunk Police Department	PT14-018	$9,507.76 S402
Saco Police Department	PT14-019	$3,737.09 S402
Lewiston Police Department	PT14-020	$7,292.35 S402
Skowhegan Police Department	PT14-021	$6,864.00 S402
Freeport Police Department	PT14-022	$5,881.07 S402
Scarborough Police Department	PT14-023	$10,000.00 S402
Jay Police Department	PT14-024	$7,533.52 S402
Caribou Police Department	PT14-025	$9,472.26 S402
Hampden Police Department	PT14-026	$7,619.22 S402
Auburn Police Department	PT14-027	$9,650.00 S402
Bangor Police Department	PT14-028	$10,000.00 S402

Biddeford Police Department	PT14-029	$10,000.00 S402
Androscoggin County Sheriff's Office	PT14-030	$9,996.00 S402
Cumberland County Sheriff's Office	PT14-031	$3,780.00 S402
Augusta Police Department	PT14-032	$10,000.00 S402
Waterville Police Department	PT14-033	$10,000.00 S402
Oxford Police Department	PT14-034	$7,260.56 S402
Kennebec County SO	PT14-035	$9,680.00 S402
Windham PD	PT14-036	$9,991.03 S402
Paris PD	PT14-037	$6,609.97 S402
Fairfield PD	PT14-038	$9072.00 S402
Topsham PD	PT14-039	$8,974.40 S402

2014 Maine State Police SAFE Program

Project Number- PT14-003

Project Description

Funds will support Maine State Police troops and the air wing unit in conducting SAFE (Strategic Area Focused Enforcement) dedicated overtime speed details in designated high crash locations. This is a data driven approach to statewide speed enforcement by 8 troops of the Maine State Police.

Data from both the FFY2014 Speed Campaign and the MSP SAFE Program is depicted below. Between the two programs grant funded speeding citations increased by 100% from FFY2013 and Maine State Police's cost per ticket was $27. The increase in speeding citations will help to deter speeding and decrease speed related fatalities/crashes.

Grantee: Maine State Police

	2014 Speed Enforcement Campaign	SAFE (Maine State Police)	Total
Funds expended	$245,357.78	$134,742.03	$380,099.81
Hours worked	5,813	2,186	7,999
Traffic stops	12,929	6,825	19,754
Stops per hour	2.22	3.12	2.67 (avg)
Speeding summons	4,205	4,056	8,261

FUNDING SOURCE: $134,742.03 S402

Police Traffic Enforcement Equipment Procurement (individual items under $5,000.00)

Project Number

Project Description

The MeBHS will survey LEA's to determine what traffic safety equipment is most needed and then will utilize the state RQS process to select the traffic safety equipment. Equipment may include items such as radars, portable printers and other items necessary for traffic enforcement. No equipment in excess of $5,000.00 will be purchased without separate approval in writing by NHTSA. Participating LEA's provide a cash match. Project numbers will be assigned after contracts with LEA's are awarded.

FUNDING SOURCE: Project was not implemented in FFY2014, but will be implemented in FFY2015.

Law Enforcement Liaison

Project Number: PT14-004

Project Description

The law enforcement liaison serves as a link between the law enforcement community and the MeBHS, encouraging more law enforcement participation in the HVE campaigns, assisting with grant applications, encouraging the use of DDACTS and other proven countermeasures and evaluation measures, and soliciting input from stakeholders.

FUNDING SOURCE: $33,025.20 S.402

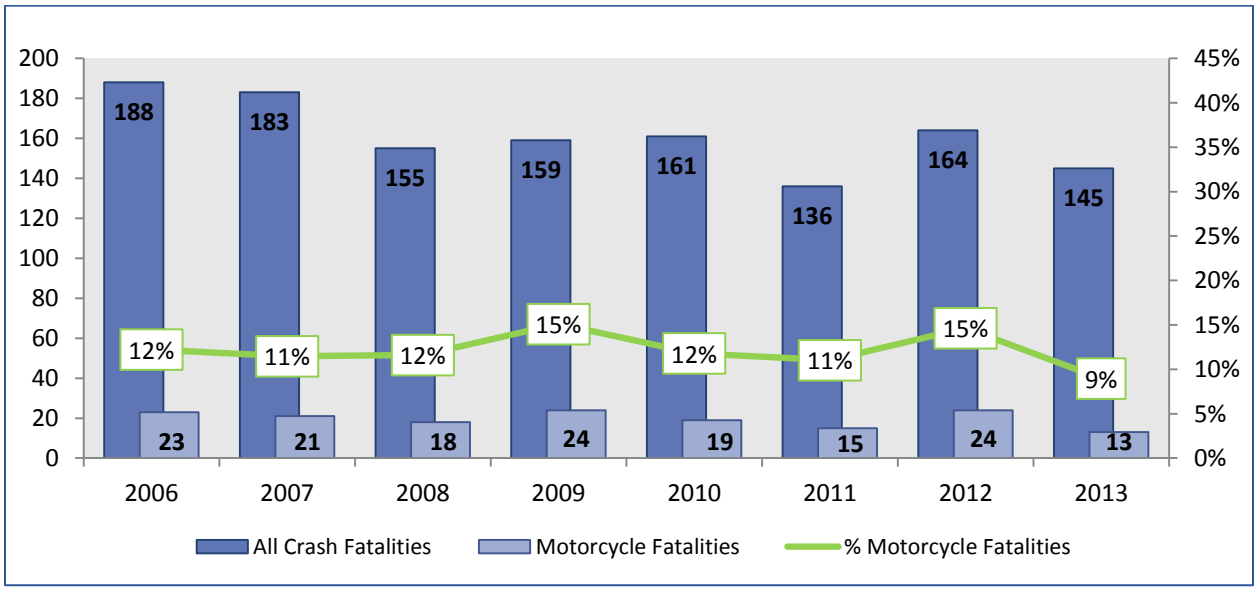
Future Countermeasures

- Sustain high visibility enforcement in data-driven locations
- Continue to produce and distribute public service announcements via television, radio, and web that emphasize speed and its effect on public safety

Motorcycle Safety

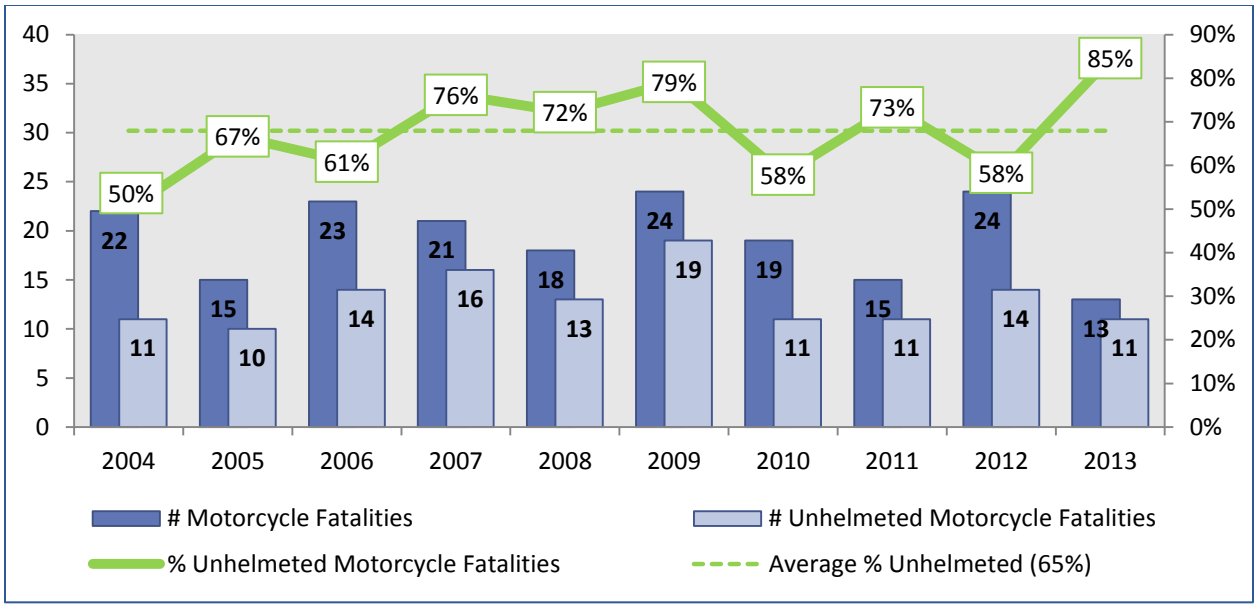
Problem

In 2013, there were 13 motorcycle fatalities. This was a significant decrease from the previous year, in which there were 24 motorcycle fatalities. The 13 motorcycle fatalities contributed to 9% of all 2013 fatalities, which was also a decrease from the previous year, in which motorcycle fatalities contributed to 15% of all fatalities.



Source: State Data Files

Approximately 85% (n=11) of the 13 motorcycle fatalities were unhelmeted fatalities. Even though the number of unhelmeted fatalities decreased from the previous year (n=14), the proportion of unhelmeted fatalities increased, from 58% to 85%. Changes in percent should be interpreted with caution when base numbers are small, but the 2013 proportion falls above the average percent of unhelmeted fatalities for the years 2004 to 2013 (75%). MeBHS will be looking to expand its Motorcycle projects in FFY2015 with several new grants that will focus on rider education and safety training in an effort to decrease fatalities and increase overall rider safety.



Source: State Data Files

Objective

The objective of the Motorcycle Safety Program is to educate the public on the importance of motorcycle safety for both motorcycle riders and the motoring public. This education and public outreach will help decrease motorcycle deaths on Maine roadways.

Goals & Progress

#1

Goal

To decrease motorcyclist fatalities by 5% from the 5 year average of 19.6 for 2008-2012 to 18.62 by December31, 2014.

Progress

The number of motorcycle fatalities in 2013 was 13.

Maine had experienced 11 Motorcyclist fatalities in 2014 at the time of report submission.

#2

Goal

To decrease unhelmeted motorcyclist fatalities by 5% from the 5 year average of 13.2 for 2008-2012 to12.54 by December 31, 2014.

Progress

The number of unhelmeted motorcyclist fatalities for 2013 was 11.

Maine had experienced 4 unhelmeted motorcyclist fatalities in 2014 at the time of report submission.

Noteworthy Motorcycle Safety Projects/Events

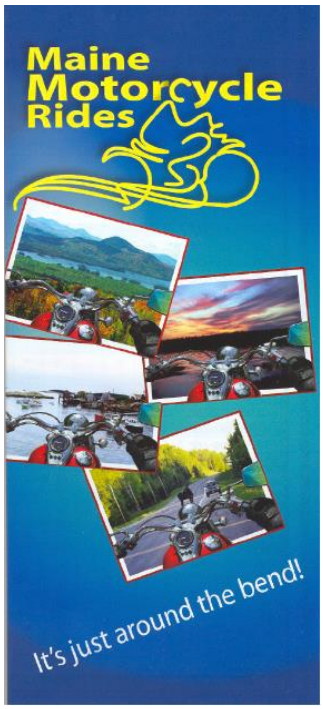
Bureau of Motor Vehicles Branch Office Media

The MeBHS partnered with the Bureau of Motor Vehicles (BMV) to play MeBHS television media spots on the video monitors located in the waiting areas of all the BMV branch offices. The media spots include two motorcycle public service announcements.

Approximately 500,000 people visit a BMV branch office annually, giving the MeBHS the opportunity to reach a great number of people at a very low cost through this partnership with BMV.

Motorcycle Safety Maps

In 2007, the MeBHS partnered with the Department of Transportation (DOT) to develop a motorcycle safety map of the state of Maine. These maps were then successfully distributed statewide.



In 2012, the MeBHS published 50,000 second edition motorcycle safety maps. MeBHS worked with the DOT to update the map, tourist routes, and safety messaging, which included information on impaired riding, proper protective gear, wildlife alerts, and much more. The maps were printed by MeBHS's media contractor, NL Partners, and distributed through the Maine Office of Tourism at all visitor areas on the Maine turnpike, to all motorcycle dealerships in Maine, and to several motorcycle clubs. (Funding for safety maps is included in the Public Relations and Marketing section of this report.)

Ride Maine Publication

The publication "Ride Maine" is a free magazine aimed at Maine residents and tourists interested in motorcycling. Each year, the MeBHS submits an article, "7 Tips for a Safer Ride," to Ride Maine encouraging riders to ride safely. In 2014, the MeBHS "Ride Safely" article listed tips on being alert for wildlife, being an alert and sober rider, and wearing the proper safety gear.

FUNDING SOURCE: FREE PUBLICATION

ALL OTHER FUNDING UNDER PAID MEDIA FOR SHARE THE ROAD EDUCATION

Future Countermeasures

- Continue Share the Road education for motorcyclists
- Continue partnership with the Bureau of Motor Vehicles to educate motorcyclists on safe riding

Pedestrian Safety

Problem

Pedestrians and bicyclists are vulnerable users of the transportation system. For many people, walking is the only option. Children, teenagers, the elderly, people with disabilities, and those with financial limitations often have no other way to get to a destination. Providing a safe place to walk and bike is essential for these and most other users of the transportation system. More than ninety percent of Maine's pedestrian crashes involve injury or death to the pedestrian. It is critical for bicycle and pedestrian safety that the road system includes sidewalks, shoulders, and safe and visible crossings, where needed and feasible. It is also critical that the public is educated regarding the need for pedestrians and bicyclists to dress brightly, be aware of surroundings and other safe behaviors. It is critical that motor vehicle drivers are educated on the importance avoiding pedestrians and bicyclists and giving them the time they need to cross the road safely. The bicyclist and pedestrian, as well as the motorist, need to be taking the right precautions to assure the safety of all road users.

The FFY2014 HSP data doesn't justify or provide enough evidence to expend NHTSA federal funds on pedestrian safety projects in the State of Maine. This data will be reevaluated for the FFY2016 HSP. As you can see from the data provided in the NHTSA Core Performance Measure C10 over the past 5 years Maine has averaged a total of 11 pedestrian fatalities throughout the entire state. However through our collaboration with the SHSP pedestrian safety has been addressed and attached below is the section from the Maine 2014 SHSP outlining the state's ongoing pedestrian safety countermeasures.

There have been 108 pedestrian and 18 bicycle fatalities over the last ten years. On seven out of every ten days, a pedestrian is hit by a motor vehicle and nearly 100% are injured.

Goals & Progress

#1 *Goal*

Reduce pedestrian-related crashes, injuries and fatalities on the transportation system by 10% by 2016 (from 11 to 9.7).

#2 *Goal*

Increase pedestrian safety awareness.

#3 *Goal*

Reduce bicycle-related crashes, injuries and fatalities on the transportation system by 10% by 2016.

#4 *Goal*

Increase bicycle safety awareness.

Countermeasures

Ensure pedestrian improvements, including sidewalks and crossing improvements, are made when warranted to improve pedestrian safety.

- Reasoning: Engineering solutions are vital to improving pedestrian safety and mobility.
- Lead: MaineDOT and local municipalities
- Timing: Ongoing

Educate municipalities, planners and advocates on the policies, processes, and funding opportunities available to improve pedestrian safety through road improvements, site visits, education, presentations and media campaigns.

- Reasoning: Many pedestrian improvements are locally driven, and education helps enable improved community environments.
- Lead: MaineDOT and local municipalities
- Timing: Ongoing

Maintain a web page that provides safety information, tools and resources for communities to identify deficiencies and solutions regarding the pedestrian infrastructure.

Reasoning: Web resources can provide viable and efficient information.

Lead: MaineDOT

Timing: Ongoing

Continue and expand state agency coordination regarding planning processes, policy implementation, outreach efforts and programming. This ensures that relevant state agencies are working towards well-planned communities with safe pedestrian infrastructure. Foster collaboration and partnerships among state and federal agencies, the private sector, and health, safety, and planning professionals. Improve coordination and partnerships with the myriad of groups working on improving conditions for walking.

- Reasoning: Coordination is essential to improving pedestrian safety by ensuring all agencies and groups are coordinating limited resources and efforts.
- Lead: MaineDOT
- Timing: Ongoing

Improve state and local policies and ordinances to ensure that pedestrian connections are made, whenever feasible, as part of all road improvement projects, developments, site plan approvals, and traffic and environmental mitigation efforts.

- Reasoning: Policies, ordinances, etc. are crucial to ensure pedestrian improvements are made at the time of designing and constructing a new building or road where warranted.
- Lead: MaineDOT and local municipalities
- Timing: Ongoing

Continue a pedestrian safety signage and visible crossing program to install crosswalk and other safety-related signage in communities and on state roads. These improvements could include:

- High visibility pavement treatments;
- Rectangular rapid flashing beacons;
- Countdown signal upgrades;
- Electronic dynamic signs to advise motorists of pedestrian activity; and
- Four-sided raised pavement markers at crosswalks.

High visibility pavement treatments should be considered at select locations.

- Reasoning: Signage and improved visibility have been shown to be important in raising awareness of pedestrian environments, reducing speeds and improving safety
- Lead: MaineDOT
- Timing: Ongoing

Continue safety awareness campaigns including Share the Road, pedestrian safety education programming in schools, law enforcement training, and the Safe Routes to School program.

- Reasoning: Education, enforcement, and encouragement efforts have been shown to improve safety behavior.
- Lead: MaineDOT, NHTSA, Maine Bureau of Highway Safety and FHWA
- Timing: Ongoing

Provide suicide prevention outreach in communities where bridge jumping is a particular concern.

- Reasoning: To support Maine's suicide awareness and prevention efforts.
- Lead: MaineDOT
- Timing: 2015 and ongoing

Public Relations and Marketing

Program

The utilization of media continues to be a key focus in the MeBHS' efforts to decrease accidents and fatalities on Maine roadways. Together with NL Partners, Maine attempts to employ media and public education in the most effective and efficient manner to influence the largest possible audience regarding highway safety issues related to Maine's priority areas. Because media outlets evolve, it is important to enter media markets that are not only cost effective but also those that will reach the target audience. In order to ensure that the MeBHS' media efforts are doing so, it has engaged Critical Insights Inc. to do periodic assessment of message reach and penetration.

Objective

The objective of the Public Relations and Marketing Program is to increase seatbelt use and the proper use of child passenger safety restraints; reduce motorcycle fatalities; and reduce impaired driving, speeding, and distracted driving through the use of a statewide media campaign.

Countermeasures[15]

Paid Media to Support National Crackdowns and Priority Program Areas

Project Number: PM14-001

Project Description

The MeBHS used paid media to support the NHTSA's high visibility enforcement campaigns, to draw attention to Maine's traffic safety laws, and to encourage safe driving habits in order to reduce the number of crashes and fatalities that occur within the state. The NHTSA Communication Calendar was used as a guide in developing the statewide media campaign timeline to ensure alignment between national and statewide efforts.

The statewide media campaign focused on providing education on impaired driving, occupant protection, child passenger safety, teen drivers, motorcycle safety, and speeding. Funds supported campaign development; the retagging of announcements; and the purchase of radio, TV, and print media.

Media Summary:

Please see attached Media Flowchart provided on page. 148 (Appendix D) for a full description/outline.

FUNDING SOURCE 402: $230,056.00

[15] See Appendix D for Marketing Flowchart.

- ***Share the Road Motorcycle Education Through Paid Media (2014 BHS Share the Road Media NLP)***

  Project Number: MC14-001

  Project Description
  The MeBHS joined with NL Partners to raise motorcycle safety awareness in the general driving population as well as among motorcycle riders. All riders and drivers were encouraged to "Share the Road" and "Watch for Motorcycles." In 2013, the number of motorcycle fatalities dropped to 13, compared to 24 fatalities in 2012.

  FUNDING SOURCE 402: $86,304.25

- ***Distracted Driving Campaign – Truck Side Advertising***

  Project Number: PM14-001

  Project Description:
  The program was designed to raise awareness of the risks of distracted driving by communicating a traffic safety warning ("One Text or Call Could Wreck it All). MeBHS with the help of our media contractor developed billboards that were displayed on the sides of delivery trucks in all three media markets in the State of Maine. The campaign had a total reach of … and was conducted June 23 – August 24, 2014.

  The campaign was an extreme success and the MeBHS conducted a media event with Maine Governor Paul Lepage speaking about the dangers of distracted driving. The State of Maine Postal Service offered to have the billboards displayed on their trucks for as long as the MeBHS saw fit. Currently the State of Maine Postal Service trucks operate in the Augusta, Maine which has two of the highest distracted
  driving crash locations in the State.

Gov. Paul LePage speaks at a press conference on distracted driving Tuesday.

- ***Distracted Driving Campaign – Pandora***

  Project Number: PM14-001

  Project Description:
  Pandora radio is internet radio company with over 80 million users worldwide. This program was designed to raise awareness of the risks of distracted driving by communicating a traffic safety warning ("one text or call could wreck it all") to Maine drivers. The message was targeted using demographics and geography targeting Maine residents 16-25 years of age. the ads were run on the web, but did not include mobile ads which are distracting during driving.

  Overall the number of impressions for Audio, Tile and Banner for the Pandora Ads was 2,289,998 and clicks on the tile and banner were 13,465.

Sports Marketing Program

Project Number: PM14-002

Project Description
The MeBHS contracted with Alliance Sports Marketing (ASM) to reach a number of sports audiences throughout the state. Targeted venues included:

- Beech Ridge Motor Speedway (Scarborough, ME)
- Maine Championship football, hockey, basketball, science, and math tournaments
- Maine Red Claws basketball
- Oxford Plains Speedway
- Portland Pirates hockey
- Portland Sea Dogs baseball
- Richmond Karting Speedway
- Speedway 95 (Hermon, ME)
- Spud Speedway (Caribou, ME)
- Unity Raceway
- University of Maine football

- University of Maine hockey
- Wiscasset Speedway

The marketing program used highway safety messages, such as Click It or Ticket and Share the Road. It addressed audiences audibly through public address announcements, visually through venue billboard signs and website banners, and interactively through on-site presence and personal connection at the different venues.

ASM and the MeBHS developed the "You've Been Ticketed" campaign, which partnered ASM and local LEAs at each event. The LEAs that volunteered to help at these events maintained a presence in parking areas, identifying spectators who were wearing seatbelts as they arrived. LEA volunteers then issued tickets to these spectators, which they could turn in at ASM booths for T-shirts bearing a NHTSA safety message along with logos of the sports teams they came to watch.

Another targeted area of concern in 2013 was distracted driving. Distracted driving is an especially serious issue for Maine's youngest, least experienced drivers. Research shows that 78% of teenagers have cell phones,[16] and that approximately 43% of high school juniors and 58% of seniors have admitted to texting or e-mailing while driving within the last 30 days.[17] To combat the growing distracted driving problem, ASM and the MeBHS developed a Distracted Driving Program utilizing the NHTSA message "One Text or Call Could Wreck It All." This campaign was used in cooperation with high school athletic programs and provided access to thousands of athletes, students, parents, school administrators, and community members from throughout the state.

ASM and MeBHS also developed a "Share the Road, Watch for Motorcycles" campaign, which included premium signage and public address announcements at six motorsports venues along with a "Share the Road, Watch for Motorcycles" safety night at those venues plus the Portland Sea Dogs. During these events, spectators arriving on motorcycles were directed to park at entrances in order to increase visual awareness of motorcycles. Throughout the events, additional motorcycle safety messages were delivered over public address systems and on video and message boards whenever possible. In addition, at each event one person was selected as an honorary guest and given the opportunity to wave the flag to start the race, ride in the pace car, or throw out the ceremonial first pitch. This was often an opportunity to recognize individuals who were saved from becoming motorcycle fatalities by wearing helmets. While the primary focus of the campaign was to encourage others to watch out for motorcycles, this recognition also served as a safety message to a concentrated group of bikers regarding the importance of wearing the proper safety gear.

FUNDING SOURCE 402: $422,625.00

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[16] Pew Research Center. (2013). *Teens and Technology 2013.* Retrieved from http://www.pewinternet.org/Reports/2013/Teens-and-Tech.aspx

[17] Centers for Disease Control and Prevention. (2012). Youth risk behavior surveillance—United States, 2011. *Morbidity and Mortality Weekly Report, 61,* 4.

Additional Noteworthy Programs

❖ Partnerships and the Strategic Highway Safety Plan

The MeBHS partnered with the Maine Department of Transportation, the Maine Turnpike Authority, the Department of Health and Human Services, state law enforcement agencies, and many others in working toward the initiatives identified within the statewide Strategic Highway Safety Plan to substantially reduce the number of injuries and deaths resulting from crashes on Maine's highways. The MeBHS will continue to strengthen existing partnerships and explore new partnerships with other agencies (governmental and non-governmental, local, state, law enforcement and non-law enforcement) in its efforts to educate Maine citizens about traffic safety and to affect behavioral change.

❖ Maine Driving Dynamics

Maine Driving Dynamics (MDD) is a five-hour defensive driving course that offers any driver the opportunity to improve his/her defensive driving abilities. MDD is sponsored by the MeBHS in partnership with local and regional adult education programs. It is offered to the public several times each month at a variety of locations around the state. The Maine BMV, in partnership with MDD, advertises the MDD class schedule in BMV branches across the state, giving the motoring public information regarding participation opportunities. In addition, the MDD course is offered on site to private companies and organizations.

The course includes discussion of collision avoidance techniques, safety issues, driver habits and attitudes, and the basic elements that challenge drivers on Maine's highways. MDD is taught by a certified instructor in a format that engages students with lectures, videos, and class discussion/participation. Those completing the course receive a three-point credit on their driving records, and students 55 and older can receive insurance discounts from their insurers. This class continues to be a success in assisting Maine drivers to become more aware and defensive drivers.

Legislative Summary

A number of new laws related to drivers and highway safety went into effect on October 9, 2013. According to a Secretary of State press release:[18]

- A driver who is cited for texting while driving will receive a $250 minimum fine for a first time violation and a $500 fine on a second or subsequent offense within three years. In addition, texting violations will now include a 30-day license suspension on a second offense; a 60-day suspension on a third offense; and a 90-day suspension on a fourth or subsequent violation. These suspension periods are mandatory, without a right to a hearing.
- The minimum practice time for a driver under the age of 21 who applies for a learner's permit on or after October 9, 2013, has increased from 35 to 70 hours, including an increase in night driving from five to 10 hours. Drivers completing their practice time must be accompanied by a parent, guardian or licensed driver at least 20 years of age. Additionally, while the permit exam is administered by the driving school prior to program completion, the law now requires all learners' permits to be issued only by the Secretary of State.
- Previously, active duty military personnel had 30 days to obtain a non-military identification card or license after discharge from service; they will now have up to 180 days.
- Bicyclists are now part of the definition of "traffic" and a collision between a motor vehicle and a bicyclist or roller skier is prima facie evidence that the motorist violated the three foot law.
- Police officers as well as the BMV may now accept proof of current insurance in electronic form.
- An officer may, at his or her discretion, issue a permit to travel directly home or to the BMV if a driver is found to be operating illegally on an expired license.
- The suspension period for an Operating Under the Influence (OUI) offender with three or more previous offenses within 10 years has been increased from six years to eight years.
- The license of a person with four or more OUI offense may be eligible for early reinstatement after serving four years of the suspension period if an approved ignition interlock device (IID) is installed for a period of four years.

[18] See Title 29-A, Motor Vehicles, 2013-2014 for more information. Press release retrieved from http://www.maine.gov/sos/news/2013/newbmvlaws.html

Crash Data

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
C-1) Fatalities (Actual)	194	169	188	183	155	159	161	136	164	144
C-2) # of Serious Injuries	1,119	1,030	996	978	862	732	775	867	981	863
C-3a) Fatality Rate /100 million VMT	1.30	1.10	1.20	1.22	1.08	1.10	1.11	0.95	1.14	1.01
C-3b) Rural Mileage Death Rate	1.56	1.50	1.49	1.51	1.08	1.32	1.23	1.15	1.58[19]	1.1
C-3c) Urban Mileage Death Rate	0.53	0.19	0.59	0.45	0.64	0.51	0.79	0.43	--[20]	0.78
C-4) # of Unrestrained Passenger Vehicle Occupant Fatalities	75	64	65	76	54	51	41	53	76	56
C-5) # of Fatalities Involving Driver or Motorcycle Operator w/ ≥ .08 BAC	57	50	52	66	42	46	38	23	49	34
C-6) # of Speeding-Related Fatalities	90	86	72	86	53	61	83	69	78	49
C-7) # of Motorcyclist Fatalities	22	15	23	21	18	24	19	15	24	13
C-8) # of Unhelmeted Motorcyclist Fatalities	11	10	14	16	13	19	11	11	14	11
C-9) # of Drivers Age 20 or Younger Involved in Fatal Crashes	21	16	23	25	19	20	24	22	20	16
C-10) # of Pedestrian Fatalities	10	9	10	10	12	11	12	11	9	11
B-1) % Observed Belt Use for Passenger Vehicles - Front Seat Outboard Occupants	72.3%	75.8%	77.2%	79.8%	83.0%	82.6%	82.0%	81.6%	84.4%	85%
A-1) # of Seat Belt Citations Issued During Grant-Funded Enforcement Activities	2,166	2,568	1,725	1,566	5,997	6,650	9,856	3,332	2,931	4,127
A-2) # of Impaired Driving Arrests Made During Grant-Funded Enforcement Activities	275	330	301	359	506	545	456	503	230	410

[19, 18] In 2012, FARS redefined "urban" and "rural;" according to the new definitions, all of Maine's roads are considered rural. As a result, the rural rate is higher for year 2012, and the urban rate is zero.

A-3) # of Speeding Citations Issued During Grant-Funded Enforcement Activities	--	--	3,312	2,947	3,963	4,887	11,732	2,382	4,435	6,950

Figure 1: C-1) Fatalities

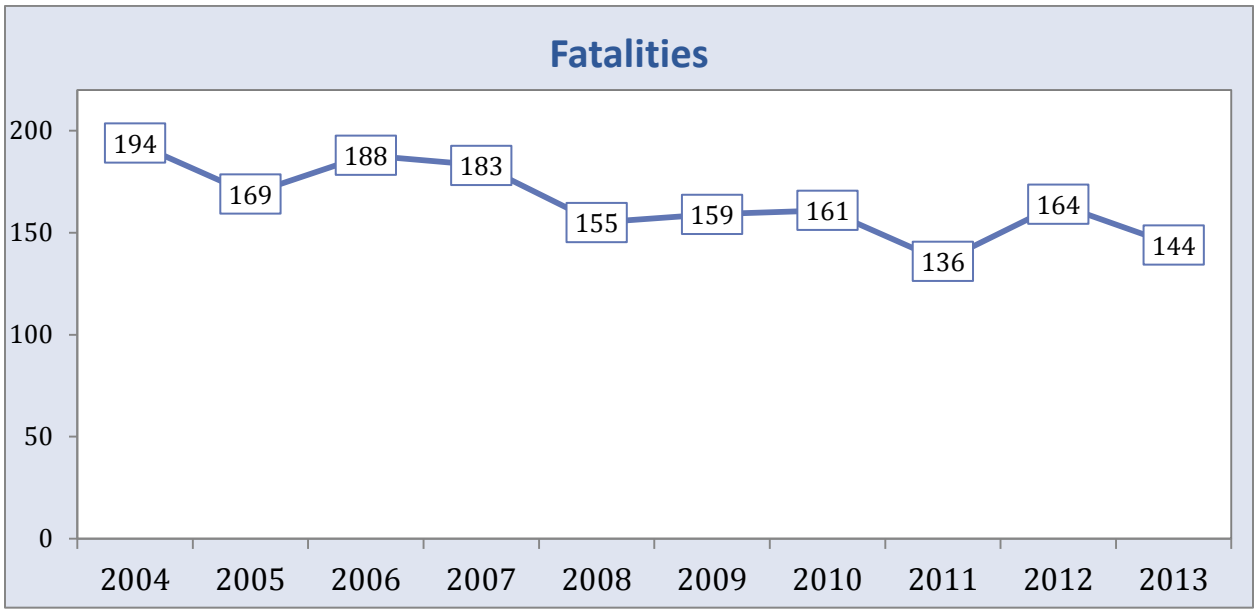


Figure 2: Number of Serious Injuries

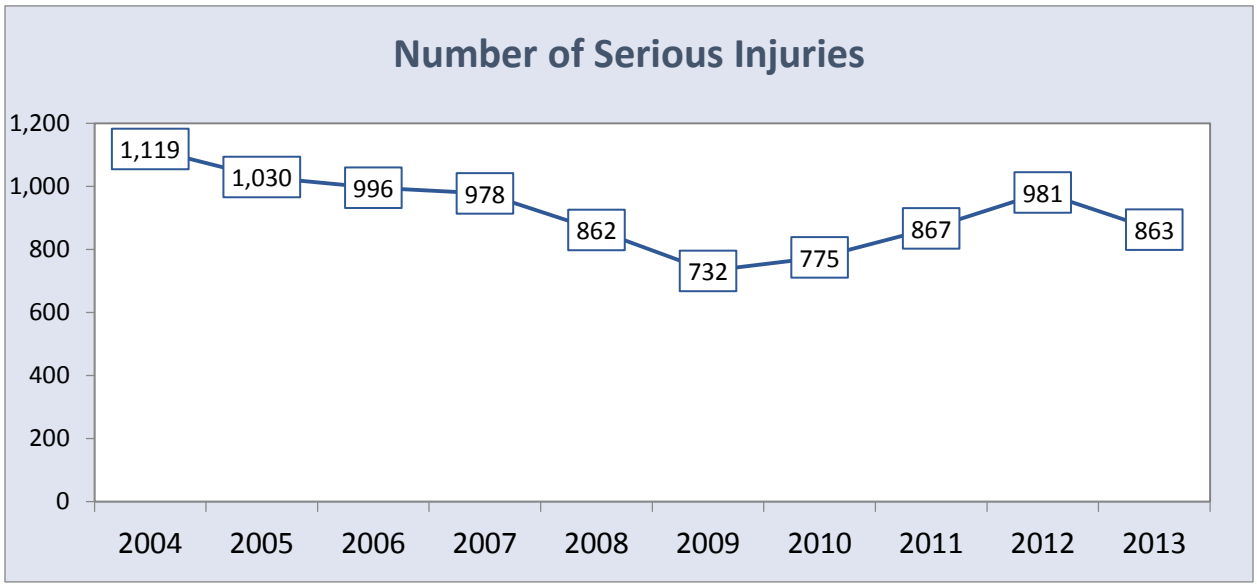


Figure 3: 3a) Fatality Rate/100 million VMT

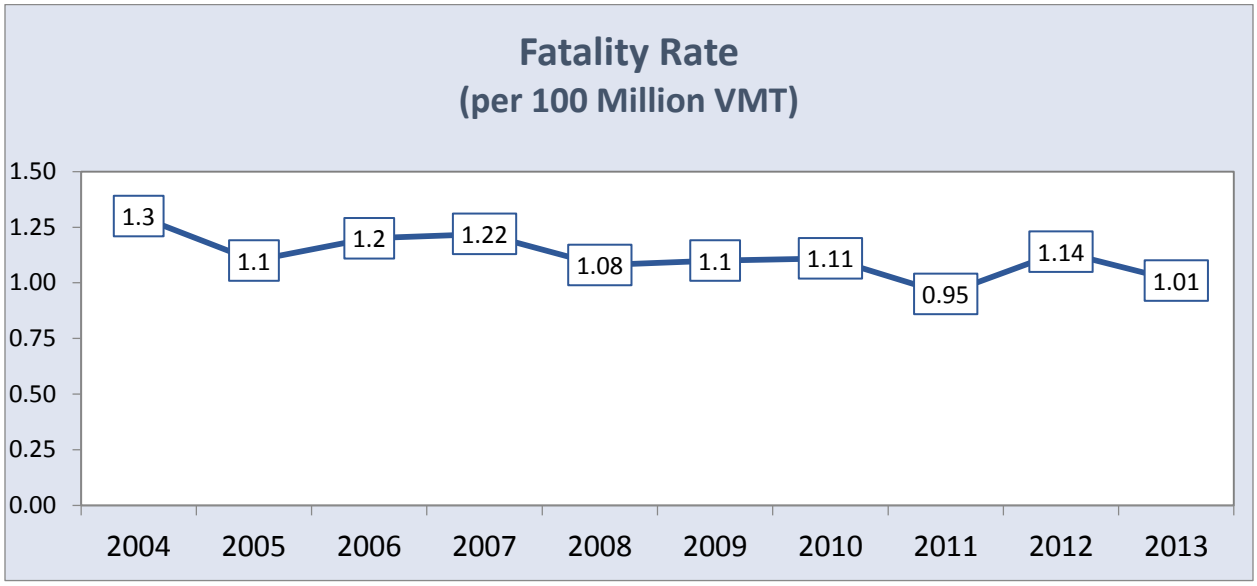
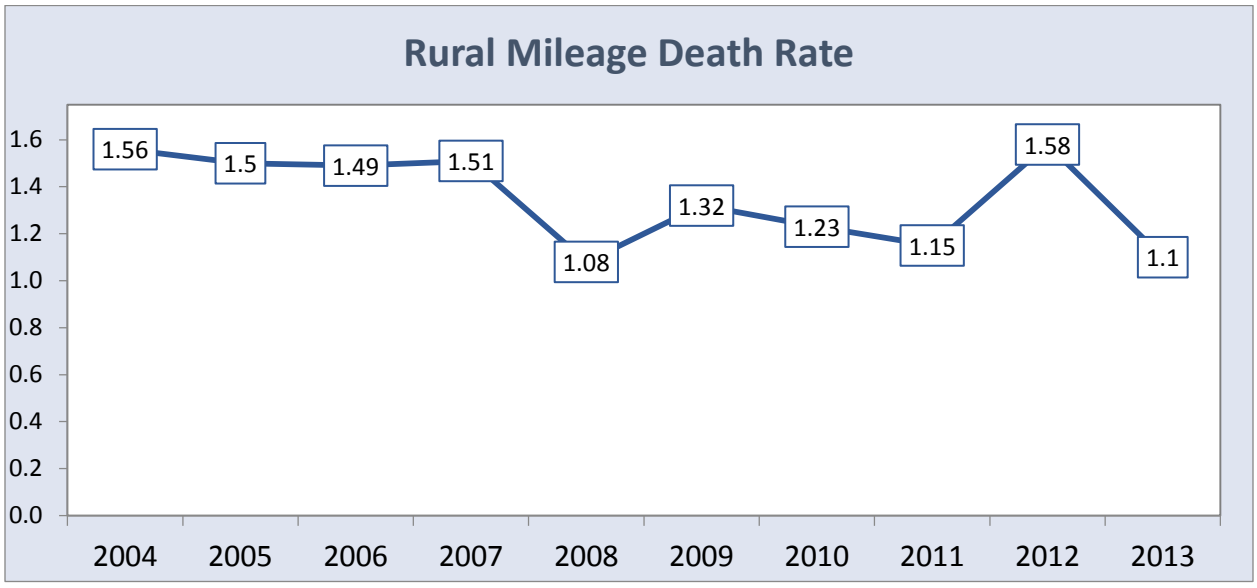


Figure 4: 3b) Rural Mileage Death Rate/100 million VMT[21]



[21] In 2012, FARS redefined "urban" and "rural;" according to the new definitions, all of Maine's roads are considered rural. As a result, the rural rate is higher for year 2012, and the urban rate is zero.

Figure 5: C-3c) Urban Mileage Death Rate/100 million VMT[22]

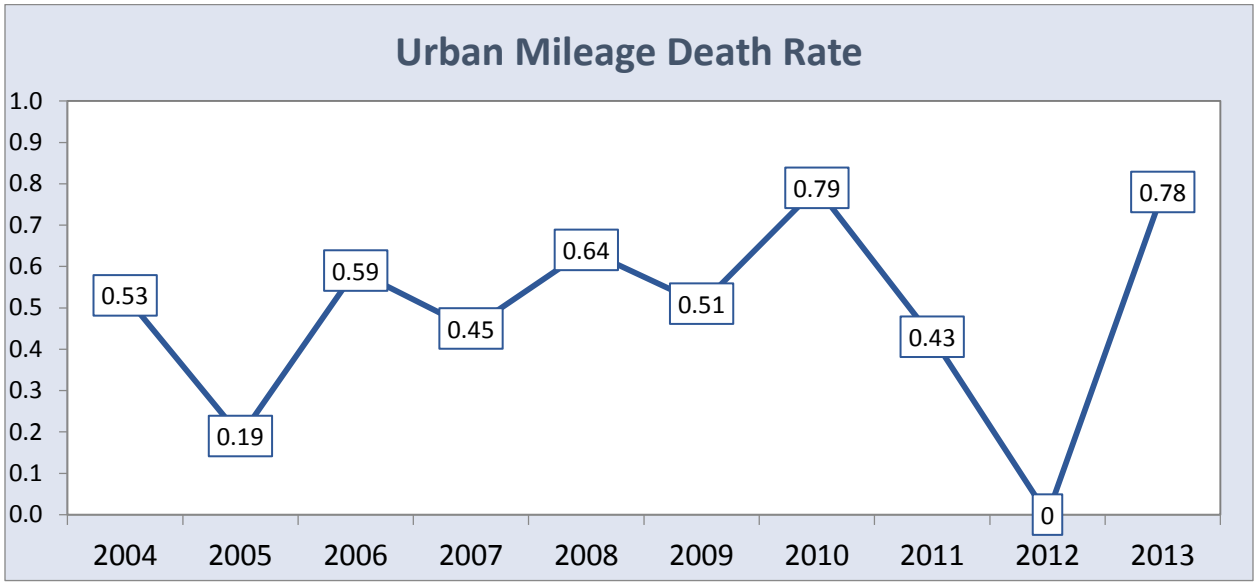
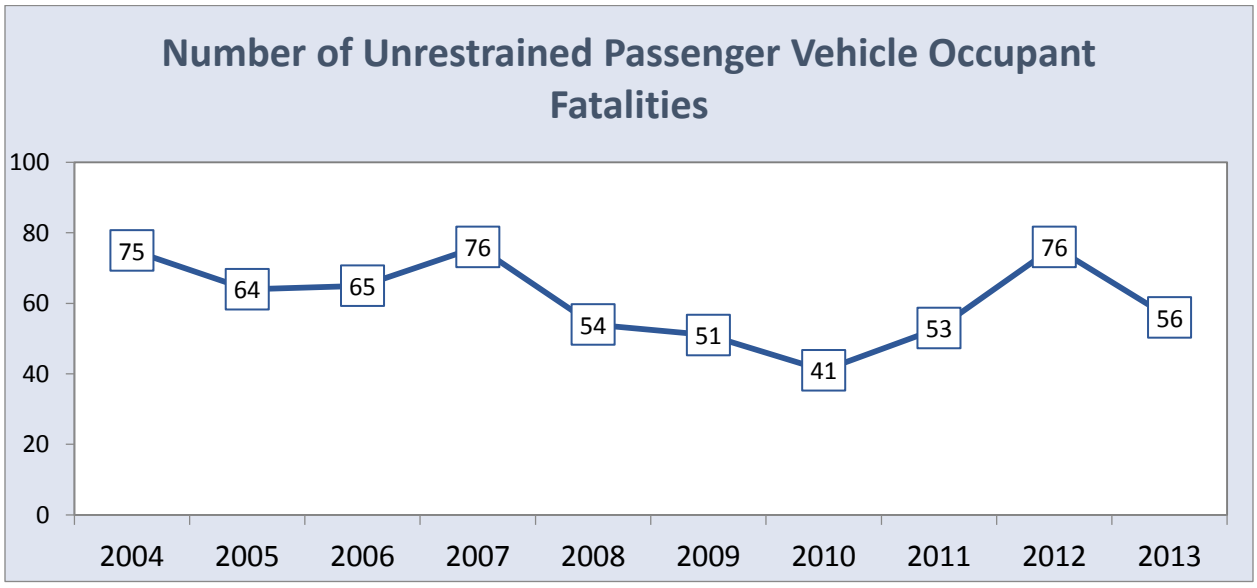


Figure 6: C-4) Number of Unrestrained Passenger Vehicle Occupant Fatalities



[22] In 2012, FARS redefined "urban" and "rural;" according to the new definitions, all of Maine's roads are considered rural. As a result, the rural rate is higher for year 2012, and the urban rate is zero.

Figure 7: C-5) Number of Fatalities Involving Driver or Motorcycle Operator with ≥ .08 BAC

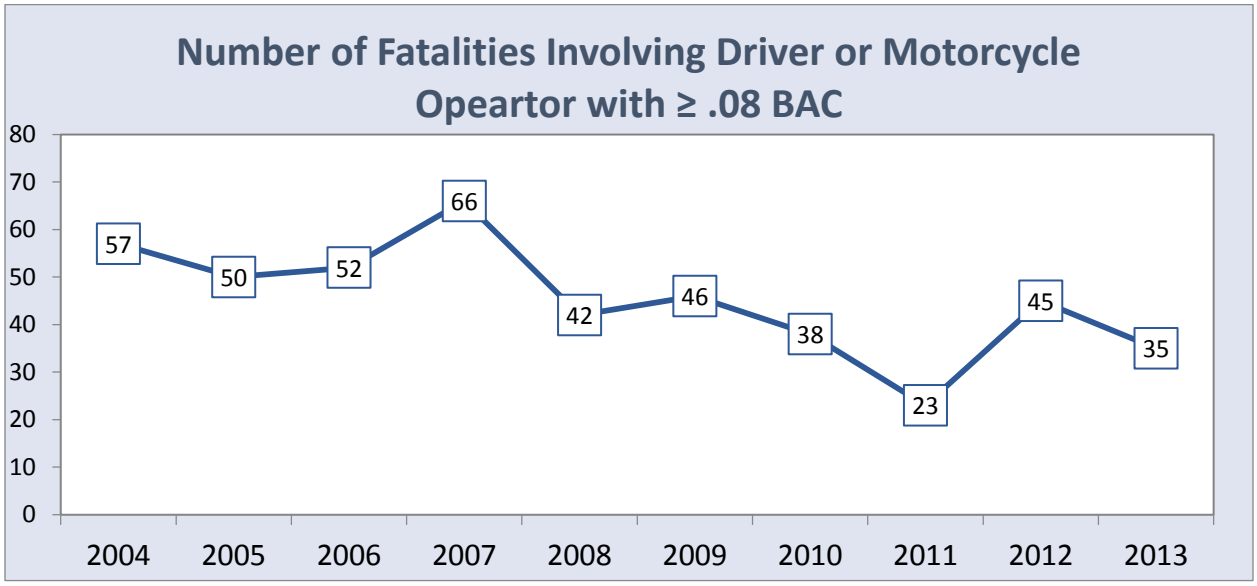


Figure 8: C-6) Number of Speeding-Related Fatalities

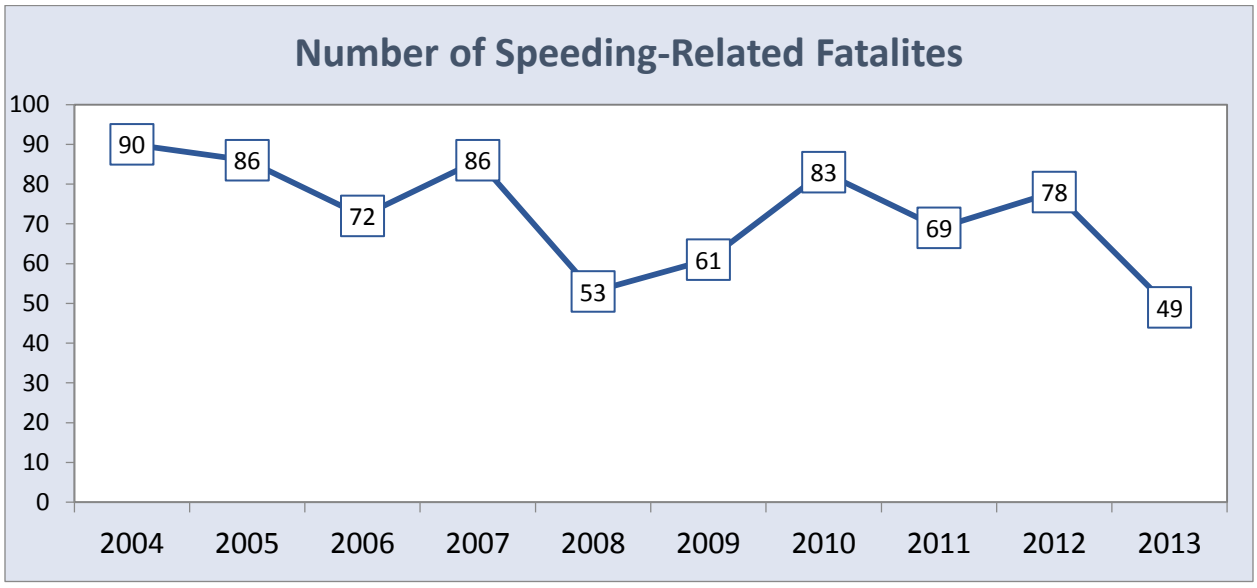


Figure 9: C-7) Number of Motorcyclist Fatalities

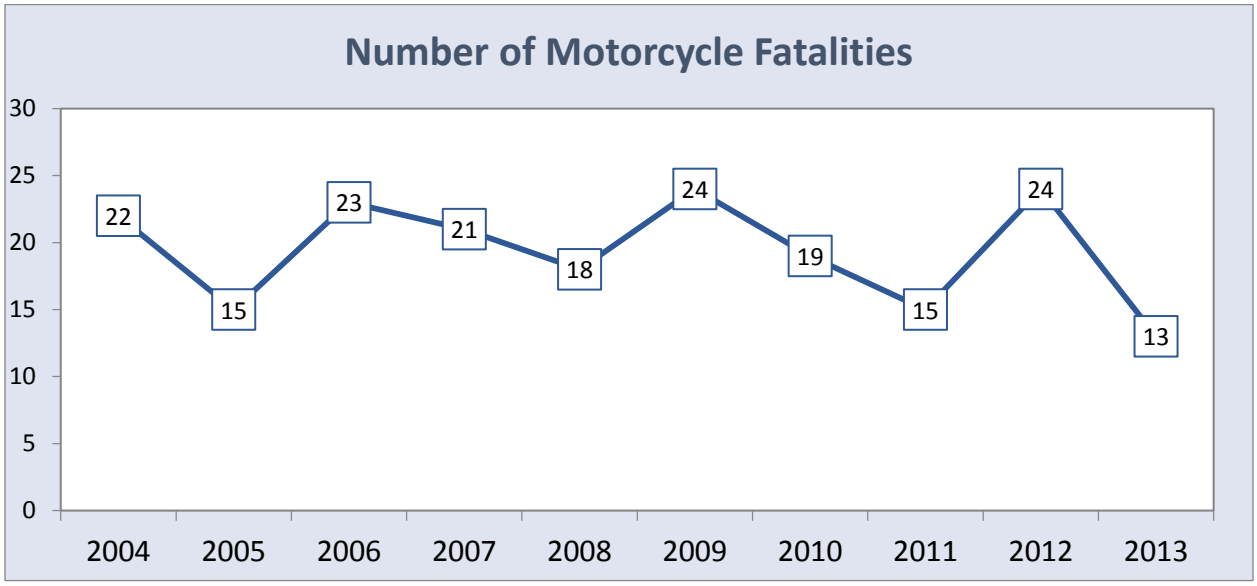


Figure 10: C-8) Number of Unhelmeted Motorcyclist Fatalities

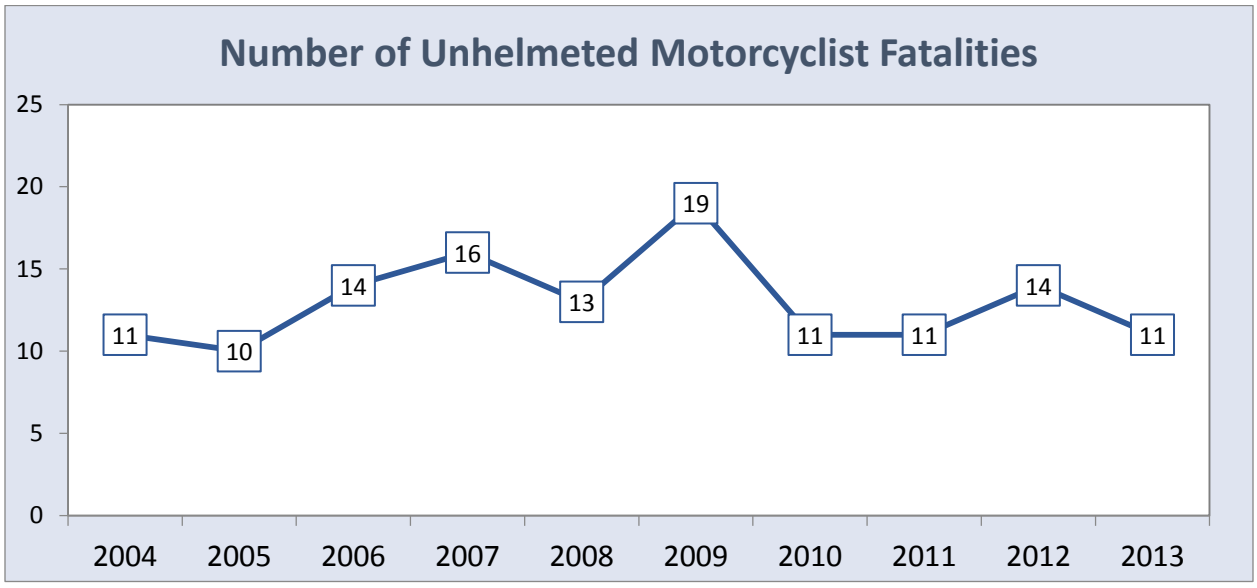


Figure 11: C-9) Number of Drivers Age 20 or Younger Involved in Fatal Crashes

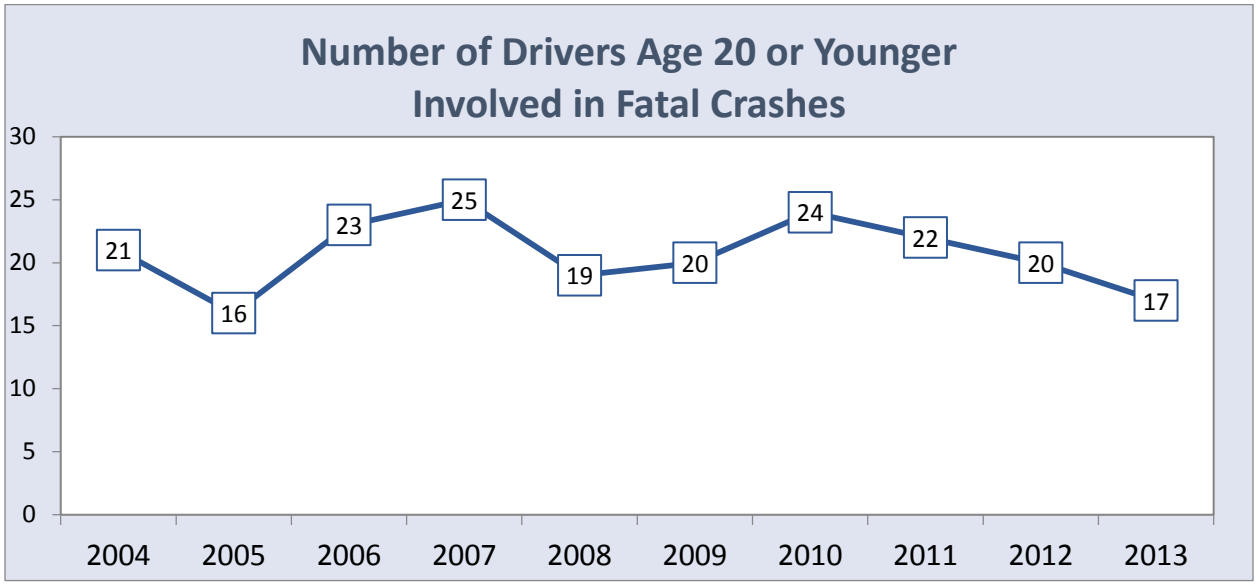


Figure 12: C-10) Number of Pedestrian Fatalities

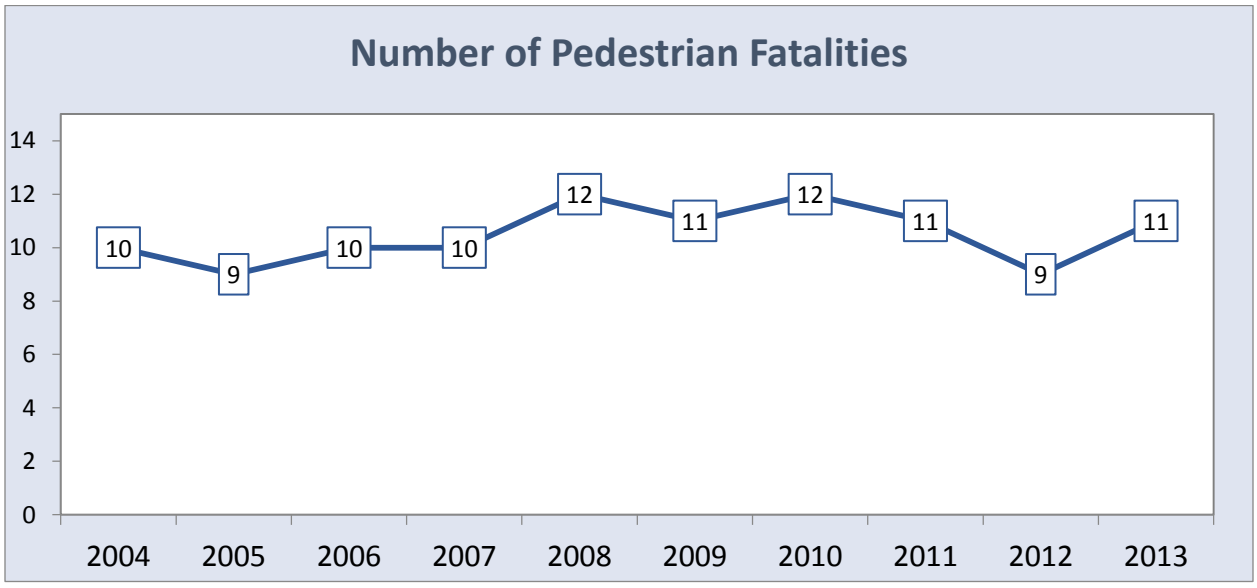


Figure 13: B-1) Observed Belt Use for Passenger Vehicles—Front Seat Outboard Occupants

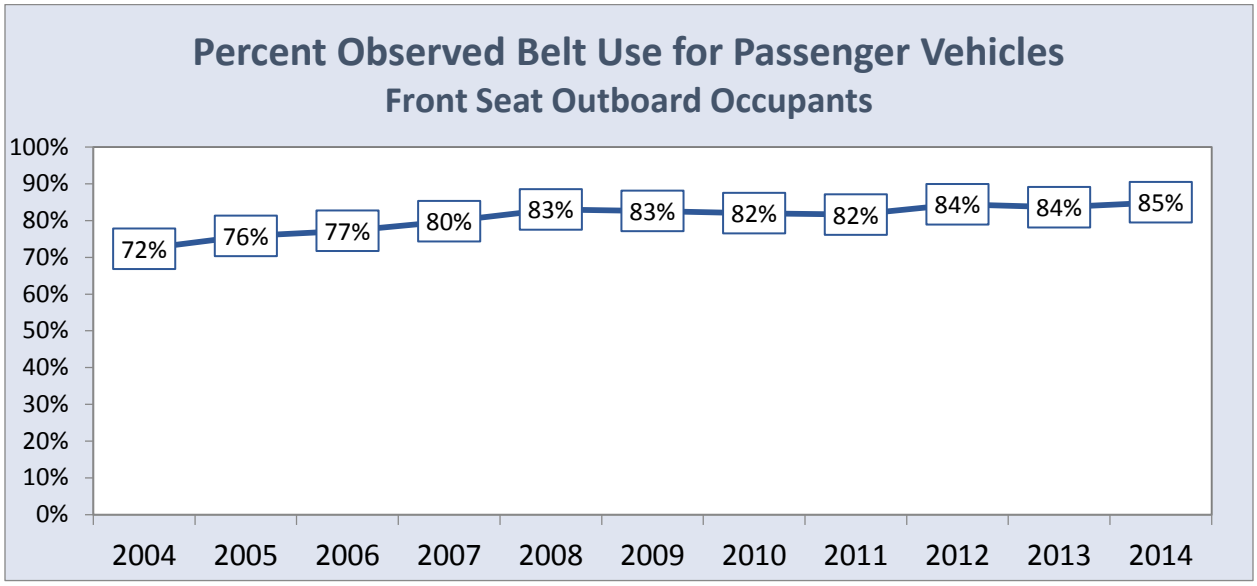


Figure 14: A-1) Number of Seat Belt Citations Issued During Grant-Funded Enforcement Activities

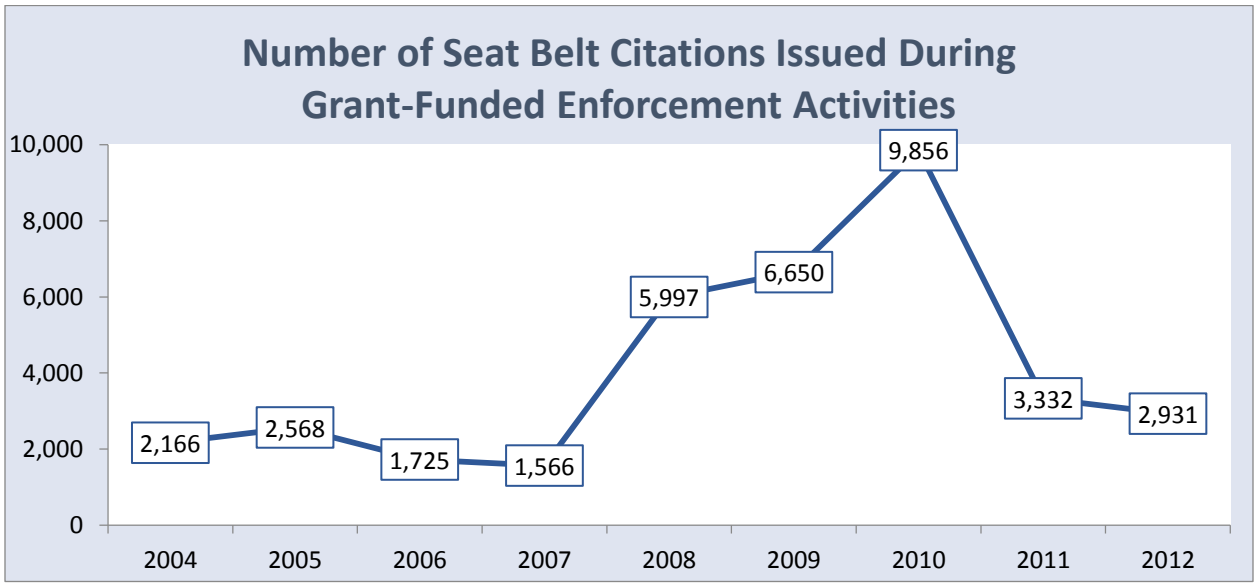


Figure 15: A-2) Number of Impaired Driving Arrests Made During Grant-Funded Enforcement Activities

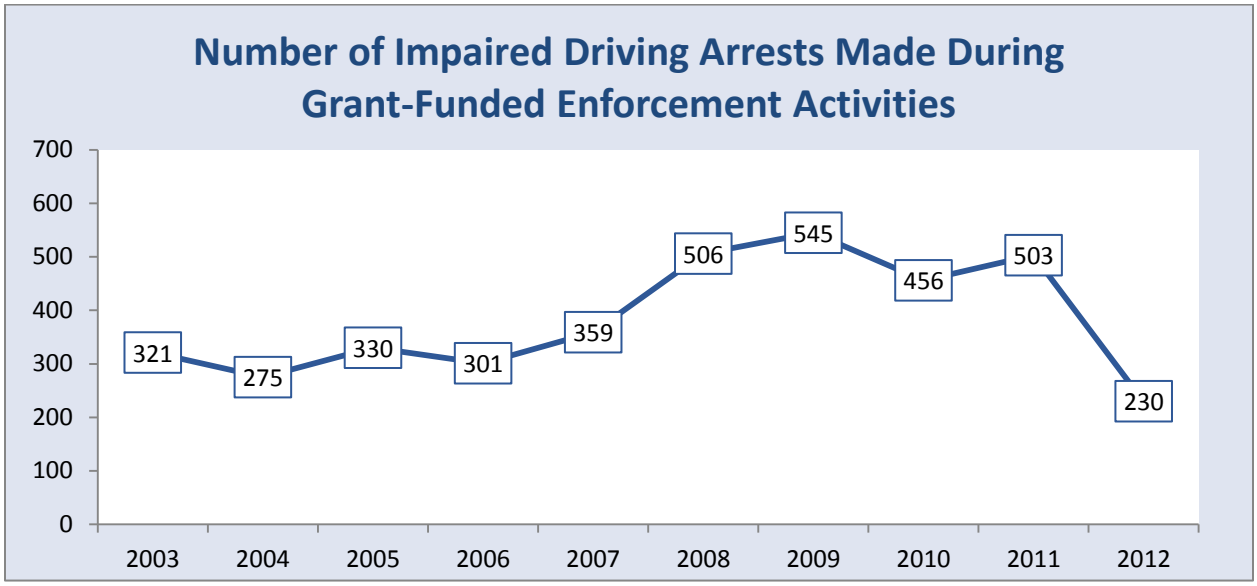
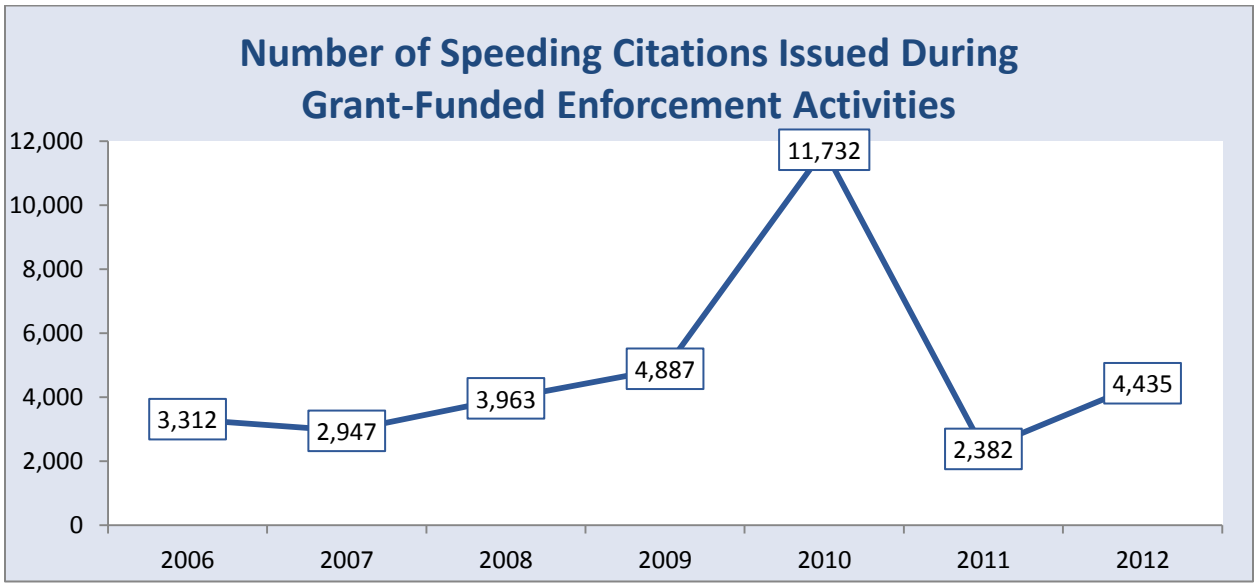
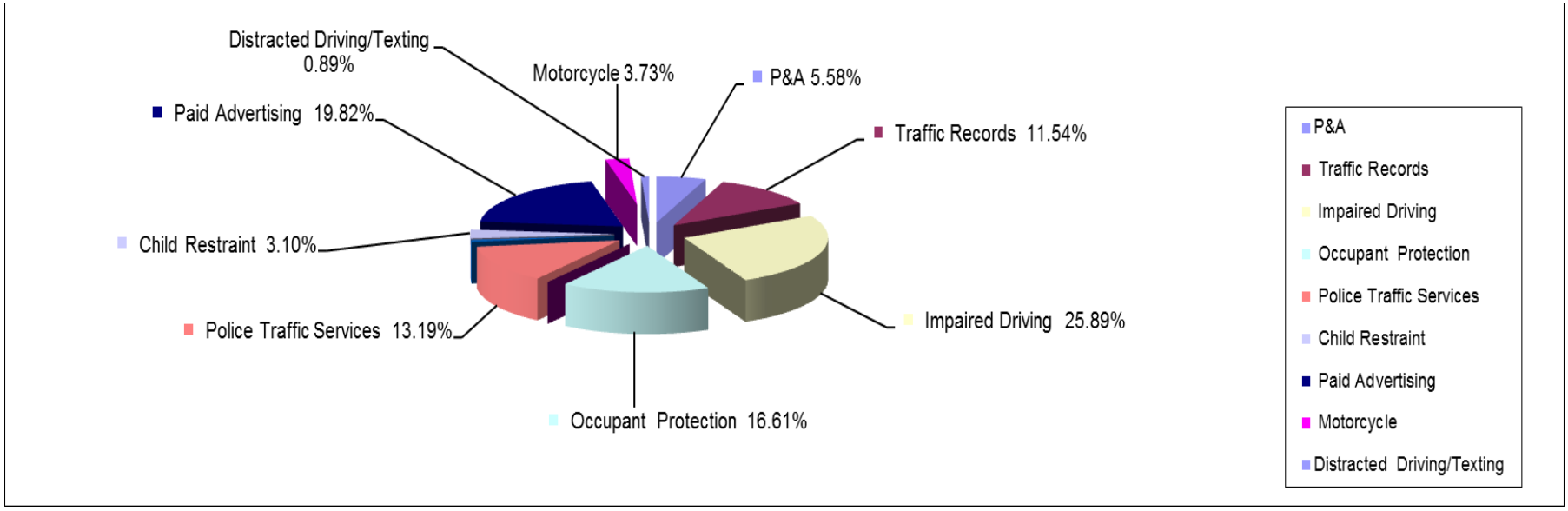


Figure 16: A-3) Number of Speeding Citations Issued During Grant-Funded Enforcement Activities



FFY14 Financial Summary of Expenditures (as of 12/23/14)

	402	405	405b	408	405c	410	405d	405e	2010	2011	Total	% of Total
P&A	$ 159,991					$ 19,998					$ 179,989	5.58%
Traffic Records	$ 104,153			$ 268,000							$ 372,153	11.54%
Impaired Driving	$ 95,144					$ 739,588					$ 834,732	25.89%
Occupant Protection	$ 373,762	$ 35,797	$ 126,083								$ 535,642	16.61%
Ped/Bicycle Safety	$										$ -	0.00%
Police Traffic Services	$ 425,247										$ 425,247	13.19%
Safe Communities	$ 22,486										$ 22,486	0.70%
Child Restraint	$ 60,664									$ 39,295	$ 99,959	3.10%
Paid Advertising	$ 639,072										$ 639,072	19.82%
Motorcycle	$								$ 86,304		$ 86,304	2.68%
Distracted Driving/Texting	$							$ 28,772			$ 28,772	0.89%
TOTAL	$ 1,880,519	$ 35,797	$ 126,083	$ 268,000	0	$ 759,586	$ -	$ 28,772	$86,304	$39,295	$ 3,224,356	100.00%



Appendix A

Safety Belt Use in Maine 2014

Al Leighton
Survey Research Center, Muskie School of Public Service
University of Southern Maine

2014

Submitted to:

Bureau of Highway Safety
State of Maine
164 State House Station
Augusta, Maine 04333-0164

Table of Contents

ACKNOWLEDGMENTS

We would like to thank several people who were helpful in conducting this study. Lauren Stewart, Director, Bureau of Highway Safety worked with us on behalf of the Maine Bureau of Highway Safety. Ed Beckwith at the Maine Department of Transportation provided all of the traffic data and location information for each of the observation sites. We especially want to express our appreciation for all of the efforts of Bill Leaf and Tara Casanova at the Preusser Research Group in Trumbull, Connecticut. Their attention to detail regarding the data analysis and training of observers has been crucial to the success of the project.

Finally, we thank the tremendous contributions of the Survey Research Center observers: Margaret Gormley, Tom Buchanan, Sharleen Garvey, Fran Kressley, Lisa Padulo, and Elise Richer.

Al Leighton
Survey Research Center
Muskie School of Public Service
University of Southern Maine

EXECUTIVE SUMMARY

Since 1986, the Maine Bureau of Highway Safety has periodically had an observation study of safety belt use in Maine conducted to determine the level of compliance in the state. For the year 2014, the Survey Research Center (SRC) at the Muskie School of Public Service, University of Southern Maine, with assistance from the Preusser Research Group of Trumbull, Connecticut, conducted the study and produced this report of the findings. Research results from this study provide the official measure of belt use in Maine and provide valuable information regarding the success of the state's efforts to educate the public about the importance of safety belt use. Furthermore, increased seatbelt use can lead to additional funding from the National Highway Traffic Safety Administration (NHTSA).

In 2012, NHTSA began implementing a new, standardized method for conducting seatbelt observations in each state. For the first time, the number of traffic fatalities in each county was utilized in the site selection process. Whereas in previous years, the counties in which observations took place were chosen to represent at least 85% of the state's **population**, the new guidelines are designed to choose the counties that represent at least 85% of the **vehicular fatalities** in the state. In Maine, 12 of 16 counties were included for observations, representing approximately 90% of all vehicular fatalities in the state. A probability based sampling method was utilized to select the 127 segments to be observed. Among the locations chosen were sites on I-95, I-295, and the Maine Turnpike. As a result, all types of roads and traffic were observed. As in all prior studies, visual observations were made to determine the extent of use.

In addition, motorcycle helmet use was recorded again in 2014. Results of those observations are reported in the "Motorcycle Helmet Use" section on page 17.

For the past eleven years, Maine's seatbelt use observations were done immediately after a major campaign to raise awareness of Maine's seatbelt laws. Radio ads about seatbelt use received heavy air play in many parts of the state. In addition, many police departments conducted a coordinated and highly visible enforcement campaign. We have speculated in the past that these steps might temporarily lead to an increased use rate, at least during the time of the campaign and shortly after. Several steps have been taken to examine the extent of any possible "drop off" in use rates. In 2009 the full observation study was conducted again during the month of September. In addition, several "mini" studies of a sub-sample of sites have been conducted. In each case, the drop in use rates was found to be very modest (see "Safety Belt Use in Maine, September 2009" for more details).

This study meets all of the applicable NHTSA criteria and was approved by NHTSA on April 5, 2012. See Table 11 for the list of counties studied.

Road sections selected as observation sites. Observations of seatbelt use were conducted at 127 sites from the 12 counties (see Table 11 for a full list of towns selected). Sites were selected following a probability-based sampling procedure developed by the Preusser Research Group and approved by NHTSA on April 5, 2012. Restraint use was recorded for 18,679 drivers and front seat passengers in 14,865 vehicles (in the 2013 study, 15,047 vehicles and 19,350 occupants were recorded).

Sampling and estimating protocols. In 2012, NHTSA began to institute new standardized sampling and estimating protocols for all states to follow in their safety belt use studies. These procedures were developed to ensure comparability among findings from state to state. The new estimation formulae are intended to provide each state with very precise estimates of their statewide belt use rates. These formulae provide a statistically sound method to calculate weights that will help adjust sample data to better reflect the volume and types of traffic found in all roads in a state, not just those selected for observation. Maine's sampling procedures are now based primarily on the number of vehicular fatalities in each county, and on traffic data known as the Daily Vehicle Miles Traveled (DVMT) for each county in the State. DVMT data provide a measure of the volume of traffic at each road segment in Maine.

One of the results of adopting new estimation methods is that the findings from 2012 through 2014 are not entirely comparable to those from previous years. Different methods can produce different results, which is why NHTSA has adopted the new standardized methods. We support the use of the new estimation approach and NHTSA's efforts to bring consistency and uniformity to all of the states but remind readers that, because of these changes, results from this year's study are not quite equivalent to those conducted in previous years.

Subgroup analyses. This report includes findings from several subgroups, such as for different seating positions, type of vehicle, etc. We urge readers to keep in mind that some of these groups have lower numbers and, therefore, the point estimates of their use rates are less precise than those for the entire sample.

OBSERVATION STUDY FINDINGS

Overview: Compliance with the law. After declining in 2013, the overall restraint use increased in 2014 to Maine's highest recorded rate to date, 85.0%. In 2002, the statewide use rate was only 59%. By 2007, that rate had increased to 79.8%. This year, drivers have a slightly higher use rate than passengers. Table A shows changes in the rates for drivers and passengers for the three most recent years.

Table A

Comparison of seat belt usage rates statewide:

Occupants Observed	2014 Study	2013 Study	2012 Study
All Vehicle Occupants	85.0%	83.0%	84.4%
All Drivers	84.8%	82.9%	84.5%
All Front Passenger Seat Occupants	84.3%	83.5%	83.4%

Gender differences. Women in particular show substantial compliance with seatbelt laws. Table B shows gender differences for 2012, 2013, and 2014.

Table B

Comparison of seat belt usage rates by gender:

Gender	2014 Study	2013 Study	2012 Study
Male Driver	81.5%	79.5%	82.1%
Female Driver	89.6%	87.2%	88.8%
Male Passenger	76.4%	71.9%	71.7%
Female Passenger	88.0%	91.6%	89.7%

Passengers' use of safety belts related to use by driver. As with prior studies, belt use of passengers is strongly correlated with the practices of the drivers. When drivers use their safety belts, other occupants of the vehicle (who are most likely friends or family of the driver) are more than two and a half times as likely to use their belts as they are when the driver is not using a belt (93.0% vs.33.6%).

Comparison with other states. While Maine's safety belt use has improved considerably over the years, other states have increased their use as well[1]. As a result, the state remained near the bottom nationally until recent years. In 1995, Maine's rate of 50% was the fifth from the bottom of a list of all 50 states, the District of Colombia, and Puerto Rico. By 2011, there still were only 11 reporting lower use rates than Maine. Because NHTSA has not yet released the 2014 use rates for all states, it is not possible to report where Maine now stands but in 2013, Maine was right in the middle of all states, with 25 states having lower rates and 24 states and DC having higher rates. Nationally, the use rate was 87% in 2013.

Type of vehicle. As has been the case in every study conducted in Maine, people in pickup trucks have the lowest use rates, at 74.1%. This is a substantial increase from the 39.7% reported in 2002, and is an increase from 2013's rate of 71.6 percent. Belt use in pickup trucks continues to be an area where considerable improvement is still possible as all other types of vehicles have belt use rates at least twelve percentage points higher than pickups. Vans, cars, and SUVs have use rates of 86.3%, 87.3%, and 87.8%, respectively.

SUMMARY

Safety belt use in Maine has increased markedly since 1991, when only a third of people aged 16 and over were belted. (Another change in study methods should be noted here: In all of the studies conducted during the 1990s, information for all vehicle occupants, including children, was recorded, as well as the estimated age of each individual. Since 2004, children are no longer included for observations, nor is age estimated.)

The impact of safety belt use is significant. Research published by NHTSA in 2008 stated that, when properly used, lap/shoulder safety belts reduce the risk of fatal injury to front-seat passenger car occupants by 45%; they reduce the risk of moderate-to-critical injury by 50%. The safety effect is even greater for light truck occupants, where safety belts reduce the risk of fatal injury by 60% and moderate-to-critical injury by 65%. The same study estimates that over 15,000 lives were saved by using safety belts in the year 2006.[2] It is research findings such as these that provide much of the impetus for continuing efforts to increase seatbelt use in Maine and the nation.

This year's study was conducted immediately after a major enforcement and publicity campaign meant to increase safety belt usage. The rest of this report describes how the 2014 study was implemented and presents the key findings. It also shows comparisons between 2014 and the previous two studies. The project was conducted thanks to a contract between the Bureau of Highway Safety, Department of Public Safety, State of Maine, and the Survey Research Center at the Muskie School of Public Service, University of Southern Maine (USM), along with a subcontract between USM and the Preusser Research Group in Trumbull, Connecticut.

Portland, Maine
September 20, 2014

INTRODUCTION

The impact of seatbelt use is substantial. Research reported by NHTSA in 2008 found that lap/shoulder belts reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. Seat belts are even more effective for light-truck occupants, reducing the fatality risk by 60 percent and the moderate-to-critical injury risk by 65 percent. In 2006, seat belts saved the lives of an estimated 15,383 vehicle occupants age 5 and older.[3] Nationally, about 87% of all motorists now use their safety belts.[4]

Prior to 1996, when mandatory seatbelt laws for adults went into effect, Maine motorists used their seatbelts at a rate only about half of the national rate.[5] In November 1995, Maine voters narrowly approved a referendum establishing a secondary enforcement law requiring almost all people to wear safety belts or use child restraint devices. In 2007, a primary enforcement law went into effect (although ticketing didn't begin until April 1, 2008, to allow time for the state to raise public awareness of the law). The study here reports on results from an observation study conducted in 2014, six years after Maine's primary enforcement law began to be implemented. The data contained in this report are used to provide the Bureau of Highway Safety and the National Highway Traffic Safety Administration the current use rates and a measure of changing use patterns over time.

The research project was conducted by the Survey Research Center of the Muskie School of Public Service at the University of Southern Maine, under a contract with the Maine Bureau of Highway Safety, Department of Public Safety, State of Maine. The study was designed to determine the rate of safety restraint use in Maine as part of the development of a statewide comprehensive highway safety plan as required by NHTSA. It incorporates the standardized design requirements developed by NHTSA in an effort to ensure reliability and comparability of findings between each of the states.

METHODOLOGY

In 2012, a number of methodological changes were introduced in the observation study. These include selecting the counties for observations based on traffic fatalities rather than population; developing a stratified sampling protocol in which each county had either 10 or 11 observation sites chosen; and the inclusion of certain commercial and emergency vehicles in the study. While all of the Muskie School's previous studies have met NHTSA guidelines and represent the official state use rates, the effect of these changes means that direct comparisons may not be entirely accurate between this year's study and some of the earlier ones. The following is a description of the changes that were implemented and their potential impact.

The biggest methodological change in 2012 was the new protocol for selecting counties for observation. In all previous years, this was based on the population of each county. NHTSA guidelines allowed selecting the counties that had a combined population that covered 85% of the population of the entire state. In 2012, the new guidelines called for choosing counties that represented 85% of all traffic fatalities in the state, as measured by the Fatality Analysis Reporting System (FARS) over the previous 3 years. The impact of this method was to increase the number of counties included, from 10 counties in previous years to 12 counties, starting in 2012; the 12 counties represent 90% of all traffic fatalities in Maine. 9 of the 10 counties chosen prior to this change were included in the new design (see Table 11 for a complete list of all towns and counties chosen).

The next biggest change in methodology was that of using a stratified sample of road segments selected for observation within each county. Prior to 2012, the number of segments chosen in each county ranged from 18 in Cumberland to only 7 in Knox, an assignment based on the county's population in relation to the state population. Now, each county has either 10 or 11 road segments included for observations; data were weighted to adjust for this selection method.

To accommodate the new guidelines, certain commercial and emergency vehicles are now included for observation. In the past, taxi cabs, pizza delivery cars, police cars, etc., were not included; beginning with 2012, these vehicles are allowed. Large commercial vehicles (generally, those with more than 4 wheels) are still excluded.

In addition to these methodological adjustments, another important factor is the highly advertised and visible awareness and enforcement campaign that was conducted immediately before the current study began. While this seems to have the effect of at least temporarily boosting people's likelihood of using safety belts, the September 2009 study that was conducted by the Muskie School and Preusser Research Group 3 months after the campaign ended found the impact to be only a modest one.

Road sections selected as observation sites. Observation sites must allow the opportunity for a reasonably representative flow of multi-purpose traffic, while allowing observers a safe viewing position from which to observe and record belt use of occupants in each vehicle. Observers were given descriptions of the road segment to observe (e.g., "in Auburn, on Minot Avenue, between Heath Lane and Garfield Road"). They were also told which direction of traffic to observe. They then were able to find the most advantageous spot on the road segment from which to observe. They were instructed to only include vehicles that had actually passed through the first identifier of the description (in the example above, the intersection of Minot Avenue and Heath Lane). Observations were conducted from a single point on each segment. In all, observations of 14,865 passenger vehicles and the use or nonuse by 18,679 occupants was recorded. A list of the towns and cities selected appears as Table 11.

Sampling. The sites to be observed were selected by the Preusser Research Group of Trumbull, Conn. The sampling design was developed to ensure compliance with NHTSA's standardized guidelines. The design of the sampling process provides a confidence level of 95% with a standard error of 0.831% and a relative standard error of 0.978%, and a final sample size of 127 road segments. The probability of a road segment being selected was proportional to the traffic volume measured in average daily vehicle-miles traveled (DVMT) on each road segment, based on Maine Department of Transportation data.

Weighting. Consistent with NHTSA guidelines, the data were weighted to reflect the sampling design and the average traffic volume at the selected road segments. The weighting simply adjusts the actual number of vehicles observed to reflect the expected number of vehicles, based on the traffic volume where the segment is located, and combines the site data in a way that represents statewide traffic volumes.

Observation times and days. Observations were made at 127 locations throughout the state for 45 minutes each, on a structured schedule of observation times and days that would maximize the opportunity to study variations in restraint use by time and by day of the week. Road segments were randomly assigned to a day and time for observations, although consideration had to be given for trips to locations that required lengthy travel times. Each day and time had an equal probability of selection. All observations were done during daylight hours. All observations in each county were conducted over a two day period. If any site had to be rescheduled (due to rain, road construction, etc), the observations were done on the same day of the week and at the same time of day as the originally scheduled time.

Many roads have two or more lanes of traffic in each direction. In those cases, the observation period was divided by the number of lanes, and each lane was observed for the proportional length of time. For example, a road with three lanes would require that each lane be observed for 15 minutes (three lanes

times 15 minutes each equals 45 minutes, the full observation period).

Observation assignments were made across a schedule of time slots that began at 7:00 a.m. and ended at 6:15 p.m. They were conducted from June 2 to June 21, 2014 (by design, the observations are scheduled to be completed before the Fourth of July holiday, as traffic patterns may be significantly different during that weekend).

Observer training. Observers were trained by Tara Casanova-Powell from the Preusser Research Group. They were trained to observe proper shoulder belt use (vs. improper or no use) of the driver and, if present, a right front seat passenger (infants were excluded). Observations were made for private passenger vehicles and for certain commercial and emergency vehicles. The training involved written material, oral presentation, and field practice. The field practice was conducted on Deering Avenue in Portland, near the SRC office. The practice observations were crucial. Results were reviewed and analyzed for accuracy and consistency; no observers were allowed to begin until their practice observations met training standards.

OBSERVATION STUDY FINDINGS

Overview: Compliance with the law. The latest use figures show an increase in the proportion of Maine's population buckling up, at 85.0% overall. While the use of safety belts has improved considerably from earlier years, many states still have higher use rates.[6] In order to further raise rates relative to other states, it seems likely that Maine will continue to require an on-going effort of education and enforcement.

Gender differences. The female use rate has been consistently higher than that of males; that pattern continues in 2014. While 89.5% of all female occupants were restrained, only 81.1% of males were using their seatbelts. Both of these represent increases from last year, particularly for males.

Seating position. In 2014, 84.8% of drivers were using seatbelts and 84.3% of passengers were using theirs. This returns to the pattern of earlier years in which drivers have had a higher rate of belt use than passengers.

Urban/rural differences. The belt use rate in rural locations is now higher than that of urban locations, at 86.7% and 84.7% respectively. The gap between the two areas has been narrowing considerably over the last few years, after a consistent pattern of higher use in urban areas for many years. This marks the first year that rural rates have passed urban rates. (Note: due to the statistical difficulties of weighting data by twelve different counties, various road types, and traffic volume at all road segments, these data are not weighted).

Type of vehicle. There is one clear difference in driver safety belt use rates according to the type of vehicle the driver is operating. At 73.9%, drivers of pickup trucks have a considerably lower use rate than any of the other types of vehicles (see Table 7 for use rates of all drivers by vehicle type). It is likely that the selection of a vehicle and the decision of whether to buckle up or not are both related to gender, age, lifestyle and other factors, so this may not be a surprising finding; it certainly has been consistent over the years. With implementation of the primary enforcement law, however, drivers in pickup trucks had shown strong improvement, going from 68.6% in 2007 to 76.7% in 2012, the highest use rate yet recorded for pickup truck drivers. But in 2013, pickup truck drivers declined significantly, down to 71.6 percent. 2014 shows an increase in use rates for pickup truck drivers but not back up to 2012's levels.

Passenger use related to use by driver. As in all prior studies, buckling up is a friend and family affair. When drivers use their safety belts, other occupants of the vehicle (who are most likely friends or family of the driver) are more than two and a half times as likely to use their belts as they are when the driver is not using a belt, 93.0% vs. 33.6%; see Table 8.

Comparison with other states. While Maine's use rate has improved substantially since 2002, other states have also improved.[7] The net result is that Maine is now in the middle of the range in national standings. In 2013, there were 25 states reporting lower use rates than Maine. 2014 figures have not been released yet so we cannot state Maine's position in this year's national rankings.

Day of week. Observations were conducted on all days of the week, and while there are slight variations in safety belt usage across the days (Table 7), there is no readily apparent pattern to the findings. The assignment of days and times of observation to the sites was systematic and unbiased, but the number of observations obtained on each day varied considerably because the traffic volume at the selected sites varied. Use rates are highest on Tuesdays (88.2%) and lowest on Wednesdays, at 80.5%, the same highest and lowest use days as last year. (NOTE: these are based on unweighted data).

Time of day. Safety belt use varies throughout the day (Table 7). The highest rates are from 9:00 a.m. to 10:59 a.m. (87.9%). The lowest rates occur between 11:00 a.m. and 1:29 p.m. (83.0%). Time of day rates have also varied from year to year.

Weather and road conditions. Good weather conditions prevailed throughout most of the study period. As a result, most observations were conducted in sunny and clear weather this year. Overall, 71.1% of vehicles were observed in sunny and clear weather and 23.5% while it was cloudy. The rest (5.4%) were done during rainy or foggy weather. There was some variation in use rates; sunny weather had 85.8% use but cloudy weather saw 86.1% use, while light rain had 84.8%. (see Table 7).

Comparison of 2014 with 2013 and 2012 data. Several studies in Maine have been conducted for the Bureau of Highway Safety of the Maine Department of Public Safety over the years. The first was done by Northeast Research for the School of Public Health of the Boston University Medical School.[8] The next four were conducted by the Muskie School's Survey Research Center.[9] The year 2002 study was completed by CSI® Santa Rita Research Center.[10]

The Muskie School has now conducted a number of these studies. As described in the Methodology section, there were several major changes in the study design that were implemented in 2012. In addition, over the years other changes have been made, so direct comparisons between years may not be entirely appropriate.

In 2002, overall compliance stood at approximately 59%. At that time, the rate for people over 18 was also 59%. Beginning in 2004, only adults were recorded (although it is likely that some mid- to older-teens were inadvertently included). The rate for 2007 had increased to 80% and to 83% in 2008. Over the next four years, Maine's rate increased to 84.4%; after a brief decline, it has now increased to 85.0 percent.

This year, drivers are more likely to use their seatbelts than passengers, 84.8% and 84.3%, respectively. This returns to the pattern of earlier years, in which drivers had higher use rates than passengers. Both driver and passenger use increased from last year, with passenger use increasing for the fourth consecutive year.

A look at male drivers and female drivers over the last three studies shows that both men and women declined in 2013 but rebounded this year. For the year 2012, male drivers had a use rate of 82.1% and females had a rate of 88.8%. In 2013, the comparable figures dropped to 79.5% for male drivers and 87.2% for female drivers. The current use rates of 81.5% for males and 89.6% for females demonstrate that the "gender gap" continues to exist as women drivers have reached their highest use rates yet.

SUMMARY

During the early to mid-nineties, seatbelt use in Maine increased substantially. By 1997, however, that trend had ended. From then through 2002, there was no overall increase and even some declines in certain areas. The years of increase correspond to a time when a number of changes were made in seatbelt laws in the state—in 1989, the law was expanded to require all occupants age 4 to 19 to use restraints. In 1993, fines for violations were increased. And most importantly, in 1995, a statewide referendum requiring all adults 19 and older to use safety belts was passed. From 1995 through 2006, there were no major revisions to Maine's belt laws. With the implementation of the new primary enforcement law, Maine's safety belt use rates showed increases in some but not all categories.

In 2014, Maine's overall use rate increased to 85% for the first time ever. A number of sub-groups also increased their rates of seat belt use, including all female occupants, all male occupants, rural drivers, and pick up drivers, among others. After recording declines in many areas in 2013, this is certainly encouraging. However, we note that it has been several years since Maine has seen increases in two consecutive years. The "up and down" nature of the state's use rates in recent years suggests that efforts will need to continue in order to ensure that Maine's level of safety in passenger vehicles will be improved and consistently maintained.

MOTORCYCLE HELMET USE

This year marks the fifth time in as many years that we included observations of motorcycle helmet use. There was no sampling protocol specific to motorcycle traffic volume; rather, we simply included observations for all motorcycles seen at the sites that had been selected for the seatbelt use sample. This resulted in recording the helmet use and non-use of 314 drivers and 61 passengers. The overall helmet use rate has decreased this year to 53.1% from last year's rate of 60.2 percent. Tables E and F present the key findings.

Table E

Comparison of motorcycle helmet usage rates statewide

Occupants Observed	June 2014
All Motorcycle Occupants	53.1% (N=375)
All Drivers	54.8% (N=314)
All Passengers	44.3% (N=61)

Table F

Comparison of motorcycle helmet usage rates by gender:

Gender	June 2014
Male Driver	54.5% (N=288)
Female Driver	54.2% (N=24)
Male Passenger	0.0% (N=1)
Female Passenger	44.1% (N=59)

ENDNOTES

[1] U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts July 2014, Research Note*, DOT HS 812 030.

[2] U.S. Department of Transportation, National Highway Traffic Safety Administration, *2006 Motor Vehicle Occupant Protection Facts, August 2008*, DOT HS 810 654.

[3] U.S. Department of Transportation, National Highway Traffic Safety Administration, *2006 Motor Vehicle Occupant Protection Facts, August 2008*, DOT HS 810 654.

[4] U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts July 2014, Research Note*, DOT HS 812 030.

[5] U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts 2011, Research Note*, DOT HS 811 493.

[6] U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts July 2014, Research Note*, DOT HS 812 030.

[7] U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts July 2014, Research Note*, DOT HS 812 030.

[8] Deidre Hungerford, David Kovenock, and James Sorg, *Maine Seat Belt Use Observation Study*, February, 1986: *Preliminary Summary*, Northeast Research, Orono, Maine, 1986.

[9] Al Leighton, Erika Ziller and Suzanne K. Hart, *Safety Belt Use in Maine 1991, 1995, 1997, 1998,* Edmund S. Muskie Institute of Public Affairs, University of Southern Maine, prepared for the Bureau of Highway Safety, Department of Public Safety, State of Maine, 1992, 1995, 1997, 1999.

[10] Ash Bose, Safety Belt Use in Maine 2002, CSI Santa Rita Research Center, Communication Software, Inc., Arizona, December, 2002.

List of Tables
2014 Maine Safety Belt Use Observation Study

TABLE 1

Restraint Use in Passenger Vehicles
Statewide

Maine, 2014

All Persons

All Persons	
Lap/Shoulder	85.0%
No Restraint	15.0%
No. Vehicles =14,865; No. Persons =18,516	

TABLE 2

Restraint Use in Passenger Vehicles
Statewide

By Seating Position

Maine, 2014

All Persons

Driver		Passenger	
Lap/Shoulder	84.8%	Lap/Shoulder	84.3%
No Restraint	15.2%	No Restraint	15.7%
N = 14,781		N = 3,735	

TABLE 3

Restraint Use in Passenger Vehicles
Statewide

Maine, 2014

Males

All Males	
Lap/Shoulder	81.1%
No Restraint	18.9%
N = 9,813	

TABLE 4

Restraint Use in Passenger Vehicles
Statewide
By seating position

Maine, 2014

Males

Driver		Passenger	
Lap/Shoulder	81.5%	Lap/Shoulder	76.4%
No Restraint	18.5%	No Restraint	23.6%
N = 8,521		N = 1,292	

TABLE 5

Restraint Use in Passenger Vehicles
Statewide

Maine, 2014

Females

All Females	
Lap/Shoulder	89.5%
No Restraint	10.5%
N = 8,617	

TABLE 6

Restraint Use in Passenger Vehicles
Statewide
By seating position

Maine, 2014

Females

Driver		Passenger	
Lap/Shoulder	89.6%	Lap/Shoulder	88.0%
No Restraint	10.4%	No Restraint	12.0%
N = 6,210		N = 2,407	

TABLE 7

Percentage of Drivers Wearing Safety Belts
Under Selected Conditions
Statewide

Maine, 2014

Type of Vehicle

Vehicle Type		Belt Use
Car	(N =6,845)	87.3%
SUV	(N =3,884)	87.8%
Van	(N =1,096)	86.3%
Truck	(N =2,956)	74.1%

Day of the Week

(Note: data in the rest of this table are not weighted)		Percent of Drivers Wearing Safety Belts
Sunday	(N = 2,159)	87.9%
Monday	(N = 2,066)	85.4%
Tuesday	(N = 2,285)	88.2%
Wednesday	(N = 1,583)	80.5%
Thursday	(N = 2,145)	88.0%
Friday	(N = 2,449)	82.4%
Saturday	(N = 2,094)	85.8%

Table 7, cont'd

Weather[23]		Percent of Drivers Wearing Safety Belts
Sunny/Clear	(N = 10,507)	85.6%
Raining	(N = 726)	84.7%
Cloudy	(N = 3,467)	86.0%
Fog	(N = 81)	77.8%
Wet/Not Raining	(N = 0)	--

1 Observations of **Sunny/Clear** and **Cloudy** imply the roads are dry. **Raining** corresponds to light rain occurring during the observations (data are not collected in heavy rain) and thus the roads are wet.

Time of Observation		Percent of Drivers Wearing Safety Belts
7am – 8:59am	(N = 3,132)	87.5%
9am – 10:59am	(N =2,717)	87.4%
11am – 1:29pm	(N = 2,477)	82.6%
1:30pm – 3:29pm	(N = 2,731)	85.2%
3:30pm – 6pm	(N = 3,724)	85.2%

TABLE 8

Passenger belt use/nonuse
compared to Driver belt use/nonuse
NOTE: Data in this table are NOT weighted

Maine, 2014

When the driver IS wearing a belt

Driver	Passenger	
NOT APPLICABLE	Lap/Shoulder	93.0%
	No Restraint	7.0%
N = Not Applicable	N = 3,308	

When the driver is NOT wearing a belt

Driver	Passenger	
NOT APPLICABLE	Lap/Shoulder	33.6%
	No Restraint	66.4%
N = Not Applicable	N = 399	

TABLE 9

Restraint Use All Occupants, All Vehicles
Grouped by Observation Sites in Rural and Urban Locations
NOTE: Data in this table are NOT weighted

Maine, 2014

RESTRAINT TYPE	Rural		Urban		STATEWIDE	
	N	%	N	%	N	%
Lap/Shoulder Belt	9,397	86.7	5,783	84.7	15,180	85.9
No Lap/Shoulder Belt	1,439	13.3	1,049	15.3	2,488	14.1
Lap/Shoulder Belt TOTAL	10,836	100.0	6,832	100.0	17,668	100.0

TABLE 10

Observed Safety Belt Use Rates Reported by States to NHTSA
2012 and 2013

State	2012	2013	State	2012	2013
Alabama	**90%**	97%	Montana	76%	74%
Alaska	**88%**	**86%**	Nebraska	79%	79%
Arizona	82%	85%	Nevada	91%	95%
Arkansas	**72%**	**77%**	New Hampshire	69%	73%
California	**96%**	**97%**	New Jersey	**88%**	**91%**
Colorado	81%	82%	New Mexico	**91%**	**92%**
Connecticut	**87%**	**87%**	New York	**90%**	**91%**
Delaware	**88%**	**92%**	North Carolina	**88%**	**89%**
District of Columbia	**92%**	**88%**	North Dakota	81%	78%
Florida	**87%**	**87%**	Ohio	82%	85%
Georgia	**92%**	**96%**	Oklahoma	**84%**	**84%**
Hawaii	**93%**	**94%**	Oregon	**97%**	**98%**
Idaho	79%	82%	Pennsylvania	84%	84%
Illinois	**94%**	**94%**	Rhode Island	78%	86%
Indiana	**94%**	**92%**	South Carolina	**91%**	**92%**
Iowa	**92%**	**92%**	South Dakota	67%	69%
Kansas	**80%**	**81%**	Tennessee	**84%**	**85%**
Kentucky	**84%**	**85%**	Texas	**94%**	**90%**
Louisiana	**79%**	**83%**	Utah	82%	82%
Maine	**84%**	**83%**	Vermont	84%	85%
Maryland	**91%**	**91%**	Virginia	78%	80%
Massachusetts	73%	75%	Washington	**97%**	**95%**
Michigan	**94%**	**93%**	West Virginia	84%	82%
Minnesota	**94%**	**95%**	Wisconsin	**80%**	**82%**
Mississippi	**83%**	**74%**	Wyoming	77%	82%
Missouri	79%	80%	NATIONWIDE	86%	87%

Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts,July 2014*, Research Note DOT HS 812 030.

1 Rates in states with primary belt enforcement laws appear in boldface.
Primary Enforcement: Allows police to stop and cite motorists simply for not wearing seat belts.
Secondary Enforcement: Motorists must be stopped for another reason in order to receive a seat belt citation.

TABLE 11

Maine 2014 Observation Sites List

1. Androscoggin (11)
1. Auburn (5)
2. Durham (1)
3. Greene (1)
4. Lewiston (4)

2. Aroostook (11)
1. Ashland (1)
2. Bridgewater (1)
3. Caribou (1)
4. Houlton (3)
5. Limestone (1)
6. Ludlow (1)
7. Mars Hill (1)
8. Presque Isle (1)
9. Sherman (1)

3. Cumberland (11)
1. Bridgton (2)
2. Brunswick (1)
3. Cumberland (1)
4. Falmouth (2)
5. Gorham (1)
6. Portland (3)
7. Pownal (1)

4. Hancock (10)
1. Bar Harbor (1)
2. Blue Hill (2)
3. Bucksport (1)
4. Ellsworth (2)
5. Franklin (1)
6. Gouldsboro (1)
7. Orland (1)
8. Trenton (1)

5. Kennebec (11)
1. Augusta (2)
2. China (2)
3. Pittston (1)
4. Sidney (1)
5. Waterville (2)
6. Windsor (2)
7. Winslow (1)

6. Lincoln (10)
1. Boothbay Harbor (1)
2. Damariscotta (1)
3. Dresden (1)
4. Edgecomb (2)
5. Newcastle (2)
6. Waldoboro (1)
7. Wiscasset (2)

7. Oxford (10)
1. Canton (1)
2. Fryeburg (1)
3. Hartford (1)
4. Otisfield (1)
5. Oxford (1)
6. Paris (2)
7. Rumford (3)

8. Penobscot (11)
1. Bangor (2)
2. Brewer (2)
3. Carmel (2)
4. Hampden (1)
5. Hermon (1)
6. Passadumkeag (1)
7. Veazie (2)

9. Somerset (11)
1. Anson (1)
2. Madison (1)
3. Mercer (1)
4. Norridgewock (1)
5. Palmyra (1)
6. Pittsfield (2)
7. Skowhegan (3)
8. Solon (1)

10. Waldo (10)
1. Belfast (5)
2. Knox (1)
3. Monroe (1)
4. Northport (1)
5. Stockton Springs (1)
6. Waldo (1)

11. Washington (10)
1. Calais (1)
2. Devereaux Twp (1)
3. Indian Twp (1)
4. Jonesboro (1)
5. Jonesport (2)
6. Princeton (1)
7. Wesley (1)
8. Whiting (1)
9. Whitneyville (1)

12. York (11)
1. Acton (1)
2. Alfred (1)
3. Biddeford (2)
4. Eliot (1)
5. Kittery (1)
6. Lebanon (1)
7. So. Berwick (1)
8. Wells (1)
9. York (2)

History of Occupant Protection Laws

EFFECTIVE DATES	LAWS
09-20-07	Primary enforcement law takes effect; ticketing began on April 1, 2008.
01-01-03	The operator is responsible for ensuring that a child (from 40 pounds but less than 80 pounds and less than 8 years of age) is properly secured in a federally approved child restraint system.
09-19-97	The operator is responsible for securing persons under age 18 in a safety belt/seat. Persons 18 years and older are responsible for securing themselves.
09-19-97	A law enforcement officer may take enforcement action against an operator or passenger 18 years or age or older who fails to wear a seat belt only if the officer detains the operator for a suspected violation of another law. The requirement that the operator must receive a fine for the other violation in order to be subject to a penalty for the seat belt violation has been deleted.
01-01-95	With the implementation of Title 29A, the child safety seat law and seat belt law were combined into one law.
12-27-95	A statewide referendum requiring adults 19 and older to use safety belts passed on 11-07-95. The law could be enforced only if the police officer had detained the operator of a motor vehicle for a suspected violation of another law.
07-94	Driver made responsible for securing children under 4 years in a child safety seat.
10-13-93	Penalty changed from fine of $25 for first violation and $50 for each subsequent violation for those aged 0 to 4 to traffic infraction (up to $500 fine).
10-13-93	Penalty changed from fine of $25 for first violation and $200 for each subsequent violation for those 4 to 19 to traffic infraction (up to $500 fine).
09-29-87	Children aged 4 to 13 years must be secured in a child safety seat or safety belt.
09-30-89	Law expanded to include children 4 to 16 years.
10-09-91	Law expanded to include persons 4 to 19 years.
09-23-83	Children aged 0 to 4 years must be secured in a child safety seat.

Maine Seat Belt Observation Form

SITE NUMBER:_____ **SITE:**_____

NOTES:_____

DATE: _____ - _____ - _____ **DAY OF WEEK:** _____

WEATHER CONDITIONS
1 Clear / Sunny **4 Fog**
2 Light Rain **5 Clear but Wet**
3 Cloudy

DIRECTION OF TRAFFIC FLOW (Circle one): N S E W

START TIME:_____ **(Observation period will last exactly 45 minutes)**

		DRIVER		PASSENGER				DRIVER		PASSENGER	
Veh. #	**Vehicle** C = car T = truck S = suv V = van	**Sex** M = male F = female U = unsure	**Use** + = yes - = no U = unsure	**Sex** M = male F = female U = unsure	**Use** + = yes - = no U = unsure	**Veh. #**	**Vehicle** C = car T = truck S = suv V = van	**Sex** M = male F = female U = unsure	**Use** + = yes - = no U = unsure	**Sex** M = male F = female U = unsure	**Use** + = yes - = no U = unsure
1						36					
2						37					
3						38					
4						39					
5						40					
6						41					
7						42					
8						43					
9						44					
10						45					
11						46					
12						47					
13						48					
14						49					
15						50					
16						51					
17						52					
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26						61					
27						62					
28						63					
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30						65					
31						66					
32						67					
33						68					
34						69					
35						70					

MAINE SEAT BELT SURVEY
FORM 2004

Page:_____
of_____

Appendix B

Night Seat Belt Use in Maine, June 2014

Prepared for:

The University of Southern Maine
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Prepared by:

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Preusser Research Group, Inc.
Trumbull, Connecticut

September 11, 2014

Introduction

Maine is one of 22 States to have upgraded their seat belt law to primary enforcement since 1997. A primary belt law in Maine went into effect September 20, 2007, with an educational grace period to April 1, 2008. In 2008, NHTSA conducted a three-part evaluation of the implementation and effects of the new primary belt law (Chaudhary, Tison, & Casanova, 2010a). Because the night belt use measurement described in this report is a continuation of their work, this document quotes liberally from the Chaudhary et al. report.

Primary laws have been associated with a higher percentage of observed seat belt use (e.g. Ulmer, Preusser, & Preusser, 1995). In 2008, States with primary laws had an average observed seat belt usage rate about 9 percentage points higher than those with secondary laws (based on NHTSA, 2009).

Seat belt use saves lives. It is estimated that nearly half of passenger vehicle fatalities involving unbelted occupants would be prevented if they had been properly restrained. In practice, changes from secondary to primary belt laws have led, along with greater belt use, to fewer traffic fatalities. For example, in late 1999 and early 2000, Alabama, Michigan, and New Jersey changed their laws from secondary to primary. Chaudhary (in review) reported that these laws led to increased seat belt use among fatally injured front seat occupants of motor vehicles and also decreased numbers of fatalities. Similar effects were seen with other States as they passed belt use laws – belt use increased and fatalities decreased.

However, fatalities did not drop as much as expected. One explanation was that the drivers who were buckling up were drivers who were already relatively safe drivers and that the risky drivers, more likely to be involved in a crash, remained unrestrained. Thus, those most in need of seat belts were least likely to buckle up. Preusser, Williams, and Lund (1986) showed support for this contention. In their study, researchers went to bars in New York State several months after the New York seat belt law went into effect. Seat belt observations occurring on roadways near taverns showed that 43 percent of drivers during the day were belted but that observed belt use at the same locations dropped to 36 percent at night. Furthermore, drivers most likely to be drinking (and therefore constituted a higher risk) had even lower belt use. Indeed, drivers arriving or leaving bar parking lots at night had a 24 percent belt use rate.

Day Versus Night Seat Belt Use

Research using National Highway Traffic Safety Administration's (NHTSA) Fatality Analysis Reporting System (FARS) indicates that seat belt use among fatally injured front seat occupants of passenger vehicles declines nationally across the hours of night (Chaudhary & Preusser, 2006).

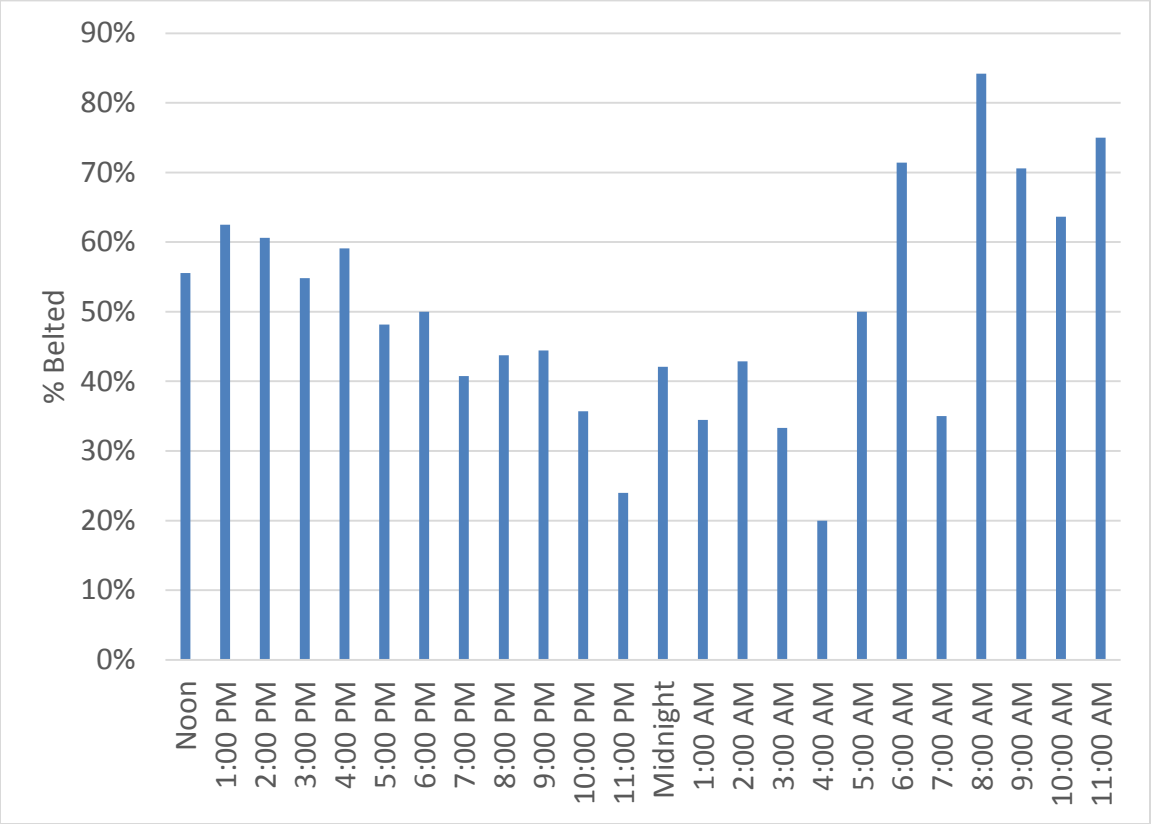
Similarly, nighttime fatalities are disproportionately frequent compared to the amount of nighttime driving. In 2007, about 26 percent of all motor vehicle fatalities occurred between the hours of 10:00 p.m. and 3:59 a.m., according to FARS, but this time period likely has less than 15 percent of daily traffic volume (Hallenbeck, 1997). Chaudhary and Preusser (2006) compared daytime and nighttime seat belt use in Connecticut, using the State's Section 157-compliant sites,

and found that daytime belt use was about 6 percentage points higher than nighttime (83 percent vs. 77 percent). Solomon, Chaudhary, and Preusser (2007) showed a similar day to night difference in New Mexico using similar observation techniques and New Mexico's daytime statewide seat belt use site locations. This study showed that nighttime seat belt use was 6.2 percentage points lower than daytime seat belt use. Masten (2007) studied the role of primary law upgrade on nighttime seat belt use using FARS. In all but one of six states that changed their law from secondary to primary, he found an increase in seat belt use among fatally injured occupants; in several states that increase was greater at night than during the day.

In 2008, along with Maine's change from secondary to primary to enforced primary belt law, Chaudhary et al. (2010a, 2010b) examined changes in daytime seat belt use and in nighttime seat belt use. Daytime belt use was measured at 40 "mini-survey" sites and nighttime belt use was measured at a subset of the mini-survey sites with actual nighttime traffic. In three time periods (before primary law enforcement began; immediately after primary enforcement began; and immediately after normal Click It or Ticket (CIOT) enforcement), they found that belt use rose consistently, day and night. Daytime belt use for the 40-site mini-survey rose from 77 percent to 79 percent to 84 percent. Nighttime belt use was always lower than daytime, but nighttime use rose as much or more, from 69 percent to 77 percent to 81 percent. Changes were statistically significant.

Data specific to Maine also indicates that use rates are lower at night. For example, Figure 1 shows this effect for the State of Maine using 2008-2012 FARS data. Belt use is uniformly highest during daytime hours (5 a.m. – 2:59 p.m.), declines steadily from 3 p.m. to late evening, and is at its lowest from midnight to 4:59 a.m. In June 2009 with the same methodology, Maine's belt use was measured at 83 percent daytime and 80 percent nighttime, virtually unchanged from the year before. In June 2010, again with the same methodology, Maine's belt use was 82 percent daytime and about 77 percent nighttime. In 2011, the figures were 82 percent daytime and 79 percent nighttime. In 2013, daytime belt use was 83 percent and 87.2 percent for nighttime belt use.

Figure 1. Percent belt use among fatally injured occupants of passenger vehicles by hour, Maine, 2008-2012



The current study continues the previous methodology using sites selected for the 2012 daytime survey (Chaudhary et. al. 2012) to examine nighttime belt use in 2014 approximately six years after Maine's primary law took effect with enforcement. This study is one of a number of coordinated seat belt use measurements being undertaken by the State.

Methods

Maine's pre-2012 statewide Section 157-compliant seat belt use survey design included 120 observation sites in 10 of the 16 counties; the design was developed in 2004. A subset of 40 of those sites in 6 counties was used for "mini" surveys from 2008 - 2010. The 40 sites were chosen to be representative of the full 120-site design in terms of urban and rural locations and road function categories. Chaudhary et al. (2010) used those 40 sites for daytime and nighttime observations in 2008 in order to be able to directly compare day and night belt usage. They found that 13 of the sites, at night, had fewer than 5 observations per 45-minute observation period in each of the three observation waves. In order to minimize the impact of these very low volume sites on the overall measures, they were dropped from nighttime belt use calculations (and day-night belt use comparisons were based only on the remaining 27 sites). Those 27 sites were used in 2009, 2010, 2011, and 2012.

Starting in 2012 the daytime statewide seatbelt survey was modified as per NHTSA regulations. Using observation data from the 2012 daytime survey a mini sample of 35 was selected from the non-local roadways to be part of the new night sample. Local roadways were excluded because late night traffic volume on local roadways are typically too low to reach a minimum number of observations. Local roadways were also not included in previous night observations so their exclusion makes the current observation sample more comparable to the old ones. The same criteria used for pre-2013 night observations of at least 5 vehicle observations for data to be included in the analyses was used for the 2013 observations. Six of the 35 sites were removed from the data set because of this criteria rendering the final analysis to be based on 29 sites.

Site information, including county name, city/town/area identifier, exact roadway location, date, day of week, time, weather condition, and direction of traffic flow and lane(s) was documented. Each one-page data collection form had space to record information on 70 vehicles, the driver of that vehicle, and the outboard front seat passenger, if any. Multiple pages could be used to record belt use in any observation session as needed.

Preusser Research Group provided experienced observers, trained to follow the procedures shown in Appendix A. Observers were trained to observe proper shoulder belt use (vs. improper or no use) of the driver and, if present, a right front seat passenger. Observations were made for non-commercial passenger vehicles and certain commercial vehicles. These were the same methods used in Maine since 2012 and for daytime belt use observations and in numerous other seatbelt observation efforts.

Observers were given descriptions of the road segment and the direction of traffic to be observed. Guidance was also provided as to the exact location from which observations should be made. Observers had the option of adjusting their location within the road segment if conditions made the recommended location unusable or unrepresentative (e.g., construction, nearby traffic rerouting), but they did not need to do so for any of these observations. Many roads had two or more lanes of traffic. In such situations, the observation period (45 minutes) was divided by the number of lanes, each lane being observed for the proportional length of time. For example, a road with three lanes would require that each lane be observed for 15 minutes.

Observations were made for 45 minutes on a structured schedule of observation times and days. The schedule was designed to maximize the opportunity to study variations in restraint use by time of day and by day of week (e.g. day/night, weekday/weekend). Nighttime observation assignments were made across a schedule beginning at 9:00 p.m. and ending at 2:45 a.m. Road segments were randomly assigned to a day of week and time of day for observations, although consideration was given for trips to locations that required lengthy travel times. Each day and time had an equal probability of selection.

When needed, military grade night vision goggles and 2 million candle-power handheld infrared spotlights were used. Two staff members were needed for these observations. One staff member (observer) would observe belt use through the night vision goggles while shining the infrared light at the vehicle. This person would also call out the data while the other staff member (recorder) would write down information on the observation data sheet.

Results

Data were collected post-CIOT, from May 30, 2014, through June 12, 2014. The numbers of observed occupants at the other sites ranged from 5 to 135. In all, there were 1,419 passenger vehicle drivers along with 261 passengers, or 1,680 occupants in all.

Belt use was calculated as the average of the 29 site belt use percentages. Overall belt use was 84.3 percent. The standard error of measurement was calculated as the standard error of the means; it was 1.23 percent. The 95% confidence interval for the statewide night belt use value was 82 percent – 87 percent.

Table 1 places these observations in context with those made in 2008 (Chaudhary et al., 2010), through 2013.

Night belt use in 2014 was about 3 percentage points lower than during the comparable time period in 2013 (but still higher than the pre-2013 rates).

Table 1. Statewide Night Belt Use, by Wave

	Obs. Dates	Condition	Night Belt Use
Wave 1	2/24 – 3/1/2008	Pre-enforcement	69.3%
Wave 2	4/25 – 5/3/2008	Post-enforcement	76.9%
Wave 3	5/30 – 6/12/2008	Post-CIOT	81.2%
Wave 4	5/30 – 6/13/2009	Post-CIOT	80.1%
Wave 5	6/6-6/12/2010	Post-CIOT	77.1%
Wave 6	6/3-6/11/2011	Post-CIOT	79.0%
Wave 7	6/4-6/9/2012	Post-CIOT	87.6%
Wave 8	**6/1-6/9/2013**	**Post-CIOT**	**87.2%**
Wave 9	**5/30-6/12/2014**	**Post-CIOT**	**84.3%**

The increase in night belt use observed in 2012 was, for the most part, sustained for the 2013 observations. The increase in use from 2011 to 2012 is discussed in Chaudhary, Casanova and Leaf (2013). It is not clear whether the relatively higher use rate in in 2013 (compared to pre-2012 rates) is a function of the new sites or a continuation of the pattern demonstrated in 2012. The rate in 2014 was still higher than the pre-2012 rates but was a bit lower than the 2013 rate.

Table 2 shows use rates (unweighted) by roadway type, vehicle type, sex, and person type (driver or passenger). Seat belt use did not vary significantly across roadway types. There was a significant effect of vehicle type (χ^2 (3) = 54.867, p < 01). The results mimic typical daytime patterns where Pickup truck use rates (70%) were the lowest of all vehicle types and SUV use (92.4%) was the highest.

The difference in use for female drivers (88.5%) versus female passengers (88.9%) was not significant (p > 0.01). The difference between male drivers (79.9%) and male passengers (81.9%) was significant (χ^2 (1) = 15.426), p <0.01). The interaction effect (as per a binomial logistic regression) was not significant (p > 0.05).

Although excluded for all analyses, motorcycle helmet use was observed and coded; of the 23 motorcyclists observed only 12 (52.2%) were helmeted. Use rates among men (80.9 %) were significantly lower than among women (88.7%; χ^2 (1) = 19.630,p <0.01). Drivers (83.6%) had lower use rates than did passengers (86.9%) but this difference was not statistically significant (p >0.05).

Table 2. Night Belt Use, June 2014, by Road Type, Vehicle Type, Person Type, and Role[1]

Road Functional Class Category	N	Night Belt Use
Expressways	413	85.7%
Urban Other Arterials	765	82.9%
Rural Other Arterials	323	84.2%
Collectors	179	88.8%
Vehicle Type		
Passenger Cars	948	84.8%
Pickups	220	70.0%
SUVs	396	92.4%
Vans	116	81.9%
Sex x Driver-Passenger		
Male Drivers	802	79.9%
Female Drivers	462	88.5%
Male Passengers	127	81.9%
Female Passengers	312	88.8%
Sex		
Male	909	80.9%
Female	771	88.7%
Driver-Passenger		
Driver	1244	83.6%
Passenger	436	86.9%

[1] Tables are raw percentages.

Discussion

Night seat belt use remained relatively stable from 2008 to 2010, ranging from 81 percent in June 2008 to 77 percent in June 2010. The observations in 2012 and 2013 (from different sample sites) both show rates over 87 percent. This is a marked increase from previous years. The most recent observations in 2014 demonstrate a slight decrease in use from the prior two years but the rate was still higher than the pre-2012 use rates.

The night belt use in Maine was about the same as the daytime rate. It should be noted that the weighting procedure for day and night are different and daytime observations contain local

roadways (which typically have the lowest belt use rates). Nevertheless, the fact that nighttime use measured the same as daytime use is remarkable.

The similarity of the daytime and nighttime figures is in sharp contrast to the difference in belt use by Maine fatalities in Figure 1, where average daytime belt use of over 50 percent (by fatally injured passenger vehicle occupants) dropped to below 40 percent from 9 p.m. to midnight and about 20 percent after midnight. This lends support to previous findings that many nighttime fatalities are drawn from high-risk subpopulations, e.g., impaired drivers, that are particularly unlikely to buckle up and are much more likely to be out in late night hours. It would be of some interest to examine FARS 2012 and 2013 relative to prior years to see if there was a change in rates of use among fatally injured occupants.

Data from 2002-2008 indicated that an average of 25 fatalities per year were unrestrained. More recent data show a decrease in the average number of unrestrained fatalities. Specifically, from 2009-2012, 87 passenger vehicle fatalities were unbuckled between 9 p.m. and 4:59 a.m. (an average of 22 per year). It is likely that about half of them, approximately 11 per year, would not have died if they had been properly restrained.

Most of these fatalities occurred before Maine's primary seat belt law, and night belt use has risen by about twenty percentage points after the new law, a very positive outcome. However, targeted efforts to increase the seat belt use of all night drivers and their passengers could further improve compliance and reduce fatalities.

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Appendix A. Maine Seat Belt and Helmet Observation Instructions

Qualifying vehicles include passenger automobiles, pickup trucks, recreational vehicles, jeeps, and vans (private, public and commercial). Pickup trucks should be coded as "trucks". Jeeps, Broncos, Blazers and other vehicles of that type should be coded as sport utility vehicles (SUVs). Recreational vehicles that are pickup or van "conversions" should be coded as a pickup or van. Do not include large trucks or buses. Eligible vehicles should be observed regardless of the state in which they are registered.
Emergency vehicles such as police, fire and ambulance, vehicles with mounted colored lights, government vehicles and taxis are to be recorded as long as they qualify as one of the above listed eligible vehicles. Ex. Fire department or Police SUV=SUV; Police cruiser=car.

Belt use will be observed for front seat occupants only. Observe and record data for the driver and passenger in the right front seat. If there is more than one front seat passenger, observe only the "outside" passenger. Do not record data for passengers in the back seat or for a passenger riding in the middle of the front seat.

If a child is present in the front seat in a child restraint seat, do not record anything. However, children riding in the right front seat, regardless of age, who are not in child restraint seats should be observed as any other right front seat passenger. Children in booster seats should be observed. Each observation period will last for exactly 45 minutes.

The following procedures will be used in conducting observations of seat belt use:
As you observe a qualifying vehicle, record the type of vehicle (car, truck, SUV, van), the occupants' sex (male, female, unknown), and shoulder restraint use (yes, no, unknown) of the front seat occupants (driver and front seat "outside" passenger only). If there is no qualified passenger, leave the passenger fields blank. If you cannot tell whether there is a qualified right front seat passenger, code "U" in the passenger gender box.

Code restrained if you observe the shoulder belt properly positioned over the shoulder. If you notice a lap belt in use without a shoulder belt, it should be recorded as not restrained. Only shoulder belts are to be counted. Even if the vehicle likely has no shoulder belts, code the occupant(s) as not restrained.
If the person is using the shoulder belt improperly, e.g., has the shoulder strap under his/her arm or behind the back, this should be recorded as not restrained. If you can't tell shoulder belt use at all, code unknown.

Code motorcycle helmet use, vehicle type "M", when you can do so without interfering with seat belt use observations. Code restrained if a helmet is in place. Code not restrained if there is no helmet or if it is not a motorcycle helmet. Code the motorcycle driver and a passenger, either riding pillion or in a sidecar. Code motorcycles in both directions if you can.

If there are multiple lanes in the "observed direction" and traffic is too dense to code all lanes at once, observe traffic in each lane for an equal amount of time, and in the direction specified, throughout the 45-minute observation time period.

In many situations, it will be possible to observe every vehicle in the designated lane(s). However, if there is too much traffic for you to observe every vehicle, you should determine a reference point up the road in the appropriate lane. Observe the next vehicle to pass the reference point after the last vehicle has been coded.

Do not observe if rain, fog, or other inclement weather makes it impossible to do so safely or accurately. If you arrive at a site and it begins to rain, do not collect data in the rain. Find a dry place and wait up to 15 minutes to see if the rain stops. If the rain does stop, begin observing again and extend the observation period to make up for the time missed. Otherwise, you will have to contact your supervisor to reschedule the site. (Note: You may continue observations in light fog, drizzle, or mist).
If more than one data sheet is used, staple the sheets together at the end of the observation period and note the number of sheets used at the top of the first data page.

It may happen that the site you are assigned is seriously compromised due to construction or special activity. If this occurs, you may move one block in either direction on the same street such that you are observing the same stream of traffic that would have normally been observed had there been no obstruction. If moving one block will not solve the problem, then do not conduct the observation. Notify your supervisor; an alternate site will be selected and observed at a future time.

The following procedures will be used in rescheduling observations of seat belt use:
If the site is temporarily unusable, e.g., due to bad weather or temporary traffic congestion or blockage:

- Inform your supervisor of the problem as soon as practical.
- With your supervisor's assistance, reschedule the same site to be observed at the same time of day/day of week.

If the site cannot be used during this observation schedule, e.g., due to construction:

- Inform your supervisor of the problem as soon as practical.
- With your supervisor's assistance, schedule an equivalent alternate site to be observed at the same time of day and day of the week. The alternate site must be in the same county and of the same roadway type. Your supervisor will provide a specific alternate site to be observed; you may not simply pick any other roadway to observe.

Appendix C

Marketing Flowchart

Maine Highway Safety Plan

FY 2014

Marketing Flowchart

Month / Week		October				November				December				January				February				March				April				May				June				July				August				September			
		30	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	3	10	17	24	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	1	8	15	22
Maine Media	**TRPs $**																																																		
TV General																																																			
- Paid GRPs	377	14	14	11	10	12	0	0	0	10	11	10	9	11																		13	13	13	12	11	14	15	14	11	9	12	16	13	16	12	12	12	12	12	12	12
- PSA GRPs (FREE)	538	15	15	12	11	13	0	0	0	11	11	74	67	60																		12	13	13	12	11	13	14	13	11	9	12	14	13	15	11	11	11	11	11	11	11
Total TV GRPS (weekly)	916	28	28	23	21	26	0	0	0	21	22	84	76	71																		25	26	26	24	22	27	28	27	22	18	24	30	26	31	23	23	22	23	23	23	23
- Costs	$60,324	$17,660																														$42,774																			
TV Motorcycle Safety																																																		
- Paid GRPs	365	17	16	16	16	15																										13	13	13	12	11	14	15	14	11	9	12	16	13	16	12	12	12	12	12	12	8
- PSA GRPs (FREE)	346	16	16	15	16	14																										12	13	13	12	11	13	14	13	11	9	12	14	13	15	11	11	11	11	11	11	8
Total TV GRPS (weekly)	711	33	32	31	32	29																										25	25	26	24	22	27	28	27	22	18	24	30	26	31	23	23	22	23	23	23	15
- Costs	$58,199	$8,911																														$48,288																			
Radio Awareness																																																		
- Paid GRPs	248	10	6	4	4	8	0	0	0	8	9	9	7	7																		8	9	6	9	9	9	9	9	7	7	8	8	9	9	9	9	9	9	9	9	9
- PSA GRPs (FREE)	385	13	8	7	7	11	0	0	0	12	13	13	11	11																		12	14	10	14	14	14	14	14	11	11	12	12	14	15	14	14	14	14	14	14	15
Total Radio GRPS (weekly)	633	23	14	11	11	19	0	0	0	21	21	22	18	18																		20	23	16	22	22	23	23	23	18	19	19	20	23	24	23	23	23	23	23	23	24
- Costs	$34,081	$9,700																														$24,381																			
Radio Motorcycle Safety																																																		
- Paid GRPs	195	7	7	4	5	8																										7	10	6	9	8	8	7	8	11	6	6	5	5	9	9	9	9	8	8	8	8
- PSA GRPs (FREE)	326	10	10	7	8	13																										12	17	10	15	14	14	13	13	19	10	10	7	7	15	15	15	15	15	14	14	14
Total Radio GRPS (weekly)	520	17	16	11	13	20																										19	27	16	23.7	22	22	20	21	30	16	16	12	11	24	24	24	23	23	22	22	22
- Costs	$30,735	$5,382																														$25,353																			
Radio Distracted Driving																																																		
- Paid GRPs	193																													53	47	41	53																			
- PSA GRPs (FREE)	167																													45	41	37	44																			
Total Radio GRPS (weekly)	360																													98	88	78	97																			
- Costs	$25,492																													$25,492																					
Digital																																									Pandora									
- Paid Impressions	4,000,000	0				0				0																				0				0				0				2,000,000				2,000,000				0			
- Impressions (FREE)	910,110	159,828				150,000				150,000																				8,333				8,333				8,333				208,475				208,475				8,333			
Total Impressions (monthly)	4,910,110	159,828				150,000				150,000																				8,333				8,333				8,333				2,208,475				2,208,475				8,333			
- Costs	$23,529																													$23,529																					

DATA/Research	
Perceptual goals research	$2,500
Production	$69,502
Total Marketing $	$294,382

Includes Truckside Advertising

Demos: Adults 18+