State of Maine

Department of Public Safety

Bureau of Highway Safety

Federal Fiscal Year 2015 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 1, 2015

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 2015. 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 2015 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)
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, one full time Law Enforcement Liaison and one full time Traffic Safety Resource Prosecutor 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 combined administration of federal funding from the National Highway Traffic Safety Administration, the Federal Highway Administration and State Highway funds, the MeBHS and our partners impacted each of the major NHTSA priority program areas in Federal Fiscal Year 2015:

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

Through additional programs developed after extensive state data analysis and a robust educational outreach program, 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, driver distraction, child passenger safety, police traffic priorities, motorcycles, public education and information, and traffic records for Federal Fiscal Year 2015 (October 1, 2014 – September 30, 2015).

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Executive Summary

Federal Fiscal Year 2015 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, 2014 to September 30, 2015, 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 54 agencies participated in the campaign, including the Maine State Police, County Sheriff's departments, and city and town police departments. Over 3,034 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**
  MeBHS offered a High Visibility Impaired Driving Enforcement program which began on April 1, 2015 and ended on September 30, 2015. This program required participating Maine law enforcement departments to join in the national impaired driving crackdown in August while also allowing the department the flexibility to schedule overtime details during the months when OUI is a problem in their jurisdictions. LEA's wrote 451 OUI Summonses between April 1, 2015 and September 30, 2015.

- **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 2014 and September 2015.

- **Regional Impaired Driving Enforcement (RIDE) Team**
  The Regional Impaired Driving Enforcement (RIDE) Team was continued in the year 2014-2015. This program expanded in FFY2015 to include not only the Cumberland County RIDE team, but the Dirigo RIDE team (serving Penobscot County) and the York County RIDE Team. The RIDE Teams efforts resulted in 31 OUI Summonses between May 2015 to September 30, 2015.

- **Convincer & Rollover Education Program**
  This program's events reached over 4,500 people of all ages in FFY2015. Attendees to these events received safety belt education and information through MeBHS's two Seatbelt Convincer units and one Rollover Simulator were.

❖ Statewide Observational Study

The MeBHS contracted with the University of Southern Maine, Muskie School of Public Service for the 2015 occupant protection observational seatbelt usage survey. The surveys were conducted immediately following the National "Click It or Ticket and Maine Buckle Up. No Excuses!" seatbelt enforcement campaign in May and June 2015. The 2015 seatbelt usage rate is 85.5%, which is the highest recorded observed usage rate in Maine.

❖ 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 2015 school year MeBHS used four driving simulators to instruct approximately 2,300 Maine teen drivers. In addition, personnel from the MeBHS were invited to make presentation at various MaineDOT workplaces and employer health fairs.

Federal Fiscal Year 2015 Challenges

❖ Mature Drivers

Mature drivers accounted for 22% of Maine's driver fatalities. This group has its own challenges; therefore, the MeBHS has established and participates in an Older Driver Safety Committee. During FFY2015 and FFY2016 MeBHS has been working to create a new Older Driver Educational Campaign to address driving issues this age group faces.

❖ Unbelted Fatalities

Despite Maine's primary enforcement law for seat belt compliance, 39% of occupants in fatal motor vehicle crashes in 2014 were unbelted (2015 is not complete). However, Maine improved its observed seat belt rate again to 85.5% in FFY2015. This beat our highest percentage on record which was the previous year's 85%.

❖ Pedestrian Fatalities

At the time this report was submitted The State of Maine experienced an increase in pedestrian fatalities in 2015 with 12 deaths. Pedestrian fatalities accounted for 10% of the overall fatalities. Pedestrian countermeasures are administered through the MaineDOT who oversee the Safe Routes to School program designed to educate kids on best practices when walking to school. MeBHS is working with the MaineDOT and other interested safety partners in FFY2016 to develop new pedestrian PSA's to help advise the public of pedestrian safety hazards.

❖ Motorcycle Fatalities

Maine ended 2014 with one of its lowest motorcycle fatality years on record, but with the new FFY 2015 year, motorcycle fatalities increased. At the time of this report submission Maine has experienced 31 motorcycle fatalities which was significantly higher than 2014's low of 11.

Performance Goals

In 2009, 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 2015.

Core Outcome Measure Goals

C-1) Traffic Fatalities

To decrease traffic fatalities by 5% from the 2013 calendar base year of 145 to 138 by December 31, 2015

Performance Review: Maine ended the year 2014 with 131 traffic fatalities which achieved our goal of a 5% decrease. Maine has experienced 145 traffic fatalities in 2015(at the time of report submission). This goal will not be achieved.

C-2a) Serious Traffic Injuries

To decrease serious traffic injuries by 5% from the 2013 calendar base year of 863 to 820 by December 31, 2015.

Performance Review: Maine ended calendar year 2014 with 814 serious traffic injuries. Maine has experienced 763 serious traffic injuries in 2015 at the time of report submission and may be on target to meet this goal.

C-2b) Serious Traffic Injury Rate

To decrease serious traffic injury rate (per 2012 VMT) by 5% from the 2013 calendar base year of 6.01 to 5.71 by December 31, 2015

Performance Review: Maine ended the year 2014 with a 5.60 serious traffic injury rate. As of the end of 2014 Maine achieved the 5% drop, but up to date urban mileage death rate for 2015 could not be calculated at the time of report submission

C-3a) Mileage Death Rate

To decrease the mileage death rate by 5% from the 2013 calendar base year of 1.01 to 0.96 by December 31, 2015

Performance Review: Maine ended the year 2014 with a 1.01 mileage death rate. As of the end of 2014 Maine achieved the 5% drop, but up to date urban mileage death rate for 2015 could not be calculated at the time of report submission

C-3b) Rural Mileage Death Rate

To decrease the rural mileage death rate by 5% from the 2013 calendar base year of 1.10 to 1.05 by December 31, 2015

Performance Review: Maine ended the year 2014 with a 1.19 rural mileage death rate. As of the end of 2014 Maine achieved the 5% drop, but up to date urban mileage death rate for 2015 could not be calculated at the time of report submission

C-3c) Urban Mileage Death Rate

To decrease the urban mileage death rate by 5% from the 2013 calendar base year of 0.78 to 0.74 by December 31, 2015

Performance Review: Maine ended the year 2014 with a .41 urban mileage death rate. As of the end of 2014 Maine achieved the 5% drop, but up to date urban mileage death rate for 2015 could not be calculated at the time of report submission.

C-4) Unrestrained Passenger Vehicle Occupant Fatalities

To decrease unrestrained passenger vehicle occupant fatalities by 5% from the 2013 calendar base year of 56 to 53 by December 31, 2015

Performance Review: Maine experienced 41 unrestrained fatalities during 2014. Maine has experienced 38 unrestrained fatalities in 2015 at the time of report submission and may be on target to achieve this goal.

C-5) Alcohol Impaired Driving Fatalities

To decrease alcohol impaired driving fatalities by 5% from the 2013 calendar base year of 35 to 33 by December 31, 2015

Performance Review: Maine experienced 32 impaired driving fatalities during 2014. Maine has experienced 23 impaired driving fatalities in 2015 at the time of report submission and may be on target to achieve this goal.

C-6) Speeding Related Fatalities

To decrease speeding related fatalities by 5% from the 2013 calendar base year of 49 to 47 by December 31, 2015

Performance Review: Maine experienced 37 speeding related fatalities in 2014. Maine has experienced 36 speeding related fatalities in 2015 at the time of report submission and may be on target to achieve this goal.

C-7) Motorcyclist Fatalities

To decrease motorcycle fatalities by 5% from the 2013 calendar base year of 13 to 12 by December 31, 2015

Performance Review: Maine experienced 11 motorcyclist fatalities in calendar year 2014 however, Maine has experienced 32 motorcyclist fatalities in 2015, at the time of report submission, and will not meet this goal by end of December 2015.

C-8) Unhelmeted Motorcyclist Fatalities

To decrease unhelmeted motorcycle fatalities by 5% from the 2013 calendar base year of 11 to 10 by December 31, 2015

Performance Review: Maine experienced 4 unhelmeted motorcyclist fatalities in calendar year 2014. Maine has experienced 25 unhelmeted motorcyclist fatalities in 2015 at the time of report submission, and will not meet this goal by end of December 2015.

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

To decrease the number of drivers age 20 or younger involved in fatal crashes by 5% from the 2009-2013 calendar base year average of 21 to 20 by December 31, 2015

Performance Review: Maine experienced 16 drivers age 20 or younger that were involved in fatal crashes in calendar year 2014. Maine has experienced 8 drivers age 20 or younger in 2015 that were involved in fatal crashes at the time of report submission and may be on target to meet this goal.

C-10) Pedestrian Fatalities

To decrease pedestrian fatalities by 5% from the 2013 calendar base year of 11 to 10 by December 31, 2015

Performance Review: Maine experienced 9 pedestrian fatalities in calendar year 2014. Maine experienced 17 pedestrian fatalities in 2015 (at the time of report submission) and will not meet this goal by end of December 2015.

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 2 Bicyclist fatalities in 2014. Maine has experienced 0 bicyclist fatalities in 2015 at the time of report submission and is on target to meet this goal.

Behavior Measure Goals

B-1) Seat Belt Usage Rate

To increase statewide seat belt compliance by 2% from the 2013 survey results from 83.6% to 85.3% by December 31, 2015.

Performance Review:

Maine experienced a statewide seat belt compliance rate of 85.5% in 2015. This goal was met.

Activity Performance Measures

ACTIVITY MEASURES			2011	2012	2013	2014	2015
A-1	# of Seat Belt Citations Issued During Grant –Funded Enforcement Activities	Annual	3,332	2,796	3,485	3,639	3,034
		Moving Average	6,458.8	5,726.2	5,223.8	4,621.6	3,257.2
A-2	# of Impaired Driving Arrests Made During Grant-Funded Enforcement Activities	Annual	503	230	550	540	386
		Moving Average	502.5	448.0	456.8	455.8	417.6
A-3	# of Speeding Citations Issued During Grant-Funded Enforcement Activities	Annual	2,382	1,232	4,853	8,157	8,166
		Moving Average	5,741.0	4,839.2	5,017.2	5,671.2	4,958

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?

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[1] See APPENDIX A for full survey report.

Planning and Administration

Funding Area, Funding Source, and Expended Funds

- S. 402 Planning and Administration

Project Number: PA15-001

Project Description:

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.

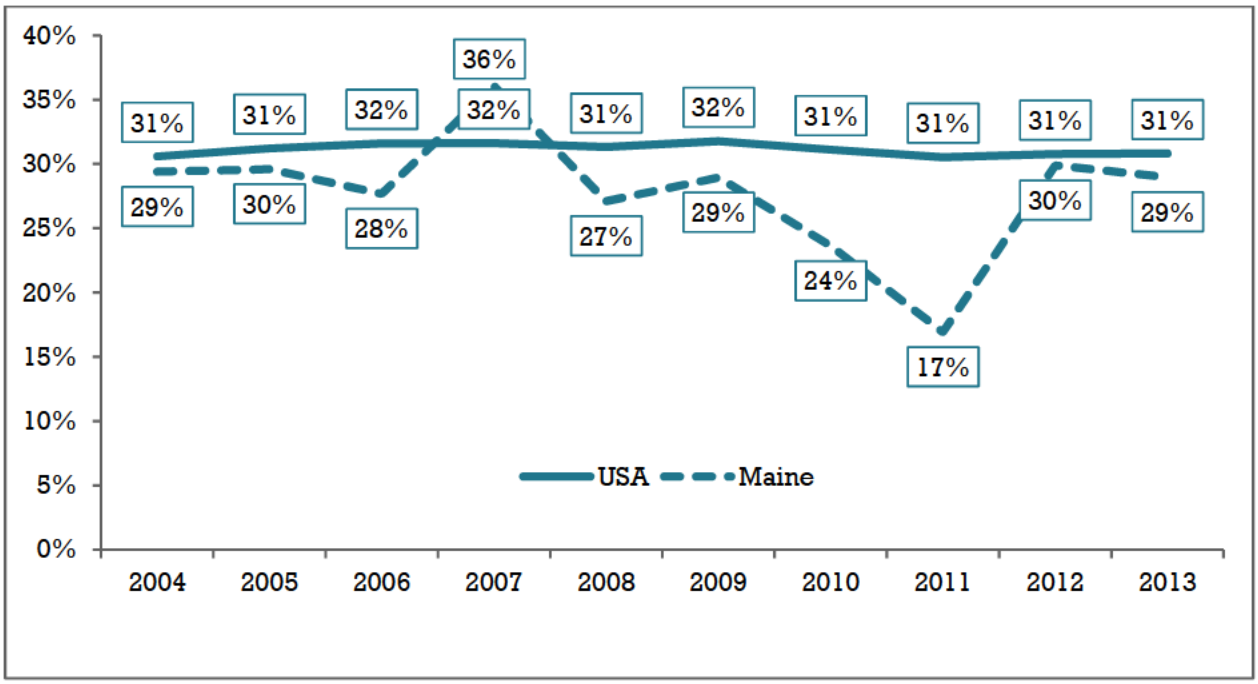
Funds were also expended to cover the costs associated with the Maine Bureau of Highway Safety's web-based Grants Managements System. This system is being developed by Agate Software Inc. and will help to collect grant information electronically allowing for a better sub-grantee grant experience.

FUNDING SOURCE S.402: $314,992.04

Impaired Driving

Problem

Nationally, the percentage of fatalities that were alcohol-related has hovered at 31% from 2010 – 2013 (which is the latest data available from NHTSA). In Maine, the proportion of fatalities that were alcohol-related exceeded the national rate for just one year, 2007, when the rate reached 36%. The rate has since dropped and consistently been below the national average as you can see in the graph below. Maine has been able to stay below the national impaired driving fatality average consistently due to law enforcement training, driver education and increased participation in its alcohol high visibility enforcement grants.



Source: FARS

Impaired Driving Fatalities in Perspective

Additional analysis of alcohol related fatal crashes in the state of Maine directed our office to 5 counties that showed the highest levels of alcohol involved crashes, those being Cumberland, York, Somerset, Penobscot, and Hancock Counties. Cumberland and York Counties are the most heavily populated counties in the State of Maine, according to the most recent Maine census data, and continue to account for about 25% of the alcohol related fatal crashes in the state. Other impaired driving data from 2014 continues to emphasize the importance of impaired driving enforcement during the summer months in Maine, those being July through September. On average 41% of our impaired driving related fatal crashes occur during the summer time period. This problem relates to not only an increase

in warmer weather, but with Maine being a tourist state the population surges during the summer with visitors.

Approximately 24% of all fatalities involved an impaired driver.

MeBHS continued to enhance its impaired driving enforcement with the addition of two new RIDE Teams in FFY2015. MeBHS added a RIDE team in Penobscot County and was able to reestablish our York County RIDE Team with the York County Sheriff's Office. MeBHS will also be adding RIDE Teams in our other problem counties in FFY2016 including Hancock and Sagadahoc Counties. Although impaired driving related fatal crashes continue to be a problem in FFY2015, the numbers have decreased over the years.

Our data from 2009-2013 and 2014 is still directing us to focus on Male drivers around the age of 29. Our public safety messages in the next federal fiscal year will continue to focus on these drivers.

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 2013 calendar base year of 35 to 33 by December 31, 2015

Performance Review: Maine experienced 32 impaired driving fatalities during 2014. Maine has experienced 23 impaired driving fatalities in 2015 at the time of report submission and may be on target to achieve this goal.

Countermeasures & Expended Funds

- Program Management and Operations

  Project Number: AL15-001

  Project Description

  Costs under this program area included FFY2015 salaries, travel (examples included TSI training courses, in state travel to monitor sub-grantees, LEA Chief committee meetings) for highway safety coordinators and program managers, clerical support personnel and operating costs (printing, supplies, state indirect rates, and postage) directly related to this program, such as program development, coordination, monitoring, evaluation, public education and marketing, auditing and training.

  FUNDING SOURCE S.402: $28,838.01

- S.410 Planning & Administration

  Project Number: PAL15-001

  Project Description

  Costs under this program area included FFY2015 salaries, travel (examples included TSI training courses, in state travel to monitor sub-grantees, LEA Chief committee meetings) for highway safety coordinators and program managers, clerical support personnel and operating costs (printing, supplies, state indirect rates, and postage) directly related to this program, such as program development, coordination, monitoring, evaluation, public education and marketing, auditing and training.

  FUNDING SOURCE S.410: $10,380.68

- Impaired Driving High Visibility Enforcement

  Project Numbers are listed in the Table #1 below:

  Project Description

  In 2015, the MeBHS continued its Drive Sober, Maine! impaired driving enforcement campaign in combination with the national campaigns. This impaired driving campaign awarded overtime grants to 68 LEAs to conduct impaired driving enforcement details from April 1, 2015 to September 30, 2015. All grantees were required to perform at least four overtime details or one sobriety checkpoint during the high visibility enforcement periods. Law enforcement officers worked a total of 10,306.75 hours of overtime and

conducted 14,571 traffic stops (1.47 stops per hour). A total of 56 roadblocks were utilized, in addition 20,252 stops and 1,507 hours. These efforts resulted in a total of 451 arrests for operating under the influence.

Table #1

Project Number	Subgrantee	Funds Expended	Funding Source
ID15-010	Paris PD	$4,552.83	S405d
ID15-011	Rumford PD	$8,910.00	S405d
ID15-012	York PD	$2,381.24	S405d
ID15-013	Oxford County SO	$9,780.00	S405d
ID15-014	Mexico PD	$8,910.00	S405d
ID15-015	Aroostook County SO	$11,170.65	S405d
ID15-016	Oxford PD	$4,686.93	S405d
ID15-017	Lincoln County SO	$10,750.00	S405d
ID15-018	Richmond PD	$5,241.72	S405d
ID15-019	Wells PD	$10,000.00	S405d
ID15-020	Fort Fairfield	$6,614.64	S405d
ID15-021	Old Town PD	$2,765.64	S405d
ID15-022	Caribou PD	$7,463.96	S405d
ID15-023	Winslow PD	$7,580.00	S405d
ID15-024	Orono PD	$1,288.19	S405d
ID15-025	Auburn PD	$20,000.00	S405d
ID15-026	Falmouth PD	$4,862.86	S405d
ID15-027	Rockland PD	$3,168.64	S405d
ID15-028	Hampden PD	$3,284.34	S405d
ID15-029	Bath PD	$8,793.75	S405d
ID15-030	Sagadahoc County SO	$9,804.00	S405d
ID15-031	Augusta PD	$9,000.00	S405d
ID15-032	Belfast PD	$14,315.00	S405d
ID15-033	Hancock County SO	$8,460.00	S405d
ID15-034	Maine State Police	$45,758.52	S405d
ID15-035	Androscoggin County SO	$4,704.00	S405d
ID15-036	Fort Kent	$3,882.94	S405d
ID15-037	Farmington PD	$15,216.12	S405d
ID15-038	Knox County	$21,180.75	S405d

	SO		
ID15-039	Mechanic Falls PD	$0.00	S405d
ID15-040	Monmouth PD	$7,200.00	S405d
ID15-041	Sabattus PD	$6,150.00	S405d
ID15-042	Eliot PD	$11,126.03	S405d
ID15-043	South Portland PD	$4,200.80	S405d
ID15-044	Berwick PD	$7,735.00	S405d
ID15-045	North Berwick PD	$8,340.00	S405d
ID15-046	Skowhegan PD	$441.76	S405d
ID15-047	Portland PD	$2,401.12	S405d
ID15-048	Kennebec County SO	$11,880.00	S405d
ID15-049	Gorham PD	$15,230.80	S405d
ID15-050	Lisbon PD	$3,401.89	S405d
ID15-051	Rockport PD	$2,282.34	S405d
ID15-052	Oakland PD	$8,200.00	S405d
ID15-053	Dexter PD	$8,273.89	S405d
ID15-054	Saco PD	$1,452.68	S405d
ID15-055	Dover-Foxcroft PD	$9,983.44	S405d
ID15-056	Ellsworth PD	$3,619.00	S405d
ID15-057	Somerset County SO	$3,048.68	S405d
ID15-058	Wilton PD	$6,186.84	S405d
ID15-059	Houlton PD	$2,800.00	S405d
ID15-060	Topsham PD	$6,361.60	S405d
ID15-061	Westbrook PD	$4,548.08	S405d
ID15-062	Bridgton PD	$5,152.00	S405d
ID15-063	Norway PD	$8,925.76	S405d
ID15-064	Brunswick PD	$2,166.95	S405d
ID15-065	Scarborough PD	$11,400.00	S405d
ID15-066	Damariscotta PD	$8,680.00	S405d
ID15-067	Presque Isle PD	$8,000.00	S405d
ID15-068	Jay PD	$5,440.00	S405d

ID15-069	**Winthrop PD**	**$5,789.25**	**S405d**
ID15-070	**Bucksport PD**	**$4,863.25**	**S405d**
ID15-071	**Milo PD**	**$2,418.87**	**S405d**
ID15-072	**Franklin County SO**	**$12,077.34**	**S405d**
ID15-073	**Lewiston PD**	**$6,998.71**	**S405d**
ID15-074	**Cumberland County SO**	**$1,755.00**	**S405d**
ID15-075	**Dixfield PD**	**$6,990.26**	**S405d**
ID15-076	**Brownville PD**	**$1,014.74**	**S405d**
ID15-077	**Milbridge PD**	**$2,380.00**	**S405d**

FUNDING SOURCE S.405d: $503,442.80

- Specialized Law Enforcement Training

  Project Number: ID15-005

  Project Descriptions:

  Drug Recognition Expert Program (DRE)

  There are currently 77 active Drug Recognition Experts in Maine, up from 70 last year. MCJA graduated a school in the summer of 2015 with 21 students and had a large number of DREs leave the program for various reasons. The next school is scheduled for February of 2016. 23 candidates are scheduled for interviews on December 14 and 15, 2015.

  MCJS had the opportunity to send half of the 2015 class to Baltimore, Maryland to evaluate drug impaired individuals at the County Jail. This was a large success and all candidates had completed their 12 required evaluations during the week they were there. This was a great success that we hope to repeat in 2016.

  The Department of Human Services Health and Environmental Testing Lab (HETL) has estimated that 292 urine samples have been received from DREs' for analysis as of the date of this report. Last year the number was at 223.

  MCJA continues to require DREs' to enter their evaluations in the National DRE Database which is managed by NHTSA. The database is very helpful in tracking individual DRE performance and allows us to process recertification applications more efficiently.

  In August of 2015, Trooper Aaron Turcotte and TSRP Scot Mattox attended the 21st Annual IACP Training Conference on Drugs, Alcohol and Impaired Driving in Cincinnati,

Ohio. Several other Maine agencies paid for and sent DRE's to the conference. Trooper Turcotte and Scot Mattox assisted with the development and instruction of the 2015 mandatory DRE refresher training held at the MCJA on August 27th. Presenters discussed MeBHS updates, conference updates, changes to the National Database and the resources available on the MeBHS web site. Steve Pierce from the HETL answered questions related to the HETL. Dr. Jack Richman was the guest speaker and provided information on HGN topics as well as Pupil Assessment of drug impaired individuals. Don Finnegan, Town of Rockland DRE, reviewed several drug evaluations with attendees and Aaron Turcotte discussed Marijuana and Driving. The class was very well attended with 67 DREs', presenters and other highway safety professionals participating. Standardized Field Sobriety Testing (SFST)

The MCJA conducted or processed 10 full SFST student classes with 113 students attending. MCJA processed 14 SFST (4 hour) Refresher classes statewide with 73 students attending. MCJA 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.

Standardized Field Sobriety Testing (SFST)

The MCJA conducted or processed 11 full SFST student classes with 126 students attending. MCJA processed 15 SFST (4 hour) Refresher classes statewide with 45 students attending. MCJA did not run an SFST Instructor Development class this year as we have 73 active instructors which is an adequate number at this time.

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. MCJA offered a DITEP Train the Trainer in Bangor in April and a full DITEP class in Old Town in August.

Advanced Roadside Impaired Driver Enforcement (ARIDE)-

The MCJA offered 2 ARIDE classes this year which were held at Rockland and Bangor Police Departments. A total of 30 students attended the two day training. The IACP has created an on-line version of the ARIDE training that is available to officers. MCJA has decided to endorse the on-line training as an entry level overview which will not be recorded in the officer's training transcript at MCJA.

On January 1, 2015, 523 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.

MCJA did not run any Breath Testing Device Instructor training in 2015 as there are 106 active instructors which is an adequate number at this time. MCJA processed 51 BTD Certification classes with a total of 197 students attending.

The JPMA development of the on-line BTD Re-cert program is moving forward. MCJA has completed the script and are in production with testing scheduled by the first of the year.

Senior Instructors have also been working on a re-write of the BTD Certification and Re-certification manuals in addition to support materials. MCJA is looking at a release date of early in 2016.

Other Activities

- Continue to attend meetings of the MeBHS Impaired Driving Task Force.
- Working closely with MeBHS to maintain the law enforcement resources area in the impaired driving section of their web site.
- Will be looking at the development of an on-line SFST refresher training component for 2016.

FUNDING SOURCE S.405d: $42,943.23

- Regional Impaired Driving Task Force Teams (RIDE)

  Project Number: See Table Below

  Project Description:

  The RIDE project gained a new team in FFY2015 with the addition of the Dirigo RIDE team. The Dirigo Team was administered by the Maine State Police and conducted enforcement in Penobscot County.

  Dirigo RIDE Team, comprised of mainly State Troopers with a few additional local law enforcement officers, conducted details between May 2015 and September 30, 2015, resulting in 5,387 traffic stops including roadblocks:

  - 22 arrests for impaired driving
  - 15 citation for possession of drugs
  - 32 arrests/citations for various other offenses,

  The York County RIDE Team, comprised of deputies from the York County Sheriff's Office and officers from Kennebunkport, Saco, York, Kennebunk, Ogunquit and North

Berwick conducted 5 Saturation Patrol details between October and August, resulting in 215 traffic stops resulting in:

- 9arrests for impaired driving,
- 8 citation for possession of drugs,
- 104 arrests/citations for various other offenses, and

Project Number	Subgrantee	Funds Expended	Funding Source
AL15-007	**Maine State Police**	**$22,143.52**	**S410**
AL15-008	**York County Sheriff's Office**	**$14,616.56**	**S410**

FUNDING SOURCE S.410: $36,760.08

Traffic Safety Resource Prosecutor (TSRP)

Project Number: ALC15-002

Project Description:

Funds supported the full time TSRP position, which assisted Maine law enforcement and prosecutors in the prosecution of impaired driving-related crimes. The TSRP is encouraged by NHTSA and proven effective in the fight against impaired driving. The MeBHS' TSRP attended many conferences throughout FFY2015 and developed three new prosecutor positions within the Maine District Attorney's Office. These prosecutors will be employed to prosecute impaired driving related cases only. Below is a summarized list of all TSRP activities in FFY2015:

Implementation of the Law Enforcement Phlebotomy Technicians Program (LEPTs)

One of the impediments to law enforcement investigation of impaired driving cases in Maine is the procurement of blood tests. In many areas of the State, officers have a difficult time obtaining blood samples because civilian blood technicians are often unavailable. A pilot program was developed to train LEOs to draw blood for evidentiary purposes in OUI cases prior to the MeBHS acquiring a TSRP; however, it was stalled for legal reasons concerning evidence admissibility and liability. After MeBHS hired Scot Mattox Esq. to the TSRP position, our TSRP engaged in several months of legal research and program development with the appropriate liability insurers, medical, law enforcement, and legal professionals in getting this program up and running again. There are now about 25 LEPTs working in the field in Maine with more classes scheduled for 2016.

Maine's First OUI Summit

MeBHS' TSRP assisted AAA Northern New England and our in-house office staff in the planning, development and implementation of Maine's first OUI summit. The one-day conference included national level speakers on a variety of impaired driving topics relevant to Maine prosecutors and law enforcement. The well-attended and well-received summit included a mock OUI drugs trial and was certified by the Maine Board of Overseers of the Bar for continuing legal education credits.

Maine Prosecutor Training

MeBHS' TSRP worked with the Maine State Police Impaired Driving Reduction Trooper and the Maine State Police Senior Crash Reconstructionist to create a two-day training seminar on Impaired Driving Investigation and Fatal Crash Reconstruction basics for Prosecutors. This was the first class of its kind in Maine and gave Maine prosecutors and Bureau of Motor Vehicle Hearings Examiners in 5 of the 7 Districts introductory information on how Maine law enforcement investigates OUI cases and fatal accidents. The class was well attended and received excellent reviews with requests for more sessions planned in 2016. The class was also accredited for continuing legal education credits.

Maine's Impaired Driving Enforcement List Serve

MeBHS' TSRP upgraded and re-implemented Maine's fledgling OUI Enforcement List Serve and now contributes relevant OUI Enforcement information regularly to Maine LEOs and Prosecutors.

Maine's DRE and LEPT Call-Out Reimbursement Plan

MeBHS' TSRP assisted with implementing a grant that will reimburse local police departments for overtime expenses incurred for the off-duty call outs of department DREs and LEPTs. This program eliminates the financial constraints for local departments utilizing these law enforcement specialists and thereby increases the availability of these specialists to all LEOs in Maine.

Maine Secretary of State's Legislative Work Group on Marijuana and Driving

MeBHS' TSRP was a member of the Secretary of State's Legislative Work Group on Marijuana and Driving. This working group consisted of Marijuana and traffic safety experts throughout Maine and was charged with making a formal recommendation for the per se' limit of Marijuana to possibly be incorporated in Maine's OUI law in 2016.

TSRP Training

MeBHS' TSRP attended a number of conferences this past year in furtherance of professional education and knowledge. The conferences have provided invaluable knowledge and information which have produced a direct and positive effect on the ability to navigate through many of the complicated issues attendant to OUI enforcement in our State. The conferences were: (1) The Colorado Chiefs of Police Association Annual Conference on Marijuana and Driving; (2) The National DRE Conference; (3) The Governors Highway Safety Association National Conference; (4) The National Traffic Safety Resource Prosecutors Annual Conference; (5) The Maine Prosecutors Annual Conference; (6) The New Hampshire Annual Conference on Motor Vehicle Law; (6) The National District Attorney's Association Course on Drug Investigation.

State OUI Training Seminars

MeBHS' TSRP was a presenter at a number of Impaired Driving related training for Maine Prosecutors, Bureau of Motor Vehicle Hearings Examiners, and Law Enforcement including: the Maine Criminal Justice OUI Basic School; DRE School; Role Call training at several police departments throughout the State; A.R.I.D.E. Training; L.E.P.T. Training; SFST and Intoxilyzer Training. The TSRP participated in about 20 trainings during the year. Maine's TSRP always responds to every request for training and has been fortunate enough to be able to accommodate every request.

Impaired Driving Special Prosecutors

MeBHS' TSRP assisted with the creation and implementation of a grant from Highway Safety for dedicated Impaired Driving Special Prosecutors to be placed in three different prosecutorial districts in Maine. These prosecutors will be dedicated full-time to increasing the technical expertise and ability of these offices to prosecute OUI cases – especially OUI Drugs. This project is slated to take place in FFY2016

FUNDING SOURCE S.410: $154,204.44

Law Enforcement Impaired Driving Traffic Enforcement Equipment

Project Number: ID15-001

Project Description:

Funds supported the procurement of equipment for law enforcement that included Watchguard in-cruiser video cameras, as approved in our FFY2015 HSP. This equipment assisted law enforcement in the detection and prosecution of impaired drivers. WatchGuard 4RE In-Cruiser Video Cameras were provided through an existing contract established in FFY2014. Participating LEAs provided a cash match for purchased units. 23 law enforcement agencies participated in this equipment opportunity during FFY2015.

FUNDING SOURCE S. 410: $628,173.94; S.405D $138,437.04

Maine Impaired Driving Summit

Project Number: AL15-003

Project Description:

Impaired driving is an evolving problem on our highways. Since the 1980s, significant improvements have been made in the area of alcohol-impaired driving. Drugged driving, however, is a growing problem in the nation. According to the Centers for Disease Control and Prevention, approximately 18% of motor vehicle fatalities are associated with drugs other than alcohol. With no nationally-accepted standard for measuring the level of drug impairment, detecting drug-impaired drivers is challenging. GHSA supports elevating drugged driving to a national priority and calls upon states to implement strategies in drugged driving detection, enforcement, and prosecution. Substance-impaired driving should be approached as a single issue with comprehensive policies that address alcohol, illicit/illegal drugs, prescriptions, and over-the-counter medications. With our partners from AAA and the Office of the Maine Secretary of State, MeBHS hosted an Impaired Driving Summit to increase awareness of this growing issue in April 2015. 134 law enforcement, prosecutors, judges, district attorneys, etc. participated. The summit was held at the Augusta Civic Center and featured many expert speakers from around the nation.

FUNDING SOURCE S. 402: $13,018.11

PBT Mobile Breath Testing Device Equipment Purchase

Project Number: Not Applicable

Project Description:

Funds will support the procurement of up to fifty new PBT Mobile Breath Testing Devices for law enforcement t and the Maine Criminal Justice Academy to enhance sobriety and safety check points and to assist with Standard Field Sobriety Test (SFST) training. The devices are used in order to test blood alcohol levels of SFST training participants. The use of these devices will further enhance the training and enforcement of impaired driving throughout the state. The specific model that will be available to LEA's through this equipment grant will be determined through the State of Maine Request for Quote process. Our project cost was based on the Drager AlcoTest 7510 PBT Device. These range around $3,000.00 apiece.

FUNDING SOURCE: THIS PROJECT WAS NOT FUNDED IN FFY2015. THERE WAS A LEGISLATIVE BILL PUT FORWARD TO ALLOW THE USE OF PBT'S IN THE PROSECUTION OF IMPAIRED DRIVING CASES, BUT IT WAS DEFEATED, SO THE USE OF PBT INSTRUMENTS IS NOT ALLOWED IN THE STATE OF MAINE. THIS PROJECT WILL BE ELIMINATED IN FFY2016.

Maine State Police Impaired Driving Reduction Position

Project Number: AL15-004

Project Description:

Funds supported the creation of a new position with the Maine State Police Traffic Safety Unit. This position assisted with the creation of and the administration/improvement of

various current traffic safety programs aimed at reducing impaired driving. Trooper Aaron Turcotte was hired in 2015 as the Impaired Driving Reduction Trooper. With the help of the MeBHS Law Enforcement Liaison Trooper Turcotte developed and administered the Dirigo Regional Impaired Driving Enforcement Team. This team is located in Penobscot county which was one of the Bureau's highest counties in impaired driving related crashes from 2010-2013. Trooper Turcotte is an active member of the Impaired Driving Task Force and has been tasked with increasing the number of DRE's not only in the Maine State Police, but statewide. This position is very important and will help to increase the state's ability to enforce impaired driving laws.

FUNDING SOURCE S.402: $68,256.14

Law Enforcement Agency DRE Callout Reimbursement

Project Number: AL15-005

Project Description:

This project was a direct result of the efforts of the Maine Impaired Driving Task Force. Multiple law enforcement members on the task force expressed a reluctance to allow DREs from their agencies to respond to requests from other agencies because they lack the ability to pay the overtime for the DRE. The MeBHS attempted to eliminate this issue by reimbursing overtime expenses from any agency which provides DRE services to another agency on request. This maximizes the expertise of the limited number of DREs in Maine. With the limited number of DRE's the Impaired Driving Task Force determined, by polling LEA's, that if the MeBHS reimbursed for a DRE callout then DRE's in one office could help service another agency in the state. Therefore making DRE's more effective in rural areas of the state, such as Aroostook County, where there are limited numbers of DRE's. MeBHS had 24 law enforcement agencies submit cash requests as a part of this program. It will take the agency several years to evaluate if this program was successful. MeBHS is measuring success by tracking impaired driving related crashes and monitoring if the number of DRE's in the State of Maine increases.

FUNDING SOURCE S.402: $2,755.83

Judicial Outreach Liaison

Project Number: Not implemented in FFY2015

Project Description:

Funding will be for the anticipated creation of a Judicial Outreach Liaison (JOL) position at the Maine Bureau of Highway Safety. The JOL will be responsible to develop a network of contacts with judges and judicial educators to promote judicial education related to sentencing and supervision of DWI offenders, court trial issues, and alcohol/drug testing and monitoring technology. Make presentations at meetings, conferences, workshops, media events and other gatherings, focusing on impaired driving and other traffic safety issues. The key to having a JOL is to be able to identify barriers that hamper effective training, education or outreach to the courts and recommend alternative means to address these issues and concerns. With the help of Traffic Safety Resource Prosecutor the JOL would

be able to achieve uniformity is regards to impaired driving prosecution throughout the entire state of Maine.

FUNDING SOURCE: NO FUNDS EXPENDED. PROJECT NOT IMPLEMENTED IN FFY2015

Blood Drug Lab Testing

Project Number: Not implemented in FFY2015

Project Description:

Use of any mind-altering drug (prescription or illicit) makes it highly unsafe to drive a car just like driving after drinking alcohol. Drugged driving puts at risk not only the driver but also passengers and others who share the road. According to the National Highway Traffic Safety Administration's (NHTSA) 2007 National Roadside Survey, more than 16 percent of weekend, nighttime drivers tested positive for illegal, prescription, or over-the-counterdrugs. More than 11 percent tested positive for illicit drugs. Maine has been identified as being deficient in testing blood for drugs in deceased and alive drivers involved in a fatal crash. We do test for alcohol. This project will allow Maine to test blood for drugs and gather data to assist us with our efforts to decrease impaired driving crashes and fatalities. Tests will be performed in the State DHHS Health and Environmental Testing lab at an estimated beginning cost of $225.00 each. The Maine Health & Environmental Testing Lab who would perform these tests received the needed equipment in FFY2015 to test for drugs in blood. They have been working throughout FFY2015 to establish testing protocols for TCH and will develop testing protocols for other drugs. MeBHS hopes to be testing for drugs in blood during FFY2016.

FUNDING SOURCE: PROJECT NOT IMPLEMENTED IN FFY2015.

Drug Chemist Salaries (Proportional)

Project Number: Not implemented in FFY2015

Project Description:

In FFY2014 Maine supplied the DHHS Health and Environmental Testing Lab with a Randox Evidence Investigator Analyzer to test drug in urine and blood. Maine had not previously tested blood for drugs using any in-state methods. In order to begin testing blood for drugs in the State, chemists will need to focus attention on developing acceptable standards, procedures and protocols. Chemist time will also be required for the actual testing of the blood for drugs. This is a new process for Maine. The MeBHS will ensure that chemist(s) time is reported proportionally and follows NHTSA standards for record and time-keeping.

FUNDING SOURCE: NOT IMPLEMENTED IN FFY2015

LCMS Instrument Purchase

Project Number: AL15-006

Project Description:

Maine is the only state in the nation that does not routinely test blood for drug presence in fatal crashes. In the 2015 HSP, page 48, Maine requested S. 402 funding in the amount of $400k for blood drug testing, which was approved. Maine was not prepared to use these funds in FFY15 for testing blood for drugs in-state until instrumentation allowing our DHHS Health and Environmental Testing Lab could be procured. MeBHS sought approval from NHTSA during FFY2015 in order to procure instrumentation in order to perform in state blood drug testing. The instrument that was purchased was a Shimadzu LCMS-8030 Triple Quad Mass Spec with Prominence binary gradient HPLC. The purchase included a 2 year extended warranty plus service agreement and meets BAA requirements as being manufactured in the State of Oregon.

FUNDING SOURCE S.402: $255,506.31

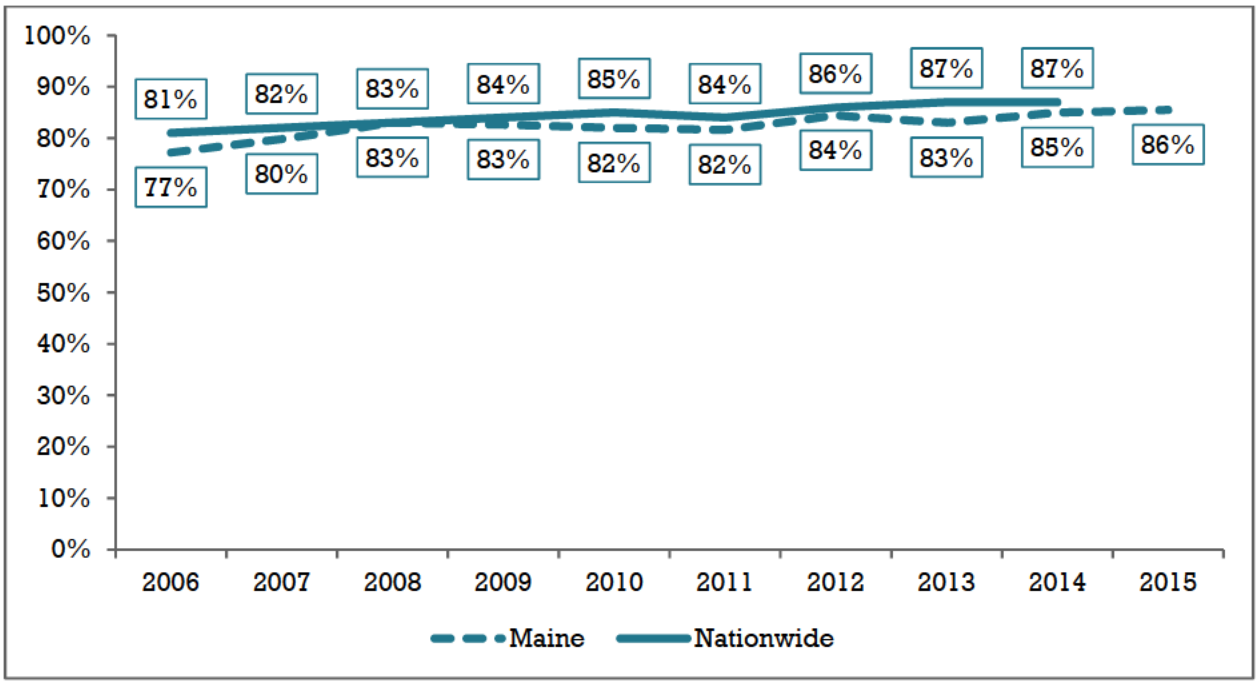
Future Countermeasures

- The MeBHS will continue to work with its partners to address impaired driving by using proven countermeasures.
- The MeBHS will continue to analyze data to ensure RIDE Teams and other grant funded activities are evidence-based.

Occupant Protection & Child Passenger Safety

Problem

The 2015 annual observational seat belt survey began in June of 2015 following the national high visibility seat belt enforcement campaign. The observed seatbelt use rate for 2015 was 85.5%—the highest rate of seatbelt use to date. This seat belt rate beat our previous seat belt rate in 2014 of 85% which was our highest on record. While Maine's rate remains slightly below the national rate of 87%, 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.



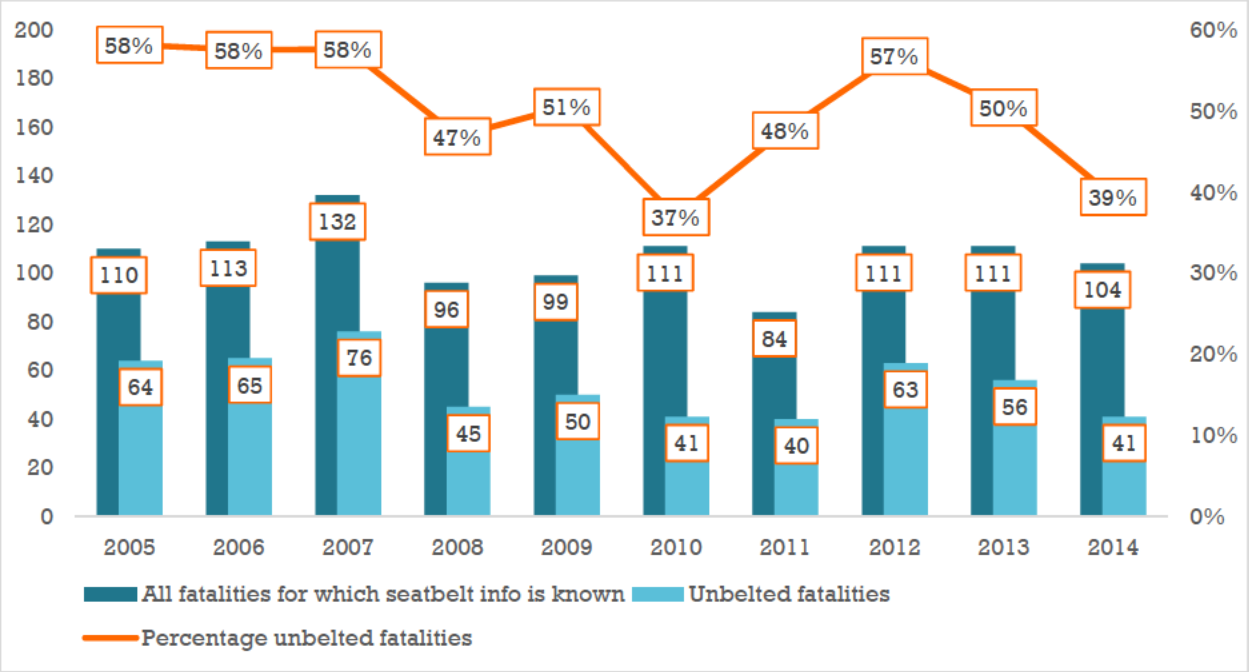
Source: State Data Files

In 2013, there were 144 occupant fatalities involving passenger vehicles. Unrestrained vehicle occupants made up approximately 51% of these fatalities (n=56).[3] This number

[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.

decreased in 2014 with 131 fatalities on Maine roadway and unrestrained occupants making up 39% of those fatalities (n=41) [4].



Source: State Data Files

Gender and Age are important factors in determining seat belt usage in the State of Maine. Approximately 77% of females involved in fatal crashes were wearing seat belts compared to 64% of Males. This creates challenges and requires MeBHS to create educational materials geared to the population segment experiencing the most problems. As MeBHS plans their marketing startegies for upcoming fiscal years data like this is used to determine where to direct our messaging. Through 2014 occupants older than 21 years of age were more apt to be wearing a seat belt then their younger counterparts. 70% of older occupants (ages 21 and up) were wearing seat belts in a fatal crash compared to 59% of younger occupants (ages 12 to 20). This helped to direct our eduational messaging a specific demographic targets in order to help increase seat belt usage. Seat belt usage again increased in FFY2015.

MeBHS has experienced success with our Regional Impaired Driving Enforcement teams in the realm of impaired driving. These teams are designed to enforce impaired driving laws in Maine Counties that are expericing the highest levels of impaired driving fatal crashes. In FFY2015 MeBHS was able to determine through data anaylsis our most problematic counties in terms of unrestrained occupants. Penobscot, Cumberland, York, Hancock, Piscataquis, Somerset, and Washington Counties were all problem counties. Using the RIDE Team model our department worked throughout FFY2015 to establish TOPAZ Teams (Targeted Occupant Protection Awareness Zones) in order to decrease the number of unrestrained motor vehicle

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

occupants. These teams however not implemented in FFY2015 will be implemented in FFY2016 and will help to increase the seat belt usage rates.

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 2013 survey results from 83.6% to 85.3% by December 31, 2015.

Performance Review:

Maine experienced a statewide seat belt compliance rate of 85.5% in 2015. This goal was met.

#2 *Goal*

To decrease unrestrained passenger vehicle occupant fatalities by 5% from the 2013 calendar base year of 56 to 53 by December 31, 2015

Performance Review: Maine experienced 41 unrestrained fatalities during 2014. Maine has experienced 38 unrestrained fatalities in 2015 at the time of report submission and may be on target to achieve this goal.

Countermeasures & Expended Funds

Program Management and Operations

Project Number: OP15-001

Project Description:

Costs under this program area included FFY2015 salaries, travel (examples included TSI training courses, in state travel to monitor sub-grantees, LEA Chief committee meetings) for highway safety coordinators and program managers, clerical support personnel and operating costs (printing, supplies, state indirect rates, and postage) directly related to this program, such as program development, coordination, monitoring, evaluation, public education and marketing, auditing and training.

FUNDING SOURCE S.402: $134,885.81

Occupant Protection Equipment Operations & Maintenance

Project Number: OP15-002

Project Description:

Costs under this program area include maintenance costs associated with the Rollover Demonstration Trailer and Seat Belt Convincer Demonstration Trailers. Both trailers are used in occupant protection education programs which are carried out by our Traffic Safety Educator.

FUNDING SOURCE S.402: $9,047.72

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 18 to May 31, 2015. This year, 54 law enforcement agencies participated. Participating agencies included 44 local police departments, 9 county sheriff offices, and 8 troops from the Maine State Police

During the enforcement period, officers stopped a total of 7202 vehicles over 3830 hours (approximately 1.88 stops per hour). A total of 3034 seatbelt summons were issued during these hours. During the 2133 nighttime enforcement hours, 1853 seatbelt summons were issued. In addition to seatbelt summons, additional charges were made for speeding (255), operating under the influence of alcohol/drugs (8), operating after suspension (110), drugs (81), and warrants (30).

Agency	Grant Number	Expended	Source
Kennebec County SO	OP15-020	**4,458.12**	S402, S.405s
Caribou Police Department	OP15-021	**2,608.62**	S402
Aroostook County SO	OP15-022	**3,914.19**	S402,405B
Old Town Police Department	OP15-023	**1,958.28**	405B
Auburn Police Department	OP15-024	**4,000.00**	405B
Lincoln County SO	OP15-025	**5,200.00**	405B
Berwick Police Department	OP15-026	**3,600.00**	405B
Knox County SO	OP15-027	**7,672.50**	405B
Androscoggin County SO	OP15-028	**3,920.00**	405B
Waterville Police Department	OP15-029	**2,000.00**	405B
Wells Police Department	OP15-030	**2,845.24**	405B
Kennebunkport Police Department	OP15-031	**2,176.40**	405B
Sabattus Police Department	OP15-032	**2,800.00**	405B

Bath Police Department	OP15-033	**2,940.00**	405B
Portland Police Department	OP15-034	**1,693.33**	405B
Scarborough Police Department	OP15-035	**3,000.00**	405B
Augusta Police Department	OP15-036	**3,040.00**	405B
Sanford Police Department	OP15-037	**3,800.00**	405B
South Portland Police Department	OP15-038	**1,980.01**	405B
Paris Police Department	OP15-039	**352.64**	405B
York Police Department	OP15-040	**2,618.39**	405B
Cape Elizabeth Police Department	OP15-041	**2,787.48**	405B
Farmington Police Department	OP15-042	**2,911.52**	405B
Rumford Police Department	OP15-043	**2,880.00**	405B
Westbrook Police Department	OP15-044	**1,800.00**	405B
Winslow Police Department	OP15-045	**3,680.00**	405B
Lisbon Police Department	OP15-046	**1,700.00**	405B
Franklin County SO	OP15-047	**5,390.10**	405B
Rockland Police Department	OP15-048	**2,684.92**	405B
Windham Police Department	OP15-049	**3,329.82**	405B
Old Orchard Beach Police Department	OP15-050	**2,700.00**	405B
Brunswick Police Department	OP15-051	**1,540.00**	405B
Gorham Police Department	OP15-052	**3,741.60**	405B
Fort Kent Police Department	OP15-053	**1,442.52**	405B
Piscataquis County SO	OP15-054	**1,540.00**	405B
Cumberland County SO	OP15-055	**3,960.00**	405B
Lewiston Police Department	OP15-056	**3,152.53**	405B
Oakland Police Department	OP15-057	**3,200.00**	405B
Freeport Police Department	OP15-058	**1,704.58**	405B
Mechanic Falls Police Department	OP15-059	**1,890.64**	405B
Rockport Police Department	OP15-060	**1,845.00**	405B
Presque Isle Police Department	OP15-061	**2,000.00**	405B
Ellsworth Police Department	OP15-062	**940.00**	405B
Mexico Police Department	OP15-063	**3,280.00**	405B
Maine State Police	OP15-064	**22,347.97**	405B
York County Sheriff's Office	OP15-065	**5,218.43**	405B
Dover-Foxcroft Police Department	OP15-066	**4,551.84**	405B
Kennebunk Police Department	OP15-067	**1,515.08**	405B
Buxton Police Department	OP15-068	**0.00**	405B

Cumberland Police Department	OP15-069	**2,902.56**	405B
Sagadahoc County SO	OP15-070	**3,000.00**	405B
Norway Police Department	OP15-071	**2,387.24**	405B
Dixfield Police Department	OP15-072	**0.00**	405B
North Berwick Police Department	OP15-073	**3,892.00**	405B
Gardiner Police Department	OP15-074	**2,520.00**	405B

Funding Source: S.402 $5,312.32; 405B $166,446.81; S.405s $3,254.42

ROPE Enforcement Team Project

Project Number: Not implemented in FFY2015. Project underway for FFY2016

Project Description:

Grant funds will be awarded to LEAs to enforce the primary seatbelt and child passenger safety belt laws. A high proportion of Maine's highway fatalities are unbelted fatalities. The lowest proportion occurred in 2010, when 25% of all highway fatalities were unbelted, and the highest percentage of unbelted fatalities occurred in 2012, when 46% were unbelted. The MeBHS teamed with the MaineDOT and the Maine Violations Bureau to address this issue with a specific focus on young drivers and middle-age drivers. The MeBHS has identified areas in the state of Maine with the highest numbers of unbelted fatalities and will be developing Targeted Occupant Protection Awareness Zones (TOPAZ) Teams in the problem counties, such as Cumberland, Hancock, Kennebec, Penobscot, Somerset, and York. Saturation and safety checks are proven countermeasures to increase seat belt compliance. ROPE Teams were unable to be created in FFY2015. The program coordinator for Occupant Protection along with our Law Enforcement Liaison are planning on the inception of these teams in FFY2016 under the new name of TOPAZ.

FUNDING SOURCE: NOT IMPLEMENTED IN FFY2015

Child Seats, Supplies and Educational Materials for Distribution Sites

Project Number: CR16-001

Project Description:

Funding for this project supported new child safety seats, supplies and materials for Maine income eligible families through distribution sites. The safety seats included: Convertible car seats and high back boosters, car beds, harness and pad replacement kits for car bed loaners, car seat levelers (pool noodles) used to assist in proper car seat installation and education to families. Educational materials included: Bureau CPS brochures explaining Maine law and federal recommendations for greater safety; and bookmarks outlining Maine law for booster seat use and the 5 step test to ensure continued boosters seat use until proper seat belt fit. Approximately 850 safety seats were distributed in FFY2015 to income eligible families and the need for seats continues. Car seats were issued monthly, as needed, to locations that provided specific data. Distribution information has to be logged into the database, with detailed recipient information, car seat type, and model numbers.

Additional information required included car seat order forms with current inventory totals The top six distribution sites in the state of Maine included: Down East Community Hospital in Machias, Catholic Charities in Portland, Waldo Community Action Partners/Belfast Fire Department in Belfast, Central Maine Medical Center in Lewiston, and Gorham Fire Department in Gorham and Penobscot Bay Medical Center in Rockport. The aforementioned distribution site locations were/are in high population, low income areas in east, central, western, and southern Maine regions. The northern half of the state of Maine is lesser populated, but had a well distributed representation of CPS educators providing car seat distribution and education.

FUNDING SOURCE S.402: $20,911.08; S.2011$23,322.00

Annual Observational Seat Belt Survey (Children and Adults)

Project Number: OPB15-003

Project Description:

Funds supported the contract with the University of Southern Maine, Muskie School for the MeBHS annual observational and attitudinal surveys. This is a project required by NHTSA. The 2015 Maine Seat Belt Survey and Attitudinal Survey which is a direct result of this project can be found in Appendix A of this report.

Funds also supported a contract with Survey Research Center (SRC) at the Muskie School of Public Service, University of Southern Maine and Preusser Research Group, Inc (Trumbull, CT) for the MeBHS child passenger observational and attitudinal surveys. The observational study, was suggested for implementation during our 2014 Occupant Protection Assessment as a way for us to judge and evaluate the effectiveness of our child passenger safety program(s). The study was conducted from May 21st through May 27th, 2015. The sampling and observation method for the study started with a sampling of counties. Observation sites were distributed across counties based on population. Sites were selected at locations where traffic must come to a complete stop in order to allow observation of both front-seat and rear-seat child restraint details, and to select a mix of signalized intersections and stop-sign-controlled intersections according to their traffic volume. This probability-based sampling method was utilized to select 100 intersections for observation, including 72 signalized intersections and 28 stop-sign intersections. The 100 intersections were from 12 (making up 91% of Maine's population) of Maine's 16 counties. The 12 counties were selected because they were part of Maine's statewide seatbelt survey. Restraint use was observed and recorded, by seating position within each vehicle, for all drivers and for all children age 17 or younger. This resulted in data for 10,454 drivers and 1,229 children age 11 or younger (the focus of this report).The overall CSS use rate is very high, with 93.3% of all children (excluding 7 children with undetermined use) under age 12 being in some type of restraint. As seen in Table B, use rates vary by age, ranging from a high of 98.7% of all children under a year old to just under 90% of those 8 – 11 years old. The overall rate for children under 12 in 2007 was 89.7%. Future study considerations will consider types of misuse. Three out of 4 car seats are installed incorrectly. The concern is now less on whether restraints are being used and more on whether restraints are being used properly

Grantee: Muskie School of Public Service, University of Southern Maine

FUNDING SOURCE S.405B: $226,709.88; S.402 $1,000.00

Child Passenger Safety Technician and Instructor Training

Project Number: CP15-001

Project Description:

Funds supported the training and certification for new and current technicians as well as recertification for those with expired credentials. The State of Maine has approximately 220 federally certified car seat technicians and 7 instructors. There is one instructor candidate that is waiting for the next certification training to complete training to become an instructor. There are 4 additional instructors in the State of Maine that have decided not to work with the Maine Bureau of Highway Safety. Having well-trained technicians and instructors has been proven to increase knowledge of occupant protection safety of children, parents, guardians and caregivers. The Bureau held 2 certification trainings in FFY2015. Training locations included Kennebunk Fire Department April 27-30, 2015 in southern Maine and the Orono Police Department September 21-24, 2015 in northern Maine. From the 2 certification trainings there were 36 individuals certified.

Roving Instructor: funds also supported one instructor to travel to sites on an as needed basis to provide seat sign-offs for technicians that were unable to attend seat check events. The Bureau CPS Coordinator monitored technician expiration dates and contacted technicians that were close to expiration. Those technicians that had a few remaining seats for sign-off were given the option to meet with an instructor. Technicians were asked to coincide appointments with instructor seat sign-offs for a best case scenario. Travel time was not paid for sign-offs, but mileage and time working with the technician was reimbursed. Instructors were sought for their geographic location to technicians in their area. There were/are technician proxies available in the north, east, and west regions of the state of Maine to assist technicians that needed assistance with car seat sign offs. There were also several instructors available in the central and southern regions of the state of Maine for technicians needing assistance with car seat sign offs. There were 4 technicians provided seat sign-off assistance.

Child Care Transporter Basic Awareness Training: certified Instructors and the CPS Coordinator developed, maintained, and trained licensed child care providers that transport children. Training covered basic child occupant protection awareness to ensure safe transport of children. . Approximately 20 classes were held statewide and 250 childcare providers were offered education.

Grantee: MeBHS

FUNDING SOURCE S.2011: $27,020.67

Occupant Protection Traffic Enforcement Equipment

Project Number: Not Implemented in FFY2015

Project Description:

Funds will support the procurement of night vision goggles to assist law enforcement agencies throughout the state of Maine in the detection of drivers and passengers who are not wearing their seat belts. MeBHS seat belt enforcement grants require LEAs to conduct 50% of their enforcement during nighttime hours (6 PM to 2 AM), and the use of night vision goggles will help increase the ability to detect seat belt compliance in areas with low levels of light and during the darkest hours of the night. This project was a recommendation from the 2014 Occupant Protection Assessment. (See Appendix 5) 100% of the equipment that will be purchases will be used for Traffic Safety related activities and specifically correlate with our seat belt HVE nighttime enforcement requirement. This piece of equipment will enhance our ability to detect seat belt violations at night.

Grantee: MeBHS

FUNDING SOURCE: NOT IMPLEMENTED IN FFY2015 AND WILL NOT BE IMPLEMENTED IN FFY2016.

Occupant Protection Task Force

Project Number: Not implemented in FFY2015

Project Description:

Funds will support the establishment and development of a task force comprising traffic safety experts, advocates, parents, youths, and survivors to develop a comprehensive occupant protection program strategy and to specifically address the declining seat belt use rate, the over-representation of unbelted teen fatalities, and the low male and pickup truck driver belt use rates. The Task Force will potentially integrate the Teen Driver Safety Committee (comprising 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 help promote the Parental Education Program. Costs involved may include travel reimbursement, training, speakers and other costs associated with quarterly meetings. This was a project recommendation from the 2014 Occupant Protection Assessment. This project has been implemented in FFY2016. The first meeting took place in October 2015 and no task force costs are expected in the future.

Grantee: MeBHS

FUNDING SOURCE: NOT IMPLEMENTED IN FFY2015.

Traffic Safety Educator

Project Number: OP15-008

Project Description:

This full-time position allowed for traffic safety education and outreach to individuals of all ages. The educational events included the use of the MeBHS Convincer and Rollover, driving simulations and the use of the Highway Safety display at schools, colleges, health fairs, community centers, etc. The MeBHS contracted with Atlantic Partners EMS Inc (APEMS). in order to carry out this project. Over the course of FFY2015 APEMS was able to touch more than 4515 students/attendees and served more than 69 locations. These events

spanned the entire state of Maine with events in Southern York County and our most northern County of Aroostook.

Grantee: Atlantic Partners EMS Inc.

FUNDING SOURCE: S.402: $66,704.91

Tween & Pre-Driver Education

Project Number: N/A

Project Description:

During 2015 a pilot program was developed with Healthy Maine Partners, which is being implemented in 2016. This is the description included in the 2016 HSP. The MeBHS will work with Healthy Maine Partnerships in Cumberland, York, Kennebec, and Penobscot Counties (the counties shown to have the highest unbelted fatalities) to pilot The Healthy Maine Partnerships will implement the described program over most of the school year (Oct 1 until mid to late May). NHTSA educational materials, as well as other material targeted at this age group, will be utilized throughout the program.

The MeBHS will work with Healthy Maine Partnerships in Cumberland, York, Kennebec, and Penobscot Counties (the counties shown to have the highest unbelted fatalities) to pilot an education campaign targeting middle school aged children. During the program, which will span most of the school year, grantees will work with schools to conduct a pre & post survey (created in consultation with BHS) to evaluate seat belt usage rates and back seat FFY2016 Highway Safety Plan Page 112 compliance rates for children 12 and under, provide traffic safety education and information to the students and their parents, with a high focus on seat belt use, and work with students to create a media campaign to encourage their peers (as well as other age groups) to always ride safely (under $5,000 do not require an individual RFP). This project resulted from a suggestion of the OP Assessment Team and is based on "Countermeasures That Work, Seventh Edition 2013" for low belt use occupants. Funds will support approved sub-grantee costs including: stipends, travel costs, necessary supplies and educational materials that will be needed for program implementation. Grantees are: Cumberland County – Healthy Portland, Access Health, Healthy Lakes; York County – Choose to be Healthy, Coastal Healthy Communities Coalition; Kennebec County – Healthy Communities of the Capital Area; and Penobscot County – Bangor Region Public Health and Wellness. This project resulted from a suggestion of the OP Assessment Team and is based on "Countermeasures That Work, Seventh Edition 2013" for low belt use occupants and our knowledge that this group is least likely to buckle up. If this project is approved, we will work toward obtaining a sole-source justification with the Department of Education. Funds will support stipends , travel costs, supplies and and educational materials that will be needed to develop the curriculum in Maine schools.

Grantee: MeBHS/Maine Department of Education

FUNDING SOURCE: PROJECT WAS NOT IMPLEMENTED IN FFY2015

Teen Driver Expo

Project Number: OP15-010

Project Description:

The first Maine Teen Driving Expo was held at the Maine Mall in South Portland on April11, 2015, with well over 100 teens and parents attending. The event was a partnership with Maine Bureau of Motor Vehicles, Maine Department of Transportation, AAA Northern New England, and South Portland Police Department. Safety experts were on hand to discuss the dangers associated with unrestrained motor vehicle crashes, distraction and impairement. The day was capped off with a mock crash event provided by the South Portland Police and Fire Departments. Each attendee was provided with a copy of *Not So Fast* by Tim Hollister.

Grantee: MeBHS

FUNDING SOURCE S.402: $2,750.32

CPS Biennial Conference

Project Number: CR15-002

Project Description:

Funds covered the costs associated with the 2015 conference, which provided training, education, and networking for CPS technicians and instructors. Speakers were sought to discuss CPS topics that applied to technicians within law enforcement, fire, and medical communities. CEUs were offered for sessions, a seat check event was organized to coincide, and awards were granted for exceptional work in CPS in Maine. There were approximately 120 technicians/instructors from Maine and New England that attended the Conference. The Conference was held at the Marriott Sable Oaks in South Portland.

Grantee: MeBHS

FUNDING SOURCE S.402: $24,910.77

CPS Reference Materials for Law Enforcement Officers

Project Number: N/A

Project Description:

Funds will be used to produce a child passenger safety reference card for law enforcement officers throughout the state. Many law enforcement officers expressed to the BHS that they have difficulty determining whether drivers are in compliance with child passenger safety laws. The reference card will be formatted to fit inside officers' ticket books allowing them to quickly view the law before ticketing and/or educating drivers. Reference cards will be distributed to area law enforcement officers by District Police Chiefs. This was a recommendation of the OP Assessment Team and will aid in increased enforcement of child passenger safety laws as referenced in above OP awareness training.

Grantee: MeBHS

FUNDING SOURCE: PROJECT WAS NOT IMPLEMENTED IN FFY2015

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
- Continue to conduct observational and attitudinal surveys to determine safety belt use in Maine.

Traffic Records

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 and to ensure that all of our state and federally funded activities are evidence based. 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) and has continued as a state priority under MAP-21 S. 405c.

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: TR15-001

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).

In FFY 2015, funds associated with this project also covered the costs associated with procuring data analysis for the MeBHS. 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 FFY2015 Muskie 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 S.402: $95,952.09

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

Project Number: N/A

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.

APPROVED TRCC PROJECT. NO FEDERAL FUNDS EXPENDED IN FFY2015.

E-Citation

Project Number: N/A

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 2015, the TRCC Working Group has finalized E-Citations data collection requirements and an E-Citation data standard.

THIS PROJECT IS UNDER CONTRACT. NO FEDERAL FUNDS WERE EXPENDED IN FFY2015.

Maine Crash Reporting System (MCRS) Upgrade

Project Number: TR15-003

Project Description

The Maine Crash Reporting System (MCRS) Upgrade project updated the technical foundation of the system by upgrading the legacy MCRS system to the .NET architecture. Its goal was 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.

In FFY15 all crash software was upgraded to the latest version of Visual Studio (.net) and implemented FIPS Security Standard 140-2. Standard Reports were added to the MCRS data collection client. A fix for an issue with Google maps was implemented (Google implemented a new API for satellite images and discontinued the old API). Various other client enhancements were made; Ambulance Code Favorites, License Endorsements and Restrictions audit rule added; client auto update enhanced, and BarCode Driver's Licenses were upgraded. Various mapping improvements to assist officers in locating crashes were also completed.

The MCRS Website went through development in FFY2015 to enhance the administrative capabilities, update the crash report submission dashboard and create the crash report delete function. MCRS security was also enhanced in FFY2015 to encrypt user passwords. Funds allocated to this project area covered the costs associated with the TRCC-approved completion of MCRS upgrade projects.

FUNDING SOURCE S.408: $415,536.25

Public Access Reports

Project Number: TR15-004

Project Description*:*

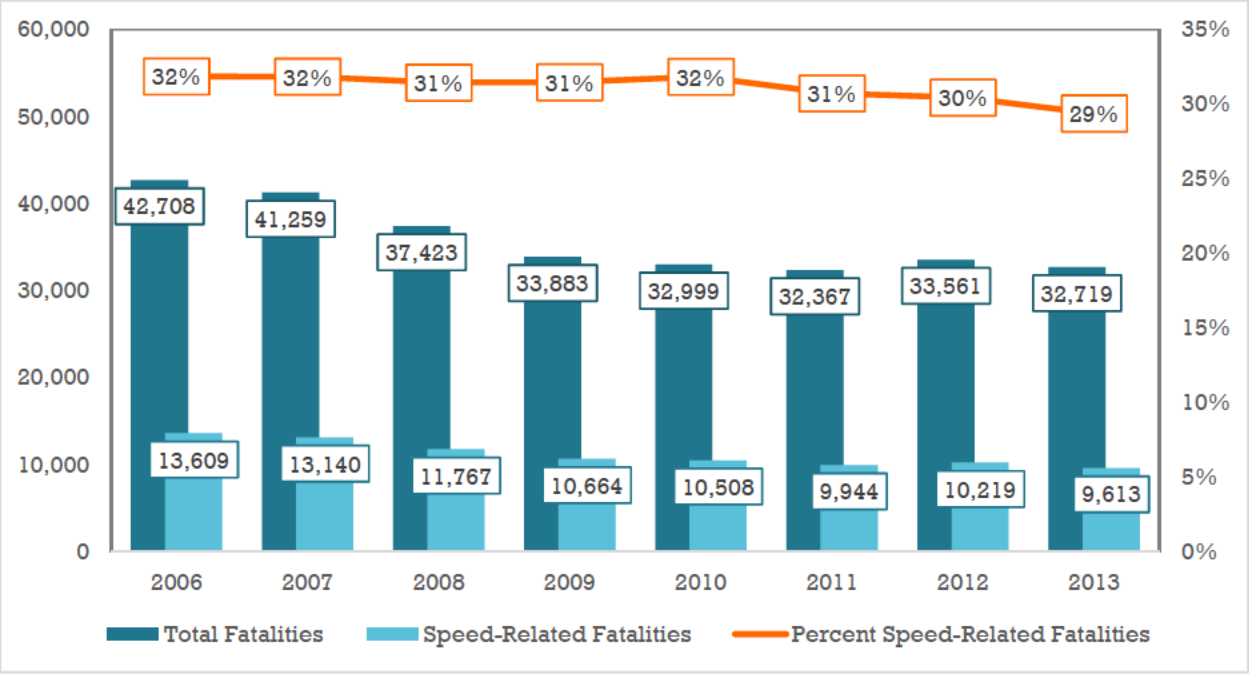
Maine crash information is only currently available on a queryable basis to select State of Maine employees. Some broad crash data reports are published on statewide basis, however specific crash data needs (location specific, trends, and maps) are created for outside requestors via individual inquiries and are custom created by state staff. Full data queries are too complex for the casual user and if not developed properly, can easily lead to erroneous data findings. This project is in its final stages of development and creates standard web-based data queries and mapping capabilities 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. A beta version has been developed and piloted by a select group of users who provided feedback for modifications to the developing vendor. Expected public release of this program is anticipated for first half of 2016.

FUNDING SOURCE S.408: $90,906.44

Police Traffic Services

Problem

Nationally, speed is cited as a factor in approximately 31% of all crash fatalities.[5] 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.

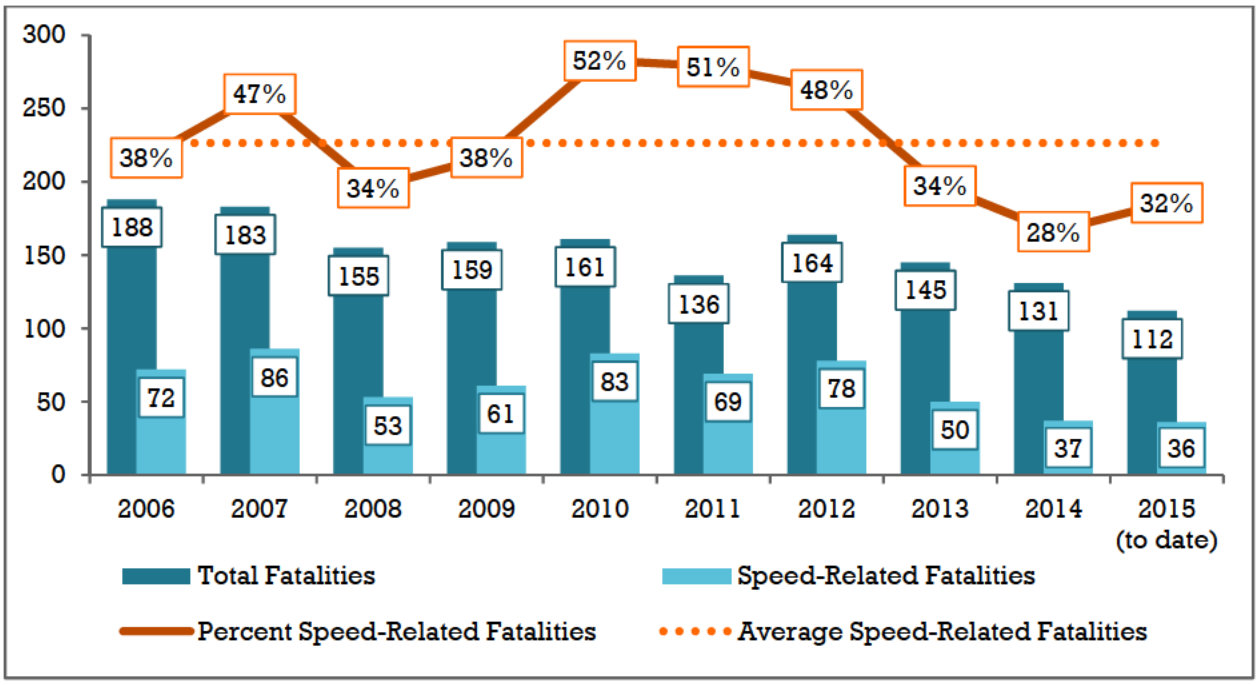


Source:FARS

In Maine, in the year 2013, speed was cited as a factor in approximately 34% of all crash fatalities. In the latest complete year of crash data (2014) speed was cited as a factor in 28% of all fatal crashes. 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 2009 to 2014 is 41%, 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

[5] 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

the state. The Maine State Police SAFE program explained below in "Countermeasures & Expended Funds" 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 FFY2015 the two campaigns yielded 8,166 speeding tickets which was an increase of 15% from FFY2014 campaign which yielded 6,940 speeding tickets. More emphasis has been devoted towards speed detection and our fatality numbers have been decreasing as stated before. MeBHS plans to increase the number of law enforcement departments in FFY2016 involved in our Speed Enforcement Grant Campaign in order to further decrease speed related fatalities.



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, to provide needed and useful tools to law enforcement and to support them in data-driven enforcement efforts.

Goal & Progress

Goal

To decrease speeding related fatalities by 5% from the 2013 calendar base year of 49 to 47 by December 31, 2015

Performance Review: Maine experienced 37 speeding related fatalities in 2014. Maine has experienced 36 speeding related fatalities in 2015 at the time of report submission and may be on target to achieve this goal.

Countermeasures & Expended Funds

Program Management and Operations

Project Number: PT15-001

Project Description

Costs under this program area included FFY2015 salaries, travel (examples included TSI training courses, in state travel to monitor sub-grantees, LEA Chief committee meetings) for highway safety coordinators and 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 S.402: $21,830.06

Speed Enforcement Campaign

Project Number: Listed Below

Project Description

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. Data highlighted specific problem areas including Cumberland, Kennebec, Penobscot, York, Somerset, Waldo, and Washington counties. Our 2015 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 Sheriff's 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. Speeding citations increased from 4205 in the FFY2014 Campaign to 5770 in the FFY2015campaign. This however is due to the addition of participating agencies in this campaign.

FUNDING SOURCE S.402*:* $350,279.68

Agency	Grant Number	Funding	Source
Ellsworth PD	PT15-010	**8,648.66**	**S402**
Jay PD	PT15-011	**2,931.37**	**S402**
Presque Isle PD	PT15-012	**20,006.22**	**S402**
Falmouth PD	PT15-013	**6,638.28**	**S402**

Paris PD	PT15-014	11,613.49	S402
Farmington PD	PT15-015	16,823.31	S402
Caribou PD	PT15-016	14,902.26	S402
Waterville PD	PT15-017	7,103.80	S402
Scarborough PD	PT15-018	20,005.89	S402
Augusta PD	PT15-019	20005.53	S402
Penobscot County Sheriff's Office	PT15-020	17,628.18	S402
Saco PD	PT15-021	8,650.07	S402
Kennebunk PD	PT15-022	17,919.46	S402
Gorham PD	PT15-023	12,189.99	S402
Windham PD	PT15-024	14,414.42	S402
York PD	PT15-025	3,301.11	S402
Lewiston PD	PT15-026	11359.21	S402
Kennebec County SO	PT15-027	19,805.24	S402
South Portland PD	PT15-028	22,913.07	S402
Cumberland County Sheriff's Office	PT15-029	6,304.41	S402
Androscoggin County SO	PT15-030	20,006.23	S402
Skowhegan PD	PT15-031	4,420.92	S402
Hampden PD	PT15-032	12,712.50	S402
Fairfield PD	PT15-033	10,924.35	S402
Oxford PD	PT15-034	10004.45	S402
Topsham PD	PT15-035	9,818.60	S402
Auburn PD	PT15-036	18,791.47	S402
Somerset County Sheriff's Office	PT15-038	4,180.35	S402
Freeport PD	PT15-039	8,245.66	S402

	2015 Speed Enforcement Campaign	**SAFE (Maine State Police)**	**Total**
Funds expended	$362,268.68	$138,293.53	$500,562.21
Hours worked	8,067	1,737	8,810
Traffic stops	16,555	4,672	19,494
Stops per hour	2.07	2.64	2.4 (avg)
Speeding summons	5,770	2,674	8,166

2015 Maine State Police SAFE Program

Project Number- PT15-003

Project Description

Funds supported 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 was a data driven approach to statewide speed enforcement by 8 troops of the Maine State Police.

Data from both the FFY2015 Speed Campaign and the MSP SAFE Program is depicted on page 47. Speeding citations increased from last year and we hope to see an increase in FFY2016 with the addition of many more Law Enforcement Agencies joining the speeding enforcement campaign.

Grantee: Maine State Police

FUNDING SOURCE S.402: $138,262.66

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

Project Number: PT15-002

Project Description

The MeBHS provided a grant opportunity to law enforcement agencies in the state in order to equip them with proper speed enforcement equipment. No equipment in excess of $5,000.00 was purchased without separate approval in writing by NHTSA. Participating LEA's provided a cash match.

FUNDING SOURCE S.402: $375,276.84

Law Enforcement Liaison

Project Number: PT15-004

Project Description

The law enforcement liaison served as a link between the law enforcement community and the MeBHS, The LEL encouraged more law enforcement participation in the HVE campaigns, assisted with grant applications, encouraged the use of DDACTS and other proven countermeasures and evaluation measures, and solicited input from stakeholders. I complete report of FFY2015 Project can be found in Appendix C of this report.

FUNDING SOURCE S.402: $58,401.74

Future Countermeasures

- Sustain high visibility enforcement in data-driven locations and increase the number of agencies performing grant funded overtime enforcement in FFY2016
- Continue to produce and distribute public service announcements via television, radio, and web that emphasize illegal and unsafe speed and its effect on public safety.

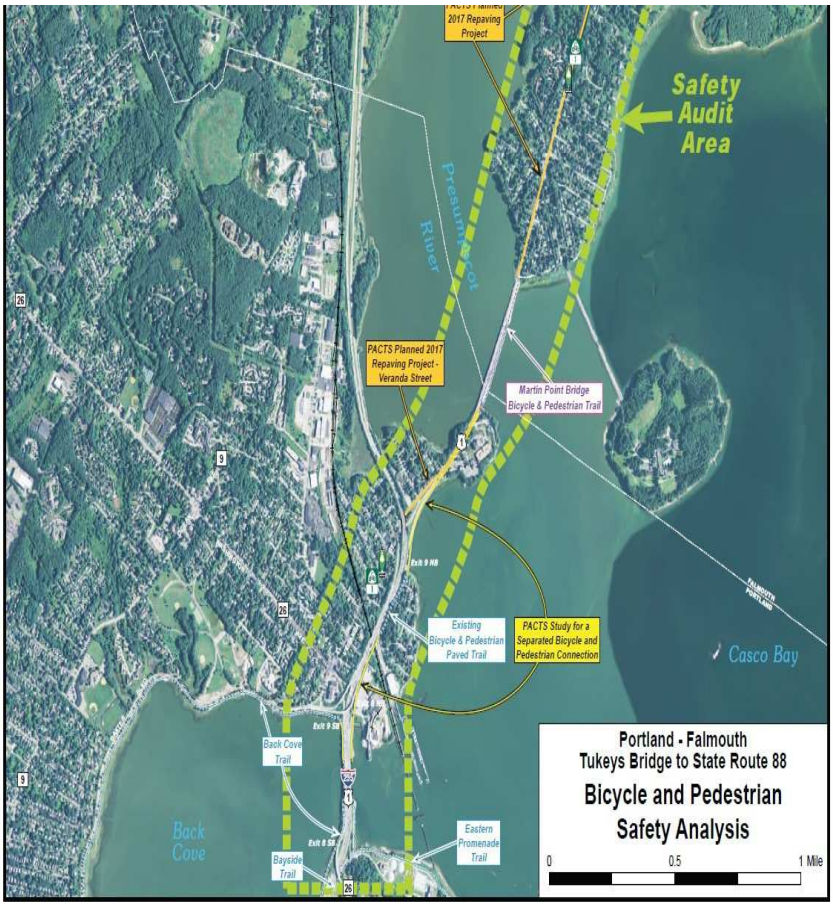
Pedestrian & Bicycle Safety

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 FFY2015 HSP data didn'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 10 pedestrian fatalities throughout the entire state. However through our collaboration with the Maine SHSP Planning Committee pedestrian safety has been addressed and shown below is the section from the Maine 2014 SHSP outlining the state's ongoing pedestrian safety countermeasures.

Pedestrian & Bicycle safety received great support in FFY2015 with MaineDOT re-energizing the BikePed Safety Workgroup. This group meets quarterly and has members from many state department as well as private and non-profit organizations. This working group is currently working on a multi-faceted pedestrian education campaign that looks to be underway in FFY2016. MeBHS will help to play a part in the campaign by developing a new pedestrian PSA.



A Road Safety Audit was also performed in Portland, Maine with the help of the Federal Highway Association and MaineDOT. MaineDOT spearheaded this audit to research a section of round way along US Route 1. This road way was of great concern to local Portland bicyclist and pedestrians as many drivers were observed passing bicyclist with little space between the automobile and the bicycle. Maine has a law that states drivers need to allow at least 3 feet of space when overtaking a bicycle on the roadway.

Goals & Progress

To decrease pedestrian fatalities by 5% from the 2013 calendar base year of 11 to 10 by December 31, 2015

Performance Review: Maine experienced 9 pedestrian fatalities in calendar year 2014, meeting the stated goal and 17 pedestrian fatalities in 2015 (at the time of report submission). We are unable to meet the stated goal of 10 for 2015.

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

Performance Review: Maine experienced 2 Bicyclist fatalities in 2014. Maine has experienced 0 bicyclist fatalities in 2015 at the time of report submission and is on target to meet this goal.

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 localmunicipalities

• 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.

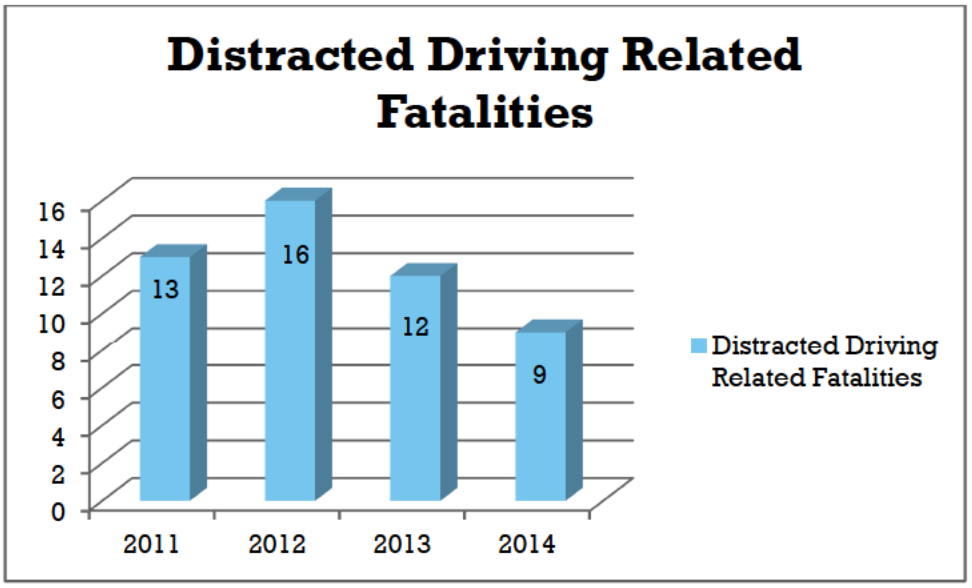
Lead: MaineDOT

Timing: 2015 and ongoing

Distracted Driving

Problem

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). By achieving 9 distracted driving related fatalities in 2014 Maine was able to achieve this goal. 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 2011.



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. It is difficult to accurately collect distracted driving related crash information at the crash scene because drivers won't always voluntarily admit if they were using a cellphone or other electronic device at the time of the crash because of the fines associated with breaking Maine 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 as officers will obtain cell phone records in order to determine if a phone was in use during a crash, but with small number of fatal distracted driving related crashes it is hard to determine a particular target area.

In FFY2015 MeBHS developed some new media campaigns and introduced dedicated enforcement to combat distracted driving. The Maine State Police were again awarded a distracted driving enforcement grant where they focused on distracted driving high crash locations such as schools zones and interstate roadways. This enforcement effort is a part of a multi-year enforcement campaign that started in FFY2014. The MSP enforcement plan can be read below under project number DD15-001 "2015 Distracted Driving Enforcement".

In combination with our enforcement efforts MeBHS worked with our media vendor (NL Partners) in FFY2015 to determine the offenders of distracted driving. Data analysis of distracted driving related fatal crashes were looked at to determine the age of drivers who were distracted during the crash. This analysis lead us to focus on drivers age 18-49. Our media vendor focused on a digital and radio educational campaign in order to reach these drivers.

Objective

An 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 10.5% from the 5 year average of 14.0 (2009-2013) to 12.53 by December 31, 2016 (Maine SHSP).

Progress

Maine has experienced 11 distracted driving related fatalities in 2015 (at the time of report submission).

Countermeasures & Expended Funds

Program Management and Operations

Project Number: N/A

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: EXPENSES WERE CHARGED TO S. 402 P&A AND OTHER SPECIAL REVENUE.

2015 Distracted Driving Enforcement MSP

Project Number: DD15-003

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.

Maine State Troopers conducted 74 distracted driving details from October 1, 2014 through September 30, 2015, totaling 540 grant hours. Troopers stopped 778 vehicles, while issuing 476 summonses, 42 of which were for distracted driving and 63 for texting while driving. Statewide troopers averaged 10.5 stops per detail. Troopers also arrested 12 people for Operating after Suspension and issued 135 seatbelt summonses.

FUNDING SOURCE S. 405 E: $27,108.08

Simulated Distracted Driving Education

Project Number- DD15-001

Project Description

This 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 2014 - 2015 school year, the following agencies have utilized the program and the simulators: Bath Police Department (PD); Gorham PD; Lincoln County Sheriff's Office; Oakland PD; York PD; Skowhegan PD; Somerset County Sheriff's Office and Troop F, Maine State Police (2 times). Approximately 2,500 high school students have been instructed through presentations and the use of simulators during the 2014 - 2015 school year.

In addition, personnel from the MeBHS have been invited to make presentations at various schools, including Gorham High School, Bangor High School, 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, Walmart, 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 700 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 S. 405E: $21,064.21

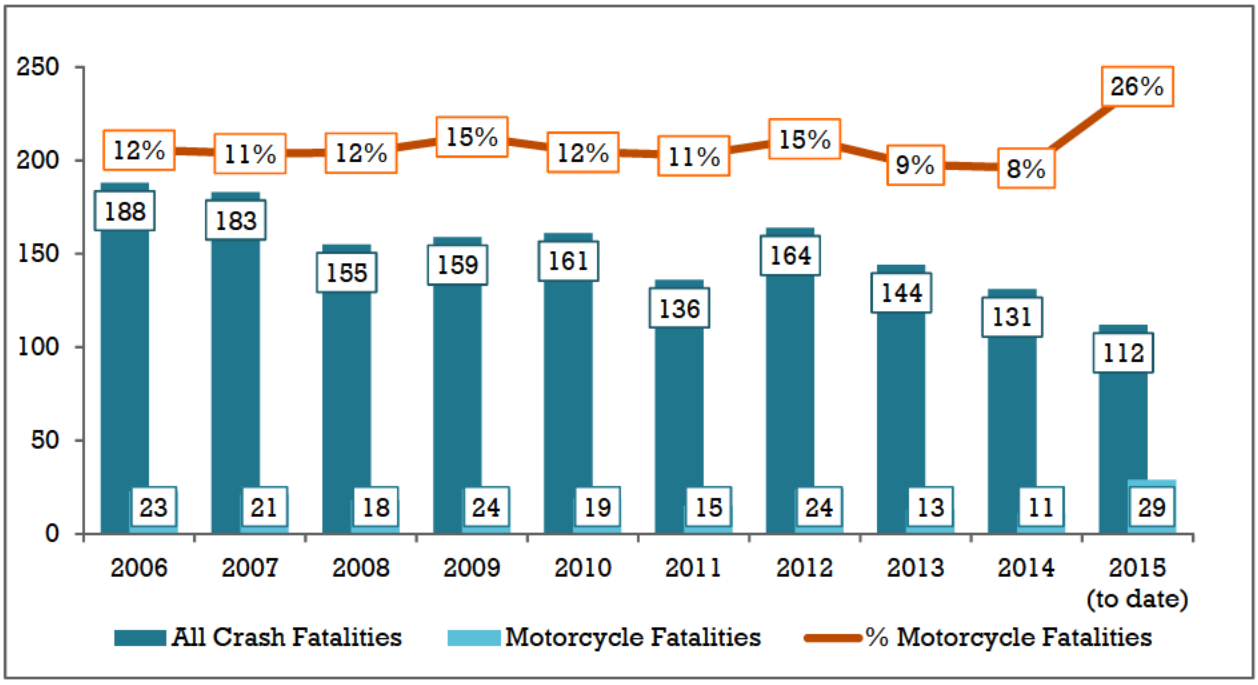
Noteworthy Distracted Driving Projects/Events

Though included in the Occupant Protection section of the Annual Report due to the primary focus on occupant protection, the Maine Teen Driving Expo can be noted as an event under distracted driving. The MeBHS brought driving simulators to the event.

Motorcycle Safety

Problem

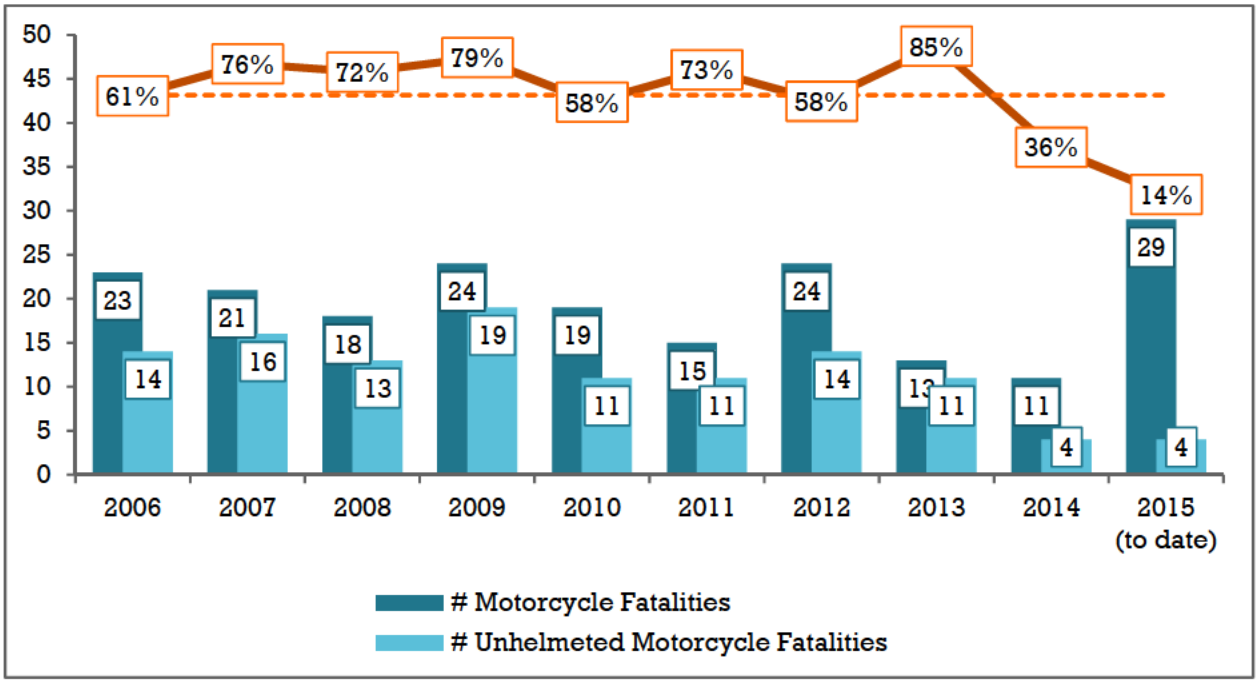
In 2014, there were 11 motorcycle fatalities. This was a decrease from the previous year, in which there were 13 motorcycle fatalities. The 11 motorcycle fatalities contributed to 8% of all 2014 fatalities, which was also a decrease from the previous year, in which motorcycle fatalities contributed to 9% 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 expanded its Motorcycle projects in FFY2015 with several new grants that focused 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 motorcycle fatalities by 5% from the 2013 calendar base year of 13 to 12 by December 31, 2015

Performance Review: Maine experienced 11 motorcyclist fatalities in calendar year 2014 however, Maine has experienced 32 motorcyclist fatalities in 2015, at the time of report submission, and will not meet this goal by end of December 2015.

#2 Goal

To decrease unhelmeted motorcycle fatalities by 5% from the 2013 calendar base year of 11 to 10 by December 31, 2015

Performance Review: Maine experienced 4 unhelmeted motorcyclist fatalities in calendar year 2014. Maine has experienced 25 unhelmeted motorcyclist fatalities in 2015 at the time of report submission, and will not meet this goal by end of December 2015.

Countermeasures & Expended Funds

Motorcycle Program Assessment

Project Number: MC15-001

Project Description:

This project funded a Motorcycle Assessment which was conducted in May of 2015 by the National Highway Traffic Safety Administration. The assessment was conducted over a week and included various motorcycle safety experts from the State of Maine coming together to discuss current practices & issues. Results of this assessment included project recommendations and feedback.

Grantee: MeBHS

FUNDING SOURCE S.402: $21,187.91

Motorcycle Instructor Training

Project Number: MC15-002

Project Description:

As a part of IFR Vol. 71, No.138 S1350.8, Use of grant funds states may use grant funds for motorcyclist safety training including measures designed to increase the recruitment or retention of motorcyclist safety training instructors. In order to retain our current instructors the Maine BMV in partnership with MeBHS held an annual Motorcycle Rider Instructor Training Meeting. This meeting enabled the BMV to give annual training updates to all instructors and by attending the training it was a way for the instructors to maintain their national motorcycle rider instructor training certification. The training allowed for retention of our instructors and as a form of quality control of the Maine BMV motorcycle rider training course that is managed through that state agency. Funds supported the educational material, instructor fees, travel and event location rental and other associated fees.

Grantee: Maine Bureau of Motor Vehicle

FUNDING SOURCE S.2011: $1,660.53

Motorcycle Rider Training Course Materials Update

Project Number: MC15-003

Project Description:

As a part of IFR Vol. 71, No.138 S1350.8, grant funds were used for motorcyclist safety training including (1) improvements to motorcyclist safety training curricula and (2ii) instructional materials. In order to improve our states motorcycle rider safety course training materials MeBHS purchased updated curriculum for the Maine BMV motorcycle rider safety course. The current course curriculum used by the Maine BMV was outdated

and the curriculum has since been updated by NHTSA. MeBHS was able to provide the MaineBMV with current motorcycle safety training materials and strategies. It is imperative to update the training materials to the schools and trainers.

Grantee: Maine Bureau of Motor Vehicle

FUNDING SOURCE S.2011: $20,580.26

Motorcycle Experience Rider Training Course Sponsorship

Project Number: MC15-004

Project Description:

Maine BMV offers a BRC-2 Experienced Motorcycle Rider Training Course to Maine residents who currently have their (I) Motorcycle Endorsement. The course enhanced the skills that have been developed through on-road motorcycle rider experience and provide additional useful safety information to experienced riders. Enrollment in these courses over the past years had been declining and with Motorcycle Rider Training listed as an effective countermeasure in *"Countermeasures That Work, Seventh Edition 2013*", Maine developed a way to increase participation in this course. According to NHTSA and the Maine BMV, many motorcycle riders are not properly licensed. In 2009, 22% of motorcycle riders involved in fatal crashes did not have valid motorcycle licenses, compared to 12% of passenger vehicle drivers who were not properly licensed (NHTSA, 2011a). Licensing systems in some states provide no incentive to become fully licensed because learner's permits may be renewed indefinitely (NCHRP, 2008, Strategy C3). MeBHS covered the costs for individuals who according to the Maine BMV do not have their motorcycle license, but who have a motorcycle registered in their name. Our intention was to provide an incentive to the riders who choose to operate without a license an avenue to become licensed and learn about rider safety and how it affects them. MeBHS offered this same incentive for the course in general as a way to encourage motorcycle riders who have their license to participate in this course in order to hone their skills, or to receive new updated safety information that may enable them to become even better riders. There were a total of 101 participants who completed the course.

Grantee: Maine Bureau of Motor Vehicle

FUNDING SOURCE S.402: $10,100.00

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.

- 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.

Future Countermeasures

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

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 & Expended Funds

Paid Media to Support National Crackdowns and Priority Program Areas

Project Number: PM15-001

Project Description

Educational topics supported NHTSA high visibility enforcement campaigns, Maine laws, and safe driving habits in order to reduce the number of crashes and fatalities that occur statewide. A statewide media campaign was implemented to provide education on impaired driving, OP, DD, MC, Speed, CPS. Funds supported campaign development, retagging of announcements, and purchase of radio, TV, digital and print media that provided education on these program areas. The NHTSA Communications Calendar will be used as a guide when developing the statewide media campaign timeline to ensure adequate coverage in all media coverage areas during national and local crackdown periods. Information regarding the FFY2015 paid media effort can be found in the "State of Maine Highway Safety Marketing Plan" located in Appendix B of this report.

FUNDING SOURCE S. 402: $262,838.49

Sports Marketing Program

Project Number: PM15-002

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.

ASM again targeted distracted driving in FFy2015. 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 again targeted motorcycle with the use of "Share the Road, Watch for Motorcycles" campaign, which included premium signage and public address announcements at six motorsports venues. The campaign included 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 S. 402: $332,494.67

Public Education through Tractor Trailer Wraps

Project Number: N/A

Project Description:

Funds will support MeBHS's distracted driving marketing campaign that was started in FY2014. MeBHS, with the guidance of our media partner and the Commercial Motor Vehicle Safety Unit designed a public outreach campaign incorporating delivery trucks from every major city in Maine; Portland, Augusta, Bangor. These trucks displayed both a Maine specific distracted driving message and the NHTSA "One Text or Call Could WRECK it All" message. The messages will be displayed on the sides of each of the participating delivery truck thus enabling MeBHS to spread the highway safety message. The ultimate goal of this campaign is to change driver behavior through the promotion of education using NHTSA social norming messages. MeBHS will be coupling this campaign with our high visibility enforcement to create a program that combats distracted driving from multiple avenues all conveying the same messages.

Grantee: MeBHS

FUNDING SOURCE: PROJECT NOT IMPLEMENTED IN FFY2015

Teen Driver Marketing Campaign: Radio Station

Project Number: N/A

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).

Grantee: MeBHS w/Media Contractor

FUNDING SOURCE: PROJECT NOT IMPLEMENTED IN FFY2015

Motorcycle PSA to encourage experienced rider education

Project Number: N/A

Project Description:

Funds will support peer-planning and production of a motorcycle rider safety education PSA to encourage experienced riders to participate in our state's experienced rider education course. The PSA will be in line with our "Motorcycle Experienced Rider Course Sponsorship." The average age of a motorcycle rider fatality was 44 from 2010-2013 which typically isn't a newly licensed rider. Our goal is to increase motorcycle safety education by increasing the amount of riders that take this course. Education helps to correct unsafe driving habits that may have been established over years of riding, or help to educate riders with new information previously unknown to the experienced rider.

Grantee:Maine BMV

FUNDING SOURCE: PROJECT NOT IMPLEMENTED IN FFY2015 BY MEBHS. THE OFFICE OF THE SECRETARY OF STATE CONDUCTED OUTREACH AS PART OF THEIR ACTIVITIES.

Safe Communities & 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.[6]

In Maine:

- There were 131 driver and passenger fatalities in 2014.
- 11% (n=14) of all motor vehicle fatalities were teens and young adults between the ages of 16 and 20.
  - In 64% of these cases (n=9), the young person was the driver.
  - In 36% of these cases (n=5), the young person was a passenger in a vehicle driven by a young 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%.

	2008	2019	2010	2011	2012	2013	2014
Number of Fatalities, Any Age	155	159	161	136	164	144	131
Number of Deceased 16- to 20-Year-Olds	15	17	22	17	21	16	14
Number of Deceased 16- to 20-Year-Old Drivers	12	11	16	14	13	12	9
Number of Fatalities Caused by 16- to 20-Year-Old Driver	18	16	27	19	22	18	18
Number of Deceased 16- to 20-Year Old Drivers with a Positive BAC	4	3	4	3	6	4	2
Number of Deceased 16- to 20-Year Old Drivers Using a Seat Belt	8	5	6	12	3	4	4

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

In the past two grant years, FFY2014 and FFY2015, the Maine Highway Safety Office (HSO) has increased its education to the 16-19 year age group throughout the state of Maine. Our office has increased the amount of distracted driving presentations with the help of our Sports Marketing vendor (Alliance Sport Marketing) and our Safe Communities Grants. MeBHS continued to enhance its school distracted and impaired driving presentations. This has led to a considerable drop in highway fatalities for the 16-19 year old age group. In 2013 Maine experienced 12 fatalities in this age group, 12 in 2014 and thus far in 2015, with the end of the year only two weeks away, Maine has experienced 4 fatalities in this age group. The increased outreach to this age group in the form of presentations and one on one contact has led to a 67% drop in fatalities for occupants ages 16-19 in 2015. This type of outreach will continue in FFY2016.

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 the number of drivers age 20 or younger involved in fatal crashes by 5% from the 2009-2013 calendar base year average of 21 to 20 by December 31, 2015

Performance Review: Maine experienced 16 drivers age 20 or younger that were involved in fatal crashes in calendar year 2014. Maine has experienced 8 drivers age 20 or younger in 2015 that were involved in fatal crashes at the time of report submission and may be on target to meet this goal.

#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*[7]

Countermeasures & Expended Funds

Safe Communities 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. In 2015

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

York PD, Augusta PD, Caribou PD and Healthy Community Coalition (Farmington) participated through various means in the Safe Communities Mini Grants. Activities included enforcement details, speaking engagements, PSAs and educational material

Project Number – SA15-001

Project Description – Efforts to reduce Teen related crashes and fatalities will focus on educating every new driver being taught at the York Driving School on the key traffic safety issues: speeding, distracted/impaired driving, graduated licensing and occupant protection; participating in the York High School Safety Fair; and conducting enforcement activities.

Grantee York PD

FUNDING SOURCE S. 402: $4,142.17

Project Number – SA15-003

Project Description – Efforts to reduce Teen & mature drivers related crashes and fatalities will focus on conducting patrols targeting teen seatbelt violations, informing motorists over 55 on the dangers of distracted driving, conducting patrols targeting distracted driving violations with mature drivers & teen drivers, providing PSAs targeting motorists over 55 on the dangers of distracted driving and present a Distracted Driving Awareness Program to first time drivers.

Grantee Augusta PD

FUNDING SOURCE S. 402: $5,000.00

Project Number – SA15-004

Project Description – Efforts to reduce Teen related crashes and fatalities will focus on conducting enforcement details and checkpoints, conduct school assembly at Caribou High School and collaborate with Power of Prevention to coordinate safety checks and promote awareness by utilizing flyers and other educational material.

Grantee Caribou PD

FUNDING SOURCE S. 402: $4,693.70

Project Number – SA15-005

Project Description – Efforts to reduce Teen related crashes and fatalities will focus on Mobile Health Unit Educational Events, creating & distributing educational material throughout Franklin County, with press & media, focus on dangers of texting while driving and distracted driving and highlight the Taylor Foundation efforts.

Grantee Healthy Communities Coalition

FUNDING SOURCE S. 402: $5,000.00

Interactive Teen Driver Awareness

Project Number: N/A

Project Description:

This project will fund an interactive, evidence based information prevention program which uses active learning to connect young people with factual information related to raising awareness of the different dangers that surround driving. This program has been proven to be an effective tool in Tennessee, Rhode Island, Virginia and Alaska. All states conducted pre and post surveys with students and saw an actual decrease in teen driver crashes and fatalities. The post surveys conducted by these states show that this program increase teens knowledge of safe driving and also changed their attitudes towards highway safety behaviors and laws such as seatbelt use, following GDL, speeding, drinking and driving and distracted driving. This program is delivered to middle and high schools throughout the state and by using a blend of social media, pop culture, and state of the art technology, this interactive program provides state specific information on rules and regulations to help teen drivers make good choices while operating a motor vehicle on Maine roadways.

Grantee: MeBHS

FUNDING SOURCE: PROJECT NOT IMPLEMENTED IN FFY2015

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

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 continues 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 Summary of Public Laws and Resolves Affecting Title 29-A, Maine Motor Vehicle Statutes 127th Legislature, First Regular Session Prepared by the Maine Bureau of Motor Vehicles Revised July 29, 2015

Public Law Chapter 31, LD 37, "An Act Regarding Emergency Lights on a Vehicle Used by a Member of a Municipal or Volunteer Fire or Emergency Medical Services Department."

This bill increases the number of emergency lights allowed on personal vehicles used by firefighters and emergency medical service personnel by increasing the number of such lights allowed on the front of the vehicles and allowing such lights on the rear of the vehicles. It allows one red auxiliary emergency light to be mounted on the rear of personal vehicles used by firefighters and emergency medical service personnel.

Public Law Chapter 51, LD 288, "An Act To Amend the Requirement of When Headlights Must Be Used."

This bill requires headlights be used from sunset to sunrise. (Previous law was ½ hour after sunset to ½ hour before sunrise.)

Public Law Chapter 113, LD 737. "An Act to Amend the laws Regarding Learners' Permits and Intermediate Licenses."

Amends the current laws prohibiting the holder of a learner's permit or intermediate license from using a mobile telephone while operating a motor vehicle to also prohibit such a person from using a handheld electronic device while operating a motor vehicle, and provides that the definitions in these provisions and in the provisions of current law that prohibit minors from using certain electronic devices while operating a motor vehicle are consistent. Provides for a voluntary intermediate driver decal program administered by the Secretary of State, and requires the Department of the Secretary of State, Bureau of Motor Vehicles to submit a report no later than February 1, 2017 to the joint standing committee of the Legislature having jurisdiction over transportation matters with an update on the decal program. Provides that the joint standing committee of the Legislature having jurisdiction over transportation matters may submit a bill to the First Regular Session of the 128th Legislature relating to the subject matter of this report.

Public Law Chapter 164, LD 1301, "An Act To Improve the Safety of Vulnerable Users in Traffic and To Clarify the Responsibilities of Bicyclists and Pedestrians"

This bill creates a "vulnerable user law" to protect people on public ways who are not in motor vehicles. A "vulnerable user" is defined as a pedestrian, a person performing emergency work or a person riding or using a non-motorized device or certain motorized devices such as a scooter, Segway or electric personal assistive mobility device. A motorist

who assaults, attempts to assault, taunts or distracts a vulnerable user, because that person is a vulnerable user, commits a traffic infraction and is subject to the same penalties as a person who texts while operating a motor vehicle. The bill requires a driver education course to contain at least 30 minutes of instruction to impart the understanding and skills necessary to operate a motor vehicle safely in a situation in which a vulnerable user is sharing the road with that motor vehicle. The bill amends the law to specify that operators must yield the right-of-way to pedestrians who have shown visible intent to enter the marked crosswalk. The bill specifies that a person riding a bicycle is required to obey traffic control devices such as lights, stop signs and yield signs. The bill clarifies the law regarding travel down one-way streets to allow travel against the direction indicated when directed by a law enforcement officer or traffic control device. The bill specifies that a person riding a bicycle or scooter or operating on roller skis has the same rights and duties as a person operating a motor vehicle pursuant to the Maine Revised Statutes, Title 29-A, chapter 19, which deals with the operation of a vehicle, except for laws that expressly apply to bicycles, scooters and roller skis or the law expressly only applies to motor vehicles. The bill specifies that the operator of a motor vehicle passing a bicyclist or roller skier proceeding in the same direction must exercise due care by taking into consideration the speed of the motor vehicle and other conditions and leaving a reasonable and proper distance between the motor vehicle and the bicycle or roller skier, but not less than 3 feet, while the motor vehicle is passing the bicycle or roller skier.

MeBHS Performance Measure History

Figure 1: C-1) Fatalities

Figure 2a: Number of Serious Injuries

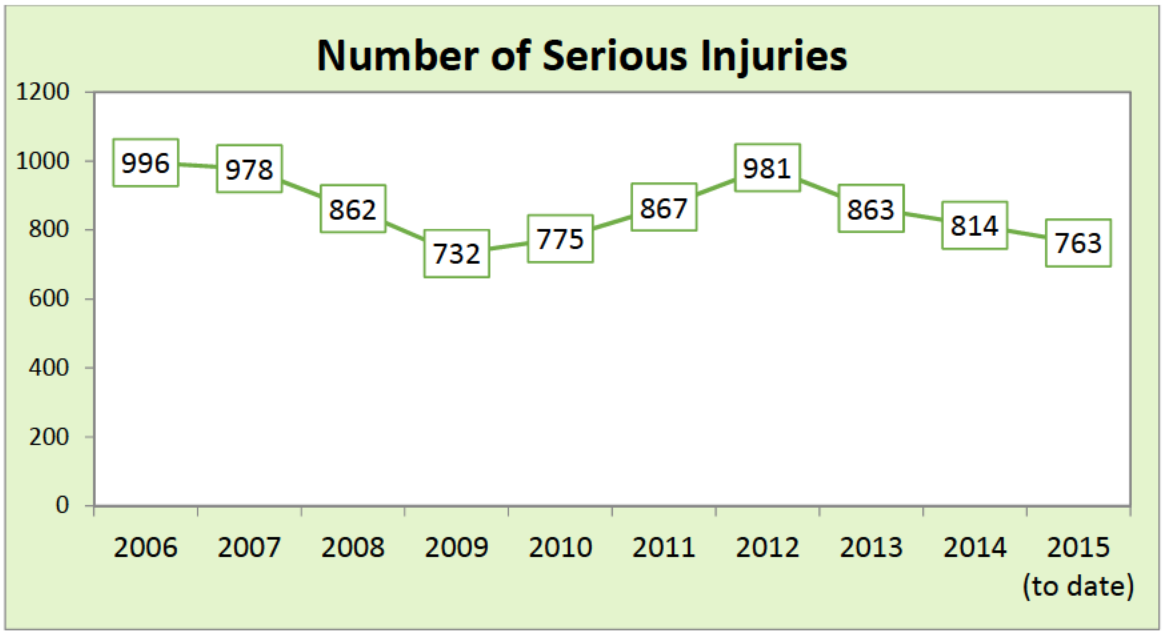


Figure 3b: Serious Injury Rate

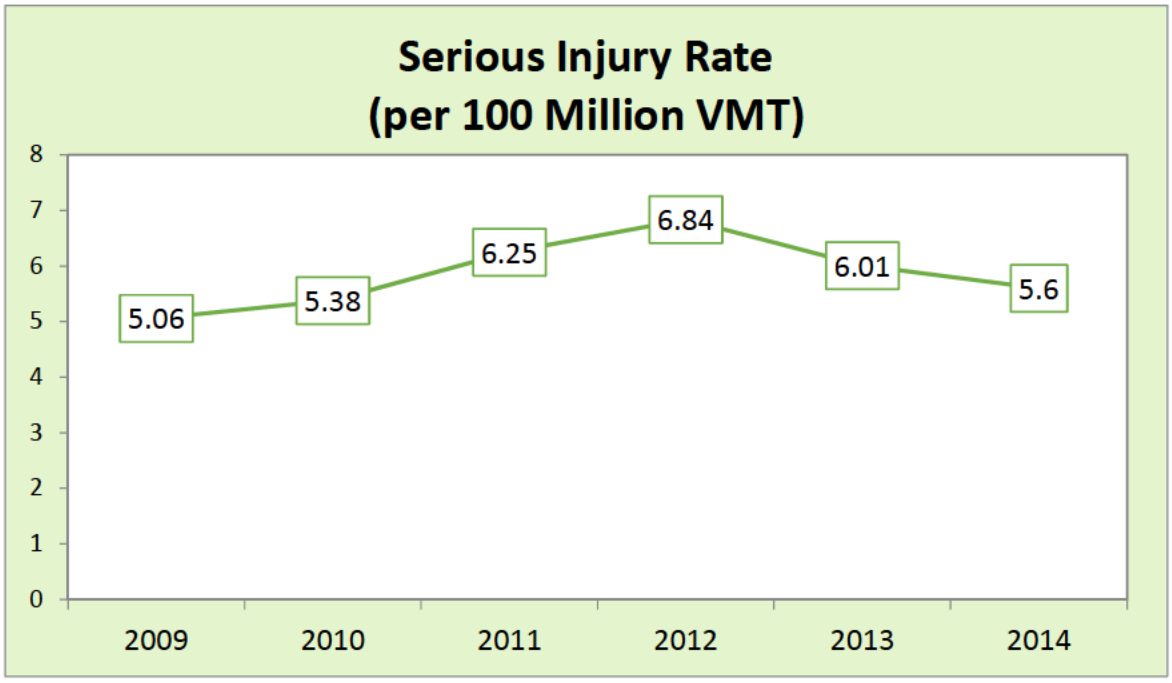


Figure 4: 3a) Fatality Rate/100 million VMT

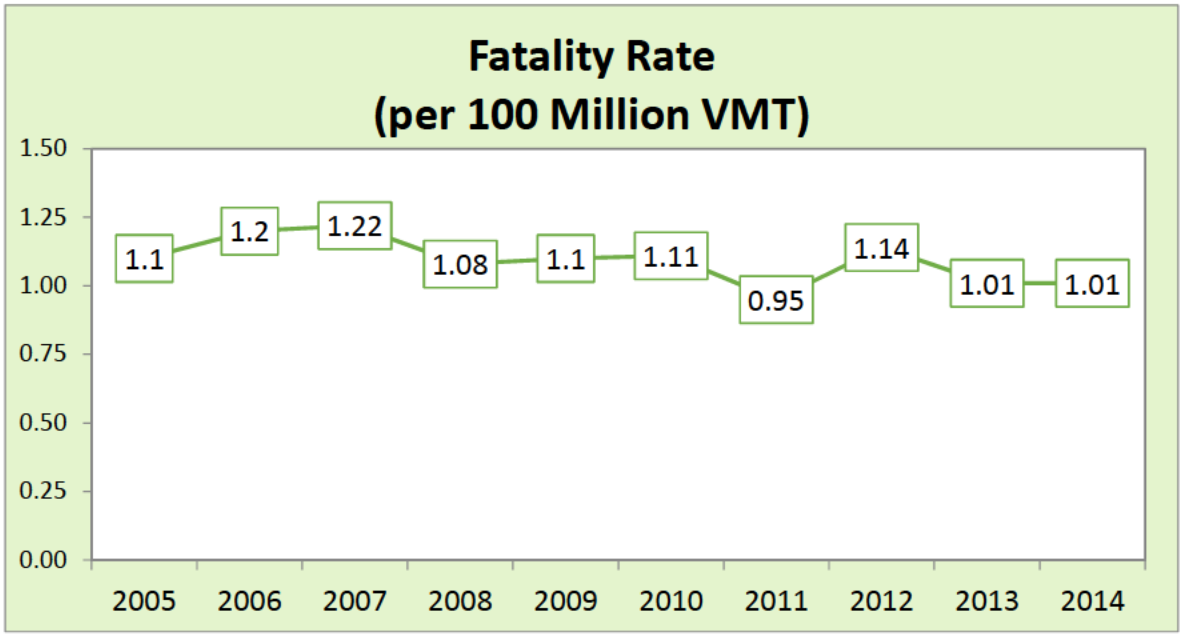


Figure 5: 3b) Rural Mileage Death Rate/100 million VMT[8]

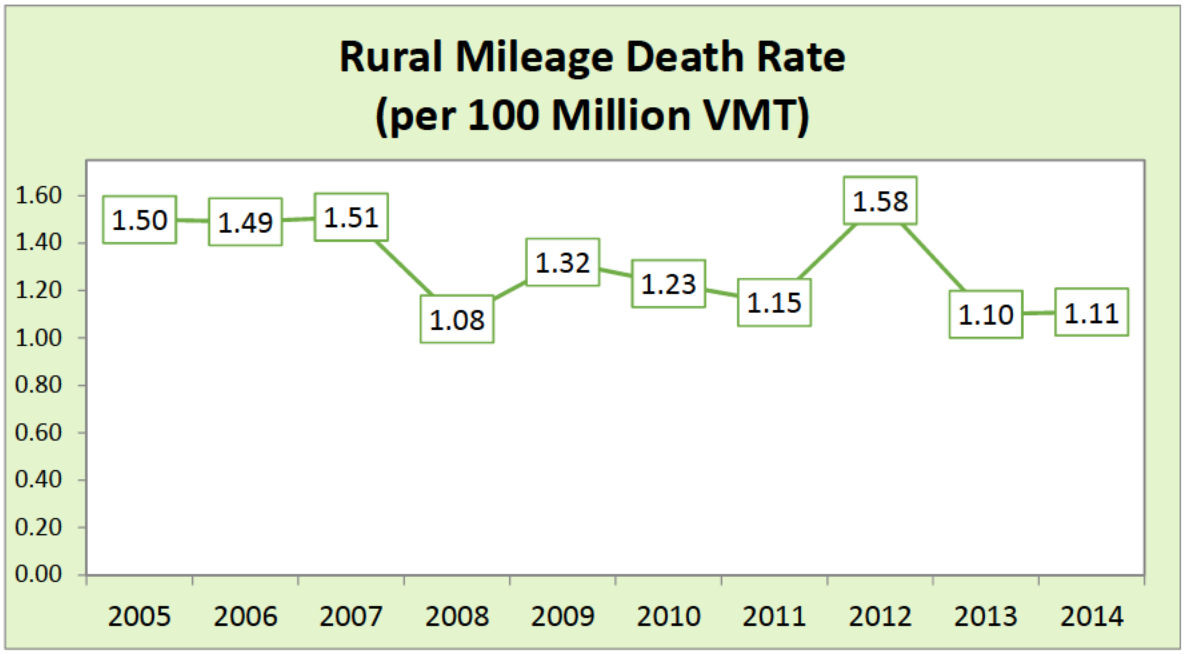
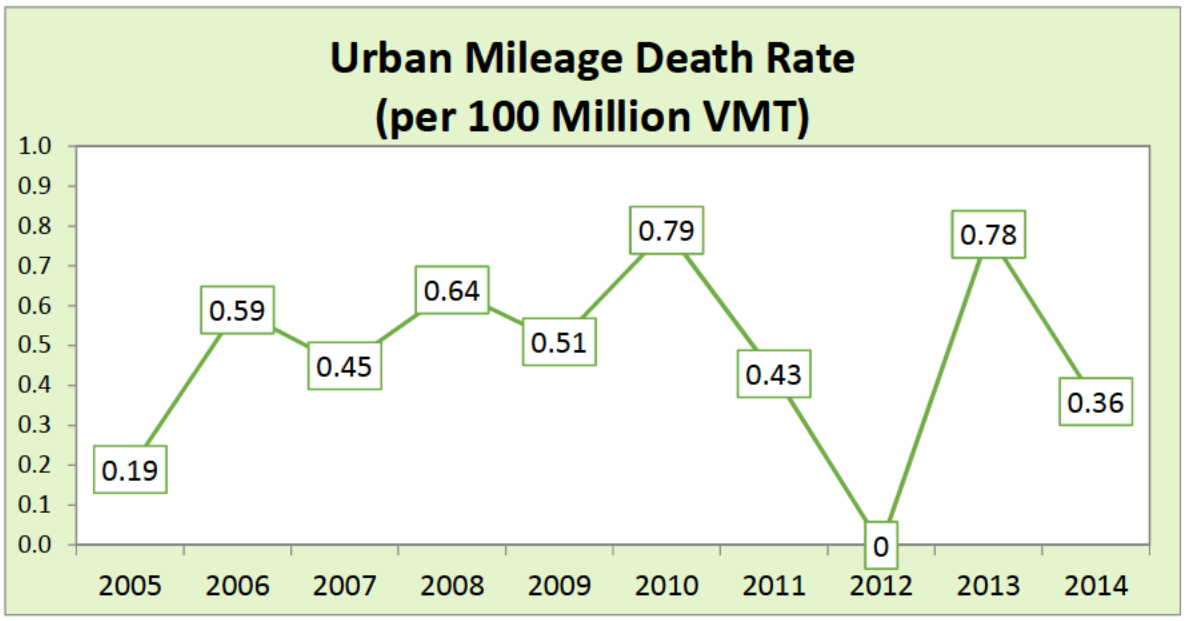


Figure 6: C-3c) Urban Mileage Death Rate/100 million VMT[9]



[8] 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.
[9] 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-4) Number of Unrestrained Passenger Vehicle Occupant Fatalities

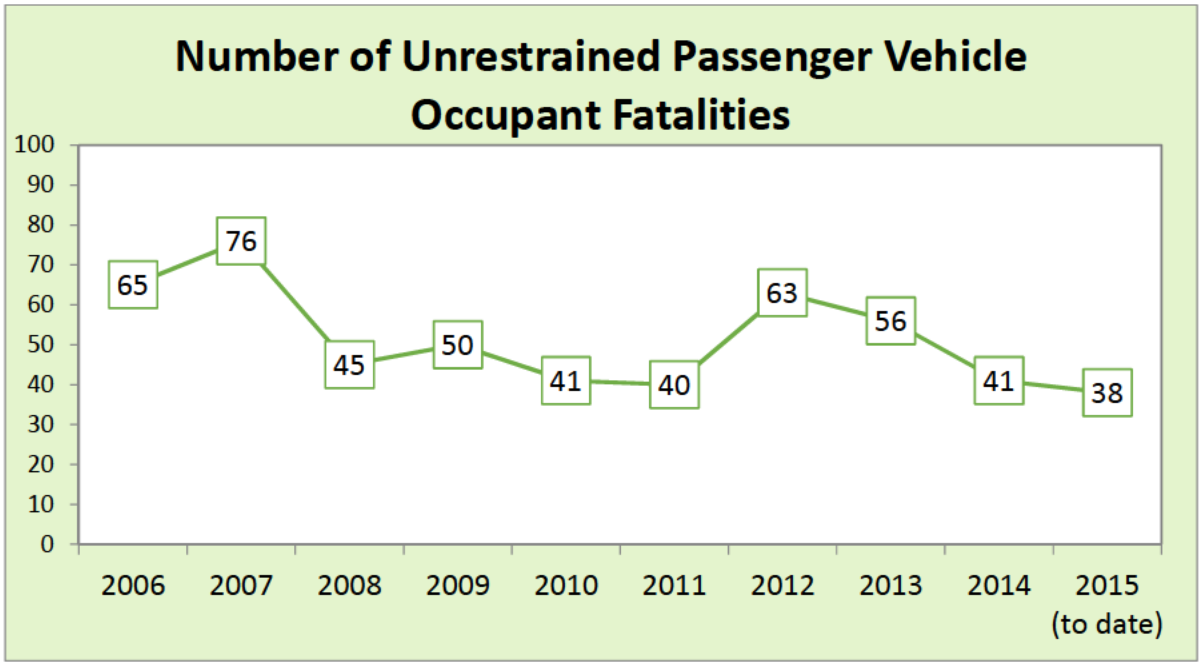


Figure 8: C-5) Number of Fatalities Involving Driver or Motorcycle Operator with ≥ .08 BAC

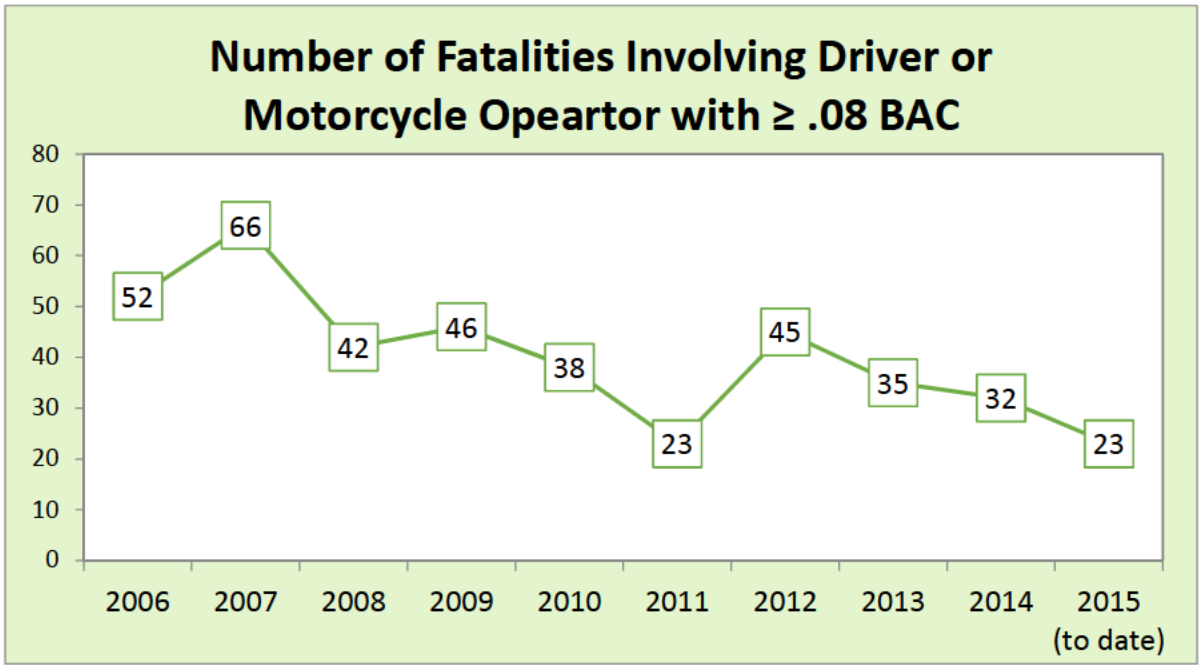


Figure 9: C-6) Number of Speeding-Related Fatalities

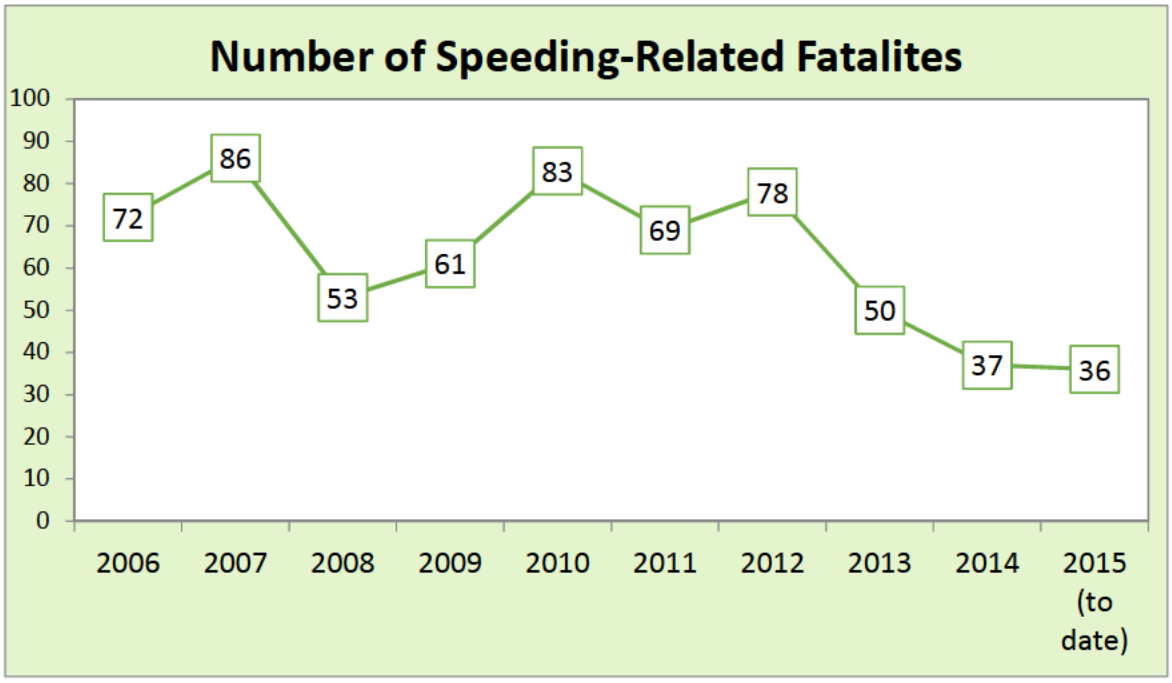


Figure 10: C-7) Number of Motorcyclist Fatalities

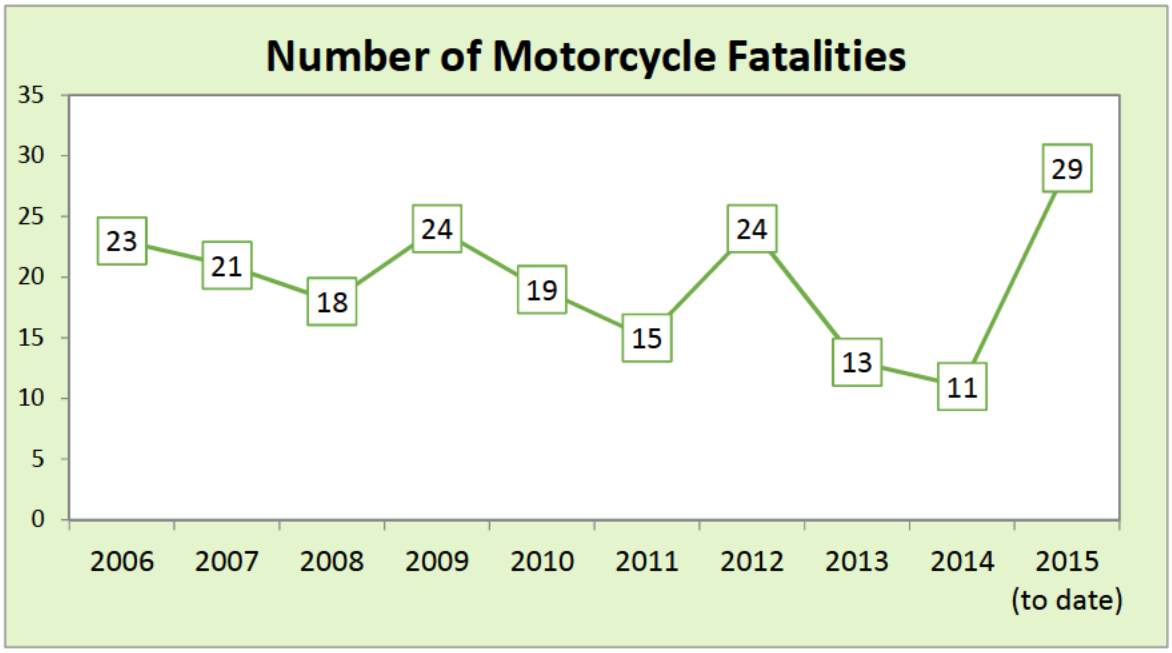


Figure 11: C-8) Number of Unhelmeted Motorcyclist Fatalities

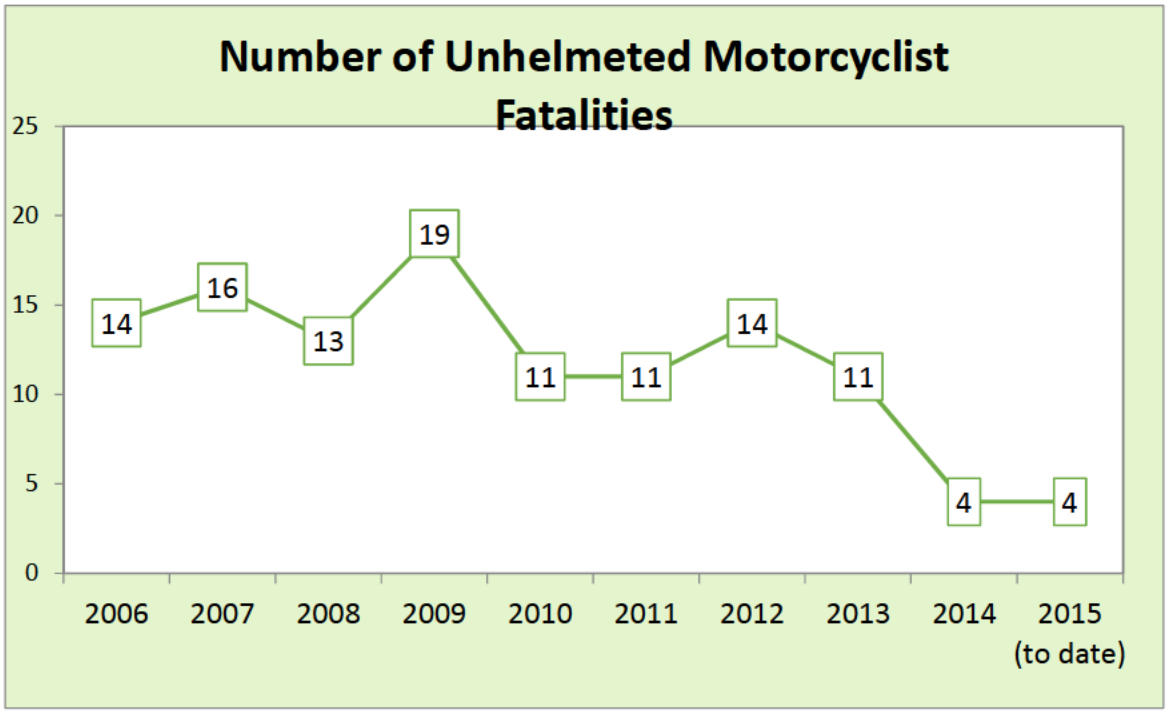


Figure 12: C-9) Number of Drivers Age 20 or Younger Involved in Fatal Crashes

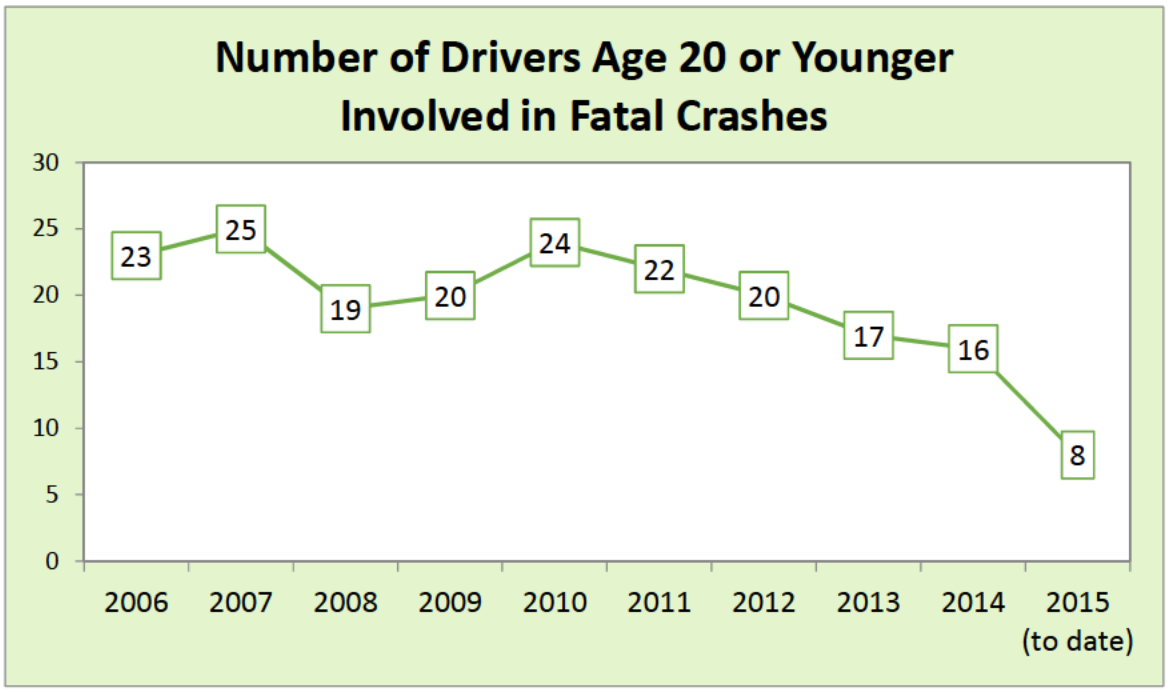


Figure 13: C-10) Number of Pedestrian Fatalities

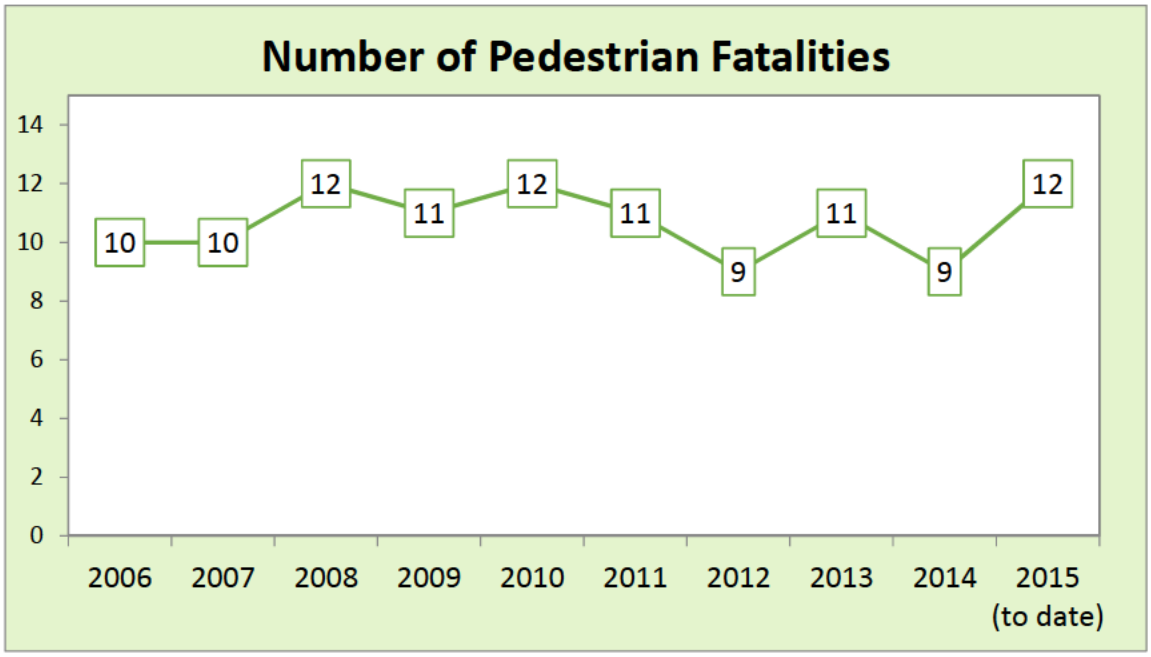


Figure 12: C-11) Number of Bicyclist Fatalities

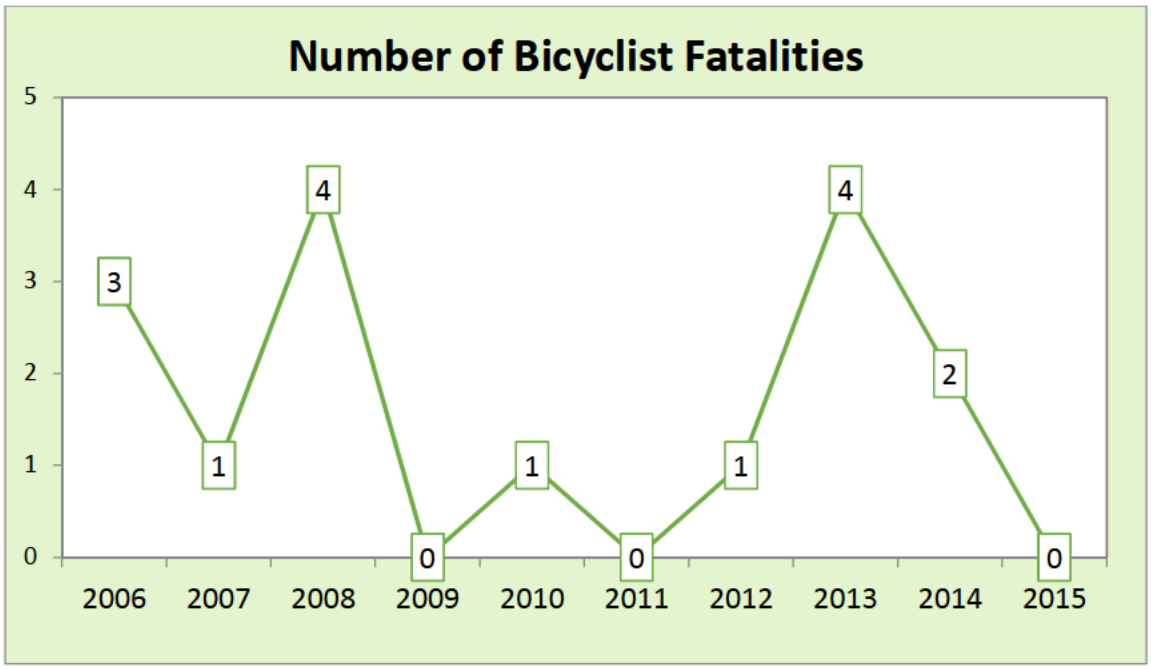


Figure 14: B-1) Observed Belt Use for Passenger Vehicles—Front Seat Outboard Occupants

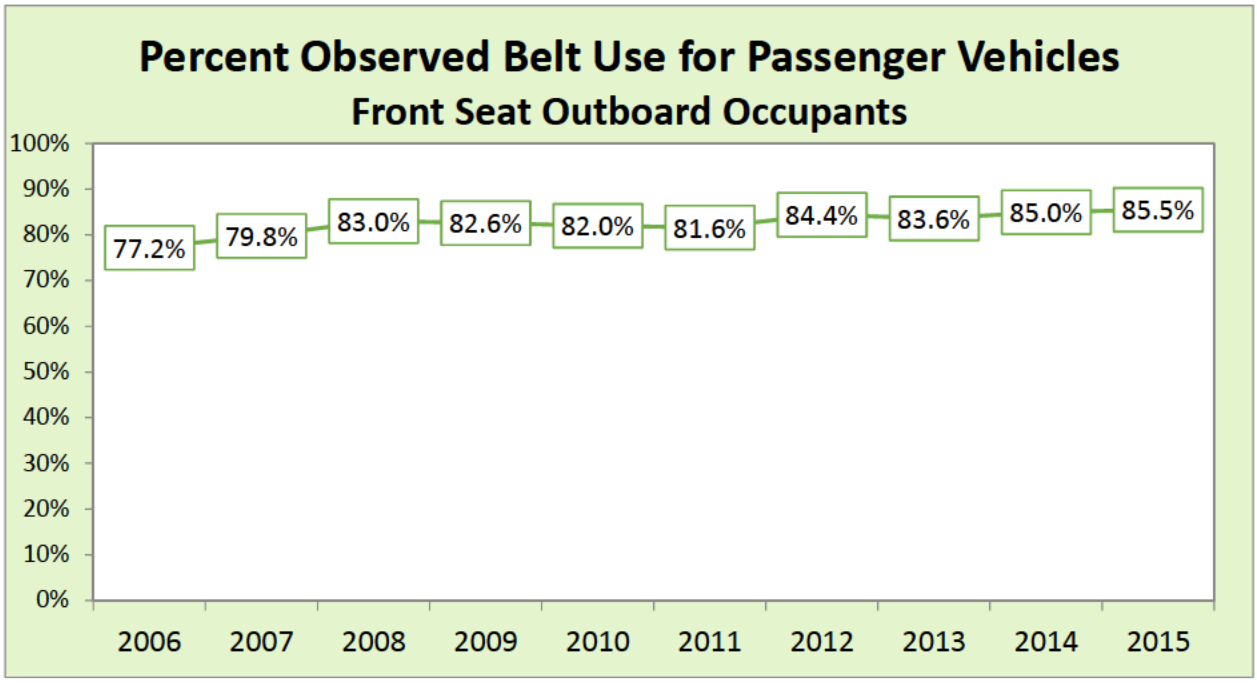


Figure 15: A-1) Number of Seat Belt Citations Issued During Grant-Funded Enforcement Activities

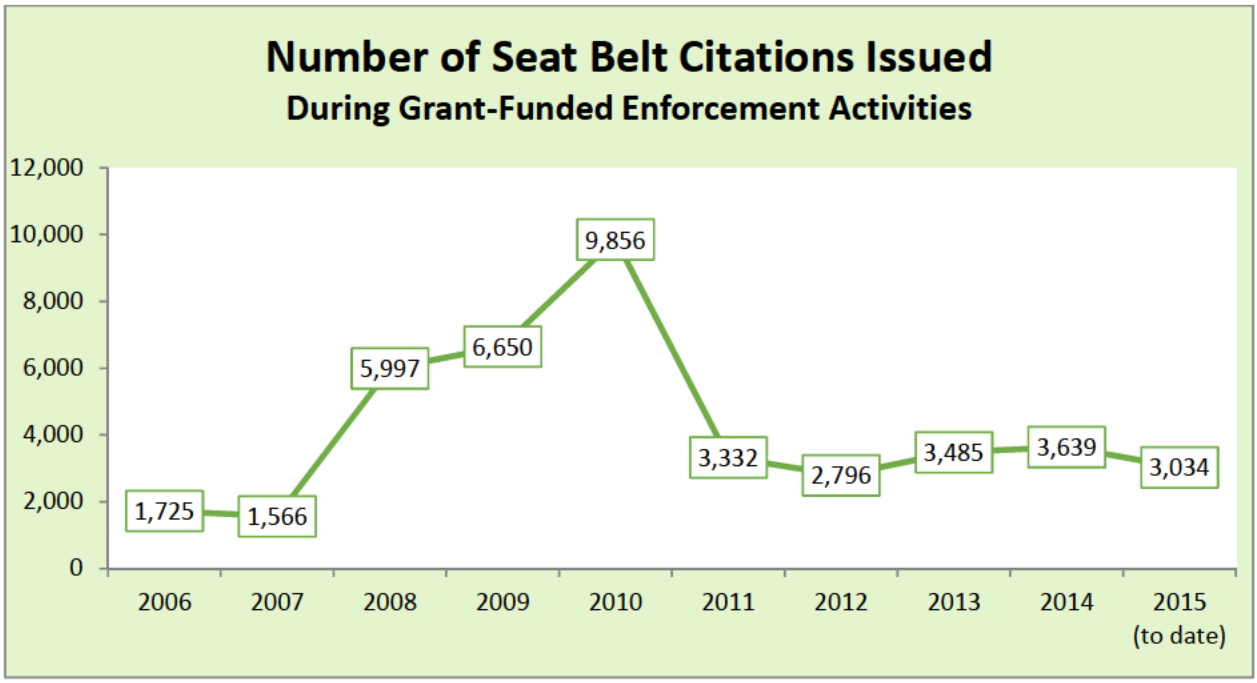


Figure 16: A-2) Number of Impaired Driving Arrests Made During Grant-Funded Enforcement Activities

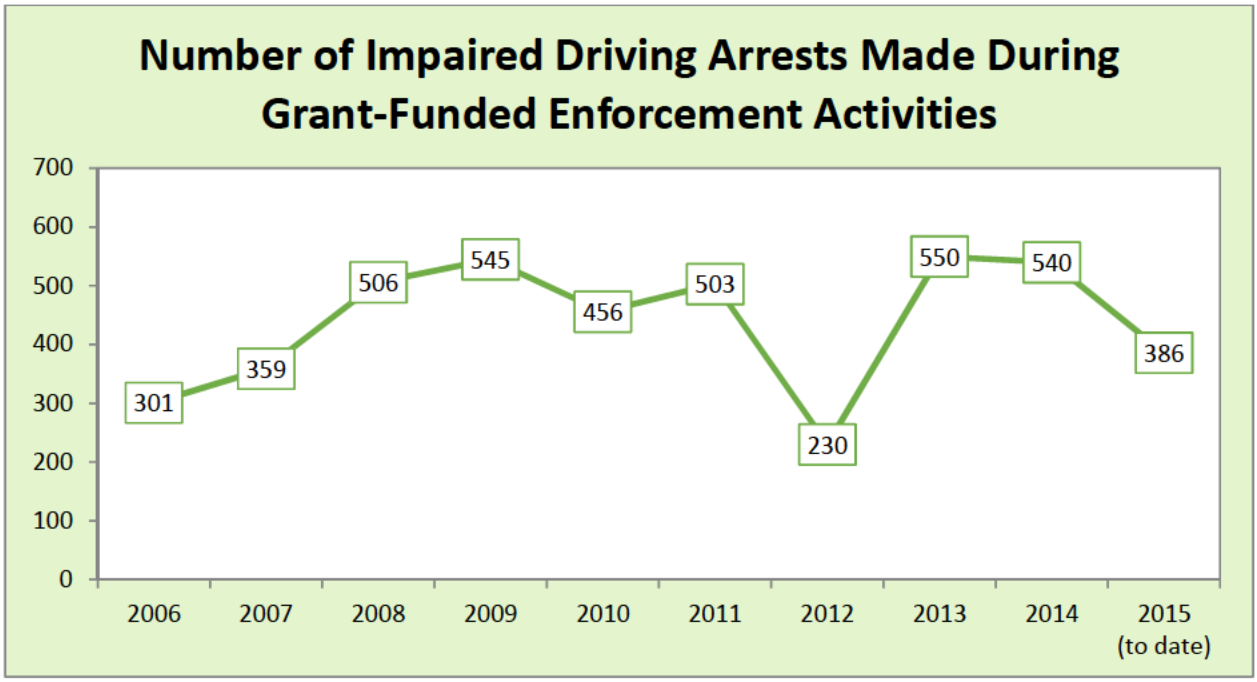
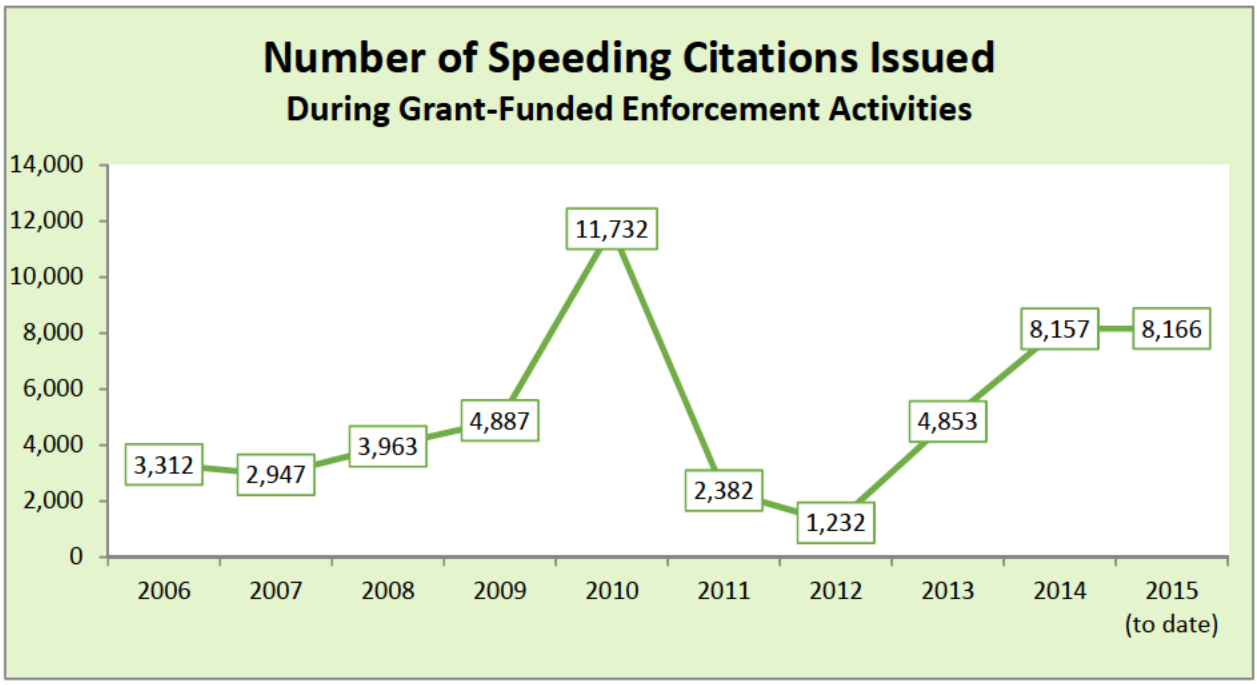


Figure 17: A-3) Number of Speeding Citations Issued During Grant-Funded Enforcement Activities



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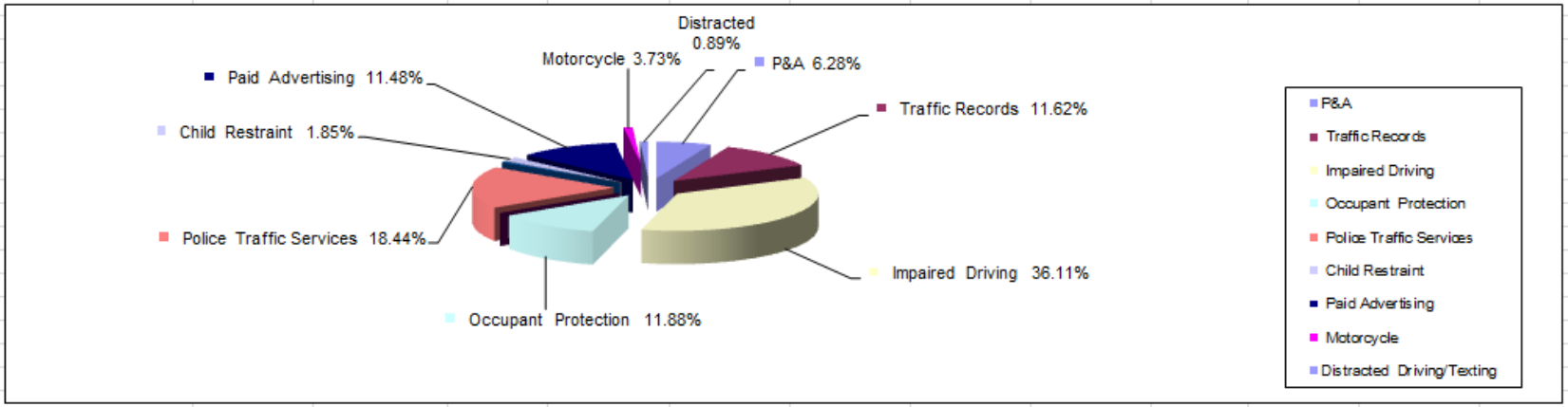
FFY2015 Financial Summary of Expenditures

FFY15 Financial Summary of Expenditures (as of 12/1/15

	402	405	405b	408	405c	410	405d	405e	2010	2011	Total	% of Total
P&A	$ 314,992					$ 10,381					$ 325,373	6.28%
Traffic Records	$ 95,952			$ 506,443							$ 602,395	11.62%
Impaired Driving	$ 368,374					$ 819,138	$ 684,823				$1,872,336	36.11%
Occupant Protection	$ 219,701	$ 3,254	*******								$ 616,112	11.88%
Ped/Bicycle Safety	$										$ -	0.00%
Police Traffic Services	$ 956,071										$ 956,071	18.44%
Safe Communities	$ 18,837										$ 18,837	0.36%
Child Restraint	$ 45,822									$ 50,343	$ 96,165	1.85%
Paid Advertising	$ 595,333										$ 595,333	11.48%
Motorcycle	$ 31,288								$ 22,241		$ 53,529	1.03%
istracted Driving/Texting	$							$ 48,244			$ 48,244	0.93%
TOTAL	$2,646,371	$ 3,254	*******	$ 506,443	0	$ 829,519	$ 684,823	$ 48,244	$22,241	$50,343	$5,184,394	100.00%



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Appendix A

Safety Belt Use in Maine 2015

Al Leighton
Julie M. Allaire
Survey Research Center, Muskie School of Public Service
University of Southern Maine
2015

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, Tara Casanova-Powell and Joyce Connolly 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, Holly Culloton, Arwen Edsall, Sharleen Garvey, and Fran Kressley.

Al Leighton,
Julie Allaire
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 2015, 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 2015. Results of those observations are reported in the "Motorcycle Helmet Use" section on page 17.

For the past twelve 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 17,165 drivers and front seat passengers in 13,531 vehicles (in the 2014 study, 14,865 vehicles and 18,679 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 2015 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, and again in 2015 to Maine's highest recorded rate to date, 85.5%. In 2002, the statewide use rate was only 59%. By 2007, that rate had increased to 79.8%. This year, passengers have a slightly higher use rate than drivers. 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	2015 Study	2014 Study	2013 Study
All Vehicle Occupants	85.5%	85.0%	83.0%
All Drivers	85.2%	84.8%	82.9%
All Front Passenger Seat Occupants	85.7%	84.3%	83.5%

Gender differences. Women in particular show substantial compliance with seatbelt laws. Table B shows gender differences for 2013, 2014, and 2015.

Table B

Comparison of seat belt usage rates by gender:

Gender	2015 Study	2014 Study	2013 Study
Male Driver	83.0%	81.5%	79.5%
Female Driver	88.3%	89.6%	87.2%
Male Passenger	77.2%	76.4%	71.9%
Female Passenger	90.1%	88.0%	91.6%

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 twice as likely to use their belts as they are when the driver is not using a belt (92.2% vs. 40.5%).

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 2015 use rates for all states, it is not possible to report where Maine now stands but in 2014, Maine was in the lower half of all states, with 17 states having lower rates and 29 states and DC having higher rates. Nationally, the use rate was 87% in 2014.

Type of vehicle. As has been the case in every study conducted in Maine, people in pickup trucks have the lowest use rates, at 74.8 percent. This is a substantial increase from the 39.7% reported in 2002, and is an increase from 2014's rate of 74.1 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 87.7%, 87.6%, and 89.0%, 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 2015 study was implemented and presents the key findings. It also shows comparisons between 2015 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 30, 2015

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 2015, seven 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 13,531 passenger vehicles and the use or nonuse by 17,165 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. Most (86%) were conducted from June 2 to June 20, 2015; the rest were done from June 22 through June 29 (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 and Joyce Connolly 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 Forest 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 85.5% 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 2015. While 89.2% of all female occupants were restrained, only 82.3% of males were using their seatbelts. For females, the rate is slightly lower than last year, while for males it represents a small increase.

Seating position. In 2015, 85.2% of drivers were using seatbelts and 85.7% of passengers were using theirs. There is no clear pattern in use rates by seating position as drivers and passengers have alternated with the highest use rates over the past four years.

Urban/rural differences. As seen in 2014, the belt use rate in rural locations remains higher than that of urban locations, at 86.7% and 85.1% respectively. The gap between the two areas had been narrowing considerably over the last few years, after a consistent pattern of higher use in urban areas for many years. This marks the second 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 74.6%, drivers of pickup trucks have a considerably lower use rate than drivers of 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. Since then, pickup truck drivers have been improving with a 2015 rate of 74.6 percent.

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 twice as likely to use their belts as they are when the driver is not using a belt,

92.2% vs. 40.5%; see Table 8. The gap, however has narrowed, and in 2015 passengers of unbelted drivers buckled up at a higher rate than they did in 2014 (40.5% this year vs. 33.6% last year).

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 still in the lower half of the range in national standings. In 2014, there were only 17 states reporting lower use rates than Maine. 2015 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 Thursdays (87.9%) and lowest on Fridays, at (83.1%). (NOTE: these are based on unweighted data).

Time of day. Safety belt use varies throughout the day (Table 7). The highest rates are from 7:00 a.m. to 8:59 (88.2%). The lowest rates occur between 11:00 a.m. and 1:29 p.m. (82.6%). Time of day rates have also varied from year to year.

Weather and road conditions. Good weather conditions were not as prevalent during this year's study period. As a result, there was more variation in the types of weather conditions encountered by observers. Overall, 57.2% of vehicles were observed in sunny and clear weather and 31.5% while it was cloudy. The rest (11.3%) were done during wet, rainy or foggy weather. There was some variation in use rates; sunny weather had 85.3% use while light rain had 88.9%. (see Table 7. Also note that the percentages for Day of week, Time of day, and Weather and road conditions each refer to all drivers, not all occupants).

Comparison of 2015 with 2014 and 2013 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 85.5 percent.

This year, drivers are less likely to use their seatbelts than passengers, 85.2% and 85.7%, respectively. Over the past 4 years, drivers and passengers have alternated each year as to which group had the higher use rates. Both driver and passenger use increased from last year, with passenger use increasing for the fifth consecutive year.

A look at male drivers and female drivers over the last three studies shows small, steady increases among men. Usage among women experienced a small dip in 2015 from the peak of 89.6% seen in 2014. For the year 2013, male drivers had a use rate of 79.5% and females had a rate of 87.2%. In 2014, the comparable figures rose to 81.5% for male drivers and 89.6% for female drivers. The current use rates for male drivers of 83.0% and for females of 88.3% demonstrate that the "gender gap" continues to exist, though increases among men are narrowing the gap.

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 2015, Maine's overall use rate increased to 85.5% for the first time ever. A number of sub-groups also increased their rates of seat belt use, including all drivers, all male occupants, and pick up drivers, among others. After having recorded declines in many areas in 2013, to have increases 2 years in a row is certainly encouraging. However, the fact that some groups increase while others decrease 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 sixth 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 316 drivers and 52 passengers. The overall helmet use rate has increased this year to 56.8% from last year's rate of 53.1%, though has not rebounded to the level seen in 2013 (60.2%). Tables E and F present the key findings.

Table E

Comparison of motorcycle helmet usage rates statewide

Occupants Observed	June 2015
All Motorcycle Occupants	56.8% (N=368)
All Drivers	55.1% (N=316)
All Passengers	67.3% (N=52)

Table F

Comparison of motorcycle helmet usage rates by gender:

Gender	June 2014
Male Driver	53.6% (N=293)
Female Driver	73.9% (N=22)
Male Passenger	66.7% (N=3)
Female Passenger	67.4% (N=49)

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
2015 Maine Safety Belt Use Observation Study

TABLE 1

Restraint Use in Passenger Vehicles
Statewide

Maine, 2015

All Persons

All Persons	
Lap/Shoulder	85.5%
No Restraint	14.5%
No. Vehicles =13,531; No. Persons =17,078	

TABLE 2

Restraint Use in Passenger Vehicles
Statewide
By Seating Position

Maine, 2015

All Persons

Driver		Passenger	
Lap/Shoulder	85.2%	Lap/Shoulder	85.7%
No Restraint	14.8%	No Restraint	14.3%
N = 13,457		N = 3,621	

TABLE 3

Restraint Use in Passenger Vehicles
Statewide

Maine, 2015

Males

All Males	
Lap/Shoulder	82.3%
No Restraint	17.7%
N = 9,149	

TABLE 4

Restraint Use in Passenger Vehicles
Statewide
By seating position

Maine, 2015

Males

Driver		Passenger	
Lap/Shoulder	83.0%	Lap/Shoulder	77.2%
No Restraint	17.0%	No Restraint	22.8%
N = 7,909		N = 1,240	

TABLE 5

Restraint Use in Passenger Vehicles
Statewide

Maine, 2015

Females

All Females	
Lap/Shoulder	89.2%
No Restraint	10.8%
N = 7,867	

TABLE 6

Restraint Use in Passenger Vehicles
Statewide
By seating position

Maine, 2015

Females

Driver		Passenger	
Lap/Shoulder	88.3%	Lap/Shoulder	90.1%
No Restraint	11.7%	No Restraint	9.9%
N = 5,517		N = 2,350	

TABLE 7

Percentage of Drivers Wearing Safety Belts
Under Selected Conditions
Statewide

Maine, 2015

Type of Vehicle

Vehicle Type	# of Drivers	Belt Use
Car	(N = 5,907)	88.0%
SUV	(N = 3,799)	88.0%
Van	(N = 961)	87.4%
Truck	(N = 2,790)	74.6%

Day of the Week

(Note: data in the rest of this table are not weighted)	# of Drivers	Percent of Drivers Wearing Safety Belts
Sunday	(N = 1,704)	86.5%
Monday	(N = 1,956)	85.6%
Tuesday	(N = 1,803)	87.0%
Wednesday	(N = 1,741)	86.1%
Thursday	(N = 2,086)	87.9%
Friday	(N = 2,264)	83.1%
Saturday	(N = 1,906)	84.4%

Table 7, cont'd

Weather[10]	# of Drivers	Percent of Drivers Wearing Safety Belts
Sunny/Clear	(N = 7,559)	85.3%
Raining	(N = 1,205)	88.9%
Cloudy	(N = 4,161)	85.1%
Fog	(N = 250)	96.0%
Wet/Not Raining	(N = 53)	71.7%

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	# of Drivers	Percent of Drivers Wearing Safety Belts
7am – 8:59am	(N = 2,731)	88.2%
9am – 10:59am	(N = 2,303)	87.5%
11am – 1:29pm	(N = 2,804)	82.6%
1:30pm – 3:29pm	(N = 2,497)	84.4%
3:30pm – 6pm	(N = 3,101)	86.1%

TABLE 8

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

Maine, 2015

When the driver IS wearing a belt

Driver	Passenger	
NOT APPLICABLE	Lap/Shoulder	92.2%
	No Restraint	7.8%
N = Not Applicable	N = 3,203	

When the driver is NOT wearing a belt

Driver	Passenger	
NOT APPLICABLE	Lap/Shoulder	40.5%
	No Restraint	59.5%
N = Not Applicable	N = 400	

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, 2015

RESTRAINT TYPE	Rural		Urban		STATEWIDE	
	N	%	N	%	N	%
Lap/Shoulder Belt	8,178	86.7	5,741	85.1	13,919	86.0
No Lap/Shoulder Belt	1,260	13.3	1,007	14.9	2,267	14.0
Lap/Shoulder Belt TOTAL	9,438	100.0	6,748	100.0	16,186	100.0

TABLE 10

Observed Safety Belt Use Rates Reported by States to NHTSA
2013 and 2014

State	2013	2014	State	2013	2014
Alabama	**97%**	**96%**	Montana	74%	74%
Alaska	**86%**	**88%**	Nebraska	79%	79%
Arizona	85%	87%	Nevada	95%	94%
Arkansas	**77%**	**74%**	New Hampshire	73%	70%
California	**97%**	**97%**	New Jersey	**91%**	**88%**
Colorado	82%	82%	New Mexico	**92%**	**92%**
Connecticut	**87%**	**85%**	New York	**91%**	**91%**
Delaware	**92%**	**92%**	North Carolina	**89%**	**91%**
District of Columbia	**88%**	**93%**	North Dakota	78%	81%
Florida	**87%**	**89%**	Ohio	85%	85%
Georgia	**96%**	**97%**	Oklahoma	**84%**	**86%**
Hawaii	**94%**	**94%**	Oregon	**98%**	**98%**
Idaho	82%	80%	Pennsylvania	84%	84%
Illinois	**94%**	**94%**	Rhode Island	**86%**	**87%**
Indiana	**92%**	**90%**	South Carolina	**92%**	**90%**
Iowa	**92%**	**93%**	South Dakota	69%	69%
Kansas	**81%**	**86%**	Tennessee	**85%**	**88%**
Kentucky	**85%**	**86%**	Texas	**90%**	**91%**
Louisiana	**83%**	**84%**	Utah	82%	83%
Maine	**83%**	**85%**	Vermont	85%	84%
Maryland	**91%**	**92%**	Virginia	80%	77%
Massachusetts	75%	77%	Washington	**95%**	**95%**
Michigan	**93%**	**93%**	West Virginia	82%	**88%**
Minnesota	**95%**	**95%**	Wisconsin	**82%**	**85%**
Mississippi	**74%**	**78%**	Wyoming	82%	79%
Missouri	80%	79%	NATIONWIDE	87%	87%

Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, *Traffic Safety Facts, June 2015*, Research Note DOT HS 812 149.

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 2015 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
2 Light Rain
3 Cloudy
4 Fog
5 Clear but Wet

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					
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27						62					
28						63					
29						64					
30						65					
31						66					
32						67					
33						68					
34						69					
35						70					

MAINE SEAT BELT SURVEY

Appendix B

State of Maine Highway Safety Marketing Plan

Fiscal Year 2015 - 2016

Maine Bureau of Highway Safety Background

The Federal Highway Safety Act of 1966 directed the National Highway Traffic Safety Administration (NHTSA) and Federal Highway Administration (FHWA) of the United States Department of Transportation to jointly administer various highway safety programs and projects. This federal grant program provides funds administered through the Maine Department of Public Safety, Bureau of Highway Safety (MeBHS) to eligible entities to be used, in part, for traffic safety education and enforcement to decrease the deaths and injuries that occur on Maine roads and highways.

The Maine Bureau of Highway Safety (MeBHS) is tasked with the responsibility of effectively administering and utilizing Federal Section 402 Highway Safety Funds and other related grants received from the National Highway Traffic Safety Administration (NHTSA). These funds are used for planning, implementing and evaluating behavioral highway safety programs and projects with the overall goal of reducing the resulting deaths, injuries and property damages caused by motor vehicle crashes.

MeBHS administers federally funded categorical grant programs offered by the National Highway Traffic Safety Administration. MeBHS develops annual statewide comprehensive plans which outline major problem areas and proposes spending plans to address identified problems.

The Bureau is the leader in coordinating the safety efforts of federal, state and local organizations involved in Maine traffic safety. Our programs are intended to improve the human behavior of drivers, passengers, pedestrians and cyclists.

In addition to administering NHTSA federal grant funds, the MeBHS is also responsible for:

- Managing Maine's Implied Consent Program under Title 29A subchapter 4 §2521- 2528. This is a statewide program that tests drivers suspected of being impaired by alcohol or other drugs. Maine's Implied Consent and Operating Under the Influence laws mandate that all drivers arrested for suspected OUI must take a blood alcohol test. Failure to do so results in even longer mandatory license suspension periods. The Maine Supreme Judicial Court has ruled that our law mandating the testing of all individuals involved in fatal accidents is both constitutional and enforceable.
- Developing and administering the Maine Driving Dynamics Driver Improvement Program under Title 23 §4208. This is a five-hour driver improvement course that allows for point reduction on a driver's record. Each year, approximately 5,000 people attend a Maine Driving Dynamics class
- Administration of the Federal Fatal Analysis Reporting System (FARS). This system records data on fatal crashes in Maine for input into a larger national record-keeping system of statistical data. The FARS data is analyzed by the MeBHS, the Maine State Police and others to determine enforcement priorities and schedules.

Mission of the Bureau

Our mission is to save lives and reduce injuries on the state's roads and highways through leadership, innovation, facilitation, project and program support, and work in partnership with other public and private organizations.

FY2015-16 MeBHS Priority Areas

Our most recent analysis of available data indicates that despite our specific education and enforcement efforts, Maine continues to experience traffic fatalities related to: unrestrained occupants in vehicles; drivers and motorcycle operators with alcohol content in excess of .08; excessive speed; teen drivers; and distracted drivers.

From a behavioral standpoint, below are the priority areas that the MeBHS anticipates addressing in Federal Fiscal Year 2015-6:

- **Alcohol/Drugs and Impaired Driving:** The program goal is to reduce deaths and injuries attributable to alcohol and drug involvement, by adults and teens, by removing alcohol- and drug-impaired drivers from the roads.

- **Occupant Protection and Child Passenger Safety:** These two programs share a goal to increase compliance with both adult and child safety restraint laws including the correct and consistent use of infant and child safety seats.

- **Traffic Records:** The program goal is to establish/improve record systems that aid in identifying existing and emerging traffic safety problems and aid in evaluating program performance. Accurate and current records are needed to support problem identification and to evaluate countermeasure effectiveness.

- **Emergency Medical Services:** The program goal is to ensure that persons involved in motor vehicle collisions receive rapid and appropriate medical treatment through a coordinated system of emergency medical care. Maine strives to increase the reliability and consistency of the program data.

- **Police Traffic Services:** The program goal is to reduce motor vehicle collisions through selective enforcement, education and deterrence. This program seeks to encourage compliance with safety belt use, impaired driving, speed limit and other traffic laws.

- **Motorcycle Safety:** The program goal is to improve motorcycle safety by training and educating motorcycle riders on the effectiveness and need for safety equipment and educating the motoring public on the presence of motorcycles in the traffic environment.

- **Teen Drivers and Senior Drivers:** These two programs share a common goal of keeping our most vulnerable drivers safe, reducing the number of crashes and injuries by teen and elder drivers and providing alternate means of transportation when necessary.

- **Distracted Driving:** This program area has become a major concern nationwide. There is a significant need for education and awareness in this area, and MeBHS has been developing projects and promoting safe driving behavior through statewide media markets. In September 2011, the Maine Legislature passed a no texting while driving law that prohibits a person from operating a motor vehicle while engaging in text messaging.

2015-16 | Goals and objectives

Goal 1: Reduce the number of fatalities and drivers pulled over due to impaired driving.

Objective 1: Inform Mainers about the risks of driving (automobiles/motorcyclists etc.) while impaired.

60% of all Maine's fatalities during the mid-1970's to 1980 were alcohol-related. This improved to a level of around 20% in 2002-2003. Since then, the percent of alcohol-related fatalities has risen slightly above 30% to 36% in 2012. The recent fatality trend reflects an overall increase.

In 2012, Maine had 58 alcohol-related fatalities and 45 of these fatalities involved drivers with a Blood Alcohol Content (BAC) of .08 or higher. Maine is slightly below the FARS (Fatality Analysis Reporting System) national rate of 32% (2008). Attention also needs to be focused on drug-impaired drivers.

Crashes involving impaired driving have seen a steady decrease since 2002, but the recent increase in impaired driving fatalities has prompted the MeBHS to offer a year-long Impaired Driving Enforcement Campaign. Maine data demonstrates that almost every county has seen a decrease in impaired driving over the last three years. With the help of MaineDOT crash data we have noticed an increase of impaired driving crashes during the days of Monday – Wednesday. Offering a yearlong campaign allows our law enforcement partners to combat impaired driving all year and on the days where we have seen an increased concentration of crashes. Our data even though it generally shows a decrease in impaired driving crashes the greatest area of concern lies within our southern region of the State of Maine. Our southern area of concern remains Cumberland and York counties. MeBHS with the help of our Regional Impaired Driving Task Force Teams consisting of law enforcement partners in Cumberland and York County conduct focused saturation patrols and sobriety checkpoints to create an increased presence in these counties. Saturation patrols along with sobriety checkpoints is a proven countermeasure outlined in the "Countermeasures That Work, Seventh Edition" published by NHTSA.

State of Maine Data:

In reviewing the data from 2009-2013, the Bureau found the following statistics:

- 93 Fatalities were reported
- Average fatal age for impaired driving is 33
- 15 of the fatals were female, 78 fatals were males
- Female average age is 37, male average age is 32

Target: Using the impaired driving fatalities data, MeBHS is targeting media statewide geared at males ages 25-54.

Strategies:

1. **TV/Radio** – media will be placed statewide targeting males 18-54. Media will be placed in May, July and during the holidays. A TV budget of $24,000 for 5 two- week campaigns and a radio budget of $18,600 for 5 two-week campaigns. Total TV/Radio budget $42,600.

2. **Added Value** -

3. **Online Advertising** – online ads will be placed on Facebook and digital sites will be placed in May, July and during the holidays targeting Maine drivers between the ages of 25-54. Total budget for targeted online advertising is $930

4. **Production**: New TV :15 PSA's will be produced with a focus on motorcycle drug impaired drivers.

5. **Social Media** – Messages will be targeted towards Facebook and Twitter users using articles, graphics and targeted messaging engaging fans and followers with Highway Safety messaging.

6. **Public Relations / Events – TBD, underdevelopment**

Goal 1: Reduce the number of fatalities and drivers pulled over due to impaired driving.

Objective 2: Inform Maine teens about the risks of driving and provide safety to reduce the number of accidents and fatalities.

Young drivers contribute to and suffer from the consequences of motor vehicle crashes at a disproportionate rate. Studies have concluded that crash rates are highest during a teen's first few hundred miles on the road.

Motor vehicle crashes are the leading cause of deaths for young drivers in the United States. Due to inexperience and other factors, young drivers have a much higher crash and fatality rate than that average driver. Maine's young driver program focuses on drivers between the ages of 16 and 24, with particular focus on the youngest of drivers, ages 16 to 18.

The following are crash facts about Maine's young drivers:

- Based on miles driven, teens are involved in 3 times as many fatal crashes as all other drivers
- Speeding or driving too fast for conditions is a factor in 37% if crashes involving teen drivers
- Teens have the lowest seat belt use rates of any age group, leading to deadly consequences
- 82% of our nation's teens ages 16-17 have a cell phone. 34% of them admit to talking on their cell phone while driving
- One out of five 16 and 17 year-old drivers will be involved in a crash this year, more than four times greater than the average rate for all drivers.

- Young drivers (aged 16-24) are involved in nearly 40% of all crashes.
  - 16-24 year-olds represent only about 10% of Maine's population, but they account for a quarter of Maine hospitalizations due to motor vehicle crashes.

State of Maine Data:

In reviewing the data from 2009-2013, the Bureau found the following statistics:

- 38 fatalities were reported
- Average fatal age for impaired driving is 18
- 11 of the fatals were female, 27 fatals were males
- Female average age is 17.8, male average age is 18.1

Target: Using the teen driving fatalities data, MeBHS is targeting media statewide geared at teens 16-19.

Strategies:

1. **TV** – A: 30 TVA PSA geared towards distracted driving will be run on a PSA schedule.

2. **Added Value** -

3. **Online Advertising** – online ads will be placed on Pandora, Facebook and digital sites will be placed from July through September (8 weeks) and October (2 weeks) targeting Maine drivers between the ages of 16-19. Total budget for targeted online advertising is $6,227

4. **Production**: A recently produced distracted driving web video will be shortened to a :15s and :30s PSA. These will be used for TV and online media.

5. **Social Media** – Messages will be targeted towards Facebook and Twitter users using articles, graphics and targeted messaging engaging fans and followers with Highway Safety messaging.

6. **Public Relations / Events – TBD, underdevelopment**

Goal 1: Reduce the number of fatalities and drivers pulled over due to impaired driving.

Goal 3: Inform Mainers about the benefits of wearing safety belts (occupant protection):

In 2008, seat belts saved more than 13,000 lives nationwide. From 2004 to 2008, seat belts saved over 75,000 lives — enough people to fill a large sports arena. During a crash, being buckled up helps keep you safe and secure inside your vehicle, whereas being completely thrown out of a vehicle is almost always deadly. Seat belts are the best defense against impaired, aggressive, and distracted drivers.

In 2008, Maine's seat belt usage rate peaked at 83%. In the years following there was a gradual decline in the observed use of seat belts. However, in 2012 the seat belt usage rate increased to the highest rate on record. The 2012 seat belt usage rate stands at 84.4%. This is slightly below the national average of 86%. The overall goal 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. In 2011, 53 occupants were unrestrained, representing nearly 50% of fatalities involving motor vehicles. In 2012 unrestrained occupant fatalities increased to 76, representing 61% of fatalities involving motor vehicles.

State of Maine Data:

In reviewing the data from 2009-2013, the Bureau found the following statistics:

- 127 fatalities were reported
- Average fatal age for impaired driving is 29
- 26 of the fatals were female, 101 fatals were males
- Female average age is 28, male average age is 29

Target: Using the unbelted fatalities data, MeBHS is targeting media statewide geared at males 18+.

Strategies:

1. **TV/Radio** – media will be placed statewide targeting males 18+. Media will be placed in throughout the months of May, June, July, August, September and October. A TV budget of $39,054 for 14 non-consecutive weeks and a radio budget of $13,520 for 14 non-consecutive weeks. Total TV/Radio budget $52,574.

2. **Added Value** -

3. **Online Advertising** – online ads will be placed on Facebook and digital sites will be placed in throughout the months of May, June, July, August. September and October targeting Maine male drivers age 18+. Total budget for targeted online advertising is $2,727

4. **Production**: New :15s seatbelt PSA will be produced for TV.

5. **Social Media** – Messages will be targeted towards Facebook and Twitter users using articles, graphics and targeted messaging engaging fans and followers with Highway Safety messaging.

6. **Public Relations / Events – TBD, Underdevelopment**

Goal 1: Reduce the number of fatalities and drivers pulled over due to impaired driving.

Goal 4: Inform Mainers about speed protection to reduce fatalities

Combating speed, aggressive driving, operating after suspension and other unsafe driving habits as well as offering programs to law enforcement agencies to support their traffic enforcement efforts are an integral part of MeBHS's effort to make Maine roads safer. The biggest concern with excessive speed is that it often leads to other driver errors and serious injuries. Adjusting speed for weather-related road conditions is also a problem. MeBHS is working with Maine law enforcement agencies to fund dedicated overtime details to combat the rise of speeders and unsafe driving behaviors on Maine roads. Enforcement and proper unsafe driver detection equipment can be effective means of improving driver behavior.

State of Maine Data:

In reviewing the data from 2009-2013, the Bureau found the following statistics:

- 115 fatalities were reported
- Average fatal age for impaired driving is 31
- 12 of the fatals were female, 102 fatals were males
- Female average age is 32.4, male average age is 31.74

Target: Using the speed fatalities data, MeBHS is targeting statewide media at males 25-49

Strategies:

1. **TV/Radio** – media will be placed statewide targeting males 25-49. Media will be placed in throughout the months of July, August. September and October. A TV budget of $42,000 for 15 non-consecutive weeks and a radio budget of $32,550 for 15 non-consecutive weeks. Total TV/Radio budget $74,550.

2. **Added Value** -

3. **Production**: New :15 motorcycle speed PSA will produced for TV.

4. **Social Media** – Messages will be targeted towards Facebook and Twitter users using articles, graphics and targeted messaging engaging fans and followers with Highway Safety messaging.

5. **Public Relations / Events -**

Goal 1: Reduce the number of fatalities and drivers pulled over due to impaired driving.

Goal 5: Inform Mainers about the dangers of distracted driving

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 and more – is a growing threat on the road.

Often it is difficult to accurately collect this information at the crash scene since drivers won't always volunteer what led to the crash. Nonetheless 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.

The goal is to reduce distracted driving-related fatalities by 10% from 33 in 2010 to 29.7 by 2014 (SHSP). In order to achieve this goal, the Bureau will continue 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. NHTSA estimates that at least 25% of police-reported crashes involve some form of driver inattention. In Maine, the concern for this growing health epidemic has caused for immediate education to promote safe and attentive driving. 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 legislature, in 2011, Maine passed a primary texting ban which states that Person 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.

Target: MeBHS is targeting media statewide geared at Adults 18-49

Strategies:

1. **TV/Radio** – media will be placed statewide as a PSA campaign. Distracted Driving radio ran for six weeks in April and June. Radio budget was $13,963.

2. **Added Value -**

3. **Online Advertising** – online ads will be placed on Facebook and digital sites will ran for six weeks in April and June. Total budget for targeted online advertising is $8,439

4. **Production**: a new 3 minute web video was produced in conjunction with the Maine State Police in late 2015. Two cut downs were made -:15s and :30s to run online and on TV.

5. **Social Media** – Messages will be targeted towards Facebook and Twitter users using articles, graphics and targeted messaging engaging fans and followers with Highway Safety messaging.

6. **Public Relations / Events –**

Goal 1: Reduce the number of fatalities and drivers pulled over due to impaired driving.

Goal 6: Inform Motorcycle drivers about safety habits and focusing other drivers on being aware of motorcycles.

Motorcycle crashes resulted in 24 fatalities in 2012, which was an increase from 15 fatalities in 2011. In 2012, motorcycle crashes and fatalities increased from 2011.

Motorcycle crash data from 2012 include:

• Helmets were not worn by 14 of the 24 riders killed

• Leading age group of motorcycle operator fatalities is 45-54

• 11 of the 24 fatal motorcycle crashes were single vehicle occurrences

The Bureau of Highway Safety is required by Maine statute to develop and implement a public education program to encourage helmet utilization by all motorcycle and moped riders.

State of Maine Data:

In reviewing the data from 2009-2013, the Bureau found the following statistics:

- 43 fatalities were reported
- Average fatal age for impaired driving is 41
- 5 of the fatals were female, 38 fatals were males
- Female average age is 34.4, male average age is 41.9

Target: Using the motorcycle fatalities data, MeBHS is targeting media statewide geared at males 25-49

Strategies:

1. **TV/Radio** – media will be placed statewide targeting males 25-49. Media will be placed in May, July and during the holidays. A TV budget of $11,200 for 2 two- week campaigns and a radio budget of $8,680 for 2 two-week campaigns. Total TV/Radio budget $19,880

2. **Added Value** -

3. **Online Advertising** – online ads will be placed on Facebook and digital sites will be placed in May, July and during the holidays targeting Maine drivers between the ages of 25-54. Total budget for targeted online advertising is $930

4. **Production**: Two new :15s PSA's will be produced regarding motorcycles – impaired driving and speeding.

5. **Social Media** – Messages will be targeted towards Facebook and Twitter users using articles, graphics and targeted messaging engaging fans and followers with Highway Safety messaging.

6. **Public Relations / Events –**

Goal 1: Reduce the number of fatalities and drivers pulled over due to impaired driving.

Goal 7: Inform Mainers about safe driving around bicyclists and pedestrians

Pedestrian Safety Currently our data doesn't provide enough evidence to justify expenditure of federal funds on pedestrian safety projects in the State of Maine. As you can see from the data provided in the NHTSA Core Performance Measure C10 over the past 5 years Maine has average 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 2012 SHSP outlining the state ongoing pedestrian safety countermeasures.

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. In Maine, a pedestrian is hit by a motor vehicle on average once a day. More than ninety percent of these 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. Both the bicyclist and pedestrian, as well as the motorist, need to be taking the right precautions to assure the safety of all road users.

Contrary to recent trends for a reduction in crashes and fatalities on the transportation system, fatalities for pedestrians have been increasing in Maine the last few years.

State of Maine Data:

In reviewing the data from 2009-2013, the Bureau found the following statistics:

- 27 fatalities were reported
- Average fatal age for impaired driving is 37.9
- 6 of the fatals were female, 21 fatals were males

- Female average age is 34.6, male average age is 38.8

Target: Using the pedestrian/bicycle fatalities data, MeBHS is targeting media statewide geared at Adults 18+

Strategies:

1. **TV/Radio** – media will be placed statewide targeting Adults 18+. Media will be placed in July and during the holidays. A TV budget of $22,400 for 2 two- week campaigns.

2. **Social Media** – Messages will be targeted towards Facebook and Twitter users using articles, graphics and targeted messaging engaging fans and followers with Highway Safety messaging.

3. **Public Relations / Events –**

Goal 1: Reduce the number of fatalities and drivers pulled over due to impaired driving.

Goal 7: Inform Mature Drivers in Maine about safe driving and providing resources for driver testing.

Mature drivers are the fastest growing segment in the United States. Because of the aging process, mature drivers are more likely to suffer injuries or die in an accident. Because male mature drivers are more likely to be driving, they are twice as likely to be in an accident.

Mature Drivers suffer a loss of:

- Dynamic visual acuity
- Depth perception
- Contrast Sensitivity
- Glare recovery
- Light / dark adaptation
- Cognition
- Memory
- Attention
- Reaction time
- Strength and flexibility

Mature drivers are also more likely to suffer from physical conditions that may inhibit their driving performance. Due to these conditions and the aging process, they are more likely to be on prescription medications and may be unaware of the effects of the medication on their driving ability.

MeBHS would like to focus the campaign around self-assessment and recognizing the signs that driving skills may be deteriorating. Once the signs of deterioration are realized, directing mature mature drivers of places that may receive help or other forms of transportation. The Bureau will also focus on interventions – helping family members approach the subject of driving with a family member or loved one.

The MeBHS has a new initiative this year with mature drivers.

Target: Because functional decline does not affect all drivers at the same age, MeBHS is targeting media statewide geared at Adults 45+

Strategies:

1. **TV/Sponsorship** – media will be placed statewide targeting males Adults 45+. Media will be placed in September through November. A TV/Sponsorship budget of $43,200 has been defined for this campaign.

2. **Added Value** -

3. **Online Advertising** – online ads will be placed on Facebook and digital sites will be placed in May, July and during the holidays targeting Maine drivers between the ages of 25-54. Total budget for targeted online advertising is $4,500

4. **Production**: Four new :15s PSA's will be produced mature driving.

5. **Website** – a website will be created to aid mature drivers assess their driving. It will also provide facts and resources to mature drivers and their families.

6. **Social Media** – Messages will be targeted towards Facebook and Twitter users using articles, graphics and targeted messaging engaging fans and followers with Highway Safety messaging.

7. **Public Relations / Events – TBD, Indevelopment**

Appendix C

Annual LEL Report

PROJECTS

Regional Impaired Driving Enforcement Teams (R.I.D.E.)

Maine has three RIDE Teams, though one is idle until October 1st. The York County Team started details on May 30th, 2015 with a saturation patrol. The Cumberland RIDE Team had difficulty getting their grant application together so they will not be active this fiscal year. They are ready to go on October 1st. These teams are sworn in under the sheriff of their county.

The third team, Penobscot, started this year. This team includes Orono, Old Town, Veazie, Hampden and the Maine State Police. Interviews for Maine State Police candidates were held in May and their first details were shortly afterwards. We ran into a problem when the Penobscot County Sheriff decided not to commission officers specifically for the RIDE Team. This limited the range of team members. As a result a letter of cooperation was drafted between the communities to allow jurisdiction of officers in each community.

Two additional teams are under consideration; Sagadahoc County and Hancock County. DREs in these counties have seen the value of the current teams and would like to participate in the program. They have each convinced their respective sheriffs of the benefits. After meeting with each the sheriffs are also interested. We are evaluating the data to consider their future involvement in the RIDE Team program.

The need for a mobile breath alcohol testing (B.A.T.) vehicle is evident with the increased use of the RIDE Teams. This vehicle would allow teams to operate more efficiently in remote areas and eliminate transport time for testing drivers. It would also increase the number of Intoxilyzers in any area where large events are taking place and impaired driving is a concern.

I have been working closely with the Massachusetts State Police, inspecting their older vehicles and their new vehicles. This gives me a perspective of what we need in a Maine vehicle. I am currently working with the vendors LDV and Farber to try to develop bid specs to send to purchasing.

In June of 2015 I was assigned to poll the chiefs of police to learn if they would prefer access to a variable message trailer or a data event recorder type trailer. I also had to determine which agencies would voluntarily house and maintain the trailers once delivered. While communicating with the chiefs or designees I learned it was almost even on the votes for speed or variable message. I assisted with the research of potential vendors and drafting of the bid specs for this project. In August the trailers were purchased. We next had to find housing the trailers and coordinate training with the vendor, ATS, and the officers who will be using them.

National High Visibility Enforcement Programs

The ***Interstate 95 Challenge*** is directed at the Maine State Police. This campaign emphasizes enforcement of large truck and bus operator's illegal and unsafe driving behaviors as well as the illegal and unsafe driving behaviors of all motorists. Officers are especially vigilant of seatbelt usage, speeding, impaired driving, and distracted driving. Move Over laws designed to protect first responders stopped along highways are an additional focus of this enforcement initiative.

New England Drive to Save Lives (NEDSL) had two phases. The first phase was May 4th through the 8th and only on the interstate. The Maine State Police managed this phase themselves.

The second phase was August 3rd though the 8th. With the help of the Maine DOT we identified six corridors in Maine that have a high number of crashes. We invited every agency along these corridors to participate. We emphasized seatbelts, speed and distracted driving. The NEDSL media event was in Quincy Mass on July 30th.

I was able to visit chiefs along three of the corridors to reiterate the need for their participation. I found that several chiefs had dismissed the campaign for various reasons. I think I successfully recruited a few chiefs by visiting and explaining how simple it actually would be for them. In order to get chiefs to participate I asked for raw data on forms I created and asked that it all be mailed to me in Augusta. I will do the tallying and final reports thus minimizing the time each agency has to dedicate to the campaign.

Border to Border was on the first Monday of the 2015 Click it or Ticket campaign. We identified six corridors along the Maine and New Hampshire border to emphasize for this event. The six corridors included Interstate 95, Routes 1, 4, 9, 202 and 169. We had great coverage and it was highly visible to anyone coming into Maine that evening. The participants in the Border to Border were the York County Sheriff's Office, York PD, Berwick PD, North Berwick PD and the Maine State Police. We held a media event at the Maine Welcome Center in Kittery. We were joined by the New Hampshire State Police and each of the Maine agencies that were involved. We had television, radio and newsprint articles after the press conference.

We looked at adding programs specifically targeted to university campuses. There are a limited number of police agencies on campuses that have the ability to work traffic enforcement. After communicating with several I determined the agencies that can work traffic have complete access to all programs available through the Maine Criminal Justice Academy. I will continue to evaluate this because of the great number of pedestrian traffic on these campuses.

The National Law Enforcement Challenge was not a priority for my time. I shared materials and postings to encourage agencies to participate. This challenge focuses on an agency's traffic safety enforcement efforts and wrapped up in May of 2015. The Maine State Police participated and won the Challenge.

I coordinated with Alliance Sports Marketing with their efforts on seat belt awareness events at racing and baseball games around the state through their "You've Been Ticketed"

campaign. I contacted the local police agencies to provide officers to check for seat belts as fans arrive at their sporting venue. The motorists receive a reward ticket for a free t-shirt in return for buckling up.

In June of 2015 two separate entities of the National Highway Traffic Safety Administration's National Center for Statistics and Analysis contacted the MeBHS. Both are seeking access the Maine crash report data. Both the Crash Report Sampling System (CRSS) and Crash Investigation Sampling System (CISS) seek full access to completed crash reports.

CRSS is paper based and wants the reports of these six agencies: Farmington PD, Kennebec County SO, Augusta PD, Lincoln County SO, Winthrop PD, and Boothbay Harbor PD. They only review the crash report. CRSS results force the automobile manufacturers to re-call vehicles when necessary.

CISS will have employees actually visit the crashed vehicles and scenes and take measurements. They seek access to all crash reports from Cumberland County. They will establish an office in the county and work independently from there. CISS justifies those same recalls with actual photographs and measurements.

At this point the release of these reports in bulk form appears to be illegal by Maine law. The research continues with the Attorney General's Office and the Maine State Police.

I have been calling and visiting Video Creations of Kennebunk to complete a PSA about the dangers of texting and driving. Video Creations is tardy and have not been able to show any production They had been evasive when asked for progress reports. They promise to get the first draft before October 1st.

I have been in contact with several municipal agencies that manage their own variable message boards. I encouraged them to each post highway safety messages at appropriate times such as Click it or Ticket, Just Drive Don't Text, and Hang up and Drive. These were seen in several communities.

I have been polling the chiefs and sheriffs to determine what percentage of their patrol efforts are dedicated to traffic enforcement and specifically for impaired driving enforcement.

Expertise Applied

I remained a Drug Recognition Expert (DRE) Instructor through the end of the fiscal year. I was able to support the Maine Criminal Justice Academy's efforts to conduct DRE training. I taught at the February of 2015 DRE class. Due to a lack of available instructors I accompanied those DRE students to Baltimore, Maryland for certification training. I also tried to coordinate certification training at the Pink Floyd Concert in Bangor, Maine. This training was eventually cancelled for lack of available DRE instructors.

I pressed for additional Advanced Roadside Impaired Driving Enforcement (A.R.I.D.E.) classes across the state. Old Town hosted one in Bangor and Rockland, Knox County hosted another. I was able to speak at each class about projects the Bureau of Highway Safety is working on.

I was able to assist our Traffic Safety Resource Prosecutor with the Prosecutor Training in York County in May, Penobscot County in August and Kennebec County in September of 2015. This training is to increase impaired driving detection skills to prosecutors to improve their direct examination of the police officers on the stand.

I assisted the Maine Criminal Justice Academy in the training SFST/OUI classes to the basic law enforcement school cadets for both the spring and fall classes. Six dates.

On July 29th I was a speaker on the Law Enforcement Liaison webinar to speak about advanced techniques of Phase Two OUI detection. I have attended many other webinars hosted by the LEL Network.

In April I assisted with the responses, as a prior LEO, to the Motorcycle Assessment and attended some of the assessment meetings. It was a greater learning opportunity for me to understand where our bureau stands on several topics.

I am a Member at Large for the Board of Directors for the Penobscot County Senior College I have shared course options with the curriculum staff about bringing AAA or AARP or similar agency to offer a safe driving course.

Membership

In my first six months I have attended four Chiefs Meetings (MCOPA) and the Summer Chiefs Meeting held in Wells, Maine. These meetings are an opportunity to meet the chiefs, tell them about what the bureau is working on and ask for their needs from the bureau.

I am a member of the Occupant Protection Task Force (OPTF), The Impaired Driving Task Force (IDTF), and the Maine Transportation Safety Coalition (MTSC)

I attended the Impaired Driving Summit held on April 30th in Augusta. My goal was to network with everyone interested in reducing the number of impaired drivers on our roadways,

I attended the Data Driven Approaches to Crime and Traffic Safety (D.D.A.C.T.S.) training in York Maine in May of 2015. This gave me a great understanding of how to look at traffic data and recognize how it impacts other aspects of law enforcement.

In March I attended Regional Highway Safety Leadership Summit in Newington Ct. It was a great opportunity to meet the people I am communicating with via e-mail. I also learned about some of the projects other LELs have created and worked on in the past few years.

In August I attended the Governors' Highway Safety Administration's Annual Meeting in Nashville, Tennessee. While at the conference I was asked by the LEL Network to assist with a PODCAST recording about the RIDE Teams.

Other Projects

Child Safety Seat enforcement tools. I am working on a flow chart to install on every police mobile data terminal to guide officers through the confusing statute 29A 2081. I anticipate this will develop into a cellular phone app specific to the Maine laws and DPS suggestions. It will be interactive and offer links and resources.

The Maine Liaison Newsletter – Investigating the advantages of an electronic newsletter emailed and available to all officers and support people. This is an attempt to get the MeBHS message out to all of the police officers. It will also inform them of the grants, programs and training available through the MeBHS.

Targeted Occupant Protection Awareness Zones - TOPAZ Grants. The purpose of these prospective grants is to increase seatbelt usage in areas of the State that have shown that noncompliance remains an issue and crashes continue to take lives and cause serious injuries. For these grants we will consider:

1. FARS and DOT data
    a. Unbelted crashes
        i. Locations
        ii. Dates
        iii. Quarter of the day (0000-0600, 0600-1200, 1200-1800, 1800-0000)
        iv. Unbelted fatalities
2. Observational survey results (geographic).
3. Historical seat belt enforcement efforts
    a. During HVE campaigns
    b. Outside HVEs
4. Identify locations, dates, quarter of crashes and fatal crashes
5. Identify agencies that have jurisdiction in the targeted zone(s)
6. MeBHS will ask those specific agencies to apply for a TOPAZ grant
    a. Simplify the grant application process

    We will do the data driven research and make it available to the applicants.

    We will make agencies aware ahead of time

    b. Assist with paid media
7. Collect typical data to evaluate effectiveness

TOPAZ grants will be awarded to agencies in these target zones at specific times of the year when the data shows increased enforcement would be beneficial. Earned media will be required by the applying agency to increase awareness of their efforts. This should be a high visibility effort.

The premise of the ‘‘Awareness Zones’’ means people are warned ahead of time. This warning includes media and the use of the new variable message trailers in the area of the enforcement efforts. This gives people an opportunity to comply with the seatbelt laws knowing they are entering an enforcement zone. Consider this:

Historical: A motorist drives by an officer at a traffic stop. The passing motorist has no clue why the stop was made. The only ‘‘seatbelt’’ enforcement message we get out of that stop is to the motorist stopped by the officer.

Concept – A motorist driving on the same stretch of roadway just passed a variable message sign that reads ‘‘SEAT BELT ENFORCEMENT ZONE’’. Now when the motorist passes the traffic stop their first impression is a seatbelt violation. Every motorist to pass will know what the officer is targeting and thus reinforce our message/goal. Of course some people will strap in as they pass the sign but then we’ve still achieved our goal, they have to consciously do it to avoid a ticket – voluntary compliance.

Appendix D

Night Seat Belt Use in Maine, June 2015

Prepared for:

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Prepared by:

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Preusser Research Group, Inc.
Trumbull, Connecticut

September 20, 2015

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).

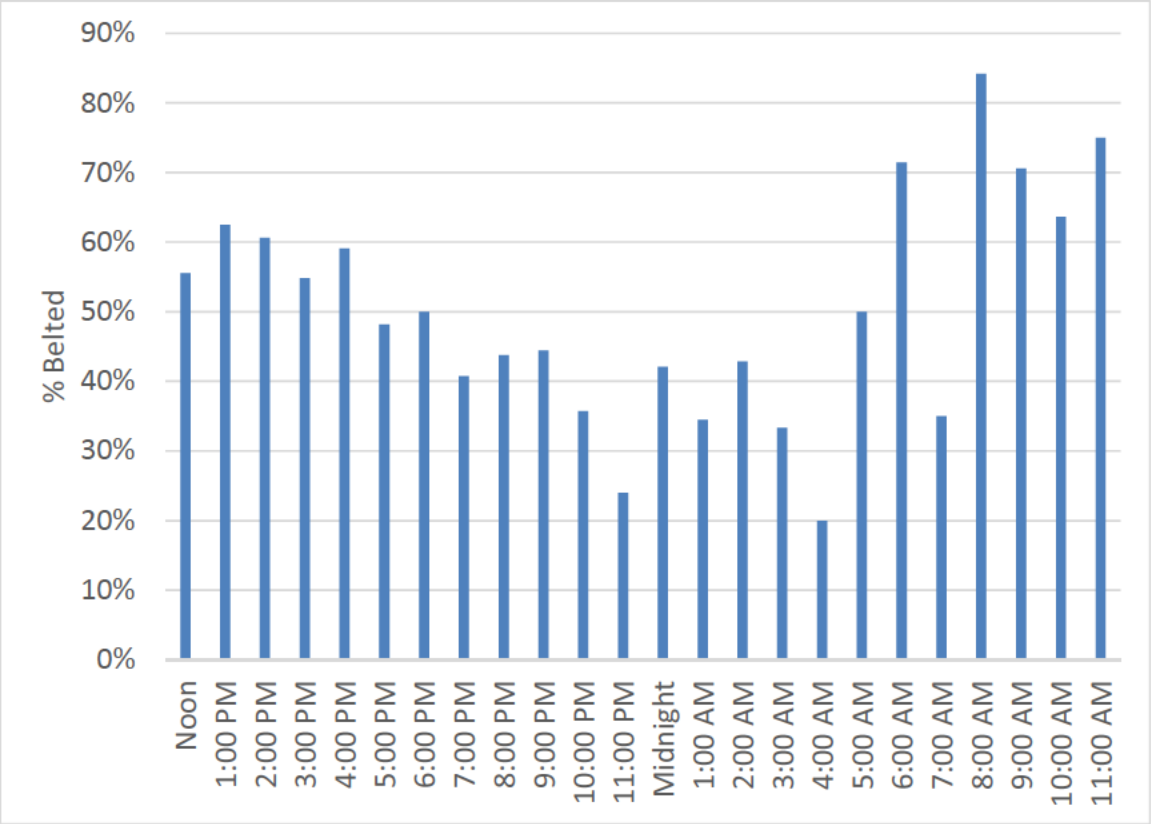
Similarly, nighttime fatalities are disproportionately frequent compared to the amount of nighttime driving. In 2007, about 26 percent of all motor vehicle fatalities occurred between the hours of 10:00 p.m. and 3:59 a.m., according to FARS, but this time period likely has less than 15 percent of daily 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 2015 approximately seven 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. These 29 sites were repeated for the 2015 night belt observations.

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 29th, 2015 through June 12th, 2015. The numbers of observed occupants at the other sites ranged from 4 to 243. In all, there were 1,137 passenger vehicle drivers along with 412 passengers, or 1,549 occupants in all.

Belt use was calculated as the average of the 29 site belt use percentages. Overall belt use was 84.0 percent. The standard error of measurement was calculated as the standard error of the means; it was 1.75 percent. The 95% confidence interval for the statewide night belt use value was 80 percent – 87 percent.

Table 1 places these observations in context with those made in 2008 (Chaudhary et al., 2010), through 2015.

Night belt use in 2015 was about .3 percentage points lower than during the comparable time period in 2014.

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%**
Wave 9	**5/29-6/1/2015**	**Post-CIOT**	**84.0%**

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) = 11.117, p < 05). The results mimic typical daytime patterns where Pickup truck use rates (80%) were the lowest of all vehicle types and SUV use (90%) was the highest.

Female occupants had higher use rates (88%) than male occupants (84%) (χ^2 (1) = 5.949, p < 05). Drivers tended to have lower use rates (85%) than did passengers (88%) but the difference was not significant (p > 0.05). The difference in use for female drivers (88 %) versus female passengers (89%) was not significant (p > 0.05). The difference between male drivers (83%) and male passengers (88%) was also not significant (p >0.05). 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 15 motorcyclists observed, 6 (40%) were helmeted. All riders except one were operators. The single passenger was also the only female rider and was helmeted.

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	300	85.7%
Urban Other Arterials	804	86.1%
Rural Other Arterials	313	86.6%
Collectors	115	87.0%
Vehicle Type*		
Passenger Cars	867	85.6%
Pickups	184	79.9%
SUVs	408	89.7%
Vans	73	89.0%
Sex x Driver-Passenger		
Male Drivers	659	83.3%
Female Drivers	466	88.2%
Male Passengers	146	87.7%
Female Passengers	259	88.8%
Sex*		
Male	805	84.1%
Female	725	88.4%
Driver-Passenger		
Driver	1125	85.3%
Passenger	405	88.4%

[1] Tables are raw percentages. * Significance level p< .05

Discussion

The most recent observations in 2014 and 2015 demonstrate a slight decrease in use (around 84 percent) compared to the prior two years when rates were over 87 percent. However, the recent two years of observations still resulted in rates higher than the pre-2012 use rates. Night seat belt use ranged from just 69 percent to around 80 percent for the first six waves of measurement from 2008 to 2011. (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 rates from 2012 to 2015 (compared to pre-2012 rates) is a function of newly selected sites or a continuation of the pattern demonstrated in 2012.

Night seat belt use in Maine was a bit lower than the daytime rate (85.5%). 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).

Consistent with previous data collection efforts, female drivers were more likely to use seat belts compared to males, and pickup truck drivers were least likely to wear seat belts compared to drivers of other vehicle types. However, given higher use belt rates measured in 2012 and 2013, it is reasonable to conclude that targeted efforts to increase the seat belt use of all night drivers and their passengers could further improve compliance and reduce fatalities.

References

Chaudhary, NK. (in review). *Evaluation of the Alabama, Michigan and New Jersey Safety Belt Law Change to Primary Enforcement.*

Chaudhary, N.K., Casanova, T. and W. Leaf. *Night Seat Belt Use in Maine, June 2013, Prepared for The University of Southern Maine, Portland, Maine*. September 2013.

Chaudhary, N.K., Casanova, T. and W. Leaf. *Night Seat Belt Use in Maine, June 2012, Prepared for The University of Southern Maine, Portland, Maine.* September 2012.

Chaudhary, NK & Preusser, DF. 2006. Connecticut nighttime safety belt use. *Journal of Safety Research, 37,* 353-358.

Chaudhary, NK, Tison, J, and Casanova, TM. 2010a. *Evaluation of Maine's Safety Belt Law Change from Secondary to Primary Enforcement*. Final Report, National Highway Traffic Safety Administration, Washington, DC. DOT HS 811 259.

Chaudhary, NK, Tison, J, and Casanova, TM. 2010b. The effects of Maine's Change to Primary Seat Belt Law on Seat Belt Use and Public Perception and Awareness. *Traffic Injury Prevention, 11*:165-172.

Hallenbeck, ME, Smith, B, Cornell-Martinez, & Wilkinson, J. 1997. Vehicle Volume Distributions by Classification, FHWA-PL-97-025.

Masten, SV. 2007. Do states upgrading to primary enforcement of safety belt laws experience increased daytime and nighttime belt use? *Accident Analysis and Prevention, 39*, 1131-1139.

NHTSA. 2009. Traffic Safety Facts: Occupant Protection, 2008 Data, DOT HS 811 160.

Preusser DF, Williams AF, & Lund AK. 1986. Seat belt use among New York bar patrons. *Journal of public health policy, 7,* 470-9.

Solomon, MG, Chaudhary, NK, & Preusser, DF. 2007. *Daytime and Nighttime Safety Belt Use at Selected Sites in New Mexico*. Final Report, National Highway Traffic Safety Administration, Washington, DC. DOT HS 810 705.

Ulmer, RG, Preusser, CW, & Preusser, DF. 1995. Evaluation of California's safety belt law change from secondary to primary enforcement. *Journal of Safety Research, 26*, 213-220.

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 E

Child Safety Restraint Use in Maine 2015

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Child Safety Seat Use in Maine, 2015

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Child Safety Seat Use in Maine, 2015

EXECUTIVE SUMMARY

In 2007, the Maine Bureau of Highway Safety (BHS) funded a survey of child safety seat use (Leighton et. al., 2007). The current study, also funded by BHS, used a similar methodology to explore child safety seat use in 2015. The study was conducted by the Survey Research Center (SRC) at the Muskie School of Public Service, University of Southern Maine and Preusser Research Group, Inc. (Trumbull, CT). Training support was provided by Maine CPS Instructor Betty Mason. Research results from this study explore changes in use from 2007 and identify related factors to non-use of restraints.

This study was conducted from May 21, 2015 through May 31, 2015. The sampling and observation method for the present study is designed to be generally comparable to the 2007 study but does include some refinements. The general approach to the current design started with a sampling of counties (i.e. we excluded some counties from the sample) whereas the previous design sampled from every county in the state. Observation sites were distributed across counties based on county population (as was the case in the 2007 study). Also identical to the 2007 study, sites were selected at locations where traffic must come to a complete stop to allow observation of both front-seat and rear-seat child restraint details. As with the 2007 study, a mix of signalized (RGA) intersections and stop-sign-controlled intersections were selected according to their traffic volume. This probability-based sampling method was utilized to select 100 intersections for observation (an increase from 86 in the 2007 study), including 72 signalized intersections and 28 stop-sign intersections. As in the earlier studies, visual observations were made to determine the extent of use.

Road intersections selected as observation sites. Observations of restraint use were conducted at 100 intersections from 12 of Maine's 16 counties (making up 91% of Maine's population). The 12 counties (see Table 9 for a full list of counties and towns included) were selected because they were part of Maine's statewide seatbelt survey. Sites were selected following the probability-based sampling procedure developed by the Preusser Research Group outlined above. Restraint use was observed and recorded by seating position within each vehicle for all drivers and for all children age 11 or younger. This resulted in data for 10,454 drivers and 1,178 children (7with unknown seat belt use) age 11 or younger.

Sampling protocols. As of 2015, there was no single standardized methodology in place for states to follow in measuring CSS use. A number of possible approaches were considered, generally centered around either:

1) selecting locations for observations where vehicles were likely to contain a high number of children (pediatrician offices, day care centers, fast food restaurants, etc.) or

2) designing a probability-based sampling procedure to select observation sites that would reflect the overall traffic types and patterns throughout the state.

Option 1 has the advantage of being very efficient but has a potential disadvantage; because these would be very specific destinations often in high traffic times and areas, CSS use may not represent more general and typical use patterns, thus possibly providing inaccurate use rates. Option 2 addresses that concern very well, but is much less efficient; most cars on most roads at most times of day have few if any children in them. Following a conference call in 2007 with SRC, BHS, Maine Bureau of Health, and the National Highway Traffic Safety Administration (NHTSA), it was decided to conduct the study following the Option 2 sampling protocol. Preusser Research Group was then brought in for their expertise in designing such sampling strategies; the same option was chosen for 2015.

Subgroup analyses. This report includes findings from several subgroups such as for different ages, gender, 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: Overall CSS use rates. The overall CSS use rate is very high, with 93.3 percent of all children (excluding 7 children with undetermined use) under age 12 being in some type of restraint. In comparison, the overall rate for children under 12 in 2007 was 89.7 percent. As seen in Table B, use rates vary by age, ranging from a high of 98.7 percent of all children under a year old to just under 90 percent of those 8 – 11 years old.

Table A
Comparison of Restraint Use for All Children Under 12

All Children Under 12		
	N	%
Some Restraint	1092	93.3
No Restraint	79	6.7
No. Children = 1,171		

Table B
Comparison of Restraint Use by Child Age Group

Child Age	Some Restraint		Not Restrained		Total	
	N	%	N	%	N	%
< 1 year	53	98.1	1	1.9	54	100
1 - 3 years	339	97.4	9	2.6	348	100
4 - 7 years	445	91.6	41	8.4	486	100
8 - 11 years	255	90.1	28	9.9	283	100

Gender differences. Table C shows that there is essentially no difference in CSS use between female children and male children.

Table C
Comparison of Child Passenger Restraint Use by Child Sex

Child Sex	Child Passenger Restraint Use					
	Some Restraint		Not Restrained		Total	
	N	%	N	%	N	%
Male	482	92.7	38	7.3	520	100
Female	525	93.3	38	6.7	563	100
Total	1,007	93.0	76	7.0	1083	100

Children's use of safety seats related to seatbelt use by driver. As has been found with adult studies, CSS use of passengers is strongly correlated with the practices of the drivers. When drivers use their safety belts, children in the vehicle (who are most likely family or friends of the driver) are much more likely to be in CSSs than they are when the driver is not using a belt (χ^2 (1) = 5.488, p <0.05).

Table D
Comparison of Child Passenger Restraint Use by Driver Restraint

Driver Restrained?	Child Passenger Restraint Use					
	Some Restraint		Not Restrained		Total*	
	N	%	N	%	N	%
Yes	945	93.6	65	6.4	1010	100
No	90	87.4	13	12.6	103	100
Total	1035	93.0	78	7.0	1113	100

* Excludes unknown use for drivers (N=58)

Type of vehicle. CSS use varies somewhat depending on the type of vehicle in which children are traveling. Rates range from 97.5 percent for kids in vans to 89.6 percent for kids in cars. Pickup trucks and SUVs fall in between at 96.0 percent and 95.5 percent, respectively. Unlike prior years, pickup truck use was relatively high when compared to cars. That is, typically use of all occupants of a pickup truck tend to be lower than use in cars but for this survey car use for kids was lowest.

Table E
Comparison of Child Passenger Restraint Use by Vehicle Type

Vehicle Type	Child Passenger Restraint Use					
	Some Restraint		Not Restrained		Total	
	N	%	N	%	N	%
Car	446	89.6	52	10.4	498	100
Truck	120	96.0	5	4.0	125	100
SUV	359	95.5	14	4.5	373	100
Van	131	97.8	3	2.2	134	100

SUMMARY

This study has found that child safety seat and seatbelt use among children is quite high in Maine. It is clear that most drivers are making an effort to ensure that children in their vehicles are restrained in some fashion. Further, we find that there has been some improvement in use rates to over 93 percent from just under 90 percent in 2007 (which was higher than the 80 percent rate found in 1995). At the same time, we note that there remain areas with room for additional improvement. The rest of this report describes how the 2015 study was implemented and presents the key findings. It also shows some comparisons between the 2007 and 2015 studies. It is our hope that findings from this study will provide the state of Maine with an important baseline measure of current CSS use and will identify areas in which the various child safety programs can best target their education and outreach efforts.

This 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 sub-contract between USM and the Preusser Research Group in Trumbull, Connecticut. Again, our thanks go out to all who assisted in the funding, planning, and implementation of the study.

Child Safety Seat Use in Maine, 2015

INTRODUCTION

For some years, the Maine Bureau of Highway Safety has contracted to have annual studies conducted to measure adult seatbelt use in the state. However, not since 2007 has there been an effort to examine the use of child safety restraints (CSRs). In 2015, the current study, similar to the previous 2007 study, was undertaken to provide estimated use rates of child safety seats (CSSs), booster seats, and seatbelts for children under the age of twelve. This report provides an overview of the findings and, where appropriate, comparisons with the 2007 results. The data contained in this report will be used to provide the Bureau of Highway Safety and the National Highway Traffic Safety Administration with 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 (USM), under a contract with the Maine Bureau of Highway Safety, Department of Public Safety, State of Maine and Preusser Research Group (under subcontract with USM). The study was designed to determine the rate of child safety restraint use in Maine as part of the development of a statewide comprehensive highway safety plan for the state. It is also hoped that other child safety agencies and organizations will find the data useful in planning additional campaigns to increase use rates for Maine's children.

METHODOLOGY

A number of state and national studies of CSS use have been conducted in recent years. Because there is no standardized method in place, however, the methodologies utilized have varied significantly. Most have adopted some variation of the following two general methods:

1) observation sites are selected specifically from destination locations where high concentrations of children are likely to be found. These locations include pediatricians' offices, schools, day care centers, large toy stores, grocery stores, fast food restaurants, etc.
2) observation sites are selected from the full range of road segments and/or intersections within the geographic area being studied. Selection of intersections is generally weighted to reflect the traffic volume and type of road at each intersection.

While option 1 is very efficient, there is a risk that CSS use while traveling to those destinations may not be representative of general and typical use patterns. It may be that, when parents are taking their kids to the doctor's office or to school or day care, they are more likely to use their child seats than they are for other travel. If this is so, the use rates would not be generalizable to the larger population.

Option 2, on the other hand, would address that concern. Choosing observation sites that represent the traffic patterns of the entire state would include all types of traffic and destinations, thus providing a more accurate overview of CSS use in Maine. Following a conference call in 2007 between SRC, BHS, the Maine Bureau of Health, and NHTSA, it was decided to utilize the second option. A very similar approach was chosen in 2015, which allows some comparisons to the 2007 study.

The design that was developed followed five steps:

1. Counties were selected from those included in the statewide adult survey (this initial step differed from the 2007 study in which all counties were used). Twelve of Maine's 16 counties were included (making up over 90% of the population). The four excluded counties were Knox, Sagadahoc, Franklin and Piscataquis.

2. Allocate the proportion of sites to be sampled in each county. Distribute the total number of RGA intersections and the total number of stop-sign intersections according to those proportions.

3. Select specific RGA intersections randomly within county according to total AADT of the intersection legs; select stop-sign intersections randomly within county according to the AADT on the minor legs.

4. Develop observation procedures and schedules which provide reasonable balance for day of week and time of day consistent with efficient scheduling of observers. For efficiency we observed on 5 days of the week (excluding Wednesday and Thursday)—all days were included in 2007.

5. Develop CSS and safety belt use estimation procedures and computations reflecting the design

requirements.

Sites were selected from the 12 counties throughout the state, apportioned to counties according to their populations. A target of 72 RGA sites and 28 stop-sign-controlled sites was set to be similar to the method used in 2007. We increased our total number of sites in the current study to strengthen the design over the 2007 study. The distribution of sites by town and city, by county, appears as Table 9.

Intersections 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 safety seat and seatbelt use of occupants in each vehicle. Observers were given descriptions of the intersection to observe. They were given descriptions ("in Auburn, at the intersection of Minot Ave and Heath Lane") and a google map image with "dots" representing where to stand for each direction of traffic. They were also told which direction of traffic to observe. They then were able to find the most advantageous spot at the intersection from which to observe. Two observers were sent to each intersection; generally, they were diagonally opposite each other, such that one would observe traffic traveling one direction on the road and the other observer would record those traveling the other direction.

Sampling. The sites to be observed were selected by the Preusser Research Group of Trumbull, Connecticut. The sampling process was designed to provide a confidence level of 95 percent with an acceptable margin of error of plus or minus five percent. This resulted in a final sample size of 100 intersections, 72 with RGA signals and 28 with stop signs. Intersections were selected with probability of selection proportional to the traffic volume measured in average daily numbers of vehicles (AADT) by the Maine Department of Transportation. RGA intersections were selected according to total AADT for all legs of the intersections.

Observation times and days. Observations were made at 100 intersections 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 included day of week. Intersections were clustered into groups of 4 or 5 such that all members of the group could be observed in a single day by a pair of observers (one observing each direction of traffic). Clusters were randomly assigned to a day and time for observations. Each day and time had an equal probability of selection. All observations were done during daylight hours.

Observation assignments were made across a schedule of time slots that began at 7:45 am and ended at 6:15 pm. They were conducted from May 21 through May 31, 2015 (after a week of "Click It or Ticket" seatbelt enforcement). The 2007 observations were conducted in March to May 2007 (before seatbelt enforcement but during the National Child Occupant Protection awareness week).

Observer training. Observers were trained by Tara Casanova-Powell and Joyce Connolly from PRG, Maine CPS Instructor Betty Mason, and SRC. The training involved not only written material and oral presentation, but also field practice. Betty Mason presented photos and descriptions of various child safety seats and a segment on estimating ages of children, including practice exercises designed to increase the consistency of data collection between observers. The field practice was conducted at the intersection of Bedford Street and Forest Avenue in Portland. The practice observations were crucial. Results were reviewed and analyzed for accuracy and consistency; no observers were allowed to begin until the practice observations met training standards.

OBSERVATION STUDY FINDINGS

Overview. In all, observations of belt use were made for 10,454 drivers and for 1,171 children under 12 (excluding 7 children for whom belt use was undetermined). The vast majority of children in Maine, 93.3 percent, are in some type of child safety seat or seatbelt. This represents an increase in the use rate of 2007, when 89.7 percent of children under age 11 were in a CSS or seatbelt. There also appears to be great strides in getting kids into the correct type of restrain for their ages (particularly among the youngest passengers). Nearly 91 percent of babies (age =0) were in a rear-facing seat (7% were in forward facing and 2% unrestrained). Newer guidelines request that children remain in rear facing seats for longer. In our sample 14 percent of the children ages 1-3 were rear facing (78% forward facing). There were 2 percent in standard belts, 4 percent in a booster and 3 percent unrestrained. Those aged 4-7 were most often in a booster (44%) followed by standard belt[11] (27%) and forward facing (21%). Eight percent of the 4-7 year olds were coded as being unrestrained. For the oldest group of children (8-11 year olds) 74 percent were in a standard belt, 16 percent were in a booster and 10 percent were unrestrained (1 individual was coded as being in a forward facing seat).

NOTE: we report the age and type of restraint in a number of tables and text. We need to point out that these data should not be considered to show "correct" use. Because weight is also a factor in determining the type of CSS each child should be using, it is impossible to precisely report the correct or incorrect usage of CSS. While children age 1 – 3 would generally be placed in a forward-facing child seat, for example, the child's size could lead to using a different type of seat. In addition, the ages recorded are only estimates, not exact ages. Thus, we can only refer to the type of CSS used, not whether it is correct or incorrect.

Sex differences. There is very little difference between boys and girls in the overall use rates of CSS. Non-use is slightly higher among boys than girls, 7.3 percent and 6.7 percent respectively, but for practical purposes, these are essentially the same. Use rates are also quite consistent across age groups as well. See Table 2 for additional information regarding gender and CSS use.

Type of vehicle. Unlike adult seatbelt use where use tends to be lowest in pickup trucks, CSS use is lowest among those in cars (89.6%) followed by vans (95.5%) then pickup trucks (96.0%). Children in SUVs had the highest use (97.8%). This effect was different from what was observed in 2007 where children in pickup trucks had the lowest overall use rate (84.6%). It should be noted that there was a relatively small number of child passengers (125) observed in pickup trucks for the current study.

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[11] It should be noted that the method may have resulted in some booster seats being coded as Standard Belt Use if the shoulder belt was visible but the booster was obscured by the door (for example).

CSS use related to seatbelt use by driver. Consistent with the findings in 2007, this study finds that when drivers use their safety belts, children in the vehicle are much more likely to use their CSS or seatbelts as they are when the driver is not using a belt. CSS use rate in this study was 87.4 percent when the driver did not use a seatbelt. Use rate was 93.6 percent when the driver was belted. Table 3 shows that there is also an effect when examining proper use.

Day of week. Observations were conducted on all days of the week except Wednesday and Thursday. There were only very minor differences in use by day of the week (Min 92.2%; Max: 94.6%). The highest use was on Saturday and the lowest use was on Sunday (Table 6). There is no readily apparent pattern to the findings.

Time of day. CSS use varies throughout the hour of the day (Table 7). The highest rate occurred during the 8:00 am hour (98.0%) and the lowest use (89.0%) occurred at the 4:00 pm hour. Again, perhaps because of somewhat low Ns per hour, no discernable pattern of use was found.

Weather conditions. There were very few observations conducted during a rainy period (22) but use was lowest for these observations (72.7%) compared to when the observer indicated sunny (93.7%) or Cloudy (93.6%). It should be noted that because of the great difficulty seeing in cars while it's raining, observations can only be done during relatively light rain. If it's raining during a scheduled observation period, observers wait 15 minutes to see if it stops; if not, they go on to the next site and reschedule the rained out site for another time.

DISCUSSION

Child safety seat and seatbelt use has increased in Maine over the years. The increase from the 2007 study to the current study shows that the state has made great strides in recent years (2007:89.7% 2015: 93.3%). Use rates were lowest among older child passengers (ages 8-11: 90%) suggesting an area where more focus can be directed. Also, drivers' habits are related to children's use of CSS, as seen in the significantly lower use rate for children when the drivers aren't using their own seatbelts.

This study now provides a current measure of CSS and seatbelt use among Maine's children. There were only minor changes to the 2007 survey which still stands as a baseline of use from which future change can be judged. However, some of the changes (e.g. conducting the survey during CIOT) might exaggerate the success if general belt enforcement results in increased child restraint use. That said, this timing provides for a parallel to the statewide use rate for adult occupants which also coincides with

general belt enforcement.

List of Tables

2015 Maine Child Passenger Restraint Use Observation Study

TABLE 1

Child Passenger Restraint Use Statewide by Age Group

Maine, 2015

All Children Under 12

Age		Rear - facing CSS	Forward - facing CSS	Booster Seat	Seatbelt	Not Restrained	All
<1	N	49	4	0	0	1	54
	%	91%	7%	0%	0%	2%	100%
1-3	N	49	270	14	6	9	348
	%	14%	78%	4%	2%	3%	100%
4-7	N	1	104	216	124	41	486
	%	0%	21%	44%	26%	8%	100%
8-11	N	0	1	44	210	28	283
	%	0%	0%	16%	74%	10%	100%
All	N	99	379	274	340	79	1171
	%	8%	32%	23%	29%	7%	100%

* Highlighted cells represent age appropriate restraints for each age group: Under 1 year = rear-facing CSS; 1 – 3 years = rear-facing or forward facing CSS; 4 – 7 years = forward facing or booster seat; and 8 – 11 years = booster or seat belt.

TABLE 2

Child Passenger Restraint Use by Child Gender Statewide

Maine, 2015

Sex of Child*		Rear - facing CSS	Forward - facing CSS	Booster Seat	Seatbelt	Not Restrained	Total
Male	N	18	157	128	179	38	520
	%	3%	30%	25%	34%	7%	100%
Female	N	51	189	133	152	38	563
	%	9%	34%	24%	27%	7%	100%
Total	N	69	346	261	331	76	1083
	%	6%	32%	24%	31%	7%	100%

* Known sex only; 88 children had unknown sex

TABLE 3

Child Passenger Proper Restraint Use by Driver Restraint Use

Maine, 2015

Driver Use		Improper	Proper	Total**
Restrained	N	192	818	1010
	%	19%	81%	100%
Unrestrained	N	29	74	103
	%	29%	71%	100%
Total	N	221	892	1113
	%	20%	80%	100%

* Age appropriate restraints are different for each age group: Under 1 year = rear-facing CSS; 1 – 3 years = rear-facing or forward facing CSS; 4 – 7 years = forward facing or booster seat; and 8 – 11 years = booster or seat belt.
** Excludes driver missing data (N = 58)

TABLE 4

Percentage of Child Passenger Restraint Use by Type of Vehicle Statewide

Maine, 2015

Vehicle Type*		Any Use	No Use	Total
Car	N	446	52	498
	%	90%	10%	100%
Pickup	N	120	5	125
	%	96%	4%	100%
SUV	N	359	17	376
	%	95%	5%	100%
Van	N	131	3	134
	%	98%	2%	100%
Total	N	1056	77	1133
	%	93%	7%	100%

* Excludes missing vehicle type (n = 38)

TABLE 5

Child Passenger Restraint Use by Driver Restraint Use

Maine, 2015

Driver Restrained?*		Child Restraint		
		Any Use	No Use	Total
Yes	N	945	65	1010
	%	94%	6%	100%
No	N	90	13	103
	%	87%	13%	100%
Total	N	1035	78	1113
	%	93%	7%	100%

* Excludes driver missing use (N = 58)

TABLE 6

Percentage of Child Passenger Restraint Use by Day of the Week Statewide

Maine, 2015

Day of Week		Any Use	No Use	Total
Sunday	N	212	12	224
	%	95%	5%	100%
Monday	N	342	23	365
	%	94%	6%	100%
Tuesday	N	109	9	118
	%	92%	8%	100%
Friday	N	75	5	80
	%	94%	6%	100%
Saturday	N	354	30	384
	%	92%	8%	100%
Total	N	1092	79	1171
	%	93%	7%	100%

TABLE 7

Percentage of Child Passenger Restraint Use by Observation Start Time Statewide

Maine, 2015

Hour		Any Use	No Use	Total
7 AM	N	34	2	36
	%	94%	6%	100%
8 AM	N	59	1	60
	%	98%	2%	100%
9 AM	N	67	3	70
	%	96%	4%	100%
10 AM	N	166	19	185
	%	90%	10%	100%
11 AM	N	183	7	190
	%	96%	4%	100%
12 PM	N	94	7	101
	%	93%	7%	100%
1 PM	N	186	17	203
	%	92%	8%	100%
2 PM	N	65	2	67
	%	97%	3%	100%
3 PM	N	68	3	71
	%	96%	4%	100%
4 PM	N	105	13	118
	%	89%	11%	100%
5 PM	N	65	5	70
	%	93%	7%	100%
Total	N	1092	79	1171
	%	93%	7%	100%

TABLE 8

Percentage of Child Passenger Restraint Use by Weather Statewide

Maine, 2015

Weather*		Any Use	No Use	Total
Sunny	N	844	57	901
	%	94%	6%	100%
Rainy	N	16	6	22
	%	73%	27%	100%
Cloudy	N	219	15	234
	%	94%	6%	100%
Total	N	1079	78	1157
	%	93%	7%	100%

* Excludes missing weather (n = 14)

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

Table 9

Maine 2015 Observation Sites List

County	City	N
Androscoggin	Auburn	4
	Lewiston	4
	Turner	1
	Total	9
Aroostook	Houlton	2
	Monticello	1
	Presque Isle	2
	Total	5
Cumberland	Brunswick	1
	Falmouth	2
	Portland	10
	Scarborough	3
	South Portland	4
	Westbrook	2
	Windham	1
	Total	23
Hancock	Ellsworth	4
Kennebec	Augusta	5
	Oakland	1
	Waterville	3
	Winslow	1
	Total	10
Lincoln	Boothbay Harbor	1
	Damariscotta	2
	Dresden	1
	Total	4
Oxford	Oxford	2
	Paris	3
	Total	5

County	City	N
Penobscot	Bangor	7
	Brewer	2
	Old Town	1
	Orono	2
	Total	12
Somerset	Madison	1
	Skowhegan	3
	Total	4
Waldo	Belfast	4
Washington	Calais	3
	Machias	1
	Total	4
York	Biddeford	1
	Buxton	1
	Dayton	1
	Eliot	2
	Kennebunk	3
	Kittery	1
	Limington	1
	Old Orchard Beach	1
	Saco	1
	Sanford	1
	Waterboro	1
	Wells	1
	York	1
	Total	16

Appendix 1. 2015 Maine Child Safety Seat Occupant Restraint Survey

2015 MAINE OCCUPANT RESTRAINT SURVEY

***1. Observer code__ __ __** 2. City _____

3. Day of week Su M T W Th F Sa 4. Date __ __ / __ __ / __ __ (MM/DD/YY)

5. Location _____

***6. Site #** _____ 7. Start Time: __ __ : __ __ (circle) am pm

8. Road Conditions (circle all that apply): Dry Wet Ice/snow Construction

9. Weather (circle all that apply): Sunny Rain Cloudy Fog Snow/sleet

***Enter on all entry pages**

***Page** ____ **of** ____

USE CATEGORIES

S= Standard seat belt R= Rear-facing car seat
N= No belt/restraint F= Forward-facing car seat w/harness
?= Unknown B=Belted booster

		DRIVER'S SIDE				PASSENGER SIDE		
	VEH	SEX	AGE (<1=0)	USE		SEX	AGE (<1=0)	USE
1	C T	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B
	S V	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B
2	C T	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B
	S V	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B
3	C T	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B
	S V	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B
4	C T	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B
	S V	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B
5	C T	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B
	S V	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B
6	C T	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B
	S V	M F ?	18+ ? <18=____	S N ? R F B		M F ?	18+ ? <18=____	S N ? R F B