MAINE STATE LEGISLATURE

State of Maine
Department of Public Safety
Bureau of Highway Safety
www.maine.gov/dps/bhs
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Federal Fiscal Year 2019 Annual Highway Safety Report

Janet T. Mills, Governor
Michael J. Sauschuck, Commissioner
Lauren V. Stewart, Director

A Message from the Director

Lauren V. Stewart, Director

The Maine Bureau of Highway Safety (MeBHS) is established in accordance with the Highway Safety Act of 1966, as amended. As such, we are the only agency in Maine *solely* tasked with the primary responsibility of promoting safer roadways by partnering with others also focused reducing and preventing fatalities, injuries, and property damage resulting from motor vehicle crashes.

At the Highway Safety Office, we believe it is essential to actively seek the input of local community representatives to achieve long-term safety improvements. We value our role as leaders in fostering cooperation and collaboration with other public and private organizations. We embrace a team-focused working environment and strive for excellence in our everyday mission. Though we focus on the behavioral aspect of highway safety, our unrelenting overall goal is to reduce and eliminate the incidence of motor vehicle crashes in Maine that result in death, serious injuries, and property damage. We believe that through committed partnerships with others interested in highway safety, through comprehensive and strategic program planning, through public information and education, and through a data-driven approach to coordinated education and enforcement activities, that we can achieve our goals to reduce and eliminate fatalities and injuries.

This annual report for federal fiscal year 2019 is required under 23 C.F.R. Part 1300.35. Despite being a federal requirement, it serves as our annual opportunity to highlight the many achievements and accomplishments of the State Highway Safety Office. The planned activities represented in this annual report were approved by NHTSA in our 2019 Highway Safety Plan as effective countermeasures that would help Maine achieve its stated goals to reduce overall traffic fatalities, injuries, and property damage for the period of October 1, 2018 to September 30, 2019. This annual report provides summary-level detail for every planned activities or program funded with NHTSA federal funds. More in-depth details are contained in each planned activity file, contract and/or subrecipient agreement. The table below examines some fatal crash factors in Maine between 2017 and 2018. This annual report examines our progress toward achieving the goals set out in the federal fiscal year 2019 highway safety plan.

I would like to thank Governor's Representative and Public Safety Commissioner
Michael J. Sauschuck for his support of our goals and our efforts. I would also like to thank the Highway Safety Office staff, and our many dedicated partners, for their tireless collective efforts to improve highway safety.

Lauren V. Stewart, Director

Snapshot of Motor Vehicle Fatality Information for Maine			
	2017	2018	% change 2017-2018
All Fatalities	173	136	-21.4%
Driver Alcohol > .08 Involved	49	42	-14.3%
Speeding Involved	50	42	-16.0%
Distracted Driver Involved	15	6	-60.0%
Unrestrained Passenger Vehicle Occupants	53	50	-5.7%
Motorcyclists	26	23	-11.5%
Pedestrians	20	7	-65.0%
Bicyclists	2	2	0%
Large Truck Involved	25	16	-76.0%
Young Drivers 15-20 Involved	18	9	-50.0%
Drivers 21> Involved	231	170	-26.4%

Our Highway Safety Partners

AAA of Northern New England
Alliance Highway Safety
American Association of Retired People (AARP)
Atlantic Partners, EMS
Federal Highway Administration (FHWA)
Federal Motor Carrier Safety Administration (FMCSA)
Governor's Highway Safety Association (GHSA)
Maine Bicycle Coalition
Maine Bureau of Labor Standards
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 Health and Humans Services
Health Environmental Testing Lab (HETL)
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)

Our Organization

Governor Janet T. Mills

Commissioner Michael J. Sauschuck

Director Lauren V. Stewart

Senior Contract Grant Specialist and FARS Supervisor Jaime Pelotte

Contract Grant Specialist Ann Johnston

Highway Safety Coordinators: Nicholas Brown, Jamie Dionne, Morgan Easler

The MeBHS is a Bureau of the Maine Department of Public Safety. The MeBHS currently consists of seven full-time employees, two grant funded Traffic Safety Educators, one contracted full time Law Enforcement Liaison, one contracted full time Traffic Safety Resource Prosecutor, and one contracted part-time Judicial Outreach Liaison. These folks are all dedicated to ensuring safe motor transportation for everyone traveling on Maine roads and highways. The MeBHS facilitates collaboration with partners and provides leadership using other state and federal financial resources for developing, promoting and evaluating programs designed to influence public and private policy, make systemic changes, and heighten public awareness of highway safety issues.

	CORE OUTCOME MEASURES	Timeframe	2015	2016	2017	2018	2019 (to date)	2019 Target
C-1	Traffic Fatalities (FARS)	Annual	156	160	173	136	146	165
		5-Year Average	146	151	153	151	154	
C-2a	Serious Injuries in Traffic Crashes (State Crash File)	Annual	755	746	729	685	625	737.6
		5-Year Average	862	832	774	746	708	
C-2b	Serious Injury in Traffic Crash Rate (State Crash File)	Annual	5.09	4.98	4.86	4.56	4.14	4.90
		5-Year Average	5.96	5.71	5.26	5.03	4.73	
C-3a	Fatalities/VMT (FARS/FHWA)	Annual	1.05	1.07	1.16	0.91	0.97	1.10
		5-Year Average	1.01	1.04	1.29	1.02	1.03	
C-3b	Rural Mileage Death Rate (FARS)	Annual	1.21	1.25	1.30	1.17	1.07	1.30
		5-Year Average	1.17	1.19	1.22	1.21	1.20	
C-3c	Urban Mileage Death Rate (FARS)	Annual	0.67	0.71	0.86	0.35	0.74	0.74
		5-Year Average	0.61	0.66	0.86	0.60	0.67	
C-4	Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions (FARS)	Annual	53	60	53	50	34	56
		5-Year Average	55	57	52	51	50	
C-5	Alcohol-Impaired Driving Fatalities (FARS)	Annual	50	63	49	42	37	46
		5-Year Average	40	48	48	48	48	
C-6	Speeding-Related Fatalities (FARS)	Annual	60	56	50	42	33	42
		5-Year Average	59	57	51	49	48	
C-7	Motorcyclist Fatalities (FARS)	Annual	32	18	26	23	27	18
		5-Year Average	19	20	20	22	25	
C-8	Unhelmeted Motorcyclist Fatalities (FARS)	Annual	24	12	17	18	18	12
		5-Year Average	13	13	14	15	18	
C-9	Drivers Age 20 or Younger Involved in Fatal Crashes (FARS)	Annual	13	19	18	9	7	13
		5-Year Average	18	17	17	15	13	
C-10	Pedestrians Fatalities (FARS)	Annual	19	17	20	7	13	13
		5-Year Average	12	13	15	14	15	
C-11	Bicyclist Fatalities (FARS)	Annual	0	4	2	2	2	2
		5-Year Average	1	2	2	2	2	
	CORE BEHAVIOR MEASURE	**Timeframe**	**2015**	**2016**	**2017**	**2018**	**2019**	**2019 Target**
B-1	Observed Seat Belt Use for Passenger Vehicles, Front Seat Outboard Occupants (State Survey)	Annual	86%	86%	89%	89%	89%	88%
		5-Year Average	84%	85%	86%	87%	88%	

	NON-CORE OUTCOME MEASURES	Timeframe	2014	2015	2016	2017	2018	2019 (to date)	2019 Target
	Senior Driver Fatalities	Annual	20	20	27	36	28	21	22
		5-Year Average	21	20	22	25	26	26	
	Distracted Driver Fatalities	Annual	5	10	3	9	9	18	7
		5-Year Average	16	11	9	8	7	10	
	NON-CORE OUTCOME MEASURES	**Timeframe**	**Spring 2017**	**Fall 2017**	**Spring 2018**	**Fall 2018**	**Spring 2019**	**Fall 2019**	**2019 Target**
	Media Recall	Annual	40%	38%	57%	42%	47%	60%	43%
		5-Season Average	44%	43%	46%	46%	45%	49%	

	TRAFFIC RECORDS OUTCOME MEASURES	Timeframe	2017	2018	2019 (to date)	2019 Target
	EMS Uniformity	3-year	0.87	70.06	94.86	92%
	Crash Uniformity	Annual	N/A	36.59	42.79	New Measure (no target set in FFY2019 plan)
	Crash Completeness	Annual	64.14	65.13	65.36	66%
	Crash Timeliness*	Annual	6.48	6.14	11.66	6

	ACTIVITY MEASURE	Timeframe	2015	2016	2017	2018	2019
A-1	# of Seat Belt Citations Issued During Grant-Funded Enforcement Activities	Annual	3,386	3,144	4,779	4,669	2,563
		5-Year Average	3,454.6	3,417.0	3,813.6	4,050.4	3,708.2
A-2	# of Impaired Driving Arrests Made During Grant-Funded Enforcement Activities	Annual	501	500	451	319	291
		5-Year Average	476.8	476.2	520.4	474.2	412.4
A-3	# of Speeding Citations Issued During Grant-Funded Enforcement Activities	Annual	8,712	6,480	6,372	8,306	3,347
		5-Year Average	4,388.6	5,208.2	6,236.2	6,926.8	6,643.4

Core Outcome Measure Goals

***Note: The baselines presented here may differ from the measures presented in the Core Outcomes Table (above). This discrepancy is the result of revisions and updates. The Core Outcome Table contains the most recent numbers.**

C-1) Traffic Fatalities

Performance Target: To hold fatalities below the 2017 value of 172 for both 2018 and 2019 in order to stay at or below a 5-year average of 165 for 2015 to 2019.*
Performance Review: The five-year average for 2015 to 2019 (to date) is 154 fatalities, which means Maine is on track to meet this goal.

C-2a) Serious Traffic Injuries

Performance Target: To continue the downward trend in serious injuries by decreasing the number of serious injuries by 11% in order to reach a 5-year average rate of 737.6 for 2015 to 2019.
Performance Review: The five-year average for 2015 to 2019 (to date) is 708, which means Maine is on track to meet this goal.

C-2b) Serious Traffic Injury Rate

Performance Target: To decrease the serious traffic injury rate to a five-year target value of 4.90 for 2015 to 2019.
Performance Review: The five-year average for 2015 to 2019 (to date) is 4.73, which means Maine is on track to meet this goal.

C-3a) Mileage Death Rate

Performance Target: To hold the fatality rate below the 2017 rate for both 2018 and 2019 in order to stay at or below a 5-year average of 1.10 for 2015 to 2019.
Performance Review: The five-year average for 2015 to 2019 (to date) is 1.03, which means Maine is on track to meet this goal.

C-3b) Rural Mileage Death Rate

Performance Target: To hold the rural mileage fatality rate at or below 1.30 for 2019.
Performance Review: The rate for 2019 (to date) is 1.07, which means Maine is on track to meet this goal.

C-3c) Urban Mileage Death Rate

Performance Target: To hold the urban mileage fatality rate at or below 0.74 for 2019.
Performance Review: The rate for 2019 (to date) is 0.74, which means Maine is on track to meet this goal.

C-4) Unrestrained Passenger Vehicle Occupant Fatalities

Performance Target: To decrease unrestrained passenger vehicle occupant fatalities from a baseline (2012-2016) value of 57 to a target value of 56 for the year 2019.
Performance Review: The number of unrestrained passenger vehicle occupant fatalities for 2019 (to date) is 34, which means Maine is on track to meet this goal.

MC-5) Alcohol Impaired Driving Fatalities

Performance Target: To hold the number of alcohol-impaired fatalities to the baseline (2012-2016) value of 46 for the year 2019.*

Performance Review: The number of alcohol impaired driving fatalities for 2019 (to date) is 37, which means Maine is on track to meet this goal.

C-6) Speeding Related Fatalities

Performance Target: To decrease speeding-related fatalities from a baseline (2012-2016) value of 57 to a target value of 42 for the year 2019.

Performance Review: The number of speeding related fatalities for 2019 (to date) is 33, which means Maine is on track to meet this goal.

C-7) Motorcyclist Fatalities

Performance Target: To hold the number of motorcycle fatalities to the baseline 2016 value of 18 for the year 2019.

Performance Review: The number of motorcycle fatalities for 2019 (to date) is 27. Maine did not meet its goal for this target area.

C-8) Unhelmeted Motorcyclist Fatalities

Performance Target: To decrease the unhelmeted fatalities from a baseline (2012-2016) value of 13 to a target of 12 for the year 2019.

Performance Review: The number of unhelmeted motorcyclist fatalities for 2019 (to date) is 18. Maine did not meet its goal for this target area.

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

Performance Target: To decrease the number of drivers age 20 or younger involved in fatal crashes from a baseline (2012-2016) value of 17 to a target value of 13 for the year 2019.

Performance Review: The number of drivers age 20 or younger involved in fatal crashes for 2019 (to date) is 7, which means Maine is on track to meet this goal.

C-10) Pedestrian Fatalities

Performance Target: To hold the number of pedestrian fatalities to the baseline (2012-2016) value of 13 for the year 2019.

Performance Review: The number of pedestrian fatalities for 2019 (to date) is 13, which means Maine is on track to meet this goal.

C-11) Bicyclist Fatalities

Performance Target: To hold the number of bicyclist fatalities to the baseline value (2012-2016) of 2 for the year 2019.

Performance Review: The number of bicyclist fatalities for 2019 (to date) is 2, which means Maine is on track to meet this goal.

Non-Core Outcome Measure Goals

Distracted Driver Fatalities

Performance Target: To decrease distracted driver fatalities by 20 percent, resulting in a target average (2015 to 2019) of 7.

Performance Review: The average number of distracted driver fatalities for 2015 to 2019 (to date) is 10, which means Maine did not meet its goal for this target area.

Senior Driver Fatalities

Performance Target: To hold the number of senior driver fatalities to the baseline value (2012-2016) of 22 for the year 2019.

Performance Review: The number of senior driver fatalities for 2019 (to date) is 21, which means Maine is on track to meet this goal.

Media Recall

Performance Target: To hold the rate of media recall to the level of 43% for the spring of 2019.

Performance Review: The rate of media recall for the spring of 2019 is 47%, which means Maine met this goal.

Behavior Measure Goals

B-1) Seat Belt Usage Rate

Performance Target: To increase the percentage of observed seat belt use for passenger vehicles from a baseline (2012-2016) rate of 85% to a target rate of 88% for the year 2019.

Performance Review: The seatbelt observation rate for 2019 is 89%. Maine exceeded its goal for this target area.

Traffic Records Measure Goals

EMS Uniformity

Performance Target: Maine will improve the Uniformity of the EMS system as measured in terms of an increase of the percentage of records on the Sate EMS data file that are NEMSIS compliant by comparing the percentage of compliance reports during the baseline period of April 1, 2016 to March 31, 2017 as compared to the percentage of compliance reported during April 1, 2017 to March 31, 2018.

Performance Review: The target for 2019 is 92% and was exceeded.

Measurements

Start Date	End Date	NEMSIS 3.x Reports	Total Reports	NEMSIS 3.x Compliant Percentage
April 1, 2016	March 31, 2017	2,575	292,911	0.87%
April 1, 2017	March 31, 2018	201,692	287,858	70.06%
April 1, 2018	March 31, 2019	263,403	277,661	94.86%

Crash Uniformity

Performance Target: This Performance Measure evaluates the uniformity of the Maine Crash Reporting System by using the NHTSA MMUCC Mapping results to count the percentage of MMUCC

V5 compliant crash data elements captured in the State of Maine Crash Form during the baseline period. It then compares that number to the number of MMUCC V5 compliant data elements captured in the form during the performance period.

Measurements

Start Date	End Date	Percent Compliance
April 1, 2017	March 31, 2018	36.59%
April 1, 2018	March 31, 2019	42.79%

Performance Review: Increase in performance. This is a new measure for FFY20; therefore, no target existed in the FFY2019 plan.

Crash Completeness

Performance Target: Maine will improve the Completeness of the Crash system as measured in terms of an increase in:

Start Date	End Date	Lat/Long Reports	Total Reports	Completeness (%)
April 1, 2013	March 31, 2014	23,256	37,530	61.97%
April 1, 2014	March 31, 2015	24364	38827	62.75%
April 1, 2015	March 31, 2016	23,837	37,929	62.85%
April 1, 2016	March 31, 2017	26,189	40,833	64.14%
April 1, 2017	March 31, 2018	26,946	41,375	65.13%
April 1, 2018	March 31, 2019	27,613	42,250	65.36%

The percentage of crash records with latitude and longitude values entered by the officer.

The state will show measurable progress using the following method:
Count the number of crash reports with latitude and longitude values (count only non-null and non-zero values) for all reporting agencies in the State during the baseline period and the current performance period. Then, count the total number of reports for all reporting agencies in the State for the same periods. Divide the total number of reports by the count of reports with latitude and longitude and multiply by 100 to get the percentage of reports with latitude and longitude for each period.

The baseline period is from April 1, 2017 to March 31, 2018 limited to reports entered into the database by April 30, 2018.
The current performance period is from April 1, 2018 to March 31, 2019 limited to reports entered into the database by April 30, 2019.
The numbers in this performance measure represent all crashes entered into the state crash database from all state reporting agencies.

The baseline period had 26,946 reports with latitude and longitude values out of a total 41,375 reports resulting in 65.13% completeness.
The current period had 27,613 reports with latitude and longitude values out of a total 42,250 reports resulting in 65.36% completeness.

Performance Review: The completeness for FFY19 was 65.36 meeting the performance goal of 66.0%.

Crash Timeliness

Performance Target: Maine will improve the Timeliness of the Crash system as measured in terms of a decrease in the average number of days from the crash date to the date the crash report is entered into the crash database within a period determined by the State.

Performance Review: The target for 2019 is 6 and was not met. The increase in the average number of days was due to deploying TLS 1.2 Security Update and working through resulting export issues at multiple agencies.

Measurements

Start Date	End Date	Total Reports	Average Number of Days
April 1, 2012	March 31, 2013	34,271	12.1
April 1, 2013	March 31, 2014	37,588	8.5
April 1, 2014	March 31, 2015	38,811	7.5
April 1, 2015	March 31, 2016	37,935	6.69
April 1, 2016	March 31, 2017	40,833	6.48
April 1, 2017	March 31, 2018	41,375	6.14
April 1, 2018	March 31, 2019	42,257	11.66

Assessment of Progress

Much progress has been made over the years to reduce and eliminate motor vehicle crashes, serious injuries, fatalities, and property damage. However, much work still needs to be done to reach zero motor vehicle related deaths. In the last decade 1,677 people have died on Maine roads as the result of crashes. In the ten years before that 2,083-people lost their lives. At the time of this writing 153 individuals will not be with their loved ones for the Holidays.

In the charts and narrative that follow you will find updates on planned activities from the Federal Fiscal Year 2019 Highway Safety Plan that were selected and implemented based on proven countermeasures from the *NHTSA 9th Edition Countermeasures that Work, 2017.* We believe that these planned activities, chosen for their proven results, contribute to the success we see in the reduction of crashes, and the saving of lives, and the meeting of most of our FFY19 performance targets. As mentioned previously, countermeasures are data-driven thereby directing resources for maximum result. The annual Highway Safety Plan and its following Annual Report are intended

to work together in telling the story of progress in any given State. Program Area problem identification is detailed in the Highway Safety Plan while general progress is detailed in the Annual Report. While most performance measures have been met for FFY19, several were not. Those include: Motorcyclist fatalities, unhelmeted motorcycle fatalities, distracted driving fatalities, and Traffic Records Crash Timeliness.

Adjustments to FFY20 (when possible) and FFY21 Highway Safety Plans to meet unmet performance targets:

C-7 and C-8: Motorcyclist fatalities, including unhelmeted fatalities, remain a challenge. Maine does not have an all-rider motorcycle helmet law. If we did, it is predicted by NHTSA that an additional six lives would have been saved in 2017 alone. See NHTSA chart below:

Maine Motorcyclist Fatalities
by Helmet Use and Lives Saved Estimates

Year	Fatalities					Lives Saved Estimates**	
	Total	Helmeted	Unhelmeted	Unknown Helmet Use	Percent Known Helmeted*	Lives Saved at Current Helmet Use	Additional Lives Savable at 100% Helmet Usage
2014	11	7	4	0	64	4	1
2015	32	8	24	0	25	5	9
2016	18	6	12	0	33	4	4
2017	26	9	17	0	35	5	6
2018	23	5	18	0	22		

*Percent Based Only Where Helmet Use Was Known
**Lives Saved Estimates (Sum of columns may not equal other published numbers due to rounding)
**2018 Lives Saved Data is Currently Not Available

To date 27 motorcyclists have died in 2019. Of those, 23 were males of an average age greater than 38 years old. Reasons or causations on crash reports indicate: inexperience, speed, recklessness, failure to maintain lane, and failure to navigate turns. Sixteen of the twenty-seven killed were single vehicle crashes, in other words, did not involve another motor vehicle and in 2018, 78% of the persons killed on motorcycles were unhelmeted. For FFY20/21, we will investigate opportunities to strengthen the number of riders taking professional rider education, we will increase our media presence on radio, television, and digital/social specifically around rider conspicuity, rider training and rider safety gear. And we will continue our partnership with rider organizations dedicated to safety of all riders.

Distracted Driver Fatalities: To obtain better data regarding distraction in crashes, Maine added specific *distracted by* elements to its electronic crash form. Prior year crash data were severely underreported. Additionally, in September of 2019 a newly passed hands-free cell phone law went into effect. Since then, anecdotal observations of cell phone manipulation by hand-held has decreased while written violations for hand-held and manipulating have increased. This new law together with our persistent paid and earned media, social and digital media, traffic safety education events, sports marketing events, Choices Matter School Program, and increased

overtime enforcement should help us see a decline in distraction-related motor vehicle fatalities in FFY20 and FFY21.

Crash Timeliness: The target for 2019 was not met. The increase in the average number of days was due to deploying TLS 1.2 Security Update and working through resulting export issues at multiple agencies. This issue has been resolved and targets to decrease timeliness of reports to the electronic system should be back on track for FFY20 and FFY21.

Further discussion of adjustments to better meet performance targets can be found in the Planned Activity Reports.

Evidence Based Traffic Safety Enforcement Program

MeBHS has developed procedures to ensure that enforcement resources are data-driven and that awarded federal funds are used efficiently and effectively to support the goals of the state's highway safety program. Maine incorporates an evidence-based approach in its statewide enforcement program through the following components:

Data Driven Problem Identification
A statewide problem identification process is used in the development of the Highway Safety Plan (HSP). The data analyses are designed to identify the high-risk populations in crashes and who, what, when, where and why crashes are occurring.

The Maine Bureau of Highway Safety utilizes a three-prong approach to identify problem areas for the three major program areas; Impaired, Distracted, and Speed. This three-prong approach is outlined below:

1. Due to the geographic size of the State of Maine, the state was divided into eight regions. To proportionately divide the state based on geography alone, the current State of Maine district court regions were utilized.
2. The eight geographic regions vary significantly in population density, which in turn affects their respective crash rates. To account for population density in each of these regions, the Maine Bureau of Highway Safety calculated the proportion of vehicle miles travelled in each region as compared to the total vehicle miles traveled in the State of Maine. Each region was then assigned a specific number of grants based upon those percentages and the total number of grants decided upon for each program area in the state. For example, Region 1 (York County) accounted for 15.73% of the total vehicle miles travelled in the entire State of Maine. This allocated 6 grants to region 1, out of the 35 grants decided upon for the impaired driving program area.
3. To identify problem areas within each geographic region, the Maine Bureau of Highway Safety utilized different tools to analyze data. The first tool that was utilized was respective crash rates for each program area. Crash data spanning the five-year period from 2013-2017 was averaged for each program area. The crash data included crashes that resulted in possible injuries, evident injuries, serious injuries, and fatalities.

Geographic Information Systems (GIS) were used to map the top problem areas in the state to further assist in problem identification. This step helped identify the major roads that had high

crash rates in each program area. Law enforcement agencies located in the problem areas identified for each region, were offered grant opportunities as tier 1 agencies. Sheriff's offices and the Maine State Police in the tier 1 areas were also identified to assist with tier 1 problem areas outside of local jurisdictions. Tier 2 problem areas were identified based on their proximity to tier 1 areas using crash data as outlined above. Law enforcement agencies in the tier 2 problem areas were offered grant opportunities if an agency in the tier 1 agency did not apply for a grant. The intent for tier 2 agencies was to have an impact on crash numbers in areas identified as tier 1 due to their proximity and shared roadways.

All enforcement agencies requesting MeBHS grant funding, to support additional overtime patrols, must also present a data driven approach to identifying the traffic safety problems in their jurisdictions. Data documenting the highway safety concerns must be included in the funding application submitted to MeBHS, along with proven strategies and countermeasures that will be implemented and evaluated to address the problem.

Data Type	Data Set	Source/Owner
Fatality and Injury	FARS, Maine Crash Reporting System (MCRS)	NHTSA, State Traffic Safety Information (STSI), MeBHS, MeDOT, Maine State Police
Violation	Maine Citation Data	Maine Violations Bureau
Seat Belt Use	Maine Seat Belt Use Observational Data, MCRS	MeBHS, Me DOT
Licensed Drivers, Registrations and Vehicle Miles Traveled (VMT)	Highway Statistics	FHWA, U.S. Census Bureau, Maine BMV
Operating Under the Influence	MCRS, FARS	NHTSA, Me DOT, Maine State Police

Implementation of Evidence-Based Strategies

MeBHS, our partners and our subrecipients use a combination of overtime enforcement checkpoints and saturation patrols, both of which are found in the most recent edition of NHTSA's, *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices* to address the identified traffic safety problem(s). The most common traffic safety problems include enforcement of traffic laws pertaining to but not limited to, adult and child seat belt safety, speeding and aggressive driving, fatigued and distracted driving, and alcohol and drug impaired driving. Non-law enforcement partners also use the most recent edition of Countermeasures That Work to implement evidence-based strategies that will result in a reduction in crashes and injuries for a focus demographic (i.e. young drivers) or an increase in voluntary compliance of traffic laws (i.e. adult and child safety restraints).

Documentation and Tracking

All grant funded activities including: summons, warnings, hours spent on the planned activities, contacts made, resources utilized, and other details of activities efforts are collected at the state level and are used for determining value of efforts, future grant awards and return on investment.

Continuous Monitoring

MeBHS Highway Safety Program Coordinators use progress reports and information collected during telephone and on-site monitoring to ensure grant funded planned activities are effective. Monthly, quarterly and final progress reports received from each subrecipient are examined to ensure achievement of the goals and outcomes of each planned activities. These reports include data on the activities conducted, such as the area and times worked, the focus demographic reached, any problems encountered, and for law enforcement the number of warnings and citations issued. MeBHS uses various available data systems, i.e. Maine Crash Reporting System, the Public Query Crash Website, and FARS to monitor crashes and fatalities and will advise law enforcement, and other partners if there are increases or decreases that would require a change in strategy in a particular jurisdiction. This continuous follow-up allows for subtle or major adjustments thereby ensuring the best use of resources to address the stated priority traffic safety problem(s). Additionally, subrecipients are presented annually with a Grants Management Manual and Grant Workshop Trainings.

FFY19 Highway Safety Plan Project Level Report

Planning and Administration

The Planning & Administration (P&A) program area and its planned activities outline the activities and associated costs necessary for the overall management and operations of the MeBHS, including, but not limited to:

- Identifying the state's most significant traffic safety problems
- Prioritizing problems and developing methods for distribution of funds
- Developing the annual Highway Safety Plan and Annual Report
- Recommending individual grants for funding
- Developing planned grants
- Monitoring and evaluating grant progress and accomplishments
- Preparing program and grant reports
- Conducting grantee performance reviews
- Increasing public awareness and community support of traffic safety and appropriate behaviors that reduce risk
- Participating on various traffic safety committees and task forces
- Promoting and coordinating traffic safety in Maine
- Creating public awareness campaigns and providing staff spokespersons for all national and state campaigns, including Child Passenger Safety Week, Drive Sober or Get Pulled Over, Teen Driver Week, etc.
- Conducting trainings for applicable grant personnel
- Applicable salaries and state costs

Performance Targets

The goal of the P&A program is to provide management, supervision, and support services for the activities of the Maine traffic safety program.

P&A Performance Target #1:
Developing a consolidated S. 402 and S. 405 coordinated Highway Safety Plan to submit to NHTSA by July 1.

P&A Performance Target #2:
Submitting an annual performance report to NHTSA by December 31.

Planned Activity Number: PA19-001
Planned Activity Title: Planning and Administration

Planned Activity Description:

This planned activity will fund applicable contracts and staff salaries and

expenses that are directly related to the planning, development, coordination, monitoring, auditing, reporting and evaluation of the MeBHS Highway Safety Plan, Annual Report, grants tracking system programs, grants, and sub grants. Funds are used for allowable expenses related to the operation of the office under all NHTSA programs, such as simulator repairs and supplies, office supplies, postage, printing, travel, dues and other appropriate costs. This planned activity also funds staff attendance and participation on committees and trainings (including NHTSA TSI Courses), meetings, and conferences related to MeBHS' mission; and in-state monitoring of sub grantees.

Planned Activity Performance:

In FFY19, the MeBHS prepared and submitted its annual application for s. 402 and s. 405 funding to the National Highway TraffiSafety Administration (NHTSA) by way of a Highway Safety Plan. The plan was submitted under requirements of Title 23 Part 1300.12 and was approved. This Annual Report submission under 1300.35 will be submitted within 90 days after the close of FFY19 (September 30, 2019) but no later than December 31, 2019. MeBHS staff also attended various in-state and out-of-state trainings and conferences that provide opportunity to offer and administer programs.

As of December 16, 2019

Planned Activity Title	Source	Planned Activity Number	Budget	Expended
Planning and Administration Costs	S. 402	PA19-001	252,186.30	225,303.26

Impaired Driving

These impaired driving program planned activities were funded in FFY19 using our Maine Impaired Driving Strategic Plan (added at the end of this report) and *Countermeasures That Work*. These planned activities were chosen for their proven and anticipated impact on the performance targets in the HSP. Each planned activity aligns with one or more strategies listed in the SHSP, the HSP and the Strategic Plan. Input from the Impaired Driving Task Force, prior NHTSA program assessments, meeting with partners, and conscientious program management all contributed to the success of meeting our performance target for FFY19. A combined focus on drug-impaired and alcohol-impaired driving is necessary to see further reductions in impaired crashes and fatalities.

Planned Activity Number:	AL19-001
Planned Activity Title:	**Impaired Driving Program Management and Operations**
Planned Activity Description:	Costs under this program area include allowable expenditures for salaries and travel for highway safety program staff. Costs also include general expenditures for operating costs e.g., printing, supplies, state indirect rates, insurance and postage.
Planned Activity Performance:	The MeBHS Program Coordinators manage program activities specific to preventing and reducing alcohol-related and alcohol-impaired crashes, fatalities and injuries. During FFY2019, the planned activities implemented and reported on below were administered by MeBHS
Planned Activity Number:	ID19-002
Planned Activity Title:	**Regional Impaired Driving Task Force Teams (RIDE)**
Planned Activity Description:	Funds will support overtime costs and supplies to continue support of the enforcement efforts by Regional Impaired Driving Enforcement (RIDE) Teams. Approximately 20 officers are necessary to conduct the proposed enforcement details. RIDE Teams will be focusing their efforts during the summer months on the five counties with the greatest number of alcohol-impaired crashes: Cumberland, York, Penobscot, Kennebec, and Androscoggin. These Regional Teams conduct saturation patrols and sobriety checkpoints in selected locations (using evidence-based traffic safety methods) throughout identified jurisdictions. Exact patrol locations are determined and agreed upon by the program coordinator and Law Enforcement Liaison in partnership with individual RIDE administrators. MeBHS monitors the successes of the grant as it is being conducted to determine if modifications need to be implemented to ensure the activity is producing results.
Planned Activity Performance:	In federal fiscal year 2019, two of the five identified counties were funded

through RIDE team grants. The three other agencies identified in the 2019 highway safety plan could not participate in the planned activity due to staffing problems and/or other agency commitments.

In York County, the York Police Department hosted the RIDE team with support from the York County Sheriff's Office. The York County RIDE Team conducted 2 impaired driving checkpoints, and 1 saturation patrol from May 23rd, 2019 to August 30th, 2019. In total 148 hours were worked, and 1,669q drivers were contacted. In addition to the impaired drivers arrested, 58 other drivers showed signs of impairment and were put through standard field sobriety tests and deemed not impaired. The York County RIDE team totals for arrests during the 3 enforcement events are listed below:

- 13 Operating Under the Influence
- 3 Violating Conditions of Release
- 3 Operating After Suspension
- 3 Drug Charges
- 1 Operating Without a License
- 1 Minor Transporting Liquor
- 1 Failing to Sign a Citation

In Cumberland County, the Gorham Police Department hosted the RIDE team with support from the Cumberland County Sheriff's Office. This RIDE team got off to a late start due to staffing issues, but was able to focus efforts in conducting a large saturation patrol during a concert event in Westbrook. Alcohol was served during the event and the saturation patrols were well advertised. Six RIDE team members from four different law enforcement agencies conducted the saturation patrol; 59 vehicles were stopped and one driver was arrested for operating under the influence.

Planned Activity Number: ID19-003

Planned Activity Title: **Maine State Police SPIDRE Team**

Planned Activity Description: The State Police Impaired Driving Reduction Enforcement Team (SPIDRE) is comprised of members of the Maine State Police that are proficient in NHSTA Standardized Field Sobriety Training, ARIDE, and several are certified as Drug Recognition Experts. SPIDRE consists of a team leader and team members available statewide. The SPIDRE Team will increase OUI saturation patrols and checkpoints, with a focus on scheduled events where there is a significant potential for impaired drivers. The team leader will be a liaison within the MeBHS to work with other agencies. The Maine Bureau of Highway Safety Roadside Testing Vehicle (RTV) and agency message trailers will be utilized when assisting other departments at various events and OUI checkpoints throughout the state.

Planned Activity Performance: In federal fiscal year 2019, the Maine State Police SPIDRE team conducted

1460.75 hours of impaired driving enforcement, which included 2 sobriety checkpoints 3,643 total contacts. In addition to the impaired drivers arrested, many other drivers showed signs of impairment and were put through standard field sobriety tests and deemed not impaired. These enforcement efforts led to the following arrests and/or citations:

- 89 Operating Under the Influence Arrests
  - 66 under the influence of alcohol
  - 22 under the influence of other intoxicants
  - 1 juvenile operating under the influence
- 15 Warrant Arrests
- 36 Operating After Suspension
- 23 Drug Arrests
- 48 Speeding Citations
- 441 Other Moving Violation Citations
- 119 Other Non-Moving Violation Citations
- 7 Defective Vehicle Citations

Planned Activity Number:	ID19-004
Planned Activity Title:	**Impaired Driving Roadside Testing Vehicle (RTV) Operational Costs**
Planned Activity Description:	The Maine State Police (MSP), local law enforcement and the MeBHS will be reimbursed for all necessary RTV operational and maintenance expenses including supplies and equipment, overtime for the drivers, troopers and E911 employees working the RTV activities (estimated at $65 per hour for 150 hours), fuel, maintenance, and monthly fees associated with storage (estimated at $3600) tolls, radio fees, and OIT/Wi-Fi. This planned activity benefits all Maine law enforcement agencies.
Planned Activity Performance:	The Maine Bureau of Highway Safety Roadside Testing Vehicle (RTV) was utilized heavily during the summer months, particularly during the August "Drive Sober or Get Pulled Over" national campaign. During the 2019 federal fiscal year, the RTV was used for 18 sobriety checkpoints and 16 educational events throughout the state. The York County RIDE team conducted 4 sobriety checkpoints and/or saturation patrols with assistance from the Maine State Police in multiple locations which focused on high crash areas in York County. The York County mobile command post was also used in conjunction with the RTV during those checkpoints and saturation patrols. With both mobile units present, it allowed for efficient OUI enforcement and processing of arrested subjects. During these checkpoints, a dispatcher, assistant district attorney and bail commissioner were present to quickly process arrested subjects allowing law enforcement officers to spend more time with sobriety checks and field sobriety testing. The following agencies requested and used the MeBHS RTV for educational events or as an essential tool for sobriety checkpoints: • AAA Northern New England • Aroostook County Sheriff's Office • Auburn Police Department

- Augusta Police Department
- Caribou Police Department
- Freeport Police Department
- Gorham Police Department
- Holden Police Department
- Houlton Police Department
- MADD
- Maine Criminal Justice Academy
- Maine Prosecutor's Association
- Maine Sheriffs Association
- Maine State Police
- Sagadahoc County Sheriff's Office
- Scarborough Police Department
- Scarborough Police Department
- University of Maine
- Westbrook Police Department
- York County Sheriff's Office

Planned Activity Number:	ID18-002
Planned Activity Title:	**Traffic Safety Resource Prosecutor**
Planned Activity Description:	A Traffic Safety Resource Prosecutor (TSRP) facilitates a coordinated, multi-disciplinary approach to the prosecution of traffic crimes with a strong focus on impaired driving. Funds will continue to support the TSRP contract, which assists Maine law enforcement, prosecutors, motor vehicle hearings examiners, DHHS lab technicians, and other state agencies with training, investigation and prosecution of traffic safety and impaired driving-related crimes. The TRSP will also assist with the implementation and coordination of the Impaired Driving Special Prosecutors (IDSPs) within selected prosecutorial districts in Maine. The TSRP is encouraged by NHTSA and proven effective in the fight against impaired driving.
Planned Activity Performance:	Maine's TSRP program completed its fifth full year. The program continues to be successful in providing legal research and support, as well as expert technical resources, in impaired driving and other traffic safety issues upon request to law enforcement and prosecutors. This supports a number of NHTSA approved *Countermeasures That Work* including: training for OUI investigation including checkpoints and high visibility saturation patrol; training for prosecution; encouraging limitations on diversion; interlock training, ARIDE and DRE training and program support (enforcement of drug

impaired driving), and more.

Training Attended:

To keep up to date on trending issues with impaired driving and traffic safety, the TSRP attended the following training in 2019:

- New Hampshire Impaired Driving Summit
- Vaping Webinar
- OUI Trial Observation in York County
- Lifesavers Conference: Louisville
- Maine Impaired Driving Summit
- Annual TSRP Training (3-days in Williamsburg, VA)
- Webinar: DRE Updates and Emerging Trends
- Maine DHHS Alcohol Prevention Conference

Training Held or Assisted With:

TSRP presentations this year included: Annual Refresher Training for DEEP providers, The DRE school, The SFST and BTD sessions of the Basic Law Enforcement Training Program OUI Weeks at MCJA, Maine's Law Enforcement Phlebotomy Classes, and ARIDE and OUI Review sessions held throughout the State.

- Guest Panel on Cannabis Impairment: New Hampshire Impaired Driving Summit
- OUI Investigation Training at Portland PD (with IDSP Joshua Saucier)
- Basic Law Enforcement Training Program at MCJA: The Legal Environment of OUI (3 Sessions) October 2018
- Basic Law Enforcement Training Program at MCJA: The Legal Aspects of Chemical Testing (3 Sessions) October 2018
- MCJA Statewide DRE Refresher: Legal Updates August
- DEEP Annual Refresher Trainings (1 Session) October 2018
- OUI Investigation Training at Bangor PD (with IDSP Alice Clifford and JOL David Kennedy)
- DRE 7-Day School: Taught "Case Preparation" and "Cannabis"
- Maine Prosecutor / DRE Training with out of state TSRPs (2 days in Portland)
- OUI Investigation Review Cape Elizabeth PD
- OUI Investigation Review Caribou PD
- Presentation at TSRP presentation on Cops in Court
- Maine DRE Annual Refresher Training at MCJA: August 2019
- Teen Safe Driving Expo: August 2019
- MCJA BLETP The Legal Environment of OUI: September (2 Sessions)

Committee Meetings:

- Impaired Driving Task Force (4)
- Bureau of Motor Vehicles Hearings Examiner Meeting (2)
- Maine Chief's Winter Meeting – handed out impaired driving related information and advised Chiefs of available resources.
- Maine Chief's Dist. 1 Meeting regarding LEPT training

- Federal Motor Carrier Safety Agency Conference Call on Maine Drug Impairment Questions.
- LEPT Informational Meeting: August 2019
- HETL Meeting on Blood: August 2019
- Region 1 LEL/TSRP/JOL Conference Call: September
-

Individual Requests for Assistance with Impaired Driving Related Questions:

- The TSRP provided legal research and support on average approximately 8 times a month throughout FY 2019 (a total of approximately 100 assignments) on various issues associated with impaired driving to law enforcement and prosecutors. About 90% of these requests were from Maine based recipients, but several requests were handled for out of state TSRPs.
- The TSRP provided technical expertise and resources about 20 times a month throughout FY 2019 (a total of approximately 240 assignments) on various issues associated with impaired driving to law enforcement and prosecutors. About 95% of these requests were from Maine based actors, but several requests were handled for out of state TSRPs.

Miscellaneous Impaired Driving Related Projects:

- Distributed approximately 75 electronic mailings throughout the year on various important traffic safety issues to Maine law enforcement and prosecutors through the Maine OUI Enforcement Newsgroup
- The TSRP was consulted by the Department of Public Safety to assist with various issues of Toxicology concerns with our DHHS lab, including assisting with the writing of proposed legislation to address legal concerns regarding chemical testing and the created of a protocol for payment of test by the HSO.
- Assist with Highway Safety Planning FY2020 with Jamie Dionne and IDTF
- Assist with TSRP Beth Barnes and LEPT training update for Maine attendees
- Written Critique LD 637
- Written evaluation DPS-1 Bill; update after reviser's office change
- Evaluation of NMS Lab Bill

Planned Activity Numbers:	See Below Chart for Planned Activity Numbers
Planned Activity Title:	**Evidence Based Impaired Driving High Visibility Enforcement Campaigns:** • *Drive Sober Maine!* • *NHTSA Drive Sober or Get Pulled Over*
Planned Activity Description:	This planned activity will support dedicated overtime costs for approximately 60 law enforcement agencies (LEA's) selected by data analysis, to participate in impaired driving enforcement details and checkpoints including those that support NHTSA's national campaigns in August and December (Holiday

Season). The "Drive Sober, Maine!" campaign is designed to further address the impaired driving problem in Maine outside of the two two-week national campaigns during the months of April to September, based on an analysis of crash and fatality data involving alcohol and discussed in the preceding pages. Agencies will be awarded grant funds using planned activity selection and data analysis methods previously discussed in this plan. Additionally, this planned activity will fund overtime call outs for drug recognition experts and Law Enforcement Phlebotomy Technicians.

Planned Activity Performance:

Over the course of the federal fiscal year, the below agencies conducted 3945.25 hours of checkpoints and overtime saturation patrols, made 8,540 contacts and wrote 187 citations for impaired driving. The media plan under the Paid Media Program Report at the end of this report will show the relationship between our paid media plan and the high-visibility enforcement efforts.

Expenditures through December 12, 2019

Subrecipient	Planned Activity ID	Award	Expended
Maine State Police	ID19-056	$40,000.00	$11,939.97
Aroostook County Sheriff's Office	ID19-035	$5,635.00	$5,948.70
Hancock County Sheriff's Office	ID19-028	$22,325.00	$9,347.92
Kennebec County Sheriff's Office	ID19-054	$17,218.00	$8,717.94
Lincoln County Sheriff's Office	ID19-036	$9,903.00	$4,980.26
Oxford County Sheriff's Office	ID19-038	$9,300.00	$0.00
Sagadahoc County Sheriff's Office	ID19-041	$16,328.00	$10,745.40
Auburn Police Department	ID19-045	$14,335.00	$8,254.18
Augusta Police Department	ID19-047	$15,950.00	$15,950.00
Bar Harbor Police Department	ID19-052	$9,102.00	$5,290.45
Bath Police Department	ID19-055	$5,262.00	$2,483.40
Berwick Police Department	ID19-037	$5,964.00	$4,211.24
Biddeford Police Department	ID19-043	$5,940.00	$5,964.71
Bridgton Police Department	ID19-046	$2,520.00	$327.17
Brunswick Police Department	ID19-057	$7,200.00	$6,983.33
Buxton Police Department	ID19-062	$6,140.00	$3,045.74
Caribou Police Department	ID19-031	$10,800.00	$4,561.66
Eliot Police Department	ID19-025	$10,103.00	$7,296.27
Ellsworth Police Department	ID19-034	$7,350.00	$7,085.91
Fort Kent Police Department	ID19-026	$3,200.00	$650.42
Gardiner Police Department	ID19-050	$3,264.00	$2,505.51
Gorham Police Department	ID19-051	$14,012.00	$12,138.13

Holden Police Department	ID19-061	$7,380.00	$4,892.25
Houlton Police Department	ID19-049	$6,708.00	$3,252.55
Kittery Police Department	ID19-032	$3,000.00	$2,486.10
Lewiston Police Department	ID19-027	$10,565.00	$7,244.59
Mexico Police Department	ID19-040	$5,456.00	$4,418.23
Old Town Police Department	ID19-039	$8,015.00	$1,452.07
Orono Police Department	ID19-058	$5,216.00	$4,860.32
Portland Police Department	ID19-059	$3,820.00	$441.71
Sabattus Police Department	ID19-033	$7,832.00	$1,863.72
Scarborough Police Department	ID19-030	$20,456.00	$15,569.38
South Portland Police Department	ID19-060	$5,300.00	$3,909.64
Waterville Police Department	ID19-053	$4,338.00	$3,995.51
Wells Police Department	ID19-042	$11,800.00	$10,090.09
Westbrook Police Department	ID19-044	$7,452.00	$6,841.52
Winslow Police Department	ID19-029	$13,650.00	$4,554.62
York Police Department	ID19-048	$8,148.00	$5,834.20

Planned Activity Number: ID19-007

Planned Activity Title: **Specialized Law Enforcement Training (Impaired)**

Planned Activity Description: This planned activity funds the specialized training and supplies necessary for law enforcement officers to detect, apprehend, and prosecute motorists suspected of operating under the influence of alcohol and/or drugs. The Maine Impaired Driving Task Force has identified that a best practice methodology for OUI investigation dictates a three-pronged approach: (1) the NHTSA approved curriculum in Standardized Field Sobriety Testing (SFST) which is mandatory for all new police officers trained at the Maine Criminal Justice Academy's Basic Law Enforcement Training Program; (2) the Advanced Roadside Impairment Driving Enforcement (ARIDE) program offered to experienced patrol officers who desire better awareness of OUI drug cases; and (3) The Drug Recognition Expert (DRE) program for those police officers who excel in OUI Enforcement. In addition to providing the basic funding for instructors, materials and supplies, this planned activity provides travel expenses for DRE candidates to complete their field certifications in more densely populated States to ensure they meet the proficiency requirements without undue delay. Phoenix, Arizona was selected for FFY2019. This planned activity also funds attendance at the annual DRE conference critical for keeping DRE's current and proficient in utilizing best practices. The MeBHS recognizes the need to increase DREs

and is actively working toward that goal. These planned activities are administered jointly with the Maine DRE and impaired driving training coordinator at the Maine Criminal Justice Academy (MCJA).
We expect to train 100 new officers for ARIDE and 25 new Drug Recognition Experts.

Planned Activity Performance:

The Maine Criminal Justice Academy (MCJA) was able to utilize grant funds in federal fiscal year 2019 to provide basic and advanced courses in impaired driving enforcement. The MCJA was able to train and certify 18 new Drug Recognition Experts (DRE) along with offering 6 ARIDE classes statewide with a total of 95 students attending. MCJA also offered a 1-day DRE refresher training in which 58 DREs and 12 DRE instructors attended.

MCJA also held 3 Breath Testing Device Site Coordinator Training sessions in Vassalboro, Cape Elizabeth, Bangor and Auburn. 49 Site Coordinators attended these trainings.

This grant also provided funding for MCJA DRE State Coordinator James Lyman to attend the International Association of Chiefs of Police Annual Training Conference on Drugs, Alcohol and Impaired Driving and bring back information to enhance Maine's impaired driving training program. James Lyman was unable to attend the conference due to prior commitments. Maine State Police Specialist Seth Allen was able to attend in his place.

Planned Activity Number: ID19-010

Planned Activity Title: **Maine Annual Impaired Driving Summit**

Planned Activity Description:

MeBHS, with our partners, intend to increase awareness of the growing issue of drug impaired driving by hosting an annual summit similar to previous successful summits. The date and location will be determined upon contract negotiation with AAANNE. The opportunity will be released upon approval of this Plan. Impaired Driving Summits are attended by over 200 people. Several out of state national speakers present at the conference. CEU's were granted to eligible participants in the legal field. A survey was conducted to measure the attendance and effectiveness of the Summit. Responses indicated a need for a yearly summit. The goal is to increase the attendance of the Impaired Driving Summits and to encourage greater judicial and legislative attendance. The summits generate a significant amount of earned media and the after-event surveys provide useful recommendations for ongoing annual summits in Maine.

Planned Activity Performance:

The 2019 Maine Impaired Driving Summit was attended by over 200 law enforcement, prosecutors, health care professionals, traffic safety professionals, medical community and others from various New England states. There was a 25% increase in the number of prosecutors who attended. Multiple sessions were held and aimed at better training law enforcement, prosecutors and the medical community in OUI trials and cases. These included an OUI mock trial, a session about improving communication between prosecutors, law enforcement and Drug Recognition Experts. One of the sessions was led by Sgt. Alan Ma of the Denver Police Department discussing the challenges that Denver has faced since the legalization of

marijuana.

The partnership with AAA Northern New England in presenting these well attended forums has been instrumental in education of drug-impaired driving. This annual forum is being replicated in other New England states.

Planned Activity Performance:

The 2018 Impaired Driving Summit supported 210 attendees that included law enforcement, legislators, administrators, judicial, educators, forensic, and traffic safety professionals from various New England states. Presentations included: Jennifer Knudsen Colorado traffic safety resource prosecutor who spoke about specific issues Colorado is dealing with in their communities, five years after marijuana legalization, Robert Forney a toxicologist from Ohio, Tara Kelly Baker from the AAA Foundation for Traffic Safety who spoke about oral fluid testing, Tara Casanova Powell who gave a national perspective on ignition interlock laws and how to increase participation and Ryan Smith from the Virginia Tech Transportation Institute who spoke about their latest research tracking marijuana use using naturalistic data. The partnership with AAA Northern New England in presenting these well attended forums has been instrumental in education of drug-impaired driving. This yearly forum is being replicated in other New England states.

Planned Activity Number: ID19-011

Planned Activity Title: **Maine State Police Impaired Driving Coordinator**

Planned Activity Description:

This planned activity supports the continuation of one Maine State Police Trooper FTE position within the Maine State Police (MSP) Traffic Safety Unit. This position assists the MeBHS and the MSP with the creation, administration and improvement of various traffic safety programs aimed at reducing impaired driving by alcohol and drugs. This position works closely with various partners and committees such as the MeBHS, MCJA, BMV, Impaired Driving Task Force, LEL, TSRP, JOL and county/municipal law enforcement agencies to deliver the best possible impaired driving reduction products and information that save lives. This will include, but not limited to, the DRE program, blood technician program, OUI/SFST instruction, ARIDE, impaired driving enforcement, educational speaking engagements, PSAs, awareness and prevention programs and monitoring of legislative issues. This position will also be responsible for other duties as assigned by the MSP Commanding Officer(s).

Planned Activity Performance:

The Maine State Police Impaired Driving Reduction Trooper position was held by Specialist Seth Allen for all of FFY2019. Specialist Allen was the lead instructor for Standardized Field Sobriety Testing (SFST), Advanced Roadside Impaired Driving Enforcement (ARIDE), and Drug Recognition Expert (DRE) trainings at the Maine Criminal Justice Academy. Specialist Allen also conducted statewide speaking engagements on the issue of impaired driving for driver's education classes and high school students. Specialist Allen was

heavily involved with Maine's Drug Recognition Expert program and utilized by prosecutors as an expert in impaired driving enforcement.

In FFY 2019, Specialist Allen coordinated activities of the Maine State Police SPIDRE team. Spc. Det. Allen also attended the International Association of Chiefs of Police Annual Training Conference on Drugs, Alcohol and Impaired Driving in August and brought back information to enhance Maine's impaired driving training program.

Specialist Allen acts as the Breath Testing Device site coordinator for the MeBHS Roadside Testing Vehicle.

Planned Activity Number:	ID19-013
Planned Activity Title:	**Judicial Outreach Liaison**
Planned Activity Description:	This funding will support a full-time position for a Judicial Outreach Liaison (JOL) that was approved by the State Department of Purchases in FFY2017. The JOL is responsible for developing a network of contacts with judges and judicial educators to promote judicial education related to sentencing and supervision of OUI offenders, court trial issues, and alcohol/drug testing and monitoring technology. In addition, the JOL makes presentations at meetings, conferences, workshops, media events and other gatherings that focus on impaired driving and other traffic safety programs. The JOL identifies barriers that hamper effective training, education or outreach to the courts and recommends alternative means to address these issues and concerns. With the help of the Traffic Safety Resource Prosecutor, the JOL achieves uniformity with regard to impaired driving prosecution throughout Maine. The planned funding will include a salary will need to be competitive with the current Maine Judiciary Retirement Plan. Maine Judges can serve as ''active retired'' with a significant pension provided they work only a few hours a month. The Maine State JOL will have a busy work load, so more pay is required and because most eligible judges will require significant traffic safety training, the cost will also include in-state travel, out-of-state travel for at least four impaired driving-related conferences (LifeSavers, DRE, GHSA, and a judicial specific conference), as well as travel and tuition for classes on traffic safety and impaired driving at the National Judicial College
Planned Activity Performance:	The JOL successfully conducted the following activities in FFY19: *Outreach to Maine Judicial Branch – introduction and discussions of purpose of JOL.* *Judicial Training*-We are now well along in the planning for a two-day training in April 2020 in concert with the other States in Region 1 and with the National Judicial College. We are working closely with Region 1 RJOL Hon. Brian Burgess, (retired Justice of the Vermont Supreme Court) and he is coordinating with the other state's highway safety offices and Judiciaries. In response to what has been identified by the other States as a priority item the current plan is for a two-day event, the first day being for training of new judges only, and the second day for a broader audience of both new and experienced Judges, along with Prosecutors and Defense Attorney *Familiarization with Maine statutes and caselaw.*

Attendance at conferences-
New England Drug Court Professionals
Conference held in Marlborough, Massachusetts on November 28-29
Region I Highway Safety Annual Conference held in Concord, New Hampshire
Lifesavers Highway Safety Conference in Louisville,
Kentucky
Governors Highway Safety Association conference
Maine Impaired Driving Summit

Liaison with other members of the traffic safety community - attended three meetings of the Impaired Driving Task Force; one meeting of the traffic safety committee of the Maine State Police Chief's Association; prepared a brief introductory piece and a summary of recent Maine OUI caselaw which are planned to go into the next Highway Traffic Safety Newsletter; participated in the monthly teleconferences between the New England JOL's, LEL's and TSRP's which are organized on a monthly basis by Ted Minall, the Region I LEL; established a strong working relationship with Justice Brian Burgess.

Training for law enforcement personnel and prosecutors - developed a PowerPoint presentation for use in training law enforcement officers on how to effectively present their cases in court, and how to understand how judges evaluate witnesses and make decisions in contested cases.

Legal Research and Analysis- reviewed and commented on two LD's which were offered for consideration in the First Regular Session of the 129th Legislature.

Planned Activity Number:	Planned activity not implemented in FFY2019
Planned Activity Title:	**Maine Judicial Education**
Planned Activity Description:	Trial judges responsible for deciding disputes arising from prevention, detection, apprehension and correction of impaired driving may have no familiarity with the science, best technical practices and related constitutional and evidentiary issues raised in court before trial. Training will include:

- DRE procedures and toxicology related to drugged driving;
- The pros and cons on admissibility of testimony from specially trained police officers absent medically or toxicologically trained experts;
- Electronic monitoring and judicial supervision, early-intervention, DWI Courts and alternative DUID/DUIA sentencing, and pre-trial release options;
- Constitutional challenges, search & seizure and any other topical judicial/factual/ legal issues arising in court out of traffic safety enforcement, such as, but not limited to, distracted driving and passenger protection.

Planned Activity Performance:	Planned activity not implemented in FFY2019 because the Administrative Office of the Courts found the training so valuable last year that did not request funding and decided to fund this planned activity using state funds.
Planned Activity Number:	ID19-015
Planned Activity Title:	**Maine TSRP Specialized Prosecutor and Law Enforcement Impaired Driving Investigation and Prosecution Training**
Planned Activity Description:	Maine's Traffic Safety Resource Prosecutor, has created a two-day class relevant to OUI enforcement and investigation for Maine prosecutors and law enforcement. This class "Impaired Driving Investigation in Maine" is aimed at presenting the concepts and principles employed by law enforcement officers in OUI investigation; including alcohol and drug impairment, chemical testing, fatal motor vehicle investigation and relevant Maine case law. The class is accredited by the Maine Board of Bar Overseers for continuing legal education credits and was held in numerous prosecutorial districts in past years. It has been well received and requested again by prosecutors. This year MeBHS will attempt to offer this class in several locations within Maine – especially the northern and less populated areas. Furthermore, we will reach out and offer invitations for other New England State prosecutors in classes where we have not filled the seats with Maine prosecutors. In addition to this locally taught class for Maine prosecutors, the MeBHS has sponsored classes annually from the National Traffic Law Center to be held here in Maine. Past classes were "Lethal Weapon," and "Courtroom Success," This year, MeBHS would like to sponsor another two NTLC classes "Cross Examination of Experts (4 hours)" and "Drug Evaluation Classification Program and Preparation for Attacks (4 hours)" using NTLC Staff and other out-of-state TSRPs as deemed appropriate by Maine's TSRP. The goal is to continue to provide this high-quality training to the prosecutorial districts in Maine. Costs include: lodging and travel, materials, and supplies. The funds will be used to cover the costs associated with delivery of the above trainings including printing/ materials, travel, lunch on site, and registration fees for the District Attorneys participating in the program. The location, date, and time of the trainings are yet to be determined.
Planned Activity Performance:	Dirigo Safety, LLC was contracted to provide training for Maine Drug Recognition Experts, forensic chemist, and prosecutors. The training titled "Courtroom Training in OUI Drug Cases for Drug Recognition Experts & Prosecutor" was held on May 2nd and 3rd, 2019 in Portland, ME. The training had 35 attendees which include prosecutors, law enforcement, DREs, forensic chemists and instructors from the Maine Criminal Justice academy. Special guests Jennifer Tibbets Knudsen (Colorado TSRP), Jared Olsen (Idaho TSRP), Ashley Schluck (Idaho TSRP), Colleen Scarneo (NH Forensic Toxicologist), Hon. John David Kennedy (Maine JOL), Scot Mattox (Maine TSRP), and Benjamin Tucker (Director of Legal Affairs, Maine BMV) presented material during the two-day event.

Planned Activity Number:	PLANNED ACTIVITY NOT IMPLEMENTED IN FFY2019
Planned Activity Title:	**Blood Drug Testing Fees**
Planned Activity Description:	In-State blood drug testing is critical for prosecutors to obtain OUI convictions. Outsourcing creates logistical problems as the prosecution has to adhere to Confrontation Clause requirements and obtain out-of-state laboratory personnel and experts to testify. As a result, few drug tests are completed on blood for Maine prosecution. The Maine Health and Environmental Testing Lab has state-of-the-art testing equipment and will soon be ready to move forward with creating and implementing blood drug testing regimes that will withstand legal scrutiny. Maine is taking an aggressive stance against drugged drivers by increasing the Drug Recognition Expert and Phlebotomy Technician programs. This planned activity provides funds for testing blood samples at the Maine Test Lab and out of state lab(s) and expert witness testimony fees, which enhances the prosecutor's ability to withstand challenges by the defense. Estimated 4,000 blood drug tests at $400 per test.
Planned Activity Performance:	This planned activity was not implemented in federal fiscal year 2019 due to statutory restrictions. Statutory changes were made in FFY2019 with an effective date of September 19, 2019.
Planned Activity Number:	ID19-017
Planned Activity Title:	**DHHS Health and Environmental Testing Lab (HETL) Staff Positions**
Planned Activity Description:	This planned activity provides funding for the costs of additional lab staffing (chemist and toxicologist) who can analyze blood samples for drugs at the Maine Health and Environmental Testing Lab and provide expert toxicological or pharmacological testimony for Maine prosecutors as needed.
Planned Activity Performance:	This planned activity was extremely successful in FFY2019. The Health and Environmental Testing Lab was able to hire 2 new chemists to fill these positions early in FFY2019. Chemists Ellen Fraser and Nicole Ingalls have been in those positions for most of FFY2019. At beginning of the FFY2019, the HETL lab was not utilizing their instrument for analyzing blood samples for drugs. This instrument had been purchased as part of another impaired driving planned activity in a prior federal fiscal year but had not been operational till this year. During the course of FFY2019, both of the chemists funded through this planned activity were able to draft policies and procedures for testing of blood samples for drugs. The chemists also attended multiple trainings throughout the year and attended the International Chiefs of Police, Drugs, Alcohol, and Impaired Driving Conference in August. The chemists worked diligently over the year to develop validation panels for 81 different drugs in five different drug categories. The HETL lab is fully prepared for the blood/drug testing program to be added to their scope of practice. The ANSI National Accreditation Board

conducted their site visit at the end of FFY2019 and they expect the blood/drug testing program to be approved under the HETL scope of practice in FFY2020

Planned Activity Number:	ID19-018
Planned Activity Title:	**Impaired Driving Special Prosecutors (IDSP) Positions**
Planned Activity Description:	An IDSP is a member in good standing of the Maine bar with knowledge, education and experience in the prosecution of OUI crimes. The IDSP works directly with selected Maine prosecutorial districts to assist with the prosecution of OUI crimes. The IDSPs in the counties of Cumberland, Androscoggin and Penobscot participated in the State DRE School, the Impaired Driving Summit, and the basic law enforcement academy Standardized Field Sobriety Testing School. Some prosecutors went on ride-alongs with local law enforcement to observe impaired driving arrests in person and others have started a state brief bank containing impaired driving related briefs on repeated evidence and trial issues. All the IDSPs have worked closely and communicate regularly with Maine's TSRP in grappling with some of the issues Maine faces in OUI enforcement and prosecution. This multi-jurisdictional effort has increased the ability of all prosecutors in Maine to more efficiently handle their OUI caseload and understand the complex and technical issues association with drug impaired driving prosecution. This is especially important in the coming 2018 budget year as Maine becomes the seventh state to implement voter legalized recreational marijuana. Funds support salary requirements, one computer and the appropriate software license for each participating district, and reimbursement for the IDSPs to attend two out-of-state conferences that will enhance their special knowledge and training. One IDSP from each county will be selected to attend the national TSRP training and the national DRE Conference.
Planned Activity Performance:	This planned activity funded activities of eight part-time Impaired Driving Special Prosecutors (IDSP) in four counties. The counties that participated were chosen based on impaired-related crash data. These IDSPs were instrumental in helping to reduce the amount of plea agreements and differed dispositions in impaired driving cases. Because of these IDSP dedicated positions, the State has been able to justify maintaining a hard line with drug OUI cases. IDSPs are often consulted by other prosecutors in their office when they have questions about their OUI cases. IDSP's are routinely consulted regarding the procedure for obtaining hospital blood/hospital records. IDSPs play a very important role in the Impaired Driving Task Force and always bring forth important issues and solutions. This planned activity has allowed special prosecutors to focus on the issue of impaired driving and spend the time needed to effectively prosecute impaired driving cases.

Planned Activity Number:	Planned activity not implemented in FFY2019
Planned Activity Title:	**Law Enforcement Phlebotomy Technician Training**
Planned Activity Description:	Maine has always had challenges facing officers in getting blood draws dues to our rural nature; travel time alone creates a huge obstacle in many cases. However, over the past decade, there are different forces combining to further increase the difficultly for investigating officers to obtain evidentiary blood tests for impaired driving investigations: 1. The State has not kept the civilian blood tech stipend in a range where it is worth the time and effort for those folks to respond to law enforcement call outs. At the current rate (35 per call-out) most blood techs (I used the term blood techs interchangeably with phlebotomists) do not find the 3-4 hours spent doing a draw to be worth it. Also, there is no State oversight of this process. Therefore, the program is quite unreliable and disorganized. No one knows how many civilian blood techs Maine uses, nor are their credentials evaluated. 2. The medical community (both pre-hospital and hospital) have grown increasingly reluctant to assist law enforcement in obtaining non-medical related blood draws. 3. The increase in drugged driving (and subsequent decrease in alcohol impaired driving) create a situation where an Intoxilyzer in not always useful for evidence gathering purposes. Therefore, even more blood draws are needed especially as our State moves forward towards going exclusively to blood draws and phasing out urine tests in drug impaired driving cases. This planned activity contracts with a vendor to train law enforcement officers as phlebotomy technicians to perform blood draws in the field.
Planned Activity Performance:	This planned activity was not implemented in FFY2019 as the MeBHS has been working with Kennebec Valley Community College in developing a new Forensic Phlebotomy course that will be offered to law enforcement officers in Maine. The course is being modeled after Arizona's forensic Phlebotomy course. Highway Safety Coordinator Jamie Dionne, Buxton Police Officer Jessica Ramsay, and 3 faculty members from Kennebec Community College were able to travel to Phoenix, AZ and audit their forensic phlebotomy course. This planned activity will be implemented as part of a new planned activity in the FFY2020 Highway Safety Plan.

As of December 16, 2019

Planned Activity Title	Source	Planned Activity Number	Budget	Expended
Program Management and Operations	S. 402	AL19-001	$148,500.00	$68,384.88
Regional Impaired Driving Task Force Teams (RIDE)	S. 405d	ID19-002	$18,043.00	$11,823.43
Maine State Police SPIDRE Team	S. 405d	ID19-003	$100,000.00	$83,140.45
Impaired Driving Roadside Testing Vehicle (RTV) Operational Costs	S. 402	ID19-004	$15,000.00	$17,029.24
Traffic Safety Resource Prosecutor	S. 405d	ID19-005	$234,000.00	$232,175.00
Evidence Based Impaired Driving High Visibility Enforcement Campaigns	S. 405d	Various	$370,987.00	$220,134.81
Specialized Law Enforcement Training (Impaired)	S. 402	ID19-007	$24,995.00	$17,373.22
Maine Annual Impaired Driving Summit	S. 402	ID19-010	$19,000.00	$12,401.29
Maine State Police Impaired Driving Coordinator	S. 405d	ID19-011	$122,021.64	$122,021.64
Maine TSRP Specialized Prosecutor and Law Enforcement Impaired Driving Investigation and Prosecution Training	S. 405d	ID19-015	$10,000.00	$2,463.70
Judicial Outreach Liaison	S. 405d	ID19-005	$104,320.00	$86,933.30
Maine Judicial Education	S. 405d	N/A	$0.00	$0.00
Blood Drug Testing Fees	S. 405d	N/A	$0.00	$0.00
DHHS Health and Environmental Testing Lab (HETL)	S. 405d	ID19-017	$189,967.75	$107,527.18
Impaired Driving Special Prosecutors (IDSP)	S. 405d	ID19-018	$713,097.00	$612,929.91
Law Enforcement Phlebotomy Technician Training	S. 405d	N/A		

Occupant Protection & Child Passenger Safety

Planned Activity Number: OP19-001

Planned Activity Title: **Program Management and Operations**

Planned Activity Description:

Costs under this program area include: salaries, travel (e.g., TSI training courses, in-state travel to monitor sub-grantees, meetings) for highway safety program coordinators, and operating costs (e.g., printing, supplies, state indirect rate, postage) directly related to the development, coordination, monitoring, evaluation, public education, monitoring, marketing, training required of this program, along with CPS educational materials including training dolls, if needed. This planned activity also funds costs associated with the procurement, use, gasoline and repairs, and maintenance of highway safety vehicles and equipment used for occupant protection education programs. Vehicles and equipment include: a loaned truck from the Maine State Police, the CPS trailer, the Convincer and Rollover Simulators.

Planned Activity Performance:

The Highway Safety Coordinator responsible for occupant protection remained vacant for most of FFY19. The planned activities listed in this Program Area were administered by the Director and other coordinators as assigned. CPS instructors were extremely helpful in assisting in managing the CPS program. As of December 16, 2019, a new coordinator for this program has been hired.

Planned Activity Number: Various Planned Activity Numbers

Planned Activity Title: **Statewide High-Visibility Enforcement**

Planned Activity Description:

Funds will support dedicated overtime enforcement costs associated with participation in the NHTSA National Click It or Ticket Campaign. This planned activity supports efforts to increase the seat belt usage rate and decrease unbelted passenger fatalities. Selected agencies will be awarded grants following Maine's standard process for contracting.

Planned Activity Performance:

In FFY19, the following law enforcement partners conducted 2,775.50 hours of overtime enforcement, made 4,330 contacts and wrote 1,630 citations for non-use of seat belts during the campaigns. This level of participation helped maintain Maine's observed seat belt usage rate at 88.5%. While maintenance is good, it is preferable that we increase the observed seat belt usage rate. For FFY20, the MeBHS has expanded opportunities for agencies to participate in the November seat belt

campaign as well as the HVE campaign in May/June. Additionally, if an agency has data to support a sustained approach, those awards will be granted. It is still difficult for many agencies to staff overtime patrols. MeBHS will discuss the importance of citations over warnings in an attempt to help us reach a high-rate seat belt use state which will allow us more flexibility in spending s. 405b. During the November and May Click It or Ticket HVE, paid media was scheduled and Sports Marketing events for You've Been Ticketed were conducted. The media chart under the Paid Media Program Report section of this report will detail the relationship between media and enforcement efforts.

Expenditures through December 6, 2019

Subrecipient	Planned Activity Number	Award Amount	Expended
Androscoggin County Sheriff's Office	OPB19-012	$ 5,203.00	$4,523.36
Kennebec County Sheriff's Office	OPB19-020	$ 11,962.00	$817.15
Lincoln County Sheriff's Office	OPB19-026	$ 2,784.00	$0.00
Sagadahoc County Sheriff's Office	OPB19-025	$ 7,438.00	$6,015.90
Augusta Police Department	OPB19-018	$ 20,422.00	$20,422.00
Berwick Police Department	OPB19-023	$ 8,448.00	$3,486.42
Bridgton Police Department	OPB19-014	$ 2,600.00	$1,163.95
Brunswick Police Department	OPB19-030	$ 2,161.00	$1,595.88
Cape Elizabeth Police Department	OPB19-016	$ 5,800.00	$5,288.99
Caribou Police Department	OPB19-015	$ 5,030.00	$2,992.29
Eliot Police Department	OPB19-017	$ 7,347.00	$6,107.21
Fort Kent Police Department	OPB19-031	$ 1,600.00	$642.28
Gorham Police Department	OPB19-027	$ 4,260.00	$3,587.35
Kennebunkport Police Department	OPB19-037	$ 2,504.00	$2,169.72
Kittery Police Department	OPB19-029	$ 2,700.00	$2,334.76
Lewiston Police Department	OPB19-011	$ 12,320.00	$12,308.00
Madawaska Police Department	OPB19-036	$ 3,850.00	$3,663.70
Mechanic Falls Police Department	OPB19-032	$ 1,496.00	$1,496.00
Mexico Police Department	OPB19-022	$ 3,741.00	$3,012.23
Old Town Police Department	OPB19-021	$ 5,800.00	$2,952.34
Orono Police Department	OPB19-033	$ 2,956.00	$1,083.36
Oxford Police Department	OPB19-038	$ 3,538.00	$3,538.00
Portland Police Department	OPB19-034	$ 2,071.00	$1,938.17
Rockland Police Department	OPB19-028	$ 4,000.00	$2,526.66
Sabattus Police Department	OPB19-019	$ 6,265.00	$2,106.29
Saco Police Department	OPB19-039	$ 1,584.00	$1,584.00
Scarborough Police Department	OPB19-010	$ 18,722.00	$16,445.31

South Portland Police Department	OPB19-035	$ 6,400.00	$3,265.46
Wiscasset Police Department	OPB19-013	$ 4,220.00	$2,578.12
York Police Department	OPB19-024	$ 3,562.00	$4,453.32

Planned Activity Number: OPB19-003

Planned Activity Title: **Maine State Police TOPAZ Team**

Planned Activity Description:

To increase seat belt compliance and decrease unrestrained fatalities, the Maine State Police Targeted Occupant Protection Awareness Zone (TOPAZ) planned activities is planned to sustain enforcement. The TOPAZ team will be made up of troopers focused on seat belt enforcement in previously identified zones with the highest unbelted fatalities. The annual observational study conducted in the state of Maine has helped the MeBHS determine not only where the unbelted driving is primarily occurring; it has also identified the times at which unbelted driving tends to occur. The MSP TOPAZ team will work the specific days, times and zones and will focus on male pickup drivers and younger drivers.

Planned Activity Performance:

The primary goal of the Maine State Police with this planned activity is to encourage and increase the use of occupant protection measures and reduce unrestrained fatalities and injuries. During the planned activities, the Maine State Police TOPAZ (Troops A, B, C, D, E, F, G, J and the Traffic Safety Unit) conducted 842.25 hours of overtime enforcement, made 1,885 contacts and wrote 789 citations for non-use of seat belts during FFY19.

Planned Activity Number: USM 19-004

Planned Activity Title: **Annual Observational Seat Belt Surveys**

Planned Activity Description: Uniform Guidelines for Highway Safety Program 20 stipulates that states must conduct and publicize at least on statewide observational survey of seat belt use annually, ensuring that it meets current, applicable Federal guidelines. This planned activity funds a contract with a vendor for the MeBHS annual observational and attitudinal surveys. The survey will be conducted in the two weeks immediately following the May Click It or Ticket enforcement campaign.

Planned Activity Performance:

The MeBHS contracted with the University of Southern Maine, Muskie School of Public Service, Survey Research Center for both the NHTSA required annual observational survey of seat belt usage (day and night), and the optional, but valuable attitudinal survey. Results of those surveys can be found as attachments at the end of this report. While nighttime usage appears to have increased from prior years, the observed daytime use rate remained the same. The MEBHS is driven to reach a high-belt use rate, therefore we

are examining opportunities in FFY20 for increased overtime by law enforcement partners, sustained enforcement where data applies, and new PSA's with greater presence.

Planned Activity Number: CR19-001

Planned Activity Title: **Car Seat Purchase**

Planned Activity Description: This planned activity supports the purchase and distribution of approximately 850 new child safety seats, site supplies and educational materials for Maine income eligible families, issued through partner CPS distribution sites. Educational materials for children and caregivers such as brochures, booklets, posters and pictorials explaining Maine's CPS laws, NHTSA booster seat information and federal recommendations for proper booster seat use will be produced and distributed, as needed. The Bureau anticipates adding more partner locations; at least three new distribution and/or inspection locations.

Planned Activity Performance:

In FFY19, the MeBHS supplied new CPS booklets and pictorial booklets to partner distribution and inspection centers to support caregiver education. We distributed 1,026 child safety seats to children in income eligible families in Maine. Additionally, 765 parents or caregivers received education on proper transportation of children.

Planned Activity Number: OPB19-001

Planned Activity Title: **CPS Technician and Instructor Training Events**

Planned Activity Description: This planned activity will support training and possible conference attendance and certification of new CPS technicians and recertification for those with expired credentials. MeBHS anticipates four certification classes and one renewal class.

Planned Activity Performance: In FFY19, the MeBHS with our CPS Instructors and Technicians conducted two recertification trainings (December and July) for eleven participants. In May and June, we conducted new certification courses for twenty-three new technicians. Two new certification classes had to be cancelled for low or no enrollment. One CPS Instructor attended the annual KIM conference as both a speaker and a participant. Upon returning, that instructor shared his knowledge with the other CPS Instructors.

Planned Activity Number:	PLANNED ACTIVITIES NOT IMPLEMENTED
Planned Activity Title:	**Child Passenger Safety 2019 Conference**
Planned Activity Description:	Funds will cover the costs associated with any pre-deposits or contracts for the 2019 Child Passenger Safety Training and Conference that may need to be secured in FFY18. A location will be determined, and a venue selected through an RFP process. This biennial conference provides training, education and networking for CPS technicians and instructors. There will be CEUs, a CSS check event, and mock car seat sign-offs offered to provide all the necessary recertification requirements. The conference will be during National CPS Week in September 2019, and the location will be selected based on accessibility and size of accommodations, and pursuant to the State of Maine policies for event site selection. It is anticipated that over 130 attendees will register and attend. Prior conferences have been very successful and were modeled after successful conferences in other NHTSA Regions.
Planned Activity Performance:	The Program coordinator responsible for Occupant Protection remained vacant for most of FFY19. The MEBHS staff were unable to coordinate a conference of this magnitude and no responses to an RFP for conference organization were received. Future opportunities for Child Passenger Safety technicians and instructors may include National conferences and training that may be included in a Maine Lifesavers Conference planned for FFY20 and/or FFY21.
Planned Activity Number:	OP19-002
Planned Activity Title:	**Traffic Safety Education**
Planned Activity Description:	This planned activities funds activity of two full time positions dedicated to providing traffic safety education statewide as well as one program specific leased vehicle. This education includes: seat belt convincer and rollover demonstrations, driving simulations for impaired and distracted, highway safety educational displays and presentations at schools, colleges, health fairs, community centers, business, and other locations where the targeted demographic can be found. The seat belt education component of this program reaches approximately 4,000 citizens each year and provides education to grades K-12, private businesses, and state agencies. These positions are filled through an RFP and contract process. Funds for travel to state and national conferences/trainings are included in the planned activities scope. The NETS component of this program works with business and industry safety leaders statewide. This program has proven to be the most effective tool for educating school aged children, young drivers, parents, and employers.
Planned Activity Performance:	Between October 1, 2018 and September 30, 2019, the traffic safety educators attended more than 156 events training nearly 6,700 participants about the benefits of occupant protection and the dangers of distracted driving. The two educators also attended national conferences: LifeSavers and NETS.

These educators allow the highway safety message to be spread statewide which increases our presence and reaches a wider audience.

Planned Activity Number: PLANNED ACTIVITIES NOT IMPLEMENTED

Planned Activity Title: **Child Passenger Safety Database**

Planned Activity Description: The Bureau currently has a car seat distribution database to track program participant usage. The database is used to prevent program abuse and offers a greater understanding of high use/need areas and the types of seats distributed. See 2019 HSP for further details of this planned activities.

Planned Activity Performance: THIS PLANNED ACTIVITY WAS NOT IMPLEMENTED IN FFY19 or FFY18 and has not been included in the FFY20 HSP. The MeBHS worked with the Maine OIT to issue an RFP, which was answered by the University of Southern Maine (USM). However, the USM and Maine OIT and AG's office were not able to secure final approval or signatures on the contract resulting from the successful bid. During FFY18, the National CPS Board has instituted an online form that can be used by all CPS technicians. The MeBHS has been exploring the potential of the new online digital CPS form which may act as a replacement to this database if state reports are available.

As of December 16, 2019

Planned Activity Title	Planned Activity Number	Fund Source	Award	Expended
Program Management and Operations	OP19-001	402	$147,107.31	$69,901.69
Traffic Safety Education	OP19-002	402	$157,772.59	$133,927.09
Statewide High Visibility Enforcement	Various	405b	$170,784.00	$124,098.22
Maine State Police TOPAZ Team	OPB19-003	405b	$101,828.00	$16,173.51
Annual Observational Seat Belt Surveys	USM19-004	405b	$206,590.84	$162,721.30
Car Seat Purchase	CR19-001	402 & 405b (5%)	$7,537.34 $51,979.36	$7,537.34 $51,979.36
Child Passenger Safety Technician and Instructor Training Events	OPB19-001	405b	$19,461.05	$17,015.79
Child Passenger Safety Conference	NOT IMPLEMENTED			
Child Passenger Safety Database	NOT IMPLEMENTED			

Traffic Records

A complete traffic records program is necessary for planning, problem identification, operational management, and evaluation of a state's highway safety activities. MeBHS and its partners collect and use traffic records data to identify highway safety problems, select the most appropriate countermeasures and evaluate their effectiveness. The goal of Maine's Traffic Records Coordinating Committee (TRCC) is to continue to develop a comprehensive traffic records system so Maine can address the highest priority highway safety issues. The planned activities included under this program area are necessary to obtain the most timely and useful data needed to quickly address our traffic safety issues and directly relate to the success of our data-driven traffic safety enforcement planned activities by allowing us to analyze most current and relevant crash, fatality and injury data to utilize funds appropriately and to adjust quickly and as necessary.

Planned Activity Number:	TR19-001
Planned activities Name:	**MeBHS Program Management and Operations**
Planned Activity Description	Costs under this program area include: salaries, in-state travel to monitor sub-grantees and contractors for highway safety program coordinators, out of state travel for Traffic Records Conference(s) and operating costs (e.g., printing, supplies, state indirect rate, postage) directly related to the development, coordination, monitoring, evaluation, public education, monitoring, marketing, and training required of this program.
Planned Activity Performance:	The MeBHS Director manages program activities specific to Traffic Records Planned activities. During FFY19, MCRS planned activities, e-citation system planned activities, public crash query tool and other traffic records activities were implemented and administered by MeBHS and/or its vendors. Details of those activities are referenced in the below planned activities:

Planned Activity Number:	TRC19-002
Planned activities Name:	**Maine Crash Reporting System Upgrades**
Planned Activity Description:	The Maine Crash Reporting System planned activities for FFY2019 include adding an online Data Dictionary page that will act as an online crash data inventory for the MCRS system and will include the State of Maine Crash Schema, the eXtensible Stylesheet audit rules, and the latest version of the paper crash form. Additionally, the MCRS client and web portal will be updated to reflect user and stakeholder feedback.
Planned Activity Performance:	In FFY19, MeBHS contracted with Lexis-Nexis to perform the following

upgrades to the Maine Crash Reporting System:

- Client updates
- Web portal updates
- NHTSA Crash Data Export
- Online Data Dictionary
- CPI Interface

Planned Activity Number:	TRC19-002
Planned activities Name:	**E-Citation**
Planned Activity Description:	The eCitation system planned activities for FFY2019 include adding an online Data Dictionary page that will act as an online eCitation data inventory for the eCitation system and will include the State of Maine eCitation NIEM-based schema and the latest version of the paper crash form. Additionally, the eCitation client and web portal will be updated to add additional dashboards and reports with additional updates to reflect user and stakeholder feedback.
Planned Activity Performance:	In FFY19, the MeBHS contracted with Lexis-Nexis to perform the following for implementation of the e-citation system: • Web Portal Updates • Dashboard creation • Online Data Dictionary • Client Updates • CPI Interface The e-citation system has been deployed to all Maine State Police troopers. We are in the process of rolling it out to municipal and county agencies. Currently 8,019 citations and 9,478 violations have been written using the electronic system.
Planned Activity Number:	TRC19-002
Planned activities Name:	**Public Access Reports and Query Tool**
Planned Activity Description:	The Public Access Query Tool will be enhanced to provide additional ad hoc queries, mapping and charting capabilities, and advanced user functions. Maine Crash information is only currently available on a query able basis to select State of Maine employees. Some broad crash data reports are published on statewide basis, however specific crash data needs (location specific, trends, and maps) are created for outside requestors via individual inquiries and are custom created by state staff. Many such requests are handled by state agency representatives. Full data queries are too complex for the casual user and if not developed

properly, can easily lead to erroneous data findings. This planned activity would create standard web-based data queries and mapping capabilities that would be structured to provide the user easy to access and accurate information. This planned activity not only improves public access to highway safety information but can lessen the customized data requests now handled by various contacts in the state.

Planned Activity Performance:

During FFY19, the Public Crash Query Tool was enhanced to add the following features:

- Advanced – "Set Section" – Add qualifications by town.
- Resolve issue with Automatic email notification to advance users not working.
- Create an option to pick multiple intersection locations in the 'Set Intersections' toggle?
- Show a break out the crashes by year when querying for multiple years.
- Resolve issues with some users who could not log on to "Advanced User" using Google Chrome.
- Add ability to download data.
- Have option to select multiple towns or counties.
- Add a 'Types of Crash' query option (similar to step 4 in Mapping) to query steps in Statistics Step 4b.
- More data capacity – some queries can only handle a year or two.
- User management – change drop down to user grid.
- Data for BHS Enforcement Grants (OUI, Speed, Distracted, Seat Belts), by
    - Town
    - Time of day
    - Day of Week
    - Location
- Along with Statewide; City/Town; County; PD – have a jurisdiction choice of MPO. Maine has four with as many as 18 towns with the MPO's area.
- Improved geo-referencing of towns. Several small communities are not being properly mapped.
- Add MDOT to crash data display (PD report # does not help DOT user).
- Update website to incorporate MMUCC V5 crash data changes.

Planned Activity Number: USM19-001

Planned Activity Description: **Highway Safety Data System Analysis/FARS/EMS Data Quality Analysis**

Planned Activity Description: The Highway Safety Office plans to use data from various traffic records sources to collect in databases to facilitate highway safety reports and analyses. Additionally, the Highway Safety Office contracts with a vendor to review and analyze the quality of EMS run reporting data. FARS analysts and analysis is partially funded using 405c.

Planned Activity Performance: The MeBHS contracted with University of Southern Maine (USM)to collect and analyze crash and injury data and present reports to be used for the annual Highway Safety Plan and the Annual Report. Additionally, the USM continued to conduct quality assurance and data analysis for the EMS run-reporting system. FARS analysts were partially funded using s. 405c funds for coding of fatal crash data and required training.

As of December 16, 2019

Planned Activity Title	Planned Activity Number	Fund Source	Award	Expended
Traffic Program Management and Operations	TR19-001	402	$10,000.00	$1,097.74
MCRS Upgrade	TRC19-002	405c	$250,000.00	$190,000.00
E-Citation	TRC19-002	405c	$250,000.00	$215,000.00
Public Access Reports	TRC19-002	405c/402	$122,000.00	$75,000.00
Highway Safety Data Analysis/EMS QA/FARS	TRC19-001	405c	$98,000.00	$31,254.19

Police Traffic Services

The planned activities funded under the Police Traffic Services Program Area directly relate to our success in meeting the stated performance targets for speeding-related crashes. Although not a national priority, illegal, aggressive, and unsafe speeding are leading causes in most Maine's crashes and fatalities (see Problem ID in FFY19 HSP). Significant funding is awarded for enforcement of laws. The value of the law enforcement liaison is a proven countermeasure by NHTSA to be effective in enhancing partnerships for State Highway Safety Offices.

Planned Activity Number:	PT19-001
Planned Activity Title:	**Police Traffic Services Program Management and Operations**
Planned Activity Description:	Costs under this program area include: salaries, travel (e.g., TSI training courses, in-state travel to monitor sub-grantees, meetings) for highway safety program coordinators, and operating costs (e.g., printing, supplies, state indirect rate, postage) directly related to the development, coordination, monitoring, evaluation, public education, monitoring, marketing, and training required of this program.
Planned Activity Performance:	In FFY19 the MeBHS performed activities listed above for administration of the Police Traffic Services programs listed below:
Planned Activity Number:	Various
Planned Activity Title:	**Municipal and County Speed Enforcement**
Planned Activity Description:	Approximately 50 law enforcement agencies are awarded funding proportionally based upon the percentage of speed related crashes in their jurisdictions as it relates to the total speed- related crashes of their respective county. A 2006 study out of University of California-Fresno concluded: Aggressive traffic enforcement decreased motor-vehicle collisions, crash fatalities and fatalities related to speed, and it decreased injury severity. This is a simple, easily implemented injury prevention program with immediate benefit." This study, and countless others, show that "hot spot" traffic enforcement does work. Therefore, our speed enforcement efforts will target "hot spots", those times and locations supported by our state's speed/crash data, to slow traffic down and encourage voluntary c compliance to our speed limits.

Planned Activity Performance:

Over the course of the federal fiscal year, the below agencies conducted 2,617.5 hours of overtime enforcement patrols, made 5,501 contacts, wrote 2,013 citations, and issued 2,891 warnings for speeding violations. For 2020 our goal is to push law enforcement agencies to give out more citations than warnings. One of the most common unforeseen issues we came across was that over the course of 2019, police departments became understaffed, reducing the total number of overtime details they could do and effected the amount of the award spent. The Bureau of Highway Safety redirects unspent funds when able.

Expenditures through December 7, 2019

Planned Activity Title	Planned Activity Number	Award	Expended
Kennebec County Sheriff's Office	PT19-028	$ 10,000.00	$8,998.32
Lincoln County Sheriff's Office	PT19-017	$ 9,635.00	$4,412.12
Penobscot County Sheriff's Office	PT19-022	$ 2,550.00	$494.99
Sagadahoc County Sheriff's Office	PT19-024	$ 10,000.00	$9,181.88
York County Sheriff's Office	PT19-018	$ 5,244.00	$5,244.00
Auburn Police Department	PT19-013	$ 9,835.00	$9,835.00
Augusta Police Department	PT19-027	$ 10,000.00	$10,000.00
Biddeford Police Department	PT19-019	$ 8,360.00	$8,327.21
Brunswick Police Department	PT19-030	$ 7,200.00	$6,818.97
Caribou Police Department	PT19-011	$ 4,671.00	$2,909.00
Ellsworth Police Department	PT19-016	$ 6,000.00	$5,190.75
Falmouth Police Department	PT19-029	$ 8,000.00	$5,928.93
Gorham Police Department	PT19-023	$ 8,744.00	$7,371.13
Lewiston Police Department	PT19-015	$ 9,680.00	$9,624.05
Orono Police Department	PT19-031	$ 5,651.00	$4,751.62
Portland Police Department	PT19-010	$ 7,042.00	$5,315.78
Saco Police Department	PT19-032	$ 5,940.00	$5,010.15
Scarborough Police Department	PT19-014	$ 10,000.00	$9,898.47
Waterville Police Department	PT19-026	$ 4,180.00	$2,805.59
Westbrook Police Department	PT19-025	$ 5,520.00	$4,901.45
York Police Department	PT19-020	$ 3,324.00	$3,002.14
	Total	$ 161,494.00	$137,708.19

Planned Activity Number: PT19-003

Planned Activity Title: **Maine State Police Strategic Area Focused Enforcement (SAFE)**

Planned Activity Description: This planned activity will support dedicated over-time speed enforcement by Maine State Police Troopers and the air wing unit in identified high-crash locations. SAFE locations are determined using the most recent and available crash and fatality data. Approximately 1500 hours of enforcement is planned t to be conducted.

Planned Activity Performance: Over the course of the federal fiscal year, the Maine State Police conducted 446 hours of overtime enforcement patrols, made 1675 contacts, wrote 885 citations, and issued 529 warnings for speeding violations. This was lower than what was originally planned. Over the course of 2019 Maine State Police were affected by staffing shortages, leading to less OT details that they were able to conduct. Even though less details were conducted they made the most of them and on average had 3.75 stops an hour. For 2020 we will monitor their spending closely and relocate funds if needed.

Planned Activity Number: PT19-004

Planned Activity Title: **Law Enforcement Liaison**

Planned Activity Description: The Law Enforcement Liaison serves the highway safety office and the law enforcement community and key partners by encouraging increased participation by law enforcement in HVE campaigns; encouraging the use of DDACTS and other proven countermeasure and evaluation measures; promoting specialized training (SFST, ARIDE, DRE, and the Law Enforcement Blood Tech Program); soliciting input from the MeBHS partners on programs and equipment needed to impact priority program areas. Funding for this planned activity will support contracted Law Enforcement Liaison costs including hourly wage and related travel expenses. State Highway Safety Offices are encouraged to utilize LELs based on proven improvements in services conducted and supported by LEL's in other states.

Planned Activity Performance: The LEL provides an integral service to both the Highway Safety office and its staff and the law enforcement agencies he or she serves. The Maine LEL has been in his position for five years. A full report of his activities is contained in the grant file, however the below list highlights some of these activities:

- Encourage participation in high visibility enforcement, especially during national campaigns.
- Worked with law enforcement agencies to help facilitate understanding of BHS and NHTSA federal rules and regulations regarding allowable expenses in funding.

- Encouraged agencies having data to show crash problems to apply for grant assistance to address those problems.
- Assisted Highway Safety Coordinators in obtaining back up documentation from agencies and assisted in helping agencies compile proper documentation for reimbursement.
- Coordinated training for Intoxilyzer site coordinators
- Assisted in instructing and coordinating the DRE certification requirements.
- Health and Environmental Testing Lab –receive the urine results from all the DRE urine kits. This data is entered on an Excel spread sheet and made available to partners on request. Often the request for information is specific and needs to be crafted to their needs.
- DRE inquiries- As a DRE Emeritus the LEL stays involved in Maine's DRE program. When a DRE has a question about procedure, a specific drug causing or not causing a sign of use then the LEL researches that information. The LEL uses the national DRE network and the LEL network as well as other to get the answers the DREs need. He advocates for the Advanced Roadside Impaired Driving Enforcement classes and puts in great effort to fill the classes with students and instructors.

Expenditures through December 16, 2019

Planned Activity Title	Planned Activity Number	Fund Source	Budget	Expended
Program Management and Operations	PT19-001	402	$125,000.00	$92,750.25
Municipal and County Speed Enforcement	Various	402	$750,000.00	$137,708.19
Maine State Police Strategic Area Focused Enforcement (SAFE)	PT19-003	402	$101,828.00	$39,691.67
Law Enforcement Liaison	PT19-004	402	$93,400.00	$89,039.04

Motorcycle Safety

Planned Activity Number: MC19-002

Planned Activity Title: **United Bikers of Maine**

Planned Activity Description:

This project will educate motorist and motorcycle riders on the principles of "Share the Road". To maximize the general awareness of motorcycles on the road, the campaign will focus on the importance of paying attention and yielding to the right of way. Activities to accomplish this may include providing educational materials to the motorcycle riding community and motorcycle retail stores, hosting a Motorcycle Safety Summit, as well as developing and displaying a unique motorcycle safety banner at statewide events. The project will consist of education, program branding, media buys, and social media. The funding for this project will support the printing of education material, mailing, program branding, and digital media efforts. The campaign will take place from April to November.

Planned Activity Performance:

The United Bikers of Maine partnered with Mix Maine Media (93.5 and 107.9) and Sinclair Broadcasting (WGME) to create radio and TV PSA's that would run from April through September. Mix Maine Media created a total of six radio PSA's, three each for Spring, Summer and Fall. Each radio PSA was :30 seconds and had a "Share the Road" message. Mix Maine Media has a total of 1,111 radio PSA spots shared during the duration of the grant. Sinclair Broadcasting filmed three members of United Bikers who had a "Share the Road" message. Each TV PSA was :30 seconds and ran on WGME from April through September. Sinclair Broadcasting had approximately 314 commercial spots from April through September.

Planned Activity Number: See PM19-001 and PM19-002 Reports

Planned Activity Title: **Motorcycle Safety Communications Campaign**

Planned Activity Description: MeBHS will purchase advertisements in multiple media markets to promote the "Share the Road" concept. The goal of the campaign is to increase awareness of motorcyclists and to educate motor vehicle operators to Share the Road with motorcyclists.

Planned Activity Performance: See Paid Media Report for details on Motorcycle Safety Media

Planned Activity Title	Planned Activity Number	Fund Source	Budget	Expended
United Bikers of Maine	MC19-002	405f & 402	$33,874.25	$34,266.94
Motorcycle Safety Communications Campaign	PM19-001& PM19-002	402		Part of Paid Media Budget

Pedestrian and Bicycle Safety

Planned Activity Number:	PS19-001 (PM19-001)
Planned Activity Title:	**"Heads Up! Safety is a Two-Way Street" Educational and Media Campaign for Pedestrian**
Planned Activity Description:	As part of a three-year campaign, the Maine Bureau of Highway Safety, along with Maine DOT will continue an extensive and targeted public education and outreach campaign aimed at pedestrians and motor vehicle safety. Print materials will be distributed by law enforcement to pedestrians and drivers. The Maine Bureau of Highway Safety will use multiple media venues to promote the Heads Up! Safety is a Two-Way Street Campaign. Media efforts will concentrate in the top 10 community clusters with the highest pedestrian fatality rates: Augusta/Hallowell, Bangor/Brewer, Bath/Brunswick/Topsham, Biddeford/Saco, Camden/Rockland, Lewiston/Auburn, Old Town/Orono, Portland/South Portland/Westbrook, Sanford, Waterville/Winslow. The focus of the media campaign will be to educate the walking and motoring public about pedestrian hazards such as: cell phone and electronic device use for both pedestrians and motorists, not using marked cross walks, law compliance, proper reflective clothing, and impairment. Some activities may include: distributing printed coffee cup sleeves to local coffee shops with pedestrian safety tips; online articles, and TV news stories; developing and implementing roll-outs for each of the 12 communities that have the highest pedestrian-motor vehicle crashes; providing a unique campaign banner for law enforcement agencies in the 12 affected communities and providing a campaign wrap for transit buses in the 10 communities.
Planned Activity Performance:	Our media campaign for 2019 was at a crossroads of old ideas and new ideas. Our standard approach of radio and TV PSAs lead us to a total awareness rate of only 30% which is the lowest for all our campaigns. We will work on updating these with new creative to increase our awareness rate for 2020. To help with this MDOT has been adding print ads into all public buses to reinforce this campaign. So far marketing material has been distributed to 14 different transit agencies across the state. The estimate for the messaging can be currently found in about 360 transit vehicles. In 2019 MDOT held 3 different public forums to get additional feedback. There were roughly 34 people at each. We are also working with MDOT and Bicycle Coalition of Maine to develop Pedestrian Safety Migration Plan for the 21 community in

Maine with high crash locations and will be working with our LEL to encourage communities to apply for pedestrian enforcement grants.

PS19-001 was rolled into PM19-001 the Paid Media Campaign.

Planned Activity Number: PS19-002 PLANNED ACTIVITY NOT IMPLEMENTED IN FFY19

Planned Activity Title: **Targeted Pedestrian-Motor Vehicle Traffic Enforcement**

Planned Activity Description: As part of a three-year campaign, targeted enforcement will continue to be used to reduce the number of pedestrian fatalities in the State of Maine. Happening from June 1 - September 15, this enforcement will focus on the high pedestrian-motor vehicle crash locations, as identified by the Maine Department of Transportation Pedestrian Safety Working Group

Planned Activity Performance: PLANNED ACTIVITY NOT IMPLEMENTED AS PLANNED IN FFY19. PLANNED ACTIVITY RE APPROVED IN FFY20 HSP. We were unable to gain any interest from law enforcement agencies this year for the program. We will push this more to law enforcement agencies to be a part of the program, in the 21 communities identified as high crash locations.

Planned Activity Title	Planned Activity Number	Budget	Expended
"Heads Up! Safety is a Two-Way Street" Educational and Media Campaign for Pedestrians	PM19-001	$30,000.00	$28,709.00
Targeted Pedestrian-Motor Vehicle Traffic Enforcement	Various	$30,000.00	$0.00

Young Drivers

Planned Activity Number: YD19-001 (SA19-001
Planned Activity Title: **AAA Teen Driver Expo**

Planned Activity Description:

This planned activity will fund AAA of Northern New England to conduct a Young Driver Expo in conjunction with their Dare to Prepare program. The Teen Driver Expo and Dare to Prepare programs provide education for young drivers, pre- drivers and parents. National speakers and presenters are sought to discuss and demonstrate topics that appeal to and influence teens and impress upon them the importance of making good driving choices. Past Exposition have been held at the Maine Mall in Southern Maine and a located TBD in Bangor. It is estimated that 300 teens will attend the expo. AAA had developed an evaluation component to determine the effectiveness of the annual event. The evaluation is used to guide future improvements and adjustments to the event.

Planned Activity Performance:

The 2019 Teen Driver Expo attracted hundreds of teens and parents on August 23rd at the Maine Mall in South Portland. Upon arrival teens were given "Teen Expo Passports" and their mission was to visit each station where they learned about highway safety by completing an interactive task or quiz. The business that had tables set up included AT&T, Poland Springs/Nestle Water, Alliance Sports Marketing, BMV, Walmart, Maine Motor Transport Association, Bike Coalition of Maine, Hot 104.7 radio station, South Portland PD, MEBHS, State Police, Portland Sea Dogs, Maine Red Claws, Atlantic EMS and Dirigo Safety. There were also tractor trailers set up outside the mall to show off how big their blind spots are. Walmart, Maine Motor Transport Association, and Poland Spring/Nestle Waters provided the tractor trailers. It is estimated that around 250-275 people attended the event and at least one of the tables. The reach of the event was more than just who attended at the mall as two local TV stations covered the event and Hot 104.7 broadcasted live during the whole event. To keep the momentum of the event moving forward the plan is to include more interactive activities outside, and reach out to local drivers schools to promote it to their students.

Planned Activity Number: YD19-002 PLANNED ACTIVITIES NOT IMPLEMENTED AS PLANNED
Planned Activity Title: **Boys & Girls Club Teen Driver Program**

Planned Activity Description:

The Insurance Institute of Highway Safety states that the risk of motor vehicle crashes is higher among 16-19-year-old than among any other age group. In fact, per mile driven, teen drivers ages 16-19 are

nearly three times more likely than drivers age 20 and older to be in a fatal crash. Per the Centers for Disease Control and Prevention (CDC), in 2015, 2,333 teens in the United States, ages 16-19, were killed and 221,313 were treated in emergency departments for injuries suffered in motor vehicle crashes. That means that six teens ages 16-19 died every day from motor vehicle injuries. National Highway Traffic Safety Administration (NHTSA) reported that at all levels of blood alcohol concentrations (BAC), the risk of involvement in a motor vehicle crash is greater for teens than for older drivers. Per the Youth Risk Behavior Surveillance – United States, 2015, 42 percent of high school students who drive report texting or emailing while driving during the past 30 days. NHTSA states, of the teens (ages 16-19) who died in passenger vehicle crashes in 2015, approximately 47% were not wearing a seat belt at the time of the crash. CDC also reported that compared to other age groups, teens have among the lowest rates of seat belt use. In 2015, only 61% of high school students reported they always wear seat belts when riding with someone else.
MDOT reported in Maine, from 2015-2017, 14% of all crashes involved operators age 16-19 years old. Funding will be provided to Boys and Girls Club of Augusta to educate young drivers on the dangers of: underage drinking, distracted driving, and occupant protection. Methods of outreach may include, but are not limited to, school presentations, peer-to-peer workshops, safety fairs, and informational campaigns. An evaluation component will be included. Funding will be used to cover expenses related to personnel, educational materials, consultants, travel/driving costs and office supplies. More details regarding this planned activity will be known following assigned contact

Planned Activity Performance: PLANNED ACTIVITIES NOT IMPLEMENTED AS PLANNED

When the Boy and Girls Club first submitted the grant application, their idea for implementation was much larger in scope and focused on going school to school to educate students. We sent back the grant asking them to scale it back and refocus on one singular big event. We never received anything back from the Boy and Girls club and had to cancel the planned activity.

Expenditures as of December 7, 2019

Planned Activity Title	Planned Activity Number	Source	Budget	Expended
AAA Young Driver Expo	SA19-001	402	$8,000.00	$7,134.91

Distracted Driving

Prior to our new (September 2019) hands-free law, enforcement for distracted driving remained difficult for law enforcement officers to detect whether a user was texting (illegal) or dialing (legal). These planned activities were selected to help reduce the incidence of distracted driving and to encourage voluntary compliance with putting the phone down and just driving. Even though the distracted driving performance measure was not met in FFY19, we believe that the new law, increased ability of officers to write citations, and increased enforcement of laws, with digital, social, and paid and earned media will assist us in meeting targets in future years.

Planned Activity Number: DD19-001 (PM19-001)

Planned Activity Title: **Distracted Driving Campaign PSA, Brochure/Educational Material**

Planned Activity Description:

Distracted Driving proves to be one of the hardest driver behaviors to curb. Every one of every age engages in distracted driving. Whether it is eating, or reading, or vaping, or talking, or texting, distracted driving related-crashes and fatalities continue to increase. Despite enforcement and our new PSA's in 2018, and our prior work in prior years, distraction continues to plague our roadways. Following contract negotiations with our media vendor, it is our intention to continue to enhance and create an all-inclusive comprehensive distracted driving campaign to include all forms of media to address all distracted behaviors. We will follow these with paid media buys and posters and brochures. We envision an approach where we brand a theme against distracted driving (**JUST DRIVE**) and build upon it using visual, digital, audio, and social media.

Planned Activity Performance:

For FFY19, the comprehensive distracted driving media campaign used a variety of media platforms (TV, radio, and social ads) to distribute distracted driving messages. One TV PSA "Oops" was created, and a TV PSA "Funeral", was updated and revised. With the new hands-free driving law being implemented a hand out was created to answer commonly asked questions and video PSA for social media. From April 1st, till the 19th we ran ads for the distracted driving campaign. During this time, we had a total gross impression of 3,175,896 for age range 18-49. For the future, we plan on refocusing our ads to have a common theme, and to be more impactful for our target audience. Paid media for distracted driving was conducted during the April enforcement mobilization. The Paid Media Plan at the end of this report details the time period for the airing PSA's.

Planned Activity Number: DD19-002

Planned Activity Title: **Distracted Driving Observational Survey**

Planned Activity Description:

Cell phone use and texting while driving can degrade driver performance in three ways --visually, manually, and cognitively. Talking

and texting while driving has grown in the past decade as drivers take their cell phones into their vehicles. To gather data on actual cell phone use, and to determine if enforcement efforts and education has been successful, Maine intends to use the Connecticut demonstration model to conduct a cell phone usage observational study. The University of Southern Maine, Muskie School will conduct the survey in April of 2019. The results will follow the April 2018 survey and give us better insight into the who, what, when and where of our distracted driving problem.

Planned Activity Performance:

The MeBHS conducted its second distracted driving observational survey in April 2019. The survey observed a total of 13,173 drivers within the 80 observation locations across 12 counties. The overall ‘‘any use’’ (hand held, ear device and manipulating) rate across all counties and categories was 6.1%. Female drivers had significantly higher use rates than male drivers (6.6% to 5.8%). The survey concludes cell phone use rate were highest among those deemed to under 25 years-old and lowest among those judged to be 60 years old and or older. Driver cell phone use was highest in Lincoln County and lowest in Washington County. The survey data supports a higher distracted driving problem during the weekdays as opposed to weekend travel. The use rates between varying roadway vehicle types were not statistically significant. As we fell short of our distracted driving goals for 2019 we will use this data to identify how we can target our PSA’s and where to strengthen enforcement to reduce people holding phones while driving. The charts below are from the report which is also attached to the end of this report.

Table 1. Sites Selected by County

County Code	County	N Selected
1	Androscoggin	7
3	Aroostook	5
5	Cumberland	8
7	Franklin	0
9	Hancock	9
11	Kennebec	8
13	Knox	0
15	Lincoln	5
17	Oxford	7
19	Penobscot	6
21	Piscataquis	0
23	Sagadahoc	0
25	Somerset	5
27	Waldo	6
29	Washington	6
31	York	8

Table 6. Phone Use by Road Type

	% Use			
Road Type	Hand Held	Ear Device	Manipulating	Any Use
Interstate/Freeways	3.3%	0.9%	3.0%	5.7%
Principal Arterials	3.6%	0.8%	3.1%	6.1%
Other Arterials	3.8%	0.9%	2.7%	5.9%
Collectors	4.2%	0.8%	3.5%	6.7%

Table 7. Phone Use by Vehicle Type

	% Use			
Vehicle Type	Hand Held	Ear Device	Manipulating	Any Use
Car	3.2%	0.5%	3.2%	5.8%
Truck	4.6%	1.3%	3.2%	6.9%
SUV	3.5%	0.8%	2.6%	5.7%
Van	4.8%	1.5%	3.9%	7.1%

Table 4. Phone Use Category by County

	% Use			
County	Hand Held	Ear Device	Manipulating	Any Use
Androscoggin	3.3%	0.0%	2.3%	5.1%
Aroostook	2.1%	1.1%	3.8%	5.2%
Cumberland	2.7%	0.1%	1.7%	4.2%
Hancock	3.1%	0.9%	2.7%	5.2%
Kennebec	3.2%	0.6%	2.4%	5.5%
Lincoln	4.4%	1.7%	5.3%	8.2%
Oxford	6.3%	0.0%	2.1%	7.9%
Penobscot	4.6%	2.2%	4.1%	7.5%
Somerset	3.6%	0.0%	1.0%	4.4%
Waldo	4.7%	1.6%	4.2%	8.0%
Washington	3.1%	0.2%	1.3%	4.1%
York	3.5%	0.3%	2.6%	5.7%

Table 8. Phone Use by Age

	% Use			
	Hand Held	Ear Device	Manipulating	Any Use
Under 25	5.1%	0.5%	4.3%	8.1%
25 to 59	4.0%	0.8%	3.3%	6.6%
60+	1.4%	0.3%	0.7%	2.1%

Table 9. Phone Use by Sex

	% Use			
	Hand Held	Ear Device	Manipulating	Any Use
Male	3.5%	0.9%	2.9%	5.8%
Female	4.1%	1.0%	3.2%	6.6%

Planned Activity Number: Various Planned Activity Numbers

Planned Activity Title: **High Visibility Distracted Driving Enforcement**

Planned Activity Description:

Funding will support overtime details for law enforcement agencies to conduct distracted driving enforcement on I-95, I-295 and other designated high crash locations. Our law enforcement partners will conduct high visibility enforcement in support of the National Campaign (April) and during times and places that have been identified through the distracted observational survey and an analysis of the crash and fatal statistics that we have.

Planned Activity Performance:

In FFY19, the following law enforcement partners conducted 1,506 hours of overtime enforcement, made 2,238 contacts and wrote 403 citations for distracted driving. This year was difficult to get PD on board with distracted driving as it was very challenging to prove that someone was texting and driving. As of September 19, 2019, the law changed to hands free driving, so for 2020 we expect more Police Departments applying for this grant and

more citations to be given out. Using the distracted driving observational survey, the counties with the highest phone use have been identified. We are reaching out to the police departments in this area to see if we can get them to join this grant for 2020 if they have not already. With this our media campaign will be reworked to be more effective for the public.

As of December 7, 2019

Subrecipient	Planned Activity Number	Budget	Expended
Kennebec County Sheriff's Office	DD19-017	$ 11,236.00	$7,441.18
Sagadahoc County Sheriff's Office	DD19-016	$ 12,500.00	$8,158.07
Augusta Police Department	DD19-018	$ 10,500.00	$10,500.00
Brunswick Police Department	DD19-019	$ 2,880.00	$2,880.00
Caribou Police Department	DD19-013	$ 4,400.00	$3,649.89
Gorham Police Department	DD19-015	$ 2,690.00	$2,516.71
Lewiston Police Department	DD19-010	$ 7,920.00	$7,883.93
Maine State Police	DD19-021	$ 40,732.00	$19,889.82
Sabattus Police Department	DD19-012	$ 9,398.00	$2,534.32
Scarborough Police Department	DD19-011	$ 15,602.00	$15,481.08
South Portland Police Department	DD19-020	$ 4,200.00	$3,829.46
York Police Department	DD19-014	$ 4,274.00	$4,274.00

Expenditures as of December 20, 2019:

Planned Activity Title	Planned Activity Number	Source	Budget	Expended
Distracted Driving Campaign PSA, Brochure/Educational Material	PM19-001	402/405e	$250,000.00	$199,496.00
Distracted Driving Observational Survey	DD19-002	405e	$64,694.00	$ 60,708.30
High Visibility Distracted Driving Enforcement	Various Numbers	s. 405e	$113,675.46	$89,130.66

Mature Drivers

Planned Activity Number: PLANNED ACTIVITIES NOT IMPLEMENTED AS PLANNED

Planned Activity Title: **"Are You ABLE" Educational Campaign for the Aging Road User**

Planned Activity Description: As a group, the aging road user is a generally safe driver, with high safety belt use and few citations. Over these past couple of years, Maine has continued to see an increasing trend in aging road user crashes. Questions regarding their ability to drive safely need to be asked. Because restricting their driving independence is an emotionally charged subject, the best person to have this conversation with the aging road user is their family and health care professional. Although unsafe driving may be an uncomfortable subject, these centers of influence have the best chance to help these older adults weigh driving, i.e., drive less, avoid certain road conditions, or stop driving altogether. Center of influence are also in the best position to surmise whether the aging road user has a medical issue, improper medication usage, or a reduced physical function that can increase their risk of a crash or injury. To assist these centers of influence in discussing driving issues, they must have information on the effects that certain medications or medical conditions may have on aging road user's vision, cognitive skills, and motor functions. Strategy: Have Maine General Health develop and distribute brochures to community centers, health professionals, town offices, etc. so that families and health care providers can obtain and use them when addressing sensitivities and impairments that occur from the aging process.

Planned Activity Performance:

PLANNED ACTIVITY NOT IMPLEMENTED AS PLANNED IN FFY19. We were working with Maine General Health to start this planned activity, but they were unable to get it off the ground. This is because the planned activity leaders ended up retiring and the work had to be passed along to someone else. During this transition, Maine General Health lost interest on the planned activity and it was dropped. For 2020 we plan on focusing our efforts on a strong media campaign, creating brochures and pamphlets that give mature drivers and their families resources for driving skills are declining.

Planned Activity Title	Planned Activity Number	Source	Budget	Expended
"Are You ABLE" Educational Campaign for the Aging Road User	OD19-001	402	$56,963.05	$0.00

Paid and Earned Media -All Planned Activities

NHTSA has long recognized paid and earned media as an essential component to a successful highway safety plan. The MeBHS works with our vendor to ensure that we effectively utilized resources for the biggest highway safety concerns and direct messaging toward our most concerning traffic safety problems and in conjunction with National Mobilization and State emphasis periods. Continued reductions in crashes and fatalities prove that paid and earned media programs are effective when used together with other proven countermeasures.

Planned Activity Number: PM19-001
Planned Activity Title: **Statewide Strategic Media Plan (Paid Media)**

Planned Activity Description:

This planned activity will fund paid media (television, radio, print, digital, social) associated with all of the MeBHS programs and NHTSA High Visibility Enforcement campaigns. Expenses include continued campaign development, re-tagging of NHTSA or other state's PSA's, purchase of radio, television, social and print media, and production of new PSA's: in 2018, together with our media contractor, we created new media for distracted driving, teen seat belt, move over, speeding, bicycle and pedestrian, motorcycle and child passenger safety. In 2019 we plan to increase our social and digital presence; and add even more new PSA's for distraction, drowsy, speeding for 20-24 year old drivers, mature drivers and move over. We will continue our drive to increase our observed seat belt usage rate by embarking on a "no excuses" campaign utilizing digital banners, pre-rolls and an accompanying PSA. In 2019 nearly half of our total advertisements were free of charge. This is a great as we were able to get the most value and airtime possible out of our spots. We branched out and tried two new ideas to get our message across for distracted driving. The first was to have a 10 second video playing at the Portland International Jetport. The focus of this message was to welcome people to our state and to not text and drive. For people visiting Maine this was an easy and effective way to inform them of this law, as it varies from state to state. The estimated reach of this is over 1.3 million people over the age of 18. The next idea was to have our distracted driving "Just Drive" messaging on the gas pump toppers. We had this message at 9 different Fabian gas station, across Maine with a total estimated reach of 135,000 people. With Maine's new hands-free law being implemented on September 19th, 2019 a buck-slip hand out was created to answer the publics commonly asked questions about the new law. The handouts were sent to police departments across Maine, so if someone was pulled over for being on their phone, they would receive a ticket and a handout. The hand out was also posted on our

web-site and shared across social media. Along with this, 20 second videos were created for social media answering a commonly asked question about the new hands-free law. These short videos are ideas we are looking to implement more in the future to educate and connect more with the public. Outside of advertising the new driver education video first draft was completed. For 2020 we will revise and edit the video and then send it out to driver education courses digitally. In 2020 our goal is to find new unique areas to reinforce our safe driving message along with working on a rebranding strategy. The idea for this is to have an over arcing message that connects better with the people of Maine and have driving safe at the top of everyone's mind.

Planned Activity Performance:

The following is a breakdown of total media (TV, radio, digital, social advertising) dollars spent in FY2019 by project:

Occupant Protection	$38,105
Impaired Driving	$60,762
Motorcycle	$35,011
Speed	$37,436
Distracted Driving	$43,558
Airport (DD)	$13,753
Teen	$28,108
Bike/Pedestrian	$28,709
Move Over	$21,895
Mature Driver	$21,270
CPS	$19,337
Total Media Spent	$347,944
Total FREE Media*	$284,064

*This additional bonus media was negotiated by NL Partners into the media buy.

The following is a breakdown of TRPs (Total Rating Points) for FY2019:

TV Paid	944
TV FREE	871
Radio Paid	923
Radio FREE	923
Digital Paid	572
Digital FREE	191
Social Ads Paid	1,492
Total Paid	3,931
Total FREE	1,985

Digital Pre roll reach/frequency for FY2019:

Occupant Protection

Reach	56%

Frequency 1.4

Impaired
Reach 57%
Frequency 2.5

Motorcycle
Reach 53%
Frequency 1.2

Speed
Reach 63%
Frequency 1.2

Distracted Driving
Reach 60%
Frequency 1.3

Teen
Reach 14%
Frequency 1.1

Move Over
Reach 26%
Frequency 1.2

Mature Driver
Reach 72%
Frequency 3.2

Child Passenger Safety
Reach 35%
Frequency 1.2

The following is a list of advertising spots completed in FFY2019:

Distracted Driving
TV PSA – "Funeral"
TV PSA – "Oops"
Just Drive – Gas Station Toppers
OOH Video (In Airports)
Digital Ads

Hand's Free
Video PSAs (9)
Buck-slips

Motorcycle
TV PSA – "Share the Road"
Pre-roll (1)

Move Over
Pre-roll (1)
Radio PSA

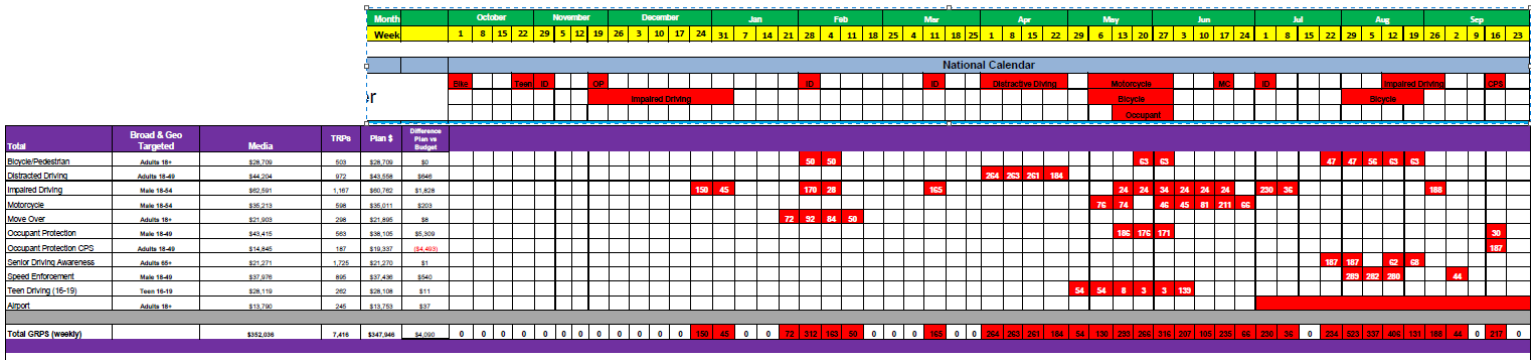
Occupant Protection
TV PSA – "Album"

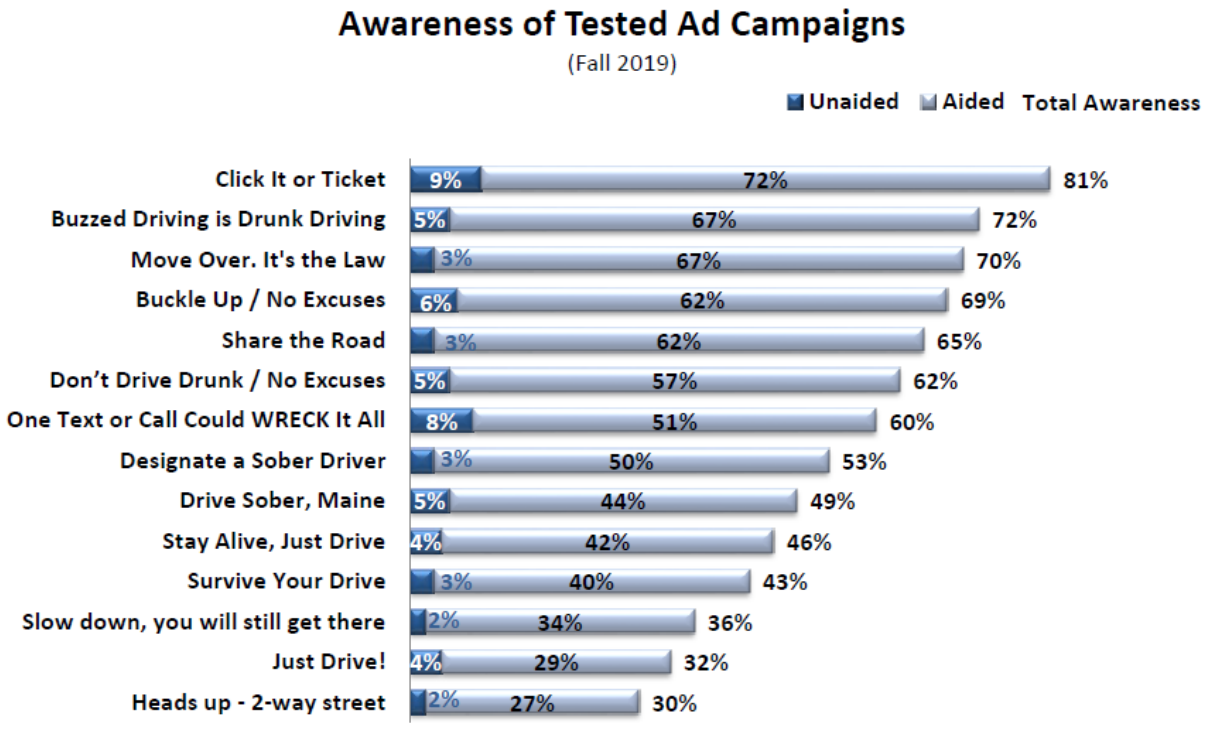
Speed
Pre-roll (1)

Teen
Pre-roll (1)
1-Hour New Driver Education Video – Sgt. Hansen

Child Passenger Safety
CPS Booklet reprints

General
Critical Insights Tracking Survey – Fall '18
Critical Insights Tracking Survey – Spring '19





Note: Respondents were prompted for each campaign if they had not mentioned it unaided or if they said they had not seen any advertising in the past year. Figures based on the TOTAL sample.

Planned Activity Number: PM19-002

Planned Activity Title: **Statewide Sports Marketing Campaign**

Planned Activity Description:

This planned activity will support educational events and advertising at sporting venues. Motorcycle safety, impaired driving, seat belt, distracted driving, and pedestrian safety will be addressed via public service announcements, signage, informational displays, and personal interaction with the public using local law enforcement and MeBHS staff during *You've Been Ticketed* and *Share the Road with Motorcycle* events. Funds will also be used for educational events and advertising at sporting venues that are frequented by sports enthusiasts. In addition, the Sports Marketing Program incorporates and focuses on young drivers through the One Text or Call Could Wreck It All Pledge Campaign. This campaign involves high school and college age students through interactive displays at major school sporting events; through the Choices Matter speaker program; and through the Coaches Playbook Influencer Program.

Planned Activity Performance:

The Choices Matter Program is an impactful presentation and interactive event focusing on impairment and distraction. Choices Matter is designed to engage high school students in understanding how one bad decision can impact a lifetime. This year they had a new speaker, David Francisco. David's story wasn't if you do this you end up it in jail, his story was the eye of being a victim of being hit by a distracted driver, and his road to recovery and forgiveness. Throughout his talk he kept the student engaged by being relatable, having humor

throughout, and singing to the students. The Choices Matter assembly was set up at 5 high schools this year. Choices Matter marketing material was set up and reached 33 different schools in Maine. Alliance sports marketing not only focused on Choices Matter, they also attended 3 college sports, 31 high school tournaments, 6 minor league sporting events, 6 youth sporting events, 8 festivals, 20 concerts, 8 motorsport events, and 3 motorcycles rides and rallies all focused during the high-visibility enforcement periods. They also visited 16 schools in April for the *One Text or Call Campaign*. The marketing program used highway safety messages, such as *Click It or Ticket, Share the Road, One Text or Call Could Wreck It All, and Drive Sober, Maine.* Audiences were addressed 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. Alliance Sports Marketing has done a wonderful job in 2019 and will keep that moment going into 2020 with more events planned and to help with any extra events.

Campaign
FY19 Cost Projects
Sports Marketing
$194,500 (College Sports, Minor League Sports, Motorsports)
High School Sports
$85,000 (High School Tournaments & "One Text or Call Could Wreck It All" High School campaign)
Choices Matter
$200,000 (Choices Matter program)
Events
$142,500 (Youth Sports, Festival, Concerts, and Motorcycles)
Total - $622,000
Average Cost Per Event - $3,936.71 per event

Event	Date	Safe Driving Message	NHTSA Calender
Kennebunk High School Choices Matter	10/1/2018	Choices Matter	
Freeport High School Choices Matter	10/2/2018	Choices Matter	
Mountain Valley High School Choices Matter	10/3/2018	Choices Matter	National Walk to School Day
Buckfield High School Choices Matter Presentation	10/3/2018	Choices Matter	
Piscataquis Community Secondary School Choices Matter	10/4/2018	Choices Matter	
University of Maine Football vs. Villanova	10/6/2018	Buckle Up & Survive Your Drive	
University of Maine Football vs. Albany	10/27/2018	Buckle Up & Survive Your Drive	National Teen Driver Safety Week
MPA Class D High School Football Championship-Orono	11/17/2018	One Text Or Call Could Wreck it All	
MPA Class A High School Football Championship-Portland	11/17/2018	One Text Or Call Could Wreck it All	
MPA Class B High School Football Championship-Portland	11/17/2018	One Text Or Call Could Wreck it All	
MPA Class C High School Football Championship-Portland	11/17/2018	One Text Or Call Could Wreck it All	
Maine Mariners Minor League Hockey	11/30/2018	Buckle Up & Survive Your Drive	Pre-Holiday Season - Impaired
University of Maine Hockey vs. Northeastern	1/12/2019	Buckle Up & Survive Your Drive	
Woodland Junior-Senior HS Choices Matter	1/22/2019	Choices Matter	
Rangeley Lakes Regional School Choices Matter	1/23/2019	Choices Matter	
Cony High School Choices Matter	1/23/2019	Choices Matter	
Houlton High School Choices Matter	1/23/2019	Choices Matter	
Central Aroostook Jr-Sr High School Choices Matter	1/24/2019	Choices Matter	
Lincoln Academy Choices Matter Presentation	1/25/2019	Choices Matter	
Bangor Cheerleading State Tournament Regionals	1/26/2019	One Text Or Call Could Wreck it All	
Augusta Cheerleading State Tournament Regionals	1/26/2019	One Text Or Call Could Wreck it All	
Maine Red Claws	2/2/2019	Buckle Up & Survive Your Drive	Impaired
Maine State Cheering Championships-Augusta	2/9/2019	One Text Or Call Could Wreck it All	
MPA Regionals Girls Hockey Game 1	2/14/2019	One Text Or Call Could Wreck it All	
MPA Class A Quarterfinals Girls Basketball-Augusta	2/15/2019	One Text Or Call Could Wreck it All	
MPA Class B Quarterfinals Girls Basketball-Bangor	2/15/2019	One Text Or Call Could Wreck it All	
MPA Class A Quarterfinals Boys Basketball-Portland	2/15/2019	One Text Or Call Could Wreck it All	
MPA State Championships Girls Ice Hockey	2/16/2019	One Text Or Call Could Wreck it All	
MPA Class A Quarterfinals Boys Basketball-Augusta	2/16/2019	One Text Or Call Could Wreck it All	
MPA Class B Quarterfinals Girls Basketball-Bangor	2/16/2019	One Text Or Call Could Wreck it All	
MPA Class A Quarterfinals Boys Basketball-Portland	2/16/2019	One Text Or Call Could Wreck it All	
MPA Girls Ice Hockey Regional Championships-Lewiston	2/16/2019	One Text Or Call Could Wreck it All	
MPA Class C Quarterfinals Boys Basketball-Augusta	2/18/2019	One Text Or Call Could Wreck it All	
MPA Class D Quarterfinals Girls Basketball-Bangor	2/18/2019	One Text Or Call Could Wreck it All	
MPA Class A Quarterfinals Girls Basketball-Portland	2/18/2019	One Text Or Call Could Wreck it All	
MPA Class A Quarterfinals Girls Basketball-Augusta	2/19/2019	One Text Or Call Could Wreck it All	
MPA Class AA North Semifinals Boys Basketball-Portland	2/19/2019	One Text Or Call Could Wreck it All	

MPA Class C Quarterfinals Girls Basketball-Bangor	2/19/2019	One Text Or Call Could Wreck it All	
MPA Class D Semifinals Boys Basketball-Augusta	2/20/2019	One Text Or Call Could Wreck it All	
MPA Class A Semifinals Girls Basketball-Portland	2/20/2019	One Text Or Call Could Wreck it All	
MPA Class C Quarterfinals Girls Basketball-Bangor	2/20/2019	One Text Or Call Could Wreck it All	
MPA Class C Semifinal Boys Basketball-Augusta	2/21/2019	One Text Or Call Could Wreck it All	
MPA Class B Semifinals Girls Basketball-Portland	2/21/2019	One Text Or Call Could Wreck it All	
MPA Class D Semifinals Girls Basketball-Bangor	2/21/2019	One Text Or Call Could Wreck it All	
MPA Class A Regional Finals Girls Basketball-Augusta	2/22/2019	One Text Or Call Could Wreck it All	
MPA Class AA North Regional Finals Boys Basketball-Portland	2/22/2019	One Text Or Call Could Wreck it All	
MPA Class C Semifinals Boys Basketball-Bangor	2/22/2019	One Text Or Call Could Wreck it All	
MPA Class C Regional Final Boys Basketball-Augusta	2/23/2019	One Text Or Call Could Wreck it All	
MPA Class B Regional Finals Girls Basketball-Portland	2/23/2019	One Text Or Call Could Wreck it All	
MPA Class B Regional Finals Girls Basketball-Bangor	2/23/2019	One Text Or Call Could Wreck it All	
MPA Class A State Championship Boys Basketball-Portland	2/28/2019	One Text Or Call Could Wreck it All	
Class A Boys State Basketball Championship- Augusta	3/1/2019	One Text Or Call Could Wreck it All	
Class A Girls State Basketball Championship-Augusta	3/1/2019	One Text Or Call Could Wreck it All	
Class C Girls State Basketball Championship-Bangor	3/2/2019	One Text Or Call Could Wreck it All	
Class D Boys State Basketball Championship-Bangor	3/2/2019	One Text Or Call Could Wreck it All	
Class D Girls State Basketball Championship-Bangor	3/2/2019	One Text Or Call Could Wreck it All	
Class AA Girls State Basketball Championship-Portland	3/2/2019	One Text Or Call Could Wreck it All	
Class B Girls State Basketball Championship-Portland	3/2/2019	One Text Or Call Could Wreck it All	
Class C Boys State Basketball Championship-Bangor	3/2/2019	One Text Or Call Could Wreck it All	
Class AA Boys State Basketball Championship-Portland	3/2/2019	One Text Or Call Could Wreck it All	
Class B Boys State Basketball Championship-Portland	3/2/2019	One Text Or Call Could Wreck it All	
Kidabaloo Youth Event	3/3/2019	Buckle Up & Survive Your Drive	
MPA Boys Hockey Regional Finals-Lewiston	3/5/2019	One Text Or Call Could Wreck it All	
MPA Boys Hockey Regional Finals-Lewiston	3/6/2019	One Text Or Call Could Wreck it All	
MPA Boys Hockey Regional Finals-Orono	3/6/2019	One Text Or Call Could Wreck it All	
Paper City Basketball Tournament (Youth)	3/7/2019	Buckle Up & Survive Your Drive	
MPA Boys Class A State Ice Hockey Championship	3/9/2019	One Text Or Call Could Wreck it All	
Poland Spirit Invitational (Youth)	3/9/2019	Buckle Up & Survive Your Drive	
MPA Boys Class B State Ice Hockey Championship	3/9/2019	One Text Or Call Could Wreck it All	
University of Maine Hockey	3/9/2019	Buckle Up & Survive Your Drive	
Skowhegan Youth Basketball Tournament	3/10/2019	Buckle Up & Survive Your Drive	
Paper City Girls Basketball Tournament (Youth)	3/14/2019	Buckle Up & Survive Your Drive	Impaired - Buzzed Driving
Jeff Dunham Show	3/15/2019	Buckle Up & Survive Your Drive	Impaired - Buzzed Driving
March Madness Youth Basketball Tournament	3/16/2019	Buckle Up & Survive Your Drive	Impaired - Buzzed Driving
Sesame Street Live (Youth)	3/23/2019	Buckle Up & Survive Your Drive	

Calais High School Choices Matter Presentation	3/25/2019	Choices Matter	
Maine Mariners	3/25/2019	Buckle Up & Survive Your Drive	
Wiscasset High School Choices Matter Presentation	3/26/2019	Choices Matter	
Nokomis Regional HS Choices Matter Presentation	3/28/2019	Choices Matter	
Monmouth Academy Choices Matter Presentation	3/29/2019	Choices Matter	
Waterville High School OTOC Event	4/1/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Maranacook High School OTOC Event	4/1/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Erskine Academy OTOC Event	4/2/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Gray-New Gloucester HS OTOC Event	4/2/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Deer Isle-Stonington HS Choices Matter Event	4/3/2019	Choices Matter	National Distracted Driving Awerness Month
Fort Kent Community HS Choices Matter Event	4/4/2019	Choices Matter	National Distracted Driving Awerness Month
Wisdom High School Choices Matter Event	4/4/2019	Choices Matter	National Distracted Driving Awerness Month
Maine School of Science & Mathematics Choices Matter Event	4/4/2019	Choices Matter	National Distracted Driving Awerness Month
Poland Regional High School Choices Matter Event	4/5/2019	Choices Matter	National Distracted Driving Awerness Month
Mt. Ararat High School OTOC Event	4/8/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Kennebunk High School OTOC Event	4/8/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Skowhegan Area High School OTOC Event	4/10/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Cheverus High School OTOC Event	4/11/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Baxter Academy OTOC Event	4/12/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Monster Truck Destination Tour: Portland	4/12/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Lewiston High School OTOC Event	4/23/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Bonny Eagle High School OTOC Event	4/24/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Cony High School OTOC Event	4/25/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Live Free Beach Party & BBQ	4/27/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Traip Academy OTOC Event	4/29/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Brunswick High School OTOC Event	4/30/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Biddeford High School OTOC Event	4/30/2019	One Text Or Call Could Wreck it All	National Distracted Driving Awerness Month
Beats & Eats Bangor Festival	5/18/2019	Watch for Motorcycles	Motorcycle/ Bicycle Safety Month - Click it or Ticket
Winterport Dragway WFM	5/25/2019	Watch for Motorcycles	Motorcycle/ Bicycle Safety Month - Click it or Ticket
Beech Ridge Motor Speedway WFM	5/26/2019	Watch for Motorcycles	Motorcycle/ Bicycle Safety Month - Click it or Ticket
Oxford Plains Speedway WFM	5/27/2019	Watch for Motorcycles	Motorcycle/ Bicycle Safety Month - Click it or Ticket
Speedway 95 Watch for Motorcycles	6/1/2019	Watch for Motorcycles	Click it or Ticket
Lynyrd Skynyrd Concert	6/1/2019	Buckle Up & Survive Your Drive	Click it or Ticket
Richmond Karting Raceway Watch for Motorcycles	6/2/2019	Watch for Motorcycles	Click it or Ticket
Spud Speedway Watch for Motorcycles	6/6/2019	Watch for Motorcycles	
Portland SeaDogs Watch for Motorcycles	6/7/2019	Watch for Motorcycles	
Wiscasset Speedway Watch for Motorcycles	6/8/2019	Watch for Motorcycles	
Outlaw Music Festival	6/14/2019	Buckle Up & Survive Your Drive	

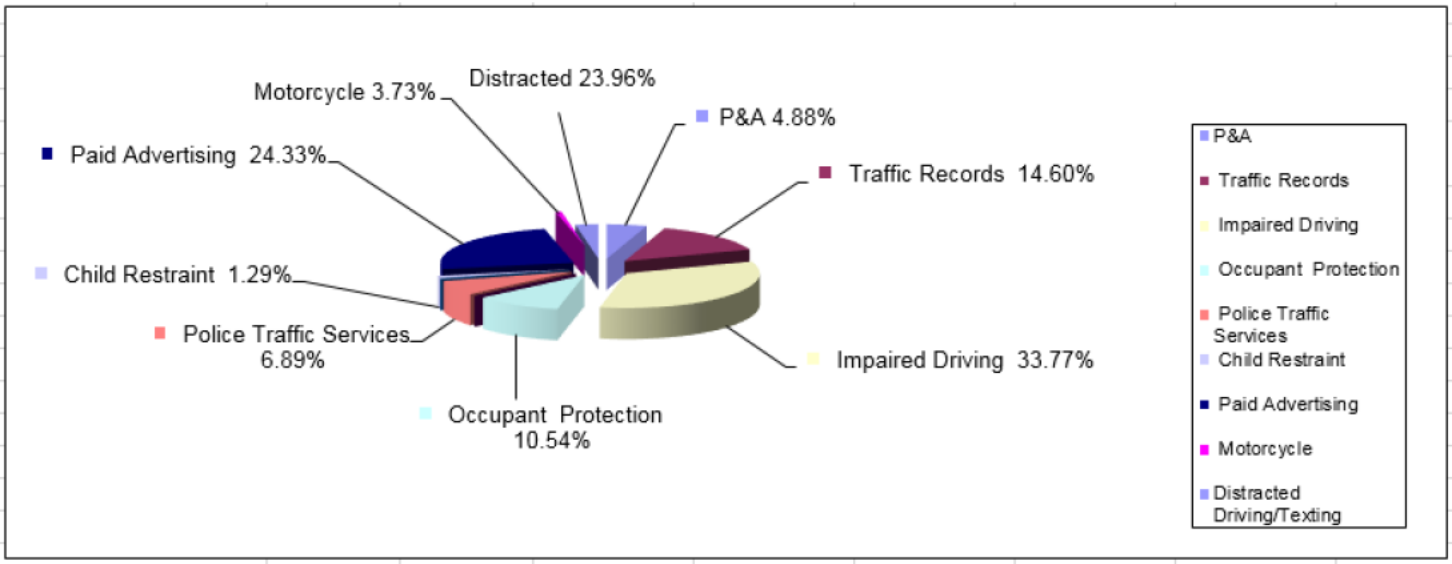
Hops & Hounds Festival	6/15/2019	Buckle Up & Survive Your Drive	
Chicago Concert	6/21/2019	Buckle Up & Survive Your Drive	
Best of the North Festival	6/22/2019	Buckle Up & Survive Your Drive	
Pints & Pups Festival	6/23/2019	Buckle Up & Survive Your Drive	
Josh Groban Concert: Portland	6/24/2019	Buckle Up & Survive Your Drive	
Phish Concert: Bangor	6/25/2019	Buckle Up & Survive Your Drive	
Kennebec River Family Festival	6/29/2019	Buckle Up & Survive Your Drive	
Bangor Waterfront: Jimmy Eat World	7/5/2019	Buckle Up & Survive Your Drive	
STIX Field Hockey Youth Event	7/6/2019	Buckle Up & Survive Your Drive	
Softball Youth Event	7/7/2019	Buckle Up & Survive Your Drive	
Boys SWISH Day Camp	7/8/2019	Buckle Up & Survive Your Drive	
Wells Brew Fest	7/12/2019	Buckle Up & Survive Your Drive	
Bangor Waterfront: Blink 182 Concert	7/13/2019	Buckle Up & Survive Your Drive	
Riverfront Food Truck Festival	7/13/2019	Buckle Up & Survive Your Drive	
Soccer Youth Event	7/14/2019	Buckle Up & Survive Your Drive	
Brawlin Lobsta Wrestling Youth Event	7/15/2019	Buckle Up & Survive Your Drive	
Red Riot Soccer Youth Event	7/15/2019	Buckle Up & Survive Your Drive	
Bangor Waterfront: Florida Georgia Line	7/17/2019	Buckle Up & Survive Your Drive	
Redneck Party Motorcycle Event	7/19/2019	Watch for Motorcycles	
Yarmouth Clam Festival	7/19/2019	Buckle Up & Survive Your Drive	
Baseball Youth Event	7/20/2019	Buckle Up & Survive Your Drive	
Porsches in the Park Car Show	7/21/2019	Buckle Up & Survive Your Drive	
Bangor Waterfront: Heart Concert	7/22/2019	Buckle Up & Survive Your Drive	
Bangor Waterfront: Chris Stapleton Concert	7/24/2019	Buckle Up & Survive Your Drive	
2019 CMA New England Motorcycle Rally	7/25/2019	Watch for Motorcycles	
Bangor Waterfront: Impact Music Festival	7/26/2019	Buckle Up & Survive Your Drive	
Maine Brewers Guild Summer Beer Festival	7/27/2019	Buckle Up & Survive Your Drive	
Volleyball Youth Event	7/28/2019	Buckle Up & Survive Your Drive	
Bangor Waterfront: Train & Goo Goo Dolls Concert	7/29/2019	Buckle Up & Survive Your Drive	
Maine Lobster Festival	7/31/2019	Buckle Up & Survive Your Drive	
Maine Lobster Festival	8/1/2019	Buckle Up & Survive Your Drive	Back To School Safety Month
Bryan Adams Concert: Bangor Waterfront	8/2/2019	Buckle Up & Survive Your Drive	Back To School Safety Month
Winterport Dragway YBT	8/3/2019	Buckle Up & Survive Your Drive	Back To School Safety Month
Wiscasset Speedway YBT	8/3/2019	Buckle Up & Survive Your Drive	Back To School Safety Month
Spud Speedway YBT	8/4/2019	Buckle Up & Survive Your Drive	Back To School Safety Month
Cirque de Soleil: Portland	8/7/2019	Buckle Up & Survive Your Drive	Back To School Safety Month
Luke Bryan Concert: Bangor Waterfront	8/8/2019	Buckle Up & Survive Your Drive	Back To School Safety Month
Portland SeaDogs YBT	8/9/2019	Buckle Up & Survive Your Drive	Back To School Safety Month
Trevor Noah: Bangor Waterfront	8/10/2019	Buckle Up & Survive Your Drive	Back To School Safety Month
Richmond Karting Speedway YBT	8/11/2019	Buckle Up & Survive Your Drive	Back To School Safety Month
Oxford Plains Speedway YBT	8/14/2019	Buckle Up & Survive Your Drive	Back To School Safety Month & Impaired
Beech Ridge Motor Speedway YBT	8/15/2019	Buckle Up & Survive Your Drive	Back To School Safety Month & Impaired
BACA Motorcycles Event	8/17/2019	Watch for Motorcycles	Back To School Safety Month & Impaired
Brantley Gilbert Concert: Bangor Waterfront	8/22/2019	Buckle Up & Survive Your Drive	Back To School Safety Month & Impaired
AAA: Teen Driving Expo	8/23/2019	Buckle Up & Survive Your Drive	Back To School Safety Month & Impaired
Breaking Benjamin Concert: Bangor Waterfront	8/28/2019	Buckle Up & Survive Your Drive	Back To School Safety Month & Impaired
Alabama Concert: Bangor Waterfront	9/1/2019	Buckle Up & Survive Your Drive	Impaired
UBM Toy Run	9/8/2019	Watch for Motorcycles	
Gardiner High School Choices Matter Event	9/12/2019	Choices Matter	
Telstar High School Choices Matter Event	9/12/2019	Choices Matter	
Winslow High School Choices Matter Event	9/13/2019	Choices Matter	
Gorham High School Choices Matter Event	9/13/2019	Choices Matter	
New Model Relaunch: Motorcycles	9/14/2019	Watch for Motorcycles	
Southern Aroostook Community School Choices Matter Event	9/23/2019	Choices Matter	
Katahdin High School Choices Matter Event	9/23/2019	Choices Matter	
Machias High School Choices Matter Event	9/24/2019	Choices Matter	
Jonesport Beals High School Choices Matter Event	9/24/2019	Choices Matter	
Woodland High School Choices Matter Event	9/25/2019	Choices Matter	
Shead High School Choices Matter Event	9/25/2019	Choices Matter	
Poland Regional High School Choices Matter Event	9/26/2019	Choices Matter	
Cony High School Choices Matter Event	9/26/2019	Choices Matter	
Piscataquis Community High School Choices Matter Event	9/27/2019	Choices Matter	
Nokomis Regional High School Choices Matter Event	9/27/2019	Choices Matter	
AAA Walk to End Distracted Driving	9/29/2019	Buckle Up & Survive Your Drive	

Planned Activity Title	Planned Activity Number	Source	Budget	Expended
Statewide Strategic Media Plan (Paid Media)	PM19-001	402	$1,299,504.46	$347,944
Statewide Sports Marketing Campaign	PM19-002	405e	$1,024,037.51	$622,000

FFY2019 Financial Summary of Expenditures

FFY19 Summary of Expenditures as of 12/7/19

	402	405b	405c	405d	405e	405f	Total	% of Total
P&A	$ 225,303						$ 225,303	4.88%
Traffic Records	$ 91,348		$582,605				$ 673,953	14.60%
Impaired Driving	$ 121,595			$ 1,437,696			$ 1,559,291	33.77%
Occupant Protection	$ 204,221	$ 282,613					$ 486,834	10.54%
Ped/Bicycle Safety	$ -	$ -					$ -	0.00%
Police Traffic Services	$ 318,037						$ 318,037	6.89%
Safe Communities	$ 8,415						$ 8,415	0.18%
Child Restraint	$ 51,979	$ 7,537					$ 59,517	1.29%
Paid Advertising	$ -				$ 1,123,573		$ 1,123,573	24.33%
Motorcycle	$ -					$ 33,874	$ 33,874	0.73%
Distracted Driving/Texting	$				$ 128,620		$ 128,620	2.79%
TOTAL	$1,020,899	$290,150	$582,605	$1,437,696	$1,252,193		$4,617,418	100.00%



Appendices-Attachments-Links

Maine Driver Awareness Survey 2019

Safety Belt Use in Maine 2019

Night Seat Belt Use in Maine, 2019

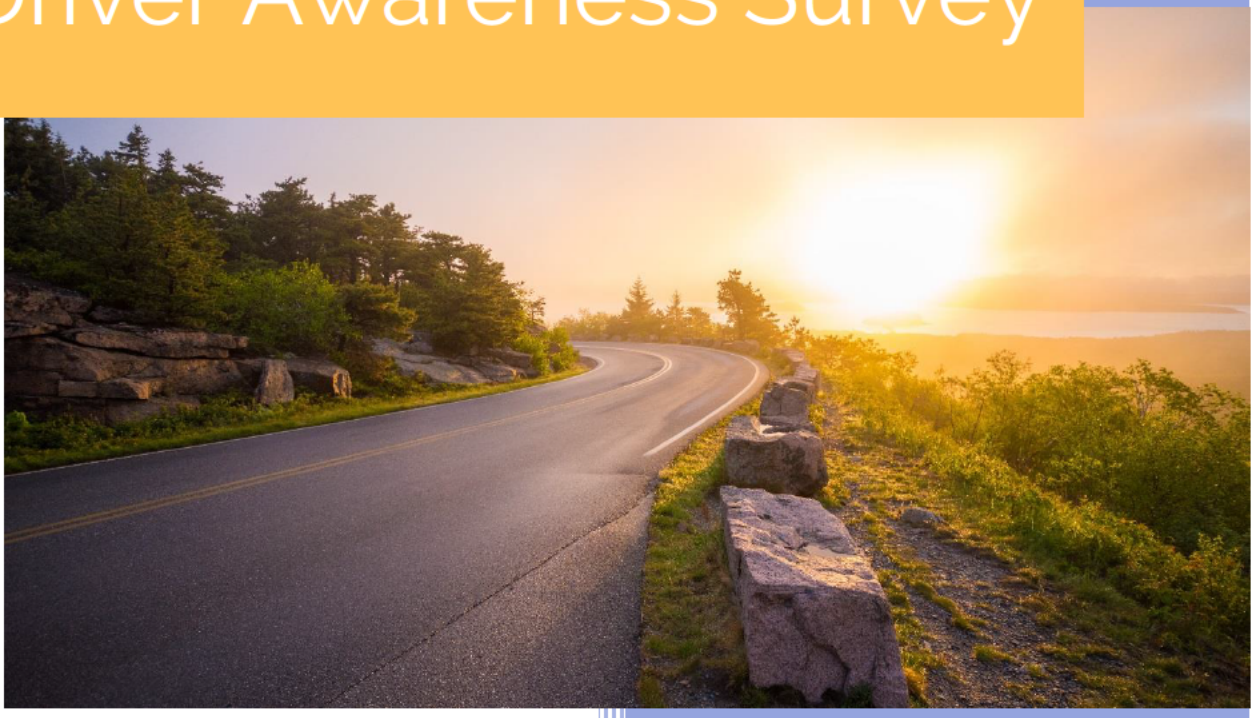
Distracted Driving: Cell Phone Use While Driving in Maine 2019

Maine Impaired Driving Strategic Plan

Maine Traffic Records Strategic Plan

2019

Maine Driver Awareness Survey



Survey Research Center
Muskie School of Public Service
University of Southern Maine
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Survey Administration

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Prepared for

Maine Bureau of Highway Safety

The authors wish to acknowledge Preusser Research Group, Inc., which conducted analysis and wrote reports for previous iterations of the Maine Driver Awareness Survey (2011 to 2016). Findings from their reports have been included in this one in order to provide historical context to current findings.

Cover photo by Jack Cohen on Unsplash

Contents

Executive Summary

This report summarizes the findings from Maine's 2019 Driver Awareness Survey. This survey has been conducted annually for a number of years and is intended to measure drivers' awareness of and adherence to seatbelt, speeding, and impaired driving laws and to measure the frequency of talking and texting with a hand-held cell phone while driving.

Seatbelts

- Ninety-five percent (95%) of survey participants reported that they *always* or *nearly always* use their seatbelts. Rates were lower for males, those 34 years of age and younger, and those who drove pickup trucks.
- The proportion who reported using a seatbelt increased from 2011 to the present, but the 2019 rate did not increase from the previous year's rate.
- Thirty-four (34%) of participants reported that they had seen or heard about extra enforcement of seatbelt laws within the last 60 days—the lowest rate in the past nine years.
- Forty-one percent (41%) of those who reported hearing about enforcement said they heard the message through TV, followed by 30% who reported hearing on radio, and 14% who reported seeing a police checkpoint.
- Forty percent (41%) of participants reported that they believed they would *always* or *nearly always* get a ticket if they did not wear a seatbelt. This belief was stronger for females, for males who drove fewer miles, by those ages 35 to 49, and by those in Kennebunk and Augusta.
- The proportion who believed they would get a ticket if they did not wear a seatbelt increased over the years of the study, from 34% in 2011 to 41% in 2019.
- Hearing about enforcement has an indirect effect on seatbelt use, at least for males. Males who hear about enforcement are more likely to think driving unbelted will result in a ticket, and males who believe a ticket is likely are more likely to buckle up.

Impaired Driving

- The majority of participants (88%) reported never driving within two hours of drinking over the past 60 days, 7% reported doing so one or two times, and 5% reported doing so three or more times. Rates were lower for females and for those who drove fewer than 10,000 miles the previous year. Rates were also lower for participants whose primary vehicle was not a pickup truck and for participants from the Augusta and Rumford locations.
- The rate of impaired driving has remained relatively unchanged since 2013, ranging between 12% and 13%.
- Fifty-seven percent (57%) of participants reported that they had seen or heard about extra enforcement of impaired driving laws within the last 60 days. This rate was

higher for males and those ages 25 years of age and younger. Those in Bangor were the most likely to have heard while those in Portland were the least likely.

- Forty-nine percent (49%) of participants reported that they believed they would *always* or *nearly always* be arrested if they drank and drove. This belief was stronger for females, decreased with age, and for males decreased with the number of miles traveled.
- Hearing about enforcement has an indirect effect on drinking and driving. Those who hear about enforcement are more likely to think drinking and driving will result in arrest, and those who believe arrest is likely are less apt to drink and drive.

Speeding

- Twelve percent (12%) of survey participants reported that they always or nearly always speed. Rates were lower for females and those who traveled fewer than 10,000 miles the previous year and decreased with age.
- The rate of speeding has remained relatively steady from 2011 to present.
- Forty-nine percent (49%) of participants reported that they had seen or heard about extra enforcement of speeding laws within the last 60 days. This rate did not vary by gender, age, miles driven, vehicle type, or location.
- Thirty-three percent (33%) of participants reported that they believed they would *always* or *nearly always* get a ticket if they drove over the speed limit. This belief was stronger for females, males who drove fewer than 10,000 miles in the previous year, and younger participants. The belief was strongest among participants from Augusta and lowest among participants from Ellsworth.

Distracted Driving

- Twenty-eight percent (28%) of survey participants reported that they *sometimes, nearly always,* or *always* talk on a hand-held cell phone while driving. This rate was lower for females, those age 60 and older, those in Rumford, and increased with the number of miles driven. This rate was higher for those whose primary vehicle was a pickup truck.
- The proportion who reported talking on a cell phone decreased over the years of the study, from 41% in 2011 to 28% in 2019.
- Eleven percent (11%) of participants reported that they *sometimes, nearly always,* or *always* text on a hand-held cell phone while driving. This rate was higher for participants in the Portland area, increase with number of miles driven, but decreased with age.
- The proportion of those who reported texting on a cell phone while driving remained unchanged from 2017 and 2019.

Introduction

This report summarizes the findings from Maine's 2019 Driver Awareness Survey. This survey has been conducted annually for a number of years and is intended to measure drivers' awareness of and adherence to seatbelt, speeding, and impaired driving laws and to gauge drivers' perceptions of law enforcement efforts around each of these issues. From 2013 to 2017, 65% of all Maine driver fatalities involved risky behavior related to at least one of these three areas—driving unbelted, speeding, and driving under the influence—making these areas logical focal points for the Bureau of Highway Safety (BHS).

Decreasing risky driving behaviors requires at least three critical elements. First, it requires laws prohibiting the behavior. Since 2007, when Maine enacted a primary seatbelt law, this element has been in place for each of the aforementioned behaviors. Drivers who are not wearing seatbelts may be pulled over for that infraction regardless of whether additional laws were broken, unlike secondary seatbelt laws.

Another critical element is enforcement; laws only work when they are enforced. While law enforcement agencies are committed to upholding traffic laws, many agencies are understaffed and face competing demands for officers limited time and attention. Recognizing this challenge, the National Highway Traffic Safety Administration (NHTSA) and the BHS distribute grant funds to agencies willing to participate in special enforcement details. This funding allows for extra enforcement around the targeted behavior.

A third critical element is awareness. Enforcement works not because all violators are stopped and ticketed but because some are, and the awareness of the possibility acts as a deterrent for others. The BHS has a number of public safety campaigns designed to bring awareness not only to the danger of the risky driving behavior but to the likelihood of being stopped by law enforcement and the ensuing consequences as well. The Driver Awareness Survey measures the effectiveness of these campaigns and gathers data on the frequency with which drivers engage in the risky behaviors targeted by the campaigns.

In addition to the three behaviors discussed above, the survey also measures the frequency of two types of distracted driving—talking on a hand-held cell phone and texting/emailing on the same. While statistics for distracted driving are harder to come by, evidence suggests that these behaviors are related to an increasing number of injuries and fatalities. At the time of the 2019 survey Maine law allowed drivers to talk on mobile devices while driving (provided the driver was 18 years of age or older) but prohibited them from using mobile devices for any type of text messaging. Effective September 19th of this year, however, both talking and texting on hand-held devices will be prohibited. The Driver Awareness Survey gathers information about the frequency of both of these behaviors.

NOTE: *Previous versions of this survey (2011 to 2016) were analyzed and summarized by Preusser Research Group, Inc., and the results of those surveys have been included in a number of tables in this report in order to provide readers with a snapshot of how survey responses have changed over time.*

Methodology & Limitations

This survey was conducted at eight of the thirteen Bureau of Motor Vehicle locations across the state. These eight locations (Augusta, Bangor, Ellsworth, Kennebunk, Portland, Rockland, Rumford, and Scarborough) were chosen for their representativeness—together they serve urban, suburban, and rural populations.

The survey was conducted with professional interviewers from the Muskie School's Survey Research Center. Interviewers spent two to three days at each location, approaching individuals and explaining that they were there to help the Maine Bureau of Highway Safety learn more about people's driving habits and attitudes. Once interviewers ascertained that individuals held a valid Maine driver's license, they invited them to participate in the survey. Individuals were instructed not to place any identifying information on the survey and to return the completed survey to the Interviewer. Most people (an estimated three-fourths) completed the survey. A total of 1,777 completed surveys were collected.

Surveys were conducted from June 19 to July 8, beginning about 2 weeks after the end of Maine's seatbelt awareness campaign, which ran from Memorial Day through June 3. The survey asked participants whether they saw or heard about extra enforcement of seatbelt laws *within the past 60 days*. Thus, the timing of the survey increased the likelihood that participants would have heard about extra enforcement.

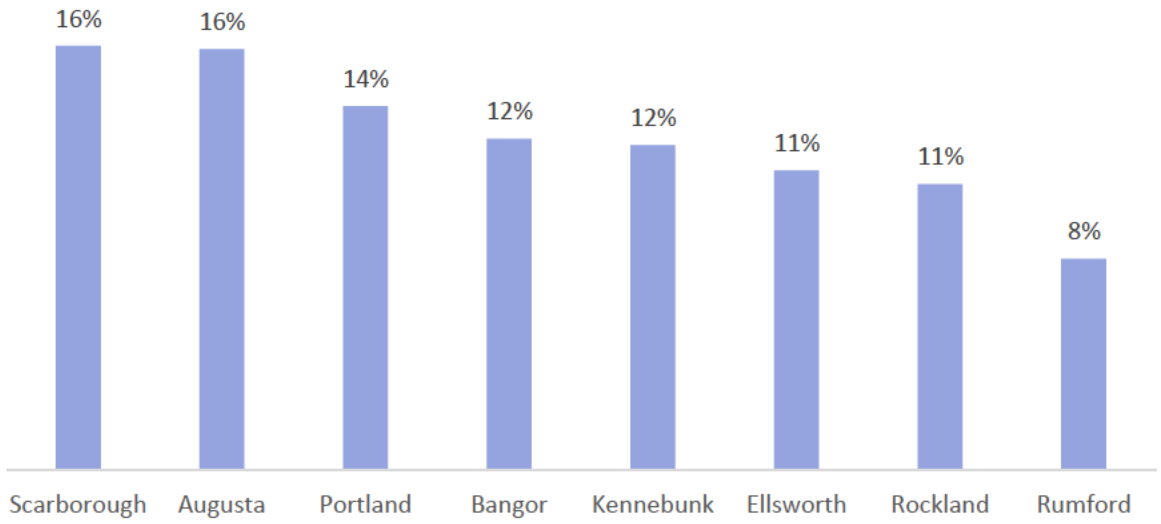
The survey asked participants a number of demographic and descriptive questions as well as questions related to seatbelt use, drinking and driving, speeding, and distracted driving. It was one page in length and contained a total of 17 questions. The current survey is identical to the survey administered in 2018 and similar to previous surveys. (A copy of the current survey can be found in the Appendix of this report.)

One of the limitations of this research lies with the challenge of obtaining a representative sample. While eight of the state's thirteen BMV offices were selected for participation, a large portion of Maine is not served by a fixed BMV office, relying instead on scheduled visits from a mobile unit. It was not practical to include the areas served by mobile units in this survey; as a result, the findings may underrepresent those who live in more rural areas of the state.

The voluntary nature of the survey is another factor that influences its representativeness. While the survey was offered to everyone, not everyone chose to participate. Those who did take part in this voluntary survey—a prosocial behavior—might be more likely to abide by the laws that govern society's roadways. If this is the case, the survey may underrepresent those who do not abide by these laws. While this drawback exists with any voluntary survey, it nevertheless bears mentioning here.

Findings

Surveys were distributed at eight different locations across the state of Maine, including Augusta, Bangor, Ellsworth, Kennebunk, Portland, Rockland, Rumford, and Scarborough. Of these locations, Scarborough accounted for the largest proportion of the total number of surveys at 16%, while Rumford accounted for the smallest at 8%. A total of 1,777 people participated from all locations.

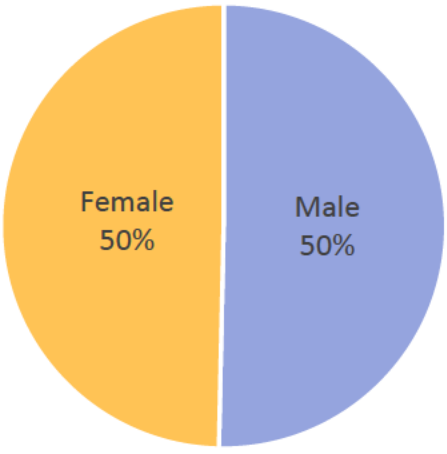


Demographics & Descriptives

Survey participants were asked to identify their gender and age, provide an approximation of how many miles they drove the previous year, and to report the type of vehicle they drove most often.

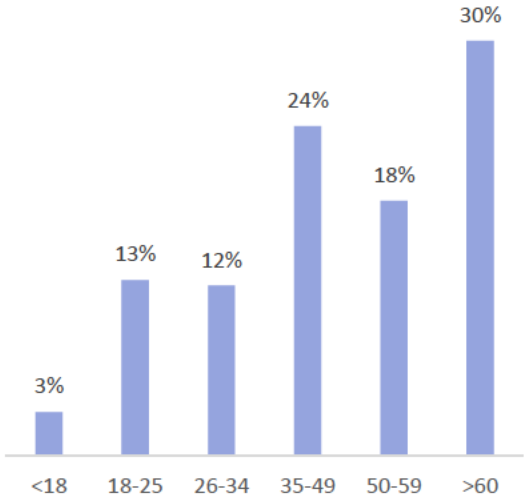
Gender

Almost all survey participants (98.9%) answered this question. Of those who answered, 50% indicated they were female, and 50% indicated they were male.



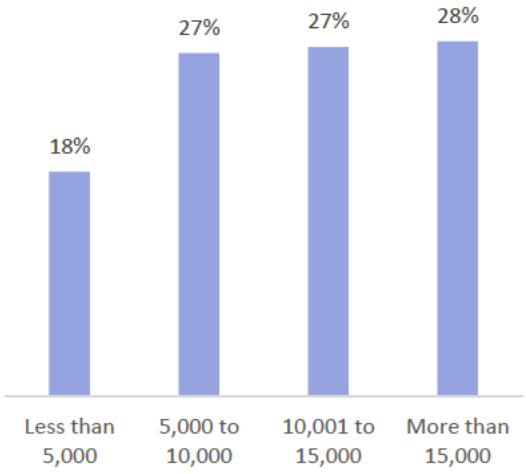
Age

Almost all survey participants (99.3%) provided an answer to this question. Of those who answered, the largest proportion (30%) were 60 years of age or older, followed by those 35 to 49 years of age at 24%, and those 50 to 59 years of age at 18%. Those 18 to 25 made up 13% of the survey sample, those 26 to 34 made up 12%, and those younger than 18 years of age made up 3% of the sample.



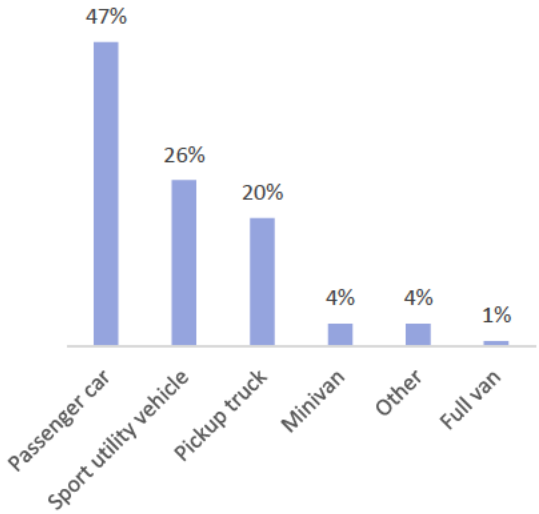
Miles Driven

Almost all survey participants (99.2%) provided information about the number of miles driven the previous year. Of those who did, the largest proportion (28%) reported driving more than 15,000 miles the previous year, followed closely by those who drove 10,001 to 15,000 miles per year at 27%, and those who drove 5,000 to 10,000 at 27%. A smaller proportion, 18%, reported driving fewer than 5,000 miles per year.



Type of Vehicle

Almost all survey participants (95.9%) provided information about the type of vehicle they drove most frequently. Almost half of participants (47%) reported driving *passenger cars*, followed by *sport utility vehicles* at 26% and *pickup trucks* at 20%. Smaller proportions reported driving *minivans*, *other types of vehicles*, and *full vans* (4%, 4%, and 1%, respectively).

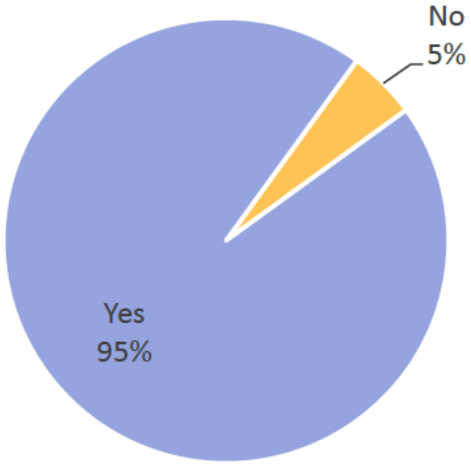


Seatbelts

Survey participants were asked a number of questions regarding their seatbelt use, their exposure to messages related to the enforcement of seatbelt laws, and their perception of the likelihood of getting a ticket if driving unbelted.

Frequency of Use

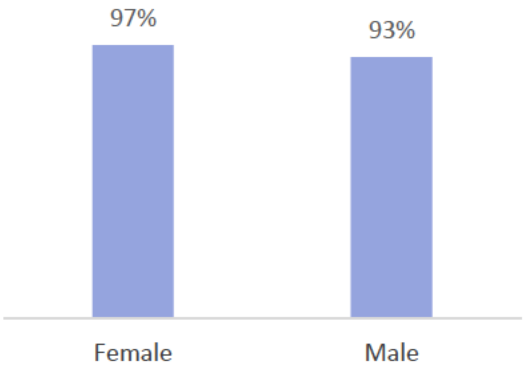
The survey asked participants how often they wore seatbelts when driving or riding in a car, sport utility vehicle, or pickup. Participants could choose from the following answers: *always, nearly always, sometimes, seldom,* and *never.* Almost all the survey participants answered this question (99.8%), and of those who did, the majority (95%) reported that they *always* or *nearly always* use their seatbelts. Those who provided these two answers—*always* and *nearly always*—are counted as seatbelt users throughout the remainder of this report.



Seatbelt rates varied depending on a number of driver attributes.

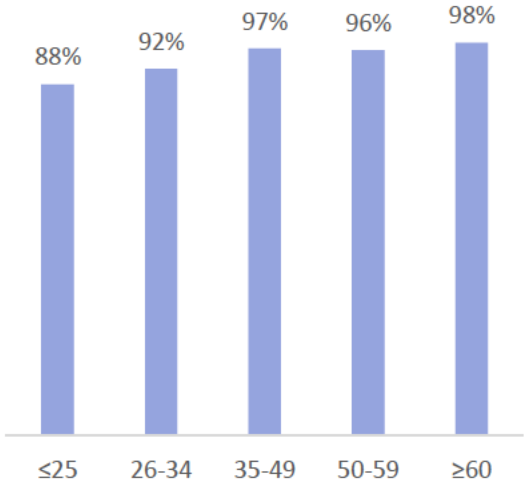
Gender

Females were more likely to buckle up than males. Approximately 97% of females reported buckling up, while 93% of males did.



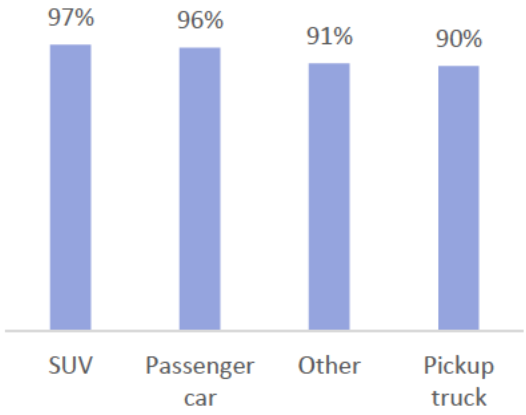
Age

Older participants were more likely to buckle up than younger ones. Approximately 98% of those 60 years of age and older reported buckling up, followed by those 35 to 49 and those 50 to 59 at 97% and 96%, respectively. A smaller proportion, 92%, of participants 26 to 34 reported buckling up, and those 25 and younger had the lowest rate of all at 88%.



Type of Vehicle

Those driving sport utility vehicles were most likely to buckle up at 97%, followed by those driving passenger cars at 96%. Those driving "other" vehicles and pickup trucks were less likely to buckle up at 91% and 90%, respectively.



Location

At 91%, those in Rockland used seatbelts at a lower rate than those from other locations which had rates ranging from 93% to 98%.

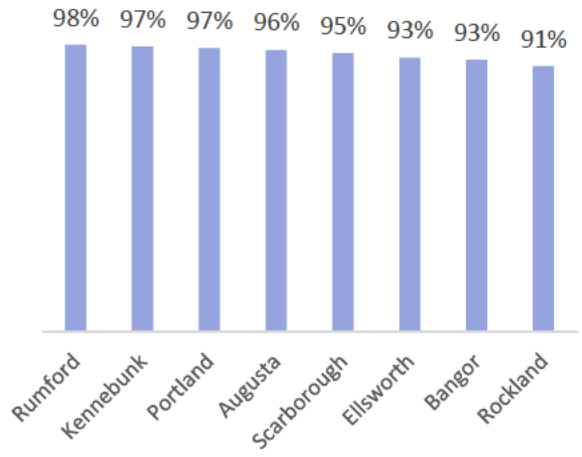


Table 1: Self-Reported Belt Use

	N	Always or Nearly Always	
		Point Estimate	Confidence Interval
Gender*			
Male	883	92.9%	91.2% - 94.6%
Female	872	97.2%	96.2% - 98.3%
Age*			
Under 25	277	87.7%	83.8% - 91.6%
26-34	216	91.7%	87.9% - 95.4%
35-49	418	96.7%	94.9% - 98.4%
50-59	324	96.3%	94.2% - 98.4%
≥60	527	98.1%	96.9% - 99.3%
Vehicle Driven Most Often*			
Pickup truck	336	90.2%	86.9% - 93.4%
Other (minivan, full van, other)	134	91.0%	86.1% - 95.9%
Passenger car	797	96.4%	95.1% - 97.7%
SUV	436	97.5%	96.0% - 98.9%
Location†			
Rockland	191	90.6%	86.3% - 94.7%
Bangor	221	92.8%	89.3% - 96.2%
Ellsworth	199	93.5%	90.0% - 96.9%
Scarborough	282	95.0%	92.5% - 97.6%
Augusta	281	96.1%	93.8% - 98.4%
Portland	242	96.7%	94.4% - 98.9%
Kennebunk	217	97.2%	95.0% - 99.4%
Rumford	141	97.9%	95.5% - 100.0%
Chances of Getting Ticket If Unbelted*			
Always or nearly always	724	97.9%	96.9% - 99.0%
Sometimes, seldom, or never	1,023	92.8%	91.2% - 94.4%

* $p < 0.001$
† $p = 0.05$

Seatbelt Trends

The proportion of those who reported *always* or *nearly always* wearing seatbelts in 2019 did not increase from the previous year. In fact, the 2019 proportion, 95.0%, was not statistically significantly different from the 2018 proportion of 94.7%.

Table 2: Frequency of Seatbelt Use, 2011-2019

	Always or Nearly Always		Sometimes, Seldom or Never		Total
	#	%	#	%	#
2011	1,544	93.1%	114	6.9%	1,658
2012	1,489	93.0%	112	7.0%	1,601
2013	1,628	93.8%	107	6.2%	1,735
2014	1,561	93.8%	104	6.2%	1,665
2015	1,330	93.3%	95	6.7%	1,425
2016	1,659	95.1%	86	4.9%	1,749
2017	1,730	95.2%	87	4.8%	1,817
2018	1,646	94.7%	92	5.3%	1,738
2019	1,685	95.0%	89	5.0%	1,774

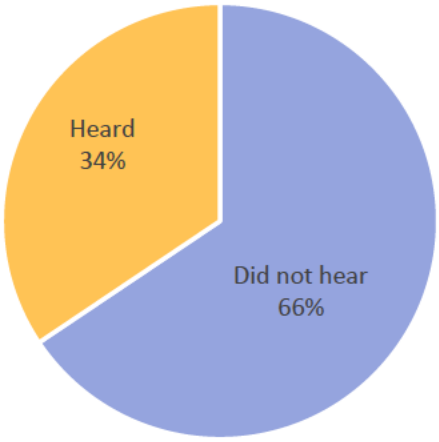
A little under a quarter of participants (24.9%) reported that they currently wore their seatbelts *more often* or *much more often* compared to the last couple of years. While this rate has been relatively low in recent years, it reflects the decreasing proportion of people who were not already using a seatbelt and were thus able to increase their seatbelt use.

Table 3: Seatbelt Use Compared to "Last Couple of Years," 2011-2019

	More or Much More Often		About the Same		Less or Much Less Often	
	#	%	#	%	#	%
2011	489	30.1%	1,109	68.3%	25	1.5%
2012	451	28.6%	1,093	69.4%	32	2.0%
2013	522	30.6%	1,167	68.4%	18	1.1%
2014	481	29.5%	1,112	68.1%	39	2.4%
2015	363	26.0%	1,007	72.0%	28	2.0%
2016	444	25.9%	1,235	72.1%	34	2.0%
2017	467	26.3%	1,270	71.6%	37	2.1%
2018	396	23.3%	1,276	75.1%	27	1.6%
2019	430	24.9%	1,259	73.0%	35	2.0%

Awareness of Seatbelt Law Enforcement

The survey asked participants if, within the past 60 days, they had seen or heard about extra enforcement of seatbelt laws. The timing of the survey, which began about 2 weeks after the end of Maine's seatbelt awareness campaign, maximizes the likelihood that participants would have seen or heard something. Almost all participants answered this question (99.6%), and of those who did, a little over a third (34%) reported having seen or heard something.

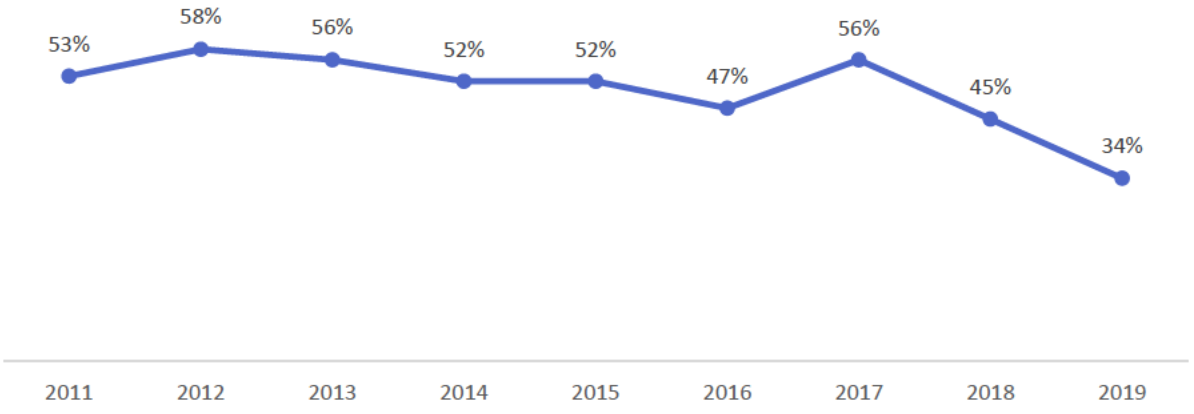


This rate varied by participant attribute. At 38%, males were more likely to have heard about extra enforcement of seatbelt laws than females at 31%. Age was likewise a factor. At 38%, those 25 and younger were more likely to have heard than those ages 60 and older at 30%. Lastly, the rate varied by location. Those in Rumford and Augusta were the most likely to have heard about extra enforcement at 47% and 44%, respectively, while those in Portland were the least likely at 25%.

Trend

The proportion of participants who heard about extra enforcement of seatbelt laws in 2019 decreased significantly from prior years, from a high of 58% in 2012 to its current low of 34%.

Awareness of Extra Enforcement of Seatbelt Laws, 2011-2019



Message

Survey participants were asked to check the specific messages heard regarding enforcement. The majority of participants who reported having seen or heard a message (75%) reported seeing or hearing *Click It or Ticket*. A smaller proportion, 33%, reported seeing or hearing *Buckle Up, No Excuses!*

Table 4: Seatbelt Campaign Seen or Heard by Participants

	Click It or Ticket		Buckle Up. No Excuses!	
	#	%	#	%
2011	642	38.9%	276	16.7%
2012	739	46.1%	279	17.4%
2013	739	42.5%	299	17.2%
2014	681	40.7%	233	13.9%
2015	584	40.9%	215	15.1%
2016	649	79.9%	298	36.7%
2017	796	78.4%	295	29.1%
2018	596	75.8%	238	30.3%
2019	454	74.5%	198	32.5%

NOTE: Percentages for 2011 to 2015 are based on the total number of respondents, while percentages for 2016 through 2019 are based on the total number of respondents who indicated they had seen/heard about extra seatbelt enforcement.

Sources

Survey participants who reported seeing or hearing about extra enforcement of seatbelt laws were asked to report where they saw or heard the message. They were provided with the following choices: *newspaper, radio, TV, poster, website, police checkpoint,* and *other.* Participants were allowed to check more than one answer.

Forty-one percent (41%) of those who reported hearing about enforcement said they heard the message through *TV*, followed by 30% who reported hearing on *radio*. TV and radio have remained in the top two positions across all the years of this study. Twenty percent (20%) reported hearing about enforcement through *other* sources, and 14% reported seeing a *police checkpoint*.

Table 5: Where Did Respondents See/Hear About Extra Seat Belt Enforcement, 2011-2019

	Newspaper		Radio		Television		Poster		Website		Police Checkpoint		Other	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
2011	182	11.0%	295	17.9%	435	26.3%	59	3.6%	24	1.5%	99	6.0%	124	7.5%
2012	174	10.9%	325	20.3%	558	34.8%	49	3.1%	27	1.7%	83	5.2%	130	8.1%
2013	202	11.6%	320	18.4%	551	31.7%	51	2.9%	26	1.5%	88	5.1%	140	8.0%
2014	132	7.9%	303	18.1%	517	30.9%	53	3.2%	37	2.2%	100	6.0%	123	7.4%
2015	78	5.5%	256	17.9%	470	32.9%	41	2.9%	34	2.4%	75	5.3%	78	5.5%
2016	107	13.2%	252	31.0%	421	51.8%	66	8.1%	51	6.3%	103	12.7%	102	12.6%
2017	133	13.1%	308	30.3%	455	44.8%	71	7.0%	58	5.7%	113	11.1%	229	22.6%
2018	99	12.6%	242	30.8%	326	41.5%	92	11.7%	54	6.9%	105	13.4%	153	19.5%
2019	63	10.3%	183	30.0%	251	41.2%	60	9.9%	60	10.0%	84	13.8%	122	20.0%

NOTE: Percentages for 2011 to 2015 are based on the total number of respondents, while percentages for 2016 through 2019 are based on the total number of respondents who indicated they had seen/heard about extra seatbelt enforcement.

Perception of the Likelihood of Getting a Ticket

Survey participants were asked to report the likelihood of getting a ticket if they did not wear their seatbelt by selecting one of the following answers: *always, nearly always, sometimes, seldom,* and *never.* Almost all participants (98.4%) answered this question, and of those who did, 41% reported that they believed they would *always* or *nearly always* get a ticket. Those who provided one of these two answers—*always* and *nearly always*—are counted as believing a ticket is likely throughout the remainder of this report.

Females were more likely than males to believe that driving unbelted would result in a ticket. Forty-seven percent (47%) of females believed so, compared to 36% of males. Miles driven influenced the perception that a ticket was likely but only among males. Forty-one percent (41%) of males who drove 10,000 miles or less believed that driving unbelted would result in a ticket, while 33% of males who drove more than 10,000 miles believed so.

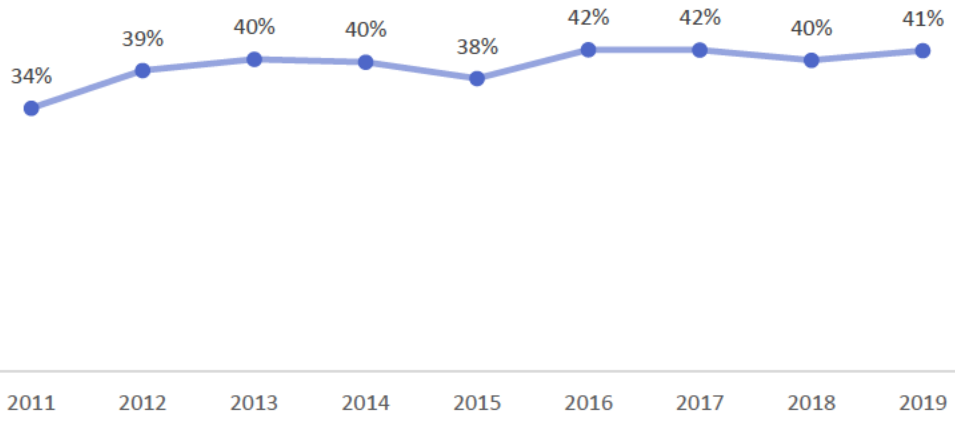
Forty-one percent (41%) of participants reported that they believed a ticket was likely if they did not wear their seatbelt.

At 48%, those 35 to 49 years of age were more likely to think that driving unbelted would result in a ticket compared to those 25 and younger and those 60 and older at 36% and 39%, respectively.

Location also influenced the perception that driving unbelted would result in a ticket. Those in Kennebunk and Augusta were the most likely to think driving unbelted would result in a ticket (at 51% and 47%, respectivley), while those from Ellsworth and Portland were the least likely (at 34% and 32%, respectively).

The proportion who believed driving unbelted would *always* or *nearly always* result in a ticket increased by 7 percentage points between 2011 and 2019.

Believe Driving Unbelted Will Result in Ticket, 2011-2019



Impact of Awareness on Seatbelt Use

The desired outcome of seatbelt campaigns and enforcement details is, of course, an increase in seatbelt use. Responses to the survey, however, show no direct correlation between hearing about enforcement of seatbelt laws and actual seatbelt use; those who heard and those who did not had the same rate of use. There was, however, a positive correlation between hearing about enforcement and believing that driving unbelted would result in a ticket. Fifty-one percent (51%) of those who heard a message within the past 60 days thought a ticket was likely, compared to 36% of those who did not hear a message.

Furthermore, for males at least, there was a positive correlation between believing a ticket was likely and wearing a seatbelt. Ninety-eight percent (98%) of males who thought a ticket was likely buckled up, compared to 90% of males who thought a ticket was not likely. There was no association between believing a ticket was likely and wearing a seatbelt for females, 97% of whom reported buckling up regardless. Thus, it appears that hearing about enforcement may have an indirect effect on seatbelt use, at least for males. Males who hear about enforcement are more likely to think driving unbelted will result in a ticket, and males who believe a ticket is likely are more likely to buckle up.

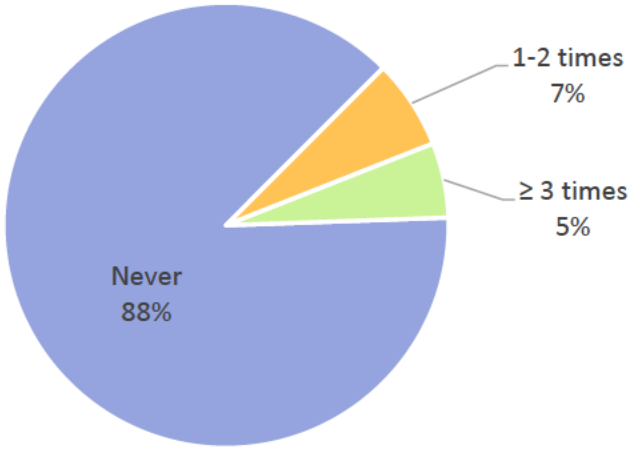
Drinking and Driving

Survey participants were asked several questions about drinking and driving. They were asked about the frequency with which they drank and drove, they were asked whether they saw or heard any messages about police enforcement of impaired driving laws, and they were asked how likely they thought it was that a person who drank and drove would be arrested.

Frequency of Drinking and Driving

The survey asked participants how many times they drove a motor vehicle within two hours of consuming an alcoholic beverage within the past 60 days. While this behavior is not necessarily illegal—legality is determined by blood alcohol concentration—any level of impairment leads to a decrease in public safety. Furthermore, questions about driving drunk are likely to result in inaccurate answers. Determining whether an illegal limit has been reached is difficult, and asking about drunk driving, which is a criminal matter rather than civil, may produce defensiveness and lead to less honest answers. Therefore, the survey focused on *any* drinking and driving; the answers obtained are a measure of the risk of drunk driving.

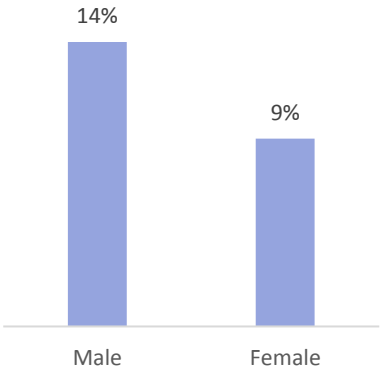
Approximately 97.5% of participants answered this question, with the majority (88%) reporting never driving within two hours of drinking over the past 60 days. Approximately 7% reported drinking and driving one or two times, and 5% reported doing so three or more times.



The frequency of drinking and driving varied depending on a number of driver attributes.

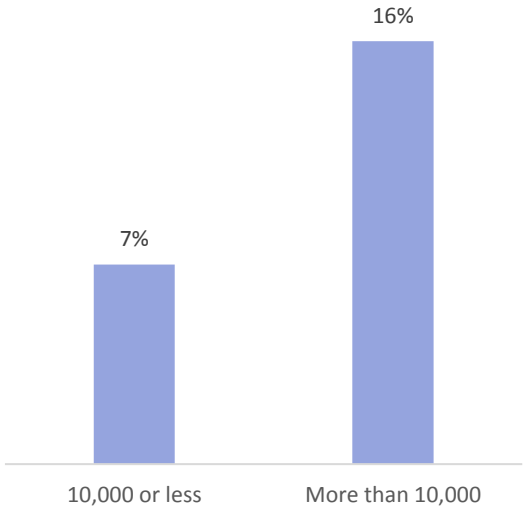
Gender

Males were more likely than females to report drinking and driving within the past 60 days. Approximately 14% of males reported doing so, while 9% of females did so.



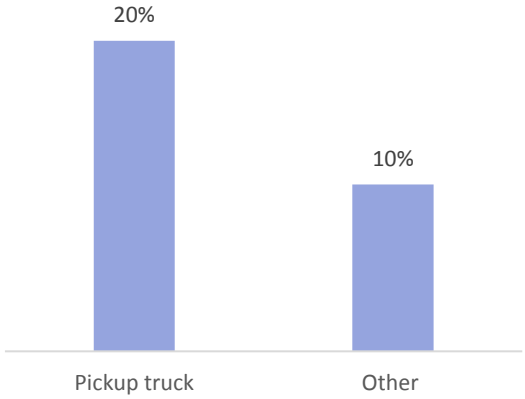
Miles Driven

At 7%, those who drove 10,000 or fewer miles the previous year were less likely to drink and drive compared to those who drove more than 10,000 miles at 16%.



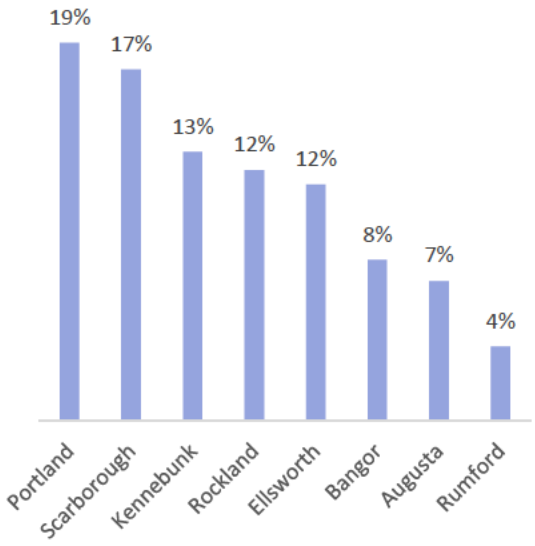
Type of Vehicle

At 20%, those driving pickup trucks were more likely to drink and drive compared to those driving other vehicles at 10%.



Location

Those who completed the survey in Portland and Scarborough were the most likely to report drinking and driving at 19% and 17%, respectively. Those completing the survey in Augusta and Rumford were the least likely to report doing so at 7% and 4%, respectively.



Drinking and Driving Trend

Rates of drinking and driving have remained relatively unchanged since 2013, ranging between 12% and 13%.

Drinking and Driving, 2011-2019

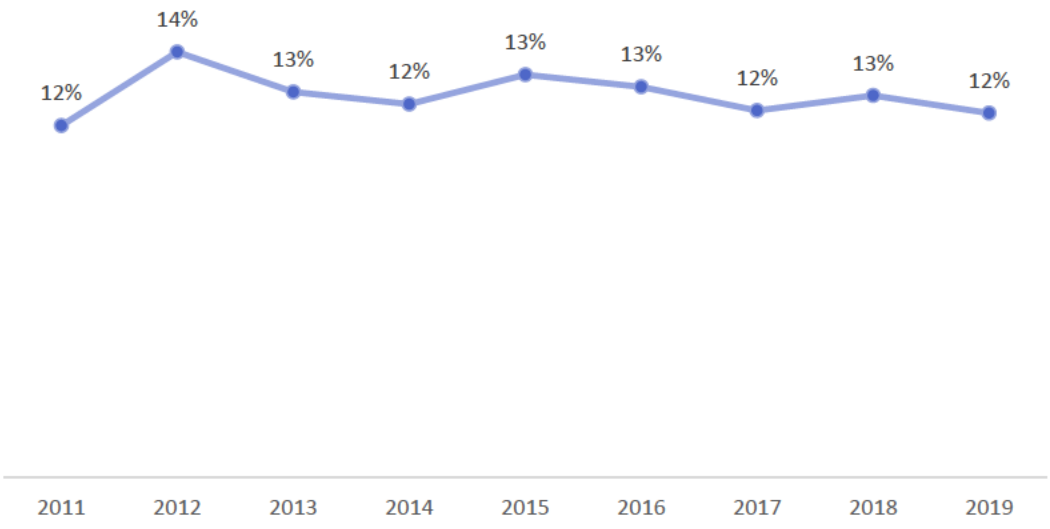


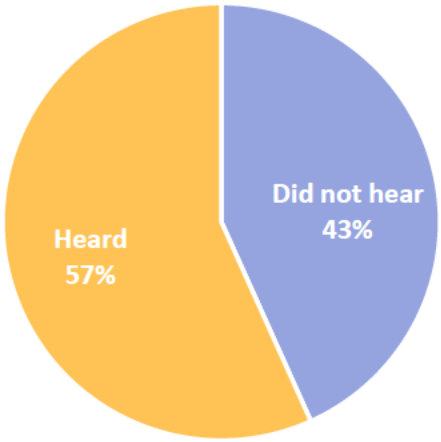
Table 6: Self-Reported Drinking and Driving

	N	Drank and Drove at Least Once Within the Last 60 Days	
		Point Estimate	Confidence Interval
Gender†			
Male	859	14.3%	11.8% - 16.7%
Female	857	9.5%	7.3% - 11.4%
Miles Driven Last Year*			
Less than 5,000	300	4.0%	1.2% - 6.2%
5,000-10,000	469	9.6%	6.6% - 12.3%
10,001-15,000	468	17.7%	14.0% - 21.2%
15,000+	481	13.7%	10.3% - 16.8%
Vehicle Driven Most Often*			
Pickup truck	328	19.5%	14.8% - 23.8%
Other vehicle	1,335	10.5%	8.7% - 12.1%
Location*			
Rumford	136	3.7%	0.0% - 6.8%
Augusta	275	6.9%	3.3% - 9.9%
Bangor	214	7.9%	3.6% - 11.6%
Ellsworth	197	11.7%	6.4% - 16.2%
Rockland	186	12.4%	6.8% - 17.1%
Kennebunk	211	13.3%	8.0% - 17.8%
Scarborough	277	17.3%	12.3% - 21.8%
Portland	236	18.6%	13.1% - 23.6%
Chances of Getting Arrested If Driving After Drinking*			
Sometimes, seldom, or never	870	15.6%	13.0% - 18.0%
Always or nearly always	850	8.4%	6.3% - 10.2%

* $p < .001$
† $p < .05$

Awareness of Impaired Driving Law Enforcement

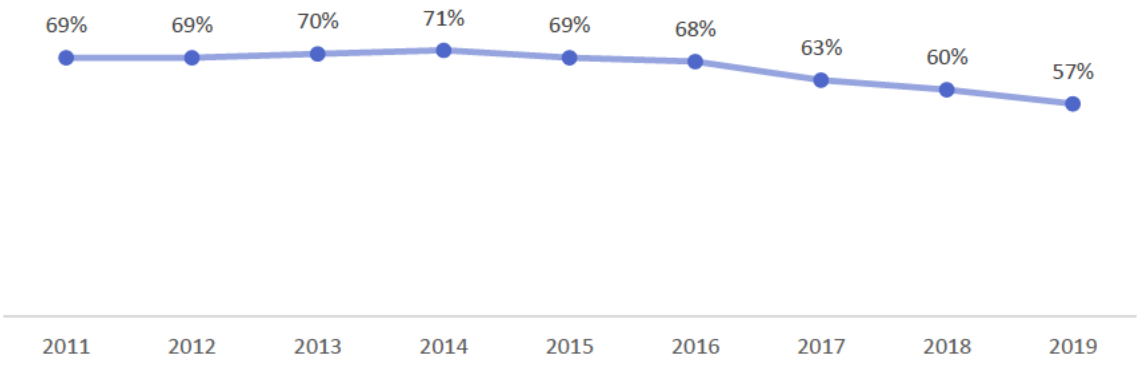
The survey asked participants if, within the past 60 days, they had seen or heard about extra enforcement of impaired driving laws. Almost all participants (98.8%) answered this question, and the majority of those who did (57%) reported having seen or heard something.



This rate varied by participant attribute. At 59%, males were more likely to have heard about extra enforcement of impaired driving laws than females at 54%. Age was likewise a factor. At 67%, those 25 years of age and younger were more likely to have heard than older participants at 55%. Those in Bangor were more likely to have heard about extra enforcement at 63%, while those in Portland were less likely to have heard at 50%.

The proportion of participants who heard about extra enforcement of impaired driving laws has decreased from prior years, from a high of 71% in 2014 to the present low of 57%.

Awareness of Extra Enforcement of Impaired Driving Laws, 2011-2019



Perception of the Likelihood of Arrest

Survey participants were asked to report the likelihood of being arrested if they drank and drove by selecting one of the following answers: *always, nearly always, sometimes, seldom,* and *never.* Almost all participants (98.9%) answered this question, and of those who did, 49% reported that they believed they would *always* or *nearly always* be arrested. Those who provided one of these two answers—*always* and *nearly always*—are counted as believing arrest is likely throughout the remainder of this report.

Approximately 49% of participants reported that they believed arrest was likely if they drank and drove.

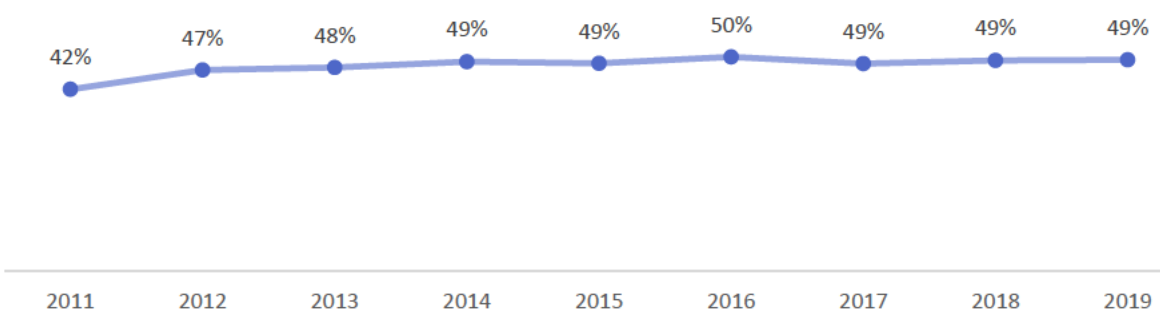
Females were more likely than males to believe drinking and driving would result in arrest. Fifty-three percent (53%) of females believed so, compared to 46% of males. Age was negatively correlated with believing that drinking and driving would result in arrest. Approximately 68% of those 25 and younger believed arrest was likely, compared to 52% of those ages 26 to 59 and 35% of those ages 60 and older.

Those who traveled fewer miles were also more likely to believe arrest was likely. Fifty-five percent (55%) of those who traveled 10,000 miles or less in the previous year believed arrest was likely, compared to 45% of those who traveled more. However, because gender and miles driven were correlated (males tended to drive more miles), males and females were analyzed separately in order to isolate the effect of miles driven. The relationship between miles driven and the perception that driving impaired would result in arrest persisted only for males; 53% of males who drove 10,000 or fewer miles the previous year thought driving while impaired would result in arrest, compared to 41% of males who drove more miles

Location also influenced the perception that arrest was likely for driving while impaired. Those in Ellsworth were the least likely to think it was likely at 39%, while those in Augusta were the most likely at 59%.

The percentage of participants who thought arrest was likely for drinking and driving has remained steady from 2012 to the present.

Believe Driving Impaired Will Result in Arrest, 2011-2019



Impact of Awareness on Drinking and Driving

The purpose of drunk driving campaigns and enforcement details is to decrease the number of drivers who drink and drive in order to ensure public safety. Responses to the survey, however, show no direct correlation between hearing about enforcement of drunk driving laws and rates of drinking and driving; those who heard and those who did not had the same rate of drinking and driving. There was, however, a positive correlation between hearing about enforcement and believing that drinking and driving would result in arrest. Forty-four percent (44%) of those who did not hear a message within the past 60 days thought arrest was likely, compared to 53% of those who did hear a message.

Eight percent (8%) of those who thought arrest was likely drank and drove, compared to 16% of those who thought arrest was not likely.

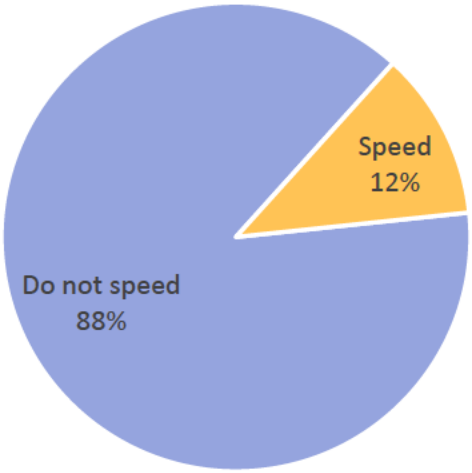
Furthermore, there was a negative association between believing arrest was likely and drinking and driving. Eight percent (8%) of those who thought arrest was likely drank and drove, compared to 16% of those who thought arrest was not likely. Thus, it appears that hearing about enforcement may have an indirect effect on drinking and driving. Those who hear about enforcement are more likely to think drinking and driving will result in arrest, and those who believe arrest is likely are less likely to drink and drive.

Speeding

Survey participants were asked several questions about speeding. They were asked about the frequency of speeding, they were asked whether they saw or heard any messages about police enforcement of speeding laws, and they were asked how likely they thought it was that they would get a ticket if they drove over the speed limit.

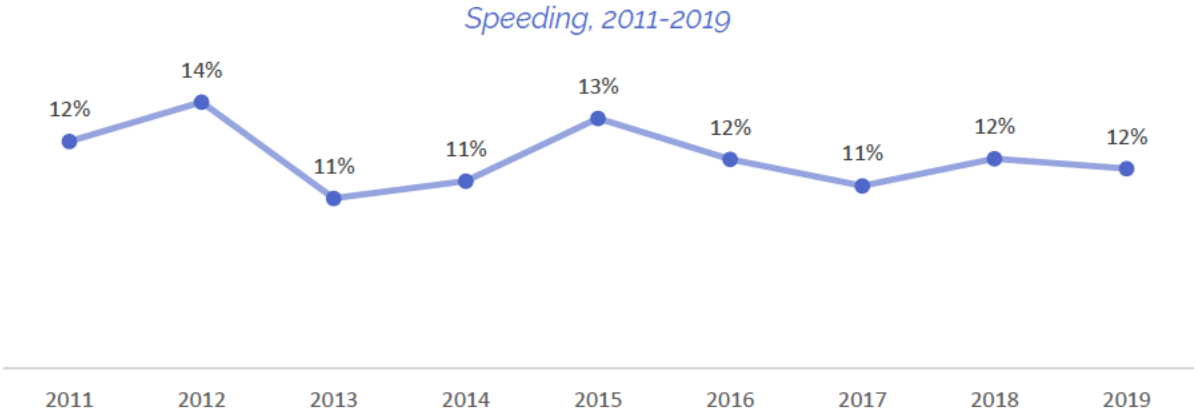
Frequency of Speeding

The survey asked participants how often, on a local road with a speed limit of 30 mph, they drove faster than 35 miles per hour. Participants could choose from the following answers: *always, nearly always, sometimes,* and *never.* Almost all participants (98.6%) answered this question, and 12% of those who did reported that they *always* or *nearly always* speed under those conditions. Those who provided these two answers—*always* and *nearly always*—are counted as speeding throughout the remainder of this report.



Speeding Trends

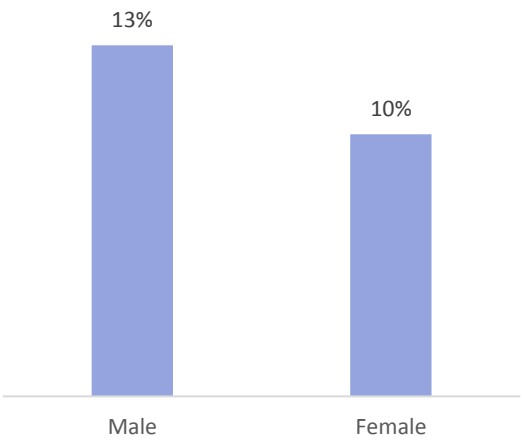
The rates of speeding have remained relatively steady from 2013 to the present, ranging between 11% and 13%.



Speeding rates varied depending on a number of driver attributes.

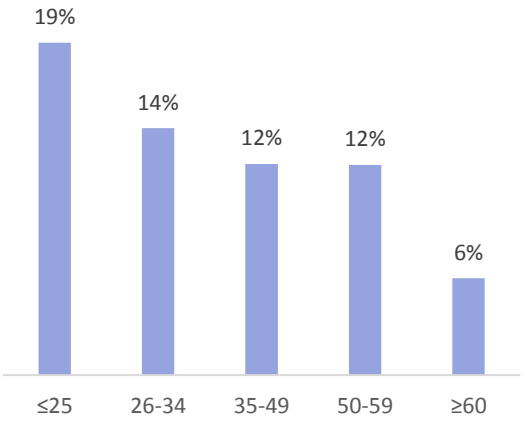
Gender

Males were more likely to speed than females. Approximately 13% of males reported speeding, while 10% of females did.



Age

Speeding decreased with age. Nineteen percent (19%) of participants who were 25 years of age and younger reported speeding, 14% of participants who were 26 to 34 years of age reported speeding, 12% of those 35 to 59 reported speeding, and only 6% of those 60 and older reported doing so.



Miles Driven

Speeding was more likely for those who drove more than 10,000 miles the previous year. Fourteen percent (14%) of these participants reported speeding compared to 9% of those who reported driving fewer miles the previous year.

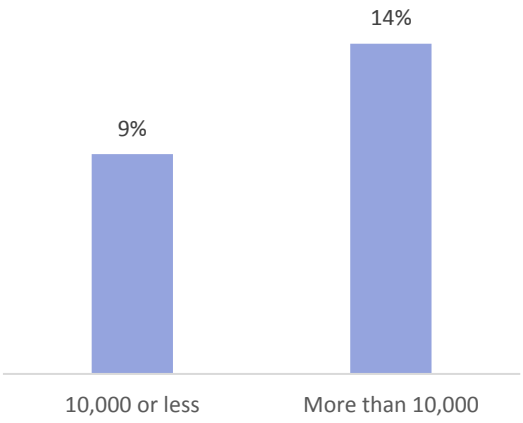


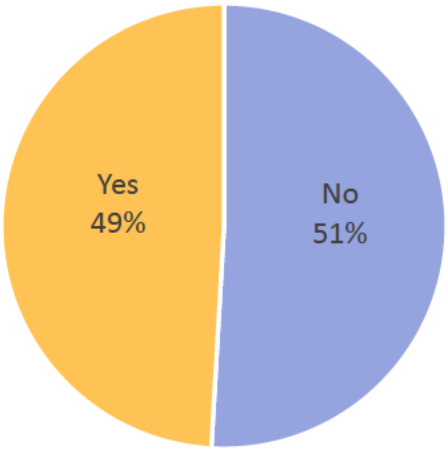
Table 7: Self-Reported Speeding

	N	*Always* or *Nearly Always*	
		Point Estimate	Confidence Interval
Gender†			
Male	876	13.2%	10.8% - 15.5%
Female	860	9.9%	7.7% - 11.9%
Age*			
≥25	277	19.1%	14.0% - 23.8%
26-34	211	14.2%	8.8% - 18.9%
35-49	411	12.2%	8.6% - 15.3%
50-59	322	12.1%	8.1% - 15.7%
60+	520	5.6%	3.3% - 7.5%
Miles Driven Last Year†			
Less than 5,000	308	8.8%	5.1% - 11.9%
5,000 to 10,000	470	9.4%	6.4% - 12.0%
10,001 to 15,000	478	12.1%	8.9% - 15.1%
More than 15,000	485	15.3%	11.7% - 18.5%
Heard Message About Speed Enforcement†			
Yes	856	9.9%	7.7% - 11.9%
No	888	13.4%	11.0% - 15.6%
Chances of Getting a Ticket If Speeding†			
Always or nearly always	573	8.4%	5.8% - 10.6%
Sometimes, seldom, or never	1,169	13.3%	11.2% - 15.2%

* $p < .001$
† $p < .05$

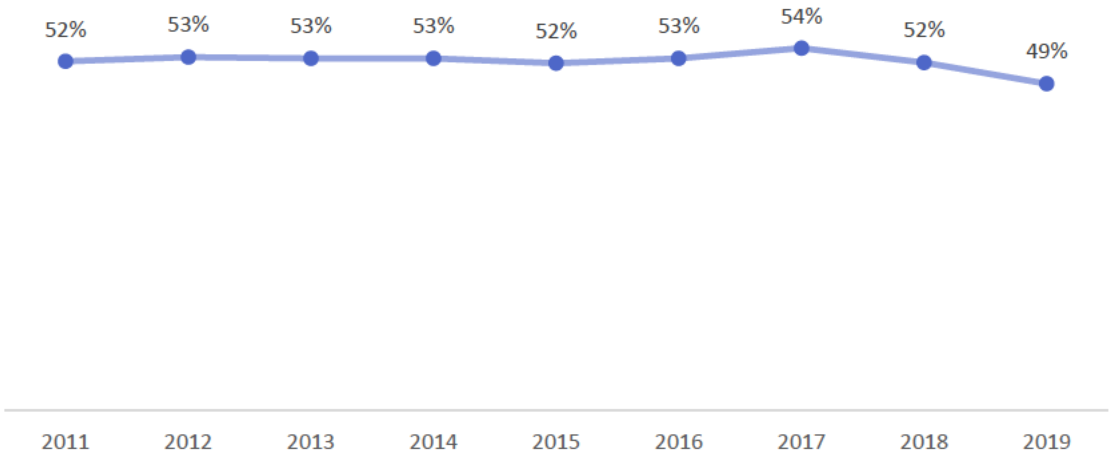
Awareness of Speeding Enforcement

The survey asked participants if, within the past 60 days, they had seen or heard about extra enforcement of speeding laws. Almost all participants (98.9%) answered this question, and about half of those who did (49%) reported having seen or heard something. This rate did not vary by gender, age, miles driven, vehicle type, or location.



While the proportion of participants who heard about extra enforcement of speeding laws in the current year appears to have decreased slightly compared to recent years, the 2019 rate of 49% is not statistically significantly different from 2018's rate of 52%.

Awareness of Extra Enforcement of Speeding Laws, 2011-2019



Perception of the Likelihood of Getting a Ticket

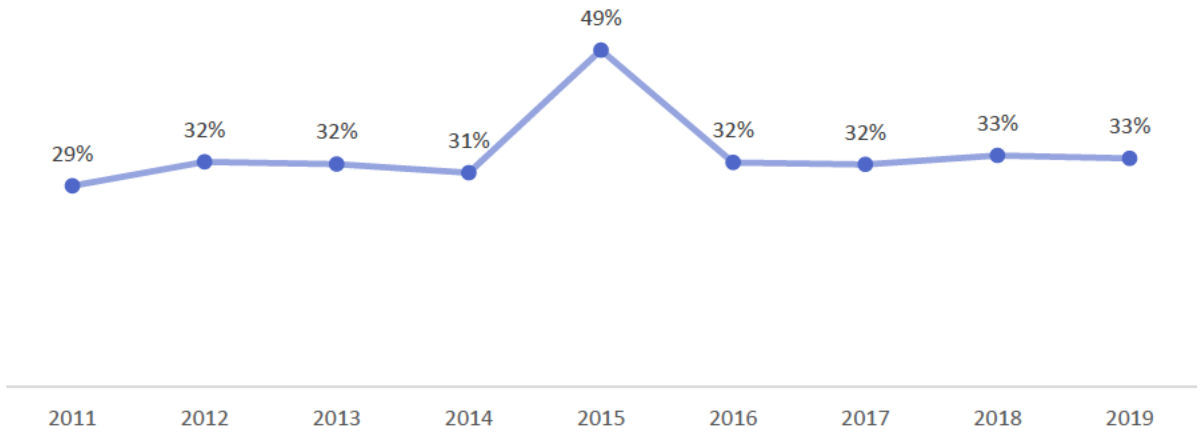
Survey participants were asked to report the likelihood of getting a ticket if they drove over the speed limit by selecting one of the following answers: *always, nearly always, sometimes, seldom,* and *never.* Almost all participants answered this question (98.8%), and of those who did, 33% reported that they believed they would *always* or *nearly always* get a ticket. Those who provided one of these two answers—*always* and *nearly always*—are counted as believing a ticket is likely throughout the remainder of this report.

Females were more likely than males to believe that driving over the speed limit would result in a ticket. Thirty-seven percent (37%) of females believed so, compared to 28% of males. Likewise, younger participants were more likely than older ones to believe speeding would result in a ticket; 37% of those 49 and younger believed speeding would result in a ticket compared to 28% of those 50 years of age and older. Miles driven also influenced the belief that speeding would result in a ticket but only among males. Thirty-four percent (34%) of males who drove 10,000 miles or less believed that driving over the speed limit would result in a ticket, while 25% of males who drove more than 10,000 miles believed so. Location also influenced perceptions. At 41%, participants from Augusta were the most likely to believe that driving over the speed limit would result in a ticket, while those from Ellsworth were the least likely to believe so at 22%.

Thirty-three percent (33%) of participants reported that they believed a ticket was likely if they drove over the speed limit.

The percentage of participants who though a ticket was likely for speeding has remained steady over the years with the exception of 2015.

Believe Speeding Will Result in a Speeding Ticket, 2011-2019



Impact of Awareness on Speeding

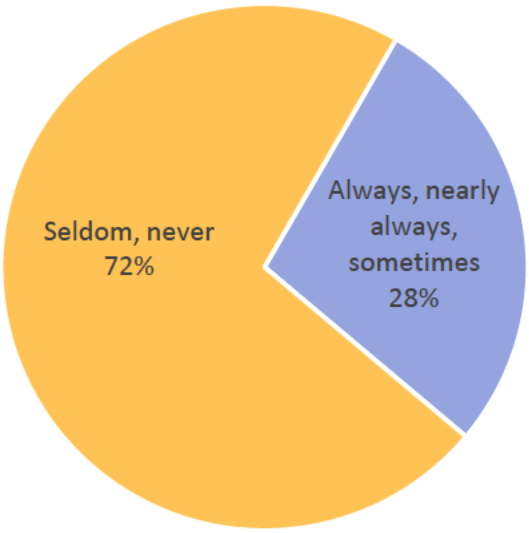
Hearing about enforcement of speeding laws was negatively correlated with speeding. That is, those who reported hearing about enforcement were less likely to speed than those who reported not hearing at 10% and 13%, respectively. Likewise, those who thought speeding would likely result in a ticket were less likely to speed compared to those who thought speeding would not result in a ticket at 8% and 13%, respectively.

Distracted Driving

Survey participants were asked two question about distracted driving.

Frequency of Talking on Hand-Held Device While Driving

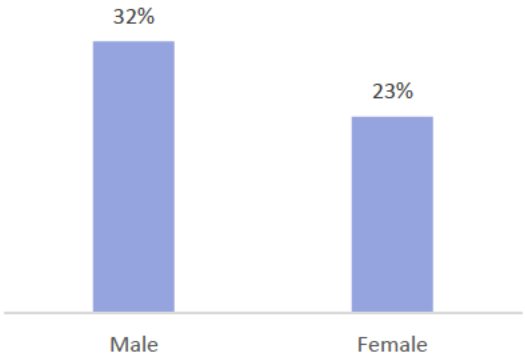
Participants were asked how frequently they talk on a hand-held cell phone while driving. Participants could choose from the following answers: *always, nearly always, sometimes, seldom,* and *never.* Almost all participants (99.0%) answered this question, and of those who did, 28% reported that they *sometimes, nearly always,* or *always* talk on a hand-held cell phone while driving. Those who provided these three answers—*sometimes*, *nearly always*, or *always*—are counted as talking on a hand-held cell phone throughout the remainder of this report.



Rates of talking on a hand-held cell phone while driving varied depending on a number of driver attributes.

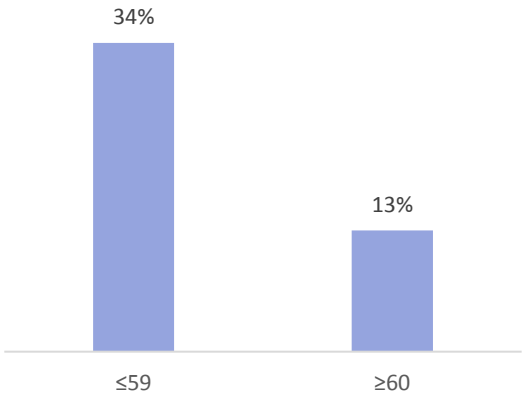
Gender

At 32%, males were more likely to talk on a hand-held cell phone while driving than females at 23%.



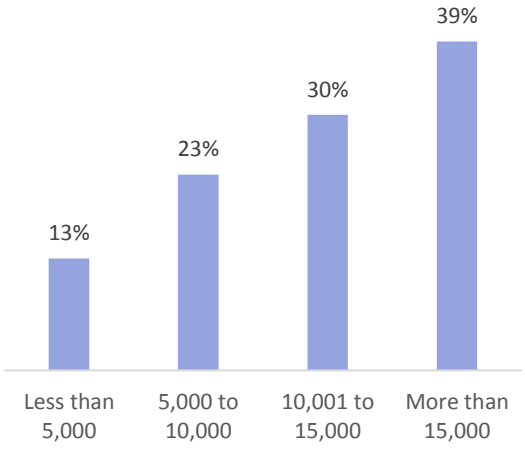
Age

Participants from the oldest age group reported the lowest rate of talking on a hand-held cell phone while driving at 13% compared to the remainder of survey participants, with rates ranging from 32% to 35%.



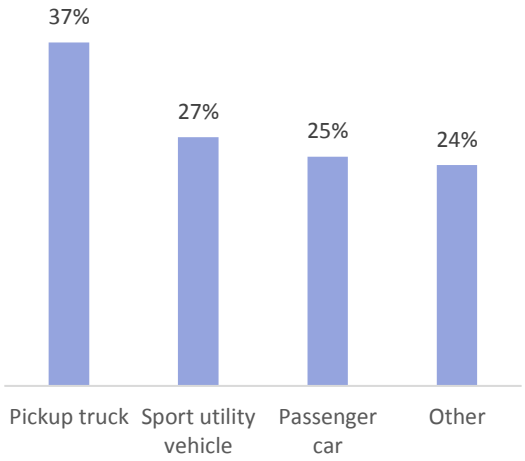
Miles Driven

Participants who drove more miles were more likely to talk on a hand-held cell phone while driving. Thirteen percent (13%) of those who drove less than 5,000 the previous year reported talking on a hand-held phone while driving, compared to 23% of those who drove 5,000 to 10,000 miles, and 30% who drove 10,001 to 15,000 miles. Those who drove more than 15,000 miles the previous year had the highest rate, at 39%.



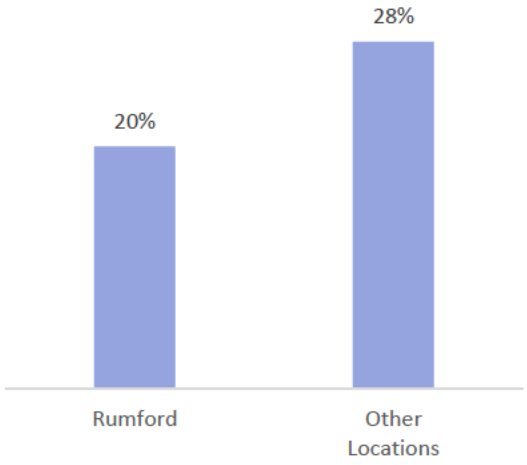
Type of Vehicle

At 37%, pickup truck drivers were more likely than other drivers to talk on hand-held cells while driving. Rates for other drivers ranged from 24% to 27%.



Location

At 20%, participants in Rumford were less likely than other drivers to talk on hand-held cells while driving. Rates for participants from other locations ranged from 25% to 33%.



Talking on Hand-Held Device While Driving Trend

The proportion of those who reported talking on a hand-held cell phone *sometimes, nearly always,* or *always* decreased by 13 percentage points between 2011 and 2019. While some of this change is likely attributable to increased public awareness of the dangers of cell phone use while driving, some of the change is likely attributable to technological advances that have made hands-free cell phone use possible in a greater number of vehicles.

Talking on Hand-Held Device While Driving, 2011-2019

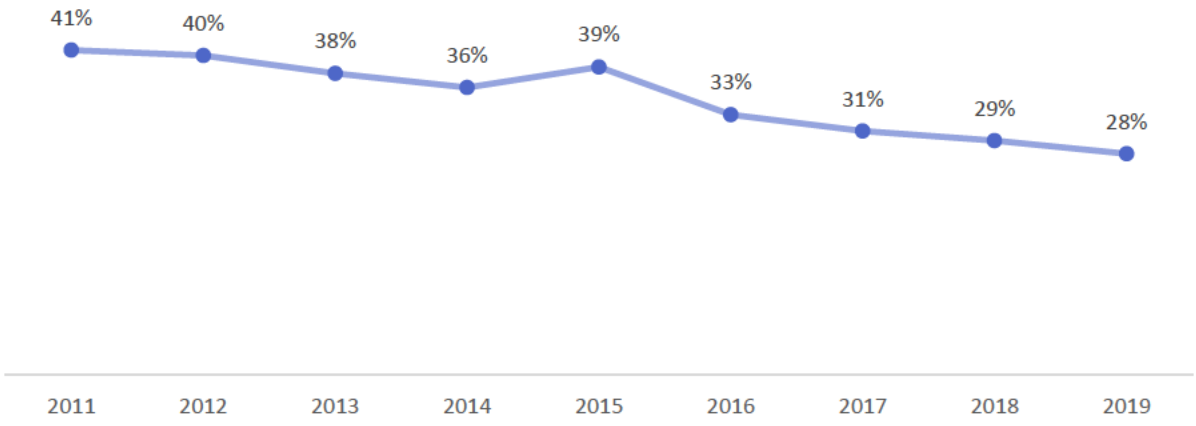


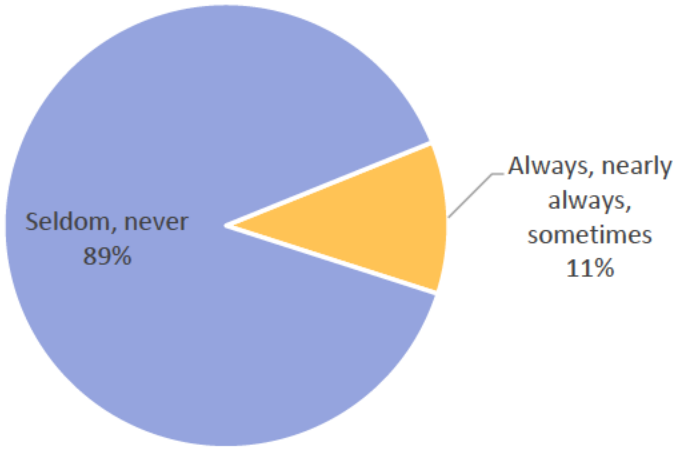
Table 8 : Self-Reported Talking on Hand-Held Cell While Driving

	N	*Always, Nearly Always* or *Sometimes*	
		Point Estimate	Confidence Interval
Gender†			
Male	878	32.2%	29.0% - 35.3%
Female	862	23.3%	20.3% - 26.1%
Age†			
≥25	276	33.7%	27.7% - 39.3%
26-34	213	34.7%	27.8% - 41.1%
35-49	413	35.4%	30.4% - 40.0%
50-59	322	32.3%	26.8% - 37.4%
60+	523	13.4%	10.2% - 16.3%
Miles Driven Last Year†			
Less than 5,000	308	13.3%	9.0% - 17.1%
5,000 to 10,000	473	23.3%	19.1% - 27.1%
10,001 to 15,000	481	30.4%	26.0% - 34.5%
More than 15,000	486	39.1%	34.5% - 43.4%
Vehicle Driven Most Often†			
Other	131	23.7%	15.3% - 30.9%
Passenger car	789	24.6%	21.4% - 27.6%
SUV	435	26.7%	22.2% - 30.8%
Pickup truck	334	36.8%	31.3% - 42.0%
Location			
Rumford	141	19.9%	12.3% - 26.4%
Bangor	221	25.3%	19.0% - 31.1%
Augusta	274	26.3%	20.6% - 31.5%
Kennebunk	215	27.4%	20.9% - 33.4%
Rockland	189	29.1%	21.9% - 35.6%
Ellsworth	197	29.4%	22.4% - 35.8%
Scarborough	282	29.4%	23.7% - 34.8%
Portland	240	32.5%	26.1% - 38.4%

* $p < .05$
† $p < .001$

Frequency of Texting on Hand-Held Device While Driving

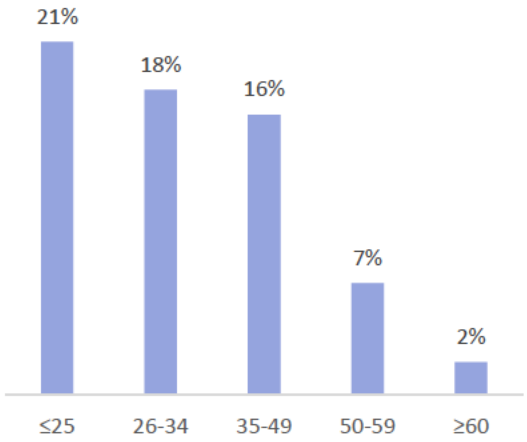
Participants were asked how frequently they text on a hand-held cellular phone while driving. Participants could choose from the following answers: *always, nearly always, sometimes, seldom,* and *never.* Almost all participants answered this question (99.2%) and of those who did, 11% reported that they *sometimes, nearly always,* or *always* text on a hand-held cell phone while driving. Those who provided these three answers—*sometimes*, *nearly always*, or *always*—are counted as texting on a hand-held cell phone throughout the remainder of this report.



Rates of texting on a hand-held cell phone while driving varied depending on a number of driver attributes.

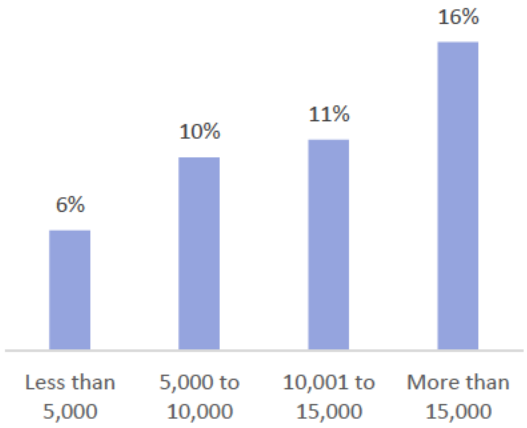
Age

Younger participants were more likely to text on a hand-cell cell phone while driving. At 21%, participants 25 and younger reported the highest rates of texting while driving, followed by those 26 to 34 at 18%, those 35 to49 at 16%, and those 50 to 59 at 7%. Those 60 years of age and older had the lowest rate at 2%.



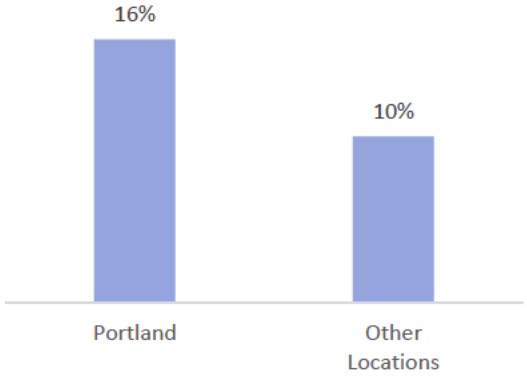
Miles Driven

Participants who drove more miles were more likely to text on a hand-held cell phone while driving. Six percent (6%) of those who drove fewer than 5,000 miles the previous year reported texting and driving, followed by those who drove 5,000 to 10,000 miles at 10%, those who drove 10,001 to 15,000 miles at 11%, and those who drove more than 15,000 miles at 16%.



Location

At 16%, participants from Portland were more likely to text on a hand-held cell while driving compared to participants from other locations at 10%.



Texting on Hand-Held Device While Driving Trend

The proportion of those who reported texting on a hand-held cell phone remained unchanged from 2017 to 2019 at 11%.

Texting on Hand-Held Device While Driving, 2011-2019

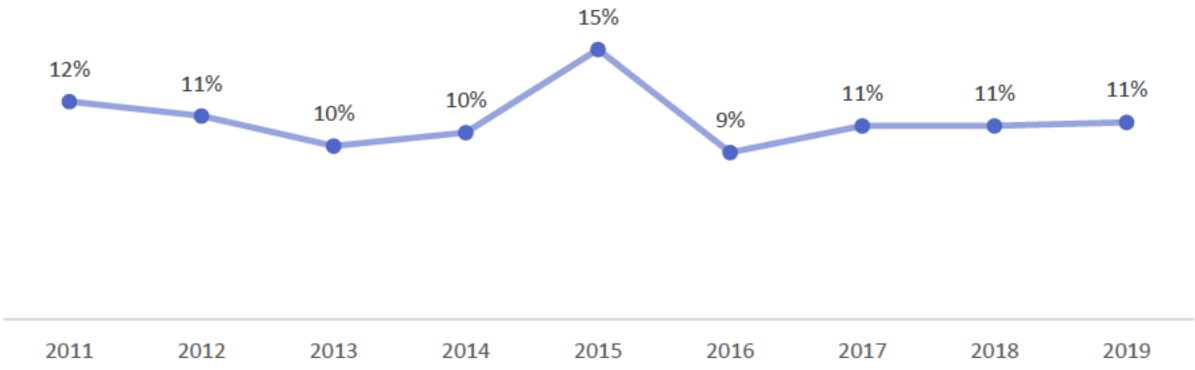


Table 9 : Self-Reported Texting on Hand-Held Cell While Driving

	N	*Always, Nearly Always,* or *Sometimes*	
		Point Estimate	Confidence Interval
Age†			
≥25	276	20.7%	15.4% - 25.4%
26-34	213	17.8%	12.0% - 23.0%
35-49	415	16.4%	12.5% - 19.9%
50-59	322	6.5%	3.3% - 9.2%
60+	524	1.9%	0.4% - 3.1%
Miles Driven Last Year†			
Less than 5,000	308	6.2%	2.9% - 8.9%
5,000 to 10,000	475	9.9%	6.9% - 12.6%
10,001 to 15,000	481	10.8%	7.7% - 13.6%
More than 15,000	487	15.8%	12.3% - 19.1%
Location			
Kennebunk	216	7.4%	3.2% - 10.9%
Rumford	141	7.8%	2.3% - 12.2%
Ellsworth	197	8.6%	3.9% - 12.6%
Augusta	275	10.2%	6.0% - 13.8%
Bangor	221	10.9%	6.0% - 15.0%
Rockland	189	12.2%	6.7% - 16.8%
Scarborough	283	13.1%	8.6% - 17.0%
Portland	240	16.3%	11.0% - 20.9%

* $p < .05$
† $p < .001$

Appendix

Survey appears in its entirety on the following page.

This Driver Licensing Office is assisting in a vehicle safety study. Your answers to the following questions are voluntary and anonymous. Please complete the survey and then put it in the drop box.

---

1. Your sex: ☐ Male ☐ Female
2. Your age: ☐ Under 18 ☐ 18-25 ☐ 26-34 ☐ 35-49 ☐ 50-59 ☐ 60 Plus
3. Your Zip Code: _____
4. About how many miles did you drive last year?
   ☐ Less than 5,000 ☐ 5,000 to 10,000 ☐ 10,001 to 15,000 ☐ More than 15,000
5. What type of vehicle do you drive most often?
   ☐ Passenger car ☐ Pickup truck ☐ Sport utility vehicle ☐ Minivan ☐ Full van ☐ Other
6. How often do you use seat belts when you drive or ride in a car, van, sport utility vehicle or pickup?
   ☐ Always ☐ Nearly always ☐ Sometimes ☐ Seldom ☐ Never
7. Compared to the last couple of years, would you say you now wear your seat belt:
   ☐ Much less often ☐ Less often ☐ About the same ☐ More often ☐ Much more often
8. What do you think the chances are of getting a ticket if you don't wear your seat belt?
   ☐ Always ☐ Nearly always ☐ Sometimes ☐ Seldom ☐ Never
9. In the past 60 days, have you seen or heard about extra enforcement where police were looking at seat belt use?
   ☐ Yes ☐ No

   If yes, where did you see or hear about it? (Check all that apply):
   ☐ Newspaper ☐ Radio ☐ TV ☐ Poster ☐ Web site ☐ Police checkpoint ☐ Other _____

   If yes, what did it say:
   ☐ Click It or Ticket ☐ Drive Sober or Get Pulled Over ☐ Buckle Up, No Excuses!
   ☒ Survive Your Drive ☐ Other _____
10. In the past 60 days, how many times have you driven a motor vehicle within 2 hours after drinking alcoholic beverages? _____ (number of times)
11. In the past 60 days, have you read, seen or heard anything about police enforcement of alcohol impaired driving (or drunk driving) laws? ☐ Yes ☐ No
12. What do you think the chances are of someone getting arrested if they drive after drinking?
    ☐ Always ☐ Nearly always ☐ Sometimes ☐ Seldom ☐ Never
13. On a local road with a speed limit of 30 mph, how often do you drive faster than 35 mph?
    ☐ Always ☐ Nearly always ☐ Sometimes ☐ Seldom ☐ Never
14. In the past 60 days, have you read, seen or heard anything about police enforcement of speed laws?
    ☐ Yes ☐ No
15. What do you think the chances are of getting a ticket if you drive over the speed limit?
    ☐ Always ☐ Nearly always ☐ Sometimes ☐ Seldom ☐ Never
16. How often do you talk on a hand-held cellular phone when you drive?
    ☐ Always ☐ Nearly always ☐ Sometimes ☐ Seldom ☐ Never
17. How often do you send text messages or emails on a hand-held cellular phone when you drive?
    ☐ Always ☐ Nearly always ☐ Sometimes ☐ Seldom ☐ Never

About the Muskie School of Public Service

The Muskie School of Public Service is Maine's distinguished public policy school, combining an extensive applied research and technical assistance portfolio with rigorous undergraduate and graduate degree programs in geography-anthropology; policy, planning, and management (MPPM); and public health (MPH). The school is nationally recognized for applying innovative knowledge to critical issues in the fields of sustainable development and health and human service policy and management, and is home to the Cutler Institute for Health and Social Policy.

About the Survey Research Center

The Survey Research Center provides technical expertise and assistance to support the generation, processing, and analysis of quantitative data in the social sciences, human services, and public opinion fields. The Center provides a wide range of research and technical assistance services to federal, state, and municipal governments, private nonprofit agencies, businesses, and University faculty and departments. Services include proposal preparation, market research, needs assessments, program evaluation, policy analysis, and information system design

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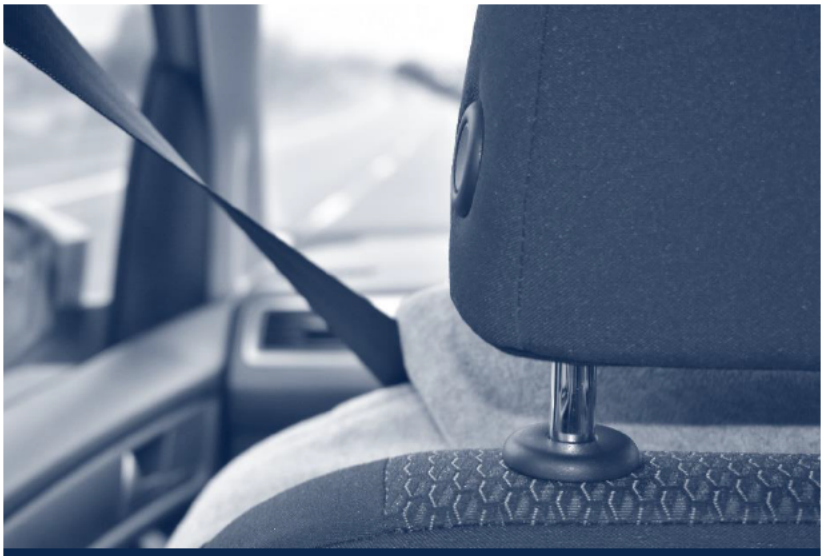
UNIVERSITY OF SOUTHERN MAINE
Muskie School of Public Service

Safety Belt Use in Maine 2019



Survey Research Center
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Contents

EXECUTIVE SUMMARY

In Maine, seatbelts saved approximately 69 lives a year over the last decade, a total of 688 lives, and could have saved 204 more. This report summarizes the results from the 2019 seatbelt observation study conducted to determine the current level of compliance in Maine.

- Overall, 88.5% of occupants (drivers and front seat passengers) were belted
- Females were more likely to use seatbelts than males; 91.7% of females were belted compared to 85.6% of males.
- Passengers were more likely to use seatbelts than drivers; 90.9% of passengers were belted compared to 88.1% of drivers.
- Female passengers were more likely than female drivers to use seatbelts (93.3% vs. 91.2%, respectively) while male passengers and male drivers were equally likely to use seatbelts (84.6% and 85.8%, respectively).
- There was no difference in seatbelt use by urban/rural designation.
- Drivers of SUV's were the most likely to be belted at 92.5%, followed by drivers of cars and vans at similar rates of 89.6% and 88.9%, respectively. Drivers of pickup trucks were the least likely to be belted, at 79.1%.
- Passengers' use of seatbelts was correlated with drivers' use of seatbelts—94.7% of passengers riding with belted drivers were likewise belted while only 46.2% of passengers riding with unbelted drivers were belted.
- Seatbelt use was highest from 7:00 AM to 8:59 AM and lowest from 1:30 PM to 3:29 PM.
- While seatbelt use was highest on Tuesdays (90.8%) and lowest on Fridays (87.7%), there is no apparent pattern to the variation of rates among days.
- Seatbelt use was highest during rainy weather (90.8%) compared to use during sunny/clear weather and cloudy weather at 89.0% and 87.8%, respectively.
- Maine ranked 32 out of the 51 states/districts reporting in 2018.

INTRODUCTION

Seatbelts save lives. According to a recent study, the use of seatbelts cuts the risk of crash fatalities by 45% for front seat occupants in passenger cars and by 60% for front seat occupants in pickup trucks, SUV's, vans and minivans.[1] Nationally, seatbelts saved the lives of 14,955 people ages 5 and older in 2017.[2] In Maine, seatbelts saved approximately 69 lives a year over the last decade, a total of 688 lives, and could have saved 204 more.[3]

Nationally, about 89.6% of all motorists now use seatbelts,[4] but in Maine the rate remains lower. While Maine's rate has increased over the years, the national rate has likewise increased and the gap persists. Efforts to close that gap include a mandatory seatbelt law for adults that went into effect in 1996 and a primary enforcement law that went into effect in 2007. From 2009 to 2018, Maine's national rank ranged between 25 out of 51 states/territories (in 2012) to 40 (in 2011). Most recently, its rank was 32.[5]

For a number of years, the Maine Bureau of Highway Safety has contracted with external partners to conduct observation studies of seatbelt use in Maine in order to determine the level of compliance in the state. The first of these studies was conducted in 1986 by Northeast Research for the School of Public Health of the Boston University Medical School.[6] The next four were conducted by the Muskie School's Survey Research Center (SRC).[7] The 2002 study was completed by CSI® Santa Rita Research Center.[8] All studies conducted from 2003 on have been conducted by the Muskie School's SRC.

This report summarizes the results from the 2019 study and presents comparisons with past years' findings. The findings from these studies are the official measure of seat belt use in Maine and are used in the annual highway safety plans submitted to the National Highway Traffic Safety Administration (NHTSA), which are used to determine funding. The current study design incorporates the standardized requirements developed by NHTSA in an effort to ensure reliability and comparability of findings between each of the states. It was approved by NHTSA on February 14, 2017.

METHODOLOGY

Changes

In 2012, a number of methodological changes were introduced to the observation study. These include changes in the protocol for selecting the counties of observations based on traffic fatalities rather than population, the development of 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, these changes mean that direct comparison with previous years' studies must be made with caution.

The biggest methodological change in 2012 was the new protocol for selecting counties for observation. In previous years, selection was based on population. NHTSA guidelines allowed for the selection of counties having a combined population equal to 85% of the state population. In 2012, the focus shifted to fatalities; 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. This change increased the number of counties to be included from 10 to 12. These 12 counties represent 90% of all traffic fatalities in Maine. Nine of the 10 counties chosen prior to this change were included in the new design. (See Appendix A for sites.)

The next biggest change in methodology was the use of 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 7 in Knox to 18 in Cumberland, 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.

In keeping with the 2012 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 were allowed. Large commercial vehicles (generally, those with more than 4 wheels) are still excluded.

Road Sections

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 the seatbelt use of front seat occupants in each vehicle. Observers were given descriptions of the road segment to observe (e.g., "in Auburn, on Minot Avenue, between Heath Lane and Garfield Road"). They were also told which direction of traffic to observe. They then were able to find the most advantageous spot on the road segment from which to observe. They were instructed to only include vehicles that had actually passed through the first identifier of the description (in the example above, the intersection of Minot Avenue and Heath Lane). Observations were conducted from a single point on each segment. In all, observations of 14,746 passenger vehicles were made, and the use or nonuse by 17,572 occupants was recorded.

Sampling

The sites to be observed were selected by the Preusser Research Group of Trumbull, CT. 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 0.880% and a relative standard error of 0.994%, 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. The findings in this report are based on weighted data unless otherwise stated.

Observation Days and Times

This observation study was conducted from June 3 to June 16, immediately following a high visibility enforcement and awareness campaign. While it seems likely that these campaigns may temporarily boost people's likelihood of using safety belts, a study conducted by the SRC in September of 2009, three months after the campaign ended, found only a slight drop off in rates relative to the summer rates of that same year.

Observations were made for 45 minutes at each location, on a structured schedule of 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 (3 lanes x 15 minutes = 45 minutes, the full observation period).

Observer Training

Observers were trained by Katie Raboin 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.

FINDINGS

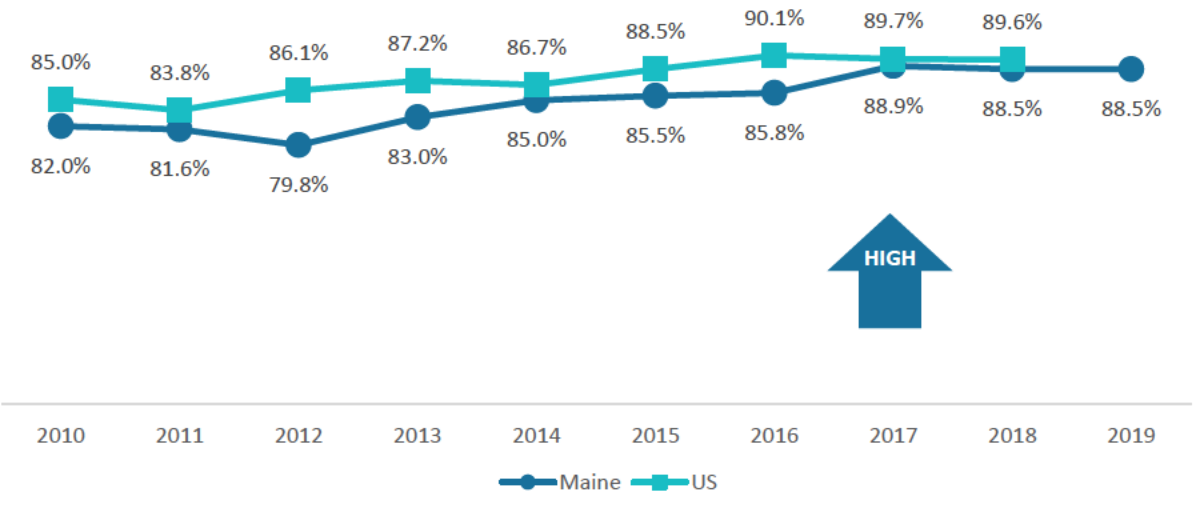
Overview

A total of 14,746 vehicles and 17,747 occupants (defined here as drivers and front seat occupants) were observed for seatbelt use. A small proportion of these observations (<1%) were inconclusive—observers could not determine whether occupants were belted. Results here are based on the remaining observations (n=17,572).

In 2019, 88.5% of occupants were belted. While this is an increase of 6.5 percentage points over the 2010 rate, the current rate is unchanged from the 2018 rate and is slightly lower than the 2017 rate of 88.9%. Maine is not alone in the failure to increase its rate; while the national rate for 2019 is not yet available, national rates have not increased since 2016 when the national rate reached its high of 90.1%. Maine reached its high one year later, at 88.9%

Overall Seatbelt Use	
Lap/Shoulder Belts (n=17,572)	88.5%

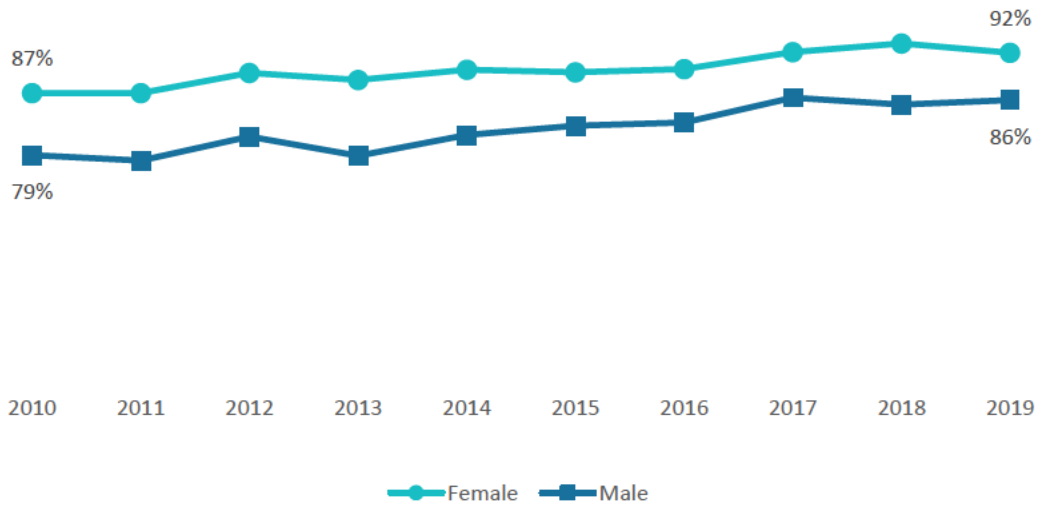
N Vehicles = 14,746



Gender

Females continue to use seatbelts at a higher rate than males. While 91.7% of all female occupants were restrained in the current study, only 85.6% of males were. Both males and females have increased their rates of use over the past 10 years, but males have increased at a slighter higher rate, closing the gap between the genders from 8 percentage points in 2010 to 6 percentage points in 2019. More recently, rates have not increased. The 2019 rates for both males and females were statistically similar to 2017 rates.

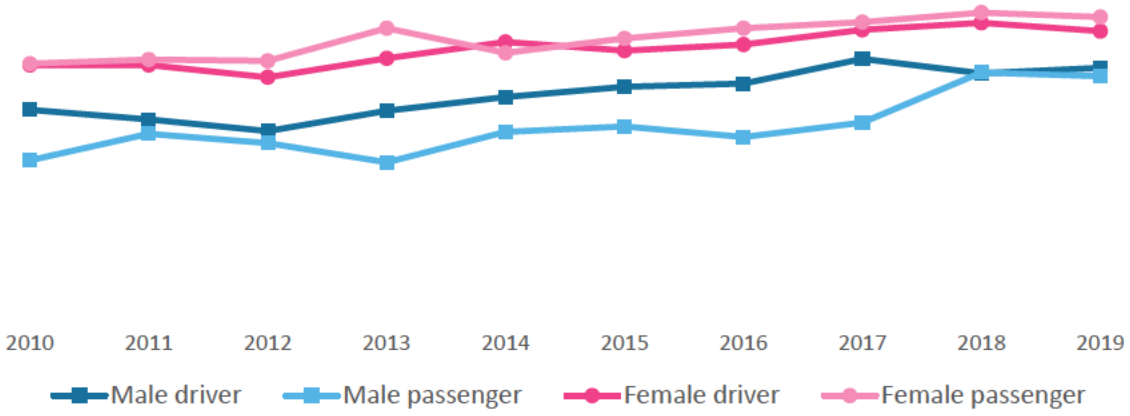
Seatbelt Use by Gender	
Female (N=7,936)	91.7%
Male (N=9,527)	85.6%



Seating Position

In 2019, more passengers than drivers were wearing seatbelts—90.9% of passengers were belted compared to 88.1% of drivers. However, when seating position was looked at separately for males and females, the difference persisted only for females. While 93.3% of female passengers were wearing seatbelts, 91.2% of female drivers were. The rates for male drivers and passengers were similar, at 85.8% and 84.6%, respectively. This is a change from previous years; historically, male passengers have been the least likely to use seatbelts; this held true for six out of the past ten years.

Seatbelt Use by Seat Position and Gender	
Male driver (N=8,666)	85.8%
Male passenger (N=861)	84.6%
Female driver (N=5,853)	91.2%
Female passenger (N=2,083)	93.3%
All drivers (male, female, and unknown) (N=14,591)	88.1%
All passengers (male, female, and unknown) (N=2,981)	90.9%

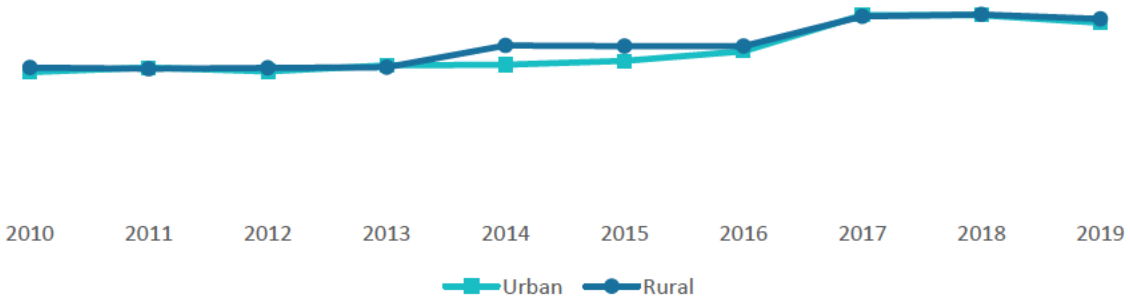


Urban/Rural Location

The belt use rate in rural locations was essentially the same as that of urban locations, at 89.5% and 89.1%, respectively. This has been true for the past 10 years as well, with the exception of two years, 2014 and 2015. (Note: Rates are based on unweighted data.)

Seatbelt Use by Urban and Rural Location	
Urban (N=5,272)	89.1%
Rural (N=11,722)	89.5%

Note: Rates are based on unweighted data.

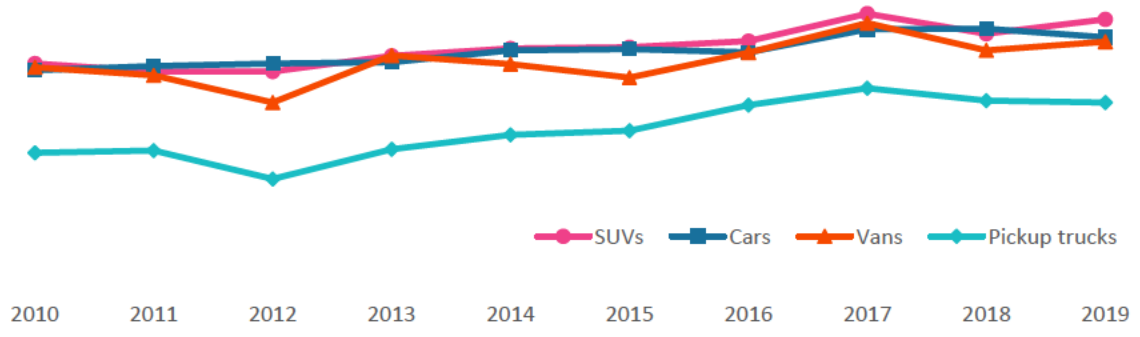


Type of Vehicle

Seatbelt use varied greatly by vehicle type. Drivers of SUV's were the most likely to be belted at 92.5%, followed by drivers of cars and vans at similar rates of 89.6% and 88.9%, respectively. At 79.1%, drivers of pickup trucks were the least likely to be belted. While the driver rates of SUV's, cars, and vans have fluctuated and shifted position over the past 10 years, they have remained higher than those of pickup truck drivers. The gap has closed slightly, however—there was a 14 percentage point gap between pickup truck drivers and drivers of other vehicles in 2010 and a 12 percentage point gap in 2019.

In 2019, both male and female drivers of pickup trucks were belted at lower rates (78% and 82%) compared to male and female drivers of other vehicles (90% and 91%). Interestingly, male and female seatbelt rates are similar after controlling for vehicle type. That is, male and female drivers of pickup trucks are belted at similar rates and male and female drivers of all other vehicles are belted at similar rates. Males, however, are much more likely to drive pickup trucks compared to females; 31% of male drivers were driving pickup trucks compared to 6% of female drivers.

Seatbelt Use of Driver by Type of Vehicle	
SUV (N=5,089)	92.5%
Car (N=5,326)	89.6%
Van (N=1,108)	88.9%
Truck (N=3,068)	79.1%

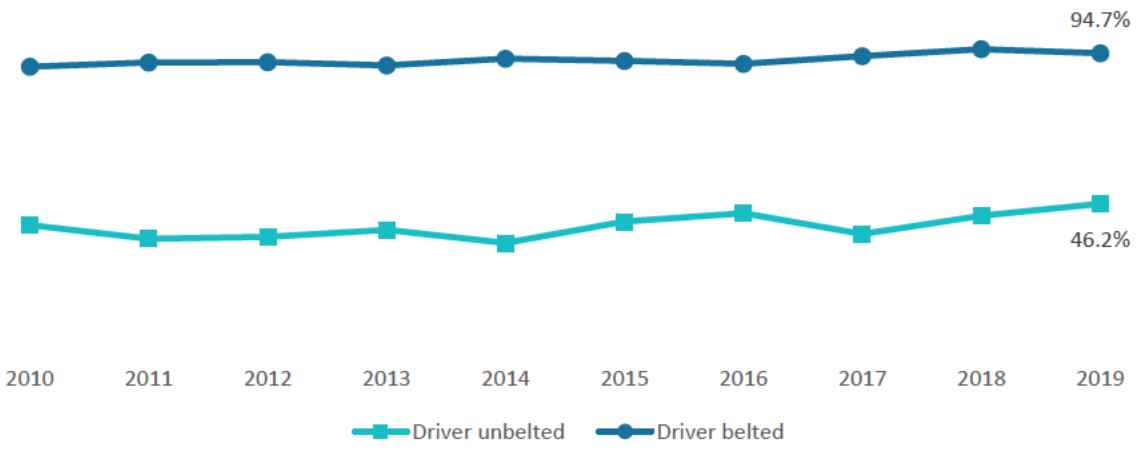


Passenger Use Related to Use by Driver

While 91% of passengers were belted, the rate varies depending on whether the vehicle driver was belted. Passengers riding with belted drivers were much more likely to be belted themselves; 94.7% of these passengers were belted compared to 46.2% of passengers riding with unbelted drivers. This holds true historically as well—buckling up is and always has been a friend and family affair. (Note: Rates are based on unweighted data.)

Seatbelt Use of Passenger by Driver Seatbelt Use	
Driver wearing seatbelt (N=2,760)	94.7%
Driver not wearing seatbelt (N=212)	46.2%

Note: Rates are based on unweighted data.

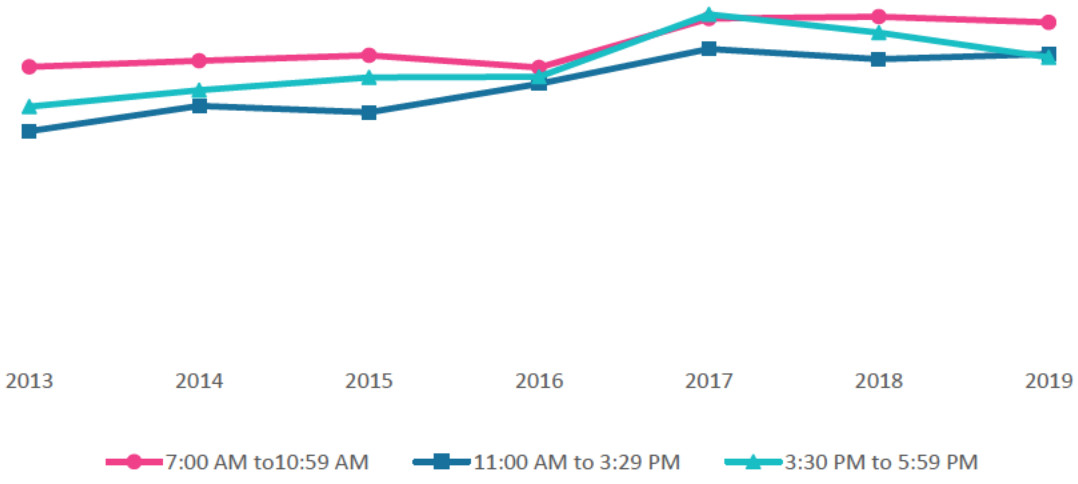


Time of Day

Driver seatbelt use varied depending on time of day. The highest rates were from 7:00AM to 8:59AM (90.1%). The lowest rate occurred between 1:30PM and 3:29PM (86.4%). These rates have shifted somewhat over the years, but overall rates have remained higher in early to late morning (between 7:00AM and 10:59AM) and lower from late morning to mid-afternoon (11:00AM to 3:29PM). Rates for mid-afternoon to early evening (3:30PM to 5:59PM) have fluctuated from low to high. (Note: Rates are based on unweighted data.)

Driver Seatbelt Use by Time of Day		
7:00 AM – 8:59 AM	(N=2,635)	90.1%
9:00 AM – 10:59 AM	(N=3,654)	90.7%
11:00 AM – 1:29 PM	(N=3,322)	89.3%
1:30 PM – 3:29 PM	(N=2,736)	86.4%
3:30 PM – 6:00 PM	(N=2,246)	87.7%

Note: Rates are based on unweighted data.



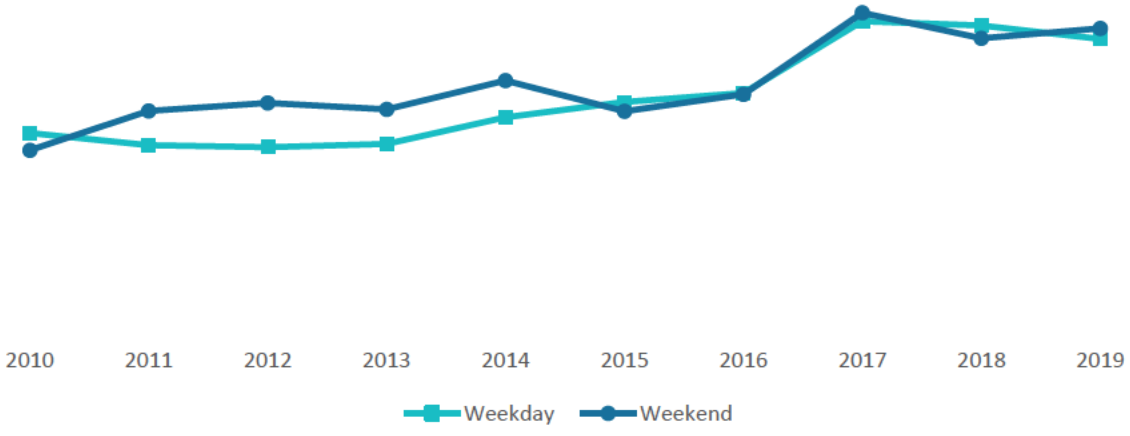
Day of Week

In 2019, seatbelt use was highest among drivers on Tuesdays (90.8%) and lowest on Fridays (87.7%). There is no apparent pattern to the variation of rates among days. From 2011 to 2014, weekend rates were higher than weekday rates, but this has not been the case in more recent years.

(Note: While observations were conducted on all days of the week and the assignment of days and times of observation to the sites was systematic and unbiased, the number of observations obtained on each day varied considerably due to differences in traffic volume. Rates are based on unweighted data.)

Driver Seatbelt Use by Day of the Week	
Sunday (N=1,768)	88.8%
Monday (N=3,080)	88.7%
Tuesday (N=1,849)	90.8%
Wednesday (N=1,538)	88.2%
Thursday (N=1,860)	89.3%
Friday (N=2,544)	87.7%
Saturday (N=1,954)	89.9%

Note: Rates are based on unweighted data.



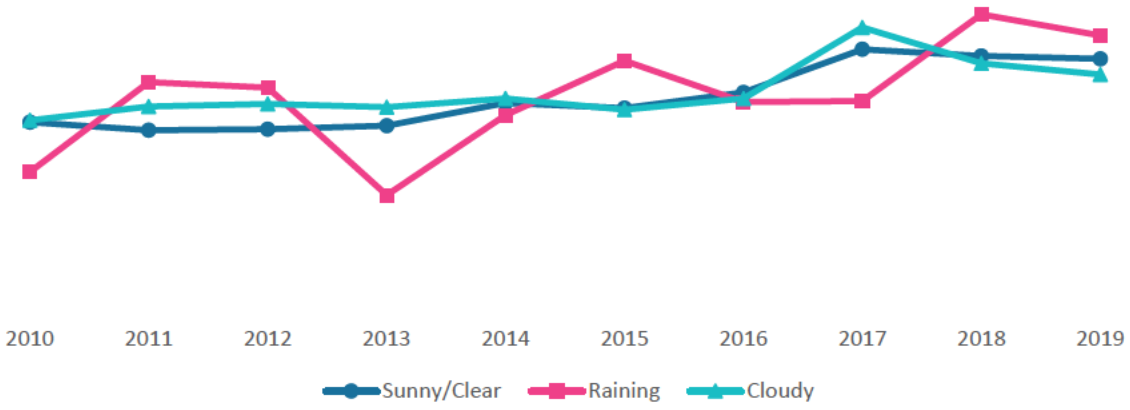
Weather and Road Conditions

Driver seatbelt use varied by weather. It was highest during rainy weather at 90.8%, compared to use during sunny/clear weather and cloudy weather at 89.0% and 87.8%, respectively. The few observations (n=120) that took place in foggy conditions yielded a rate of 88.3%.

In 2019, 67.8% of observations were conducted in sunny weather, 17.6% when it was cloudy, 13.8% during slight rain, and 0.9% in fog. (None took place in during wet/not raining conditions.) Because this distribution varies across the years of this study, trend analysis will focus on rainy, sunny/clear, and cloudy weather, which accounts for at least 93% of observations in any given year. Historically, there has been no difference between seatbelt use during clear and cloudy conditions while use during rainy conditions has varied. (Note: Rates are based on unweighted data.)

Driver Seatbelt Use by Weather Conditions	
Raining (N=1,938)	90.8%
Sunny/Clear (N=9,547)	89.0%
Fog (N=120)	88.3%
Cloudy (N=2,473)	87.8%
Wet/Not Raining (N=0)	0%

Note: Rates are based on unweighted data.



Comparison with Other States

While Maine's use rate has improved substantially over the last decade, other states have also improved. Thus, despite Maine's improvements, it remains below the midpoint in national standings. As of 2018, the last year for which data were available, Maine was 32nd out of the 51 states/districts reporting.[9]

Seatbelt Use Rates Reported by States to NHTSA					
State	2017	2018	State	2017	2018
Alabama	**93%**	**92%**	Montana	78%	87%
Alaska	**90%**	**92%**	Nebraska	86%	86%
Arizona	86%	86%	Nevada	91%	92%
Arkansas	**81%**	**78%**	New Hampshire	68%	76%
California	**96%**	**96%**	New Jersey	**94%**	**95%**
Colorado	84%	86%	New Mexico	**92%**	**90%**
Connecticut	**90%**	**92%**	New York	**93%**	**93%**
Delaware	**91%**	**92%**	North Carolina	**91%**	**91%**
District of Columbia	**94%**	**95%**	North Dakota	79%	83%
Florida	**90%**	**91%**	Ohio	83%	85%
Georgia	**97%**	**96%**	Oklahoma	**87%**	**86%**
Hawaii	**97%**	**98%**	Oregon	**97%**	**96%**
Idaho	81%	85%	Pennsylvania	86%	89%
Illinois	**94%**	**95%**	Rhode Island	**88%**	**89%**
Indiana	**93%**	**93%**	South Carolina	**92%**	**90%**
Iowa	**91%**	**93%**	South Dakota	75%	79%
Kansas	**82%**	**84%**	Tennessee	**89%**	**91%**
Kentucky	**87%**	**90%**	Texas	**92%**	**91%**
Louisiana	**87%**	**87%**	Utah	89%	**89%**
Maine	**89%**	**89%**	Vermont	85%	90%
Maryland	**92%**	**90%**	Virginia	85%	84%
Massachusetts	74%	82%	Washington	**95%**	**93%**
Michigan	**94%**	**93%**	West Virginia	**90%**	**91%**
Minnesota	**92%**	**92%**	Wisconsin	**89%**	**90%**
Mississippi	**79%**	**80%**	Wyoming	85%	86%
Missouri	84%	87%	NATIONWIDE	90%	90%

*Rates in states with primary belt enforcement laws appear in **BOLD**. Primary enforcement allows police to stop and cite motorists simply for not wearing seatbelts. Secondary enforcement requires that another reason be present in order for seatbelt citations to be issued.*

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APPENDIX A: MAINE 2018 OBSERVATION SITE LIST

1. Androscoggin (11)
1. Auburn (6)
2. Lewiston (3)
3. Mechanic Falls (1)
4. Poland (1)

2. Aroostook (11)
1. Dyer Brook (1)
2. Fort Kent (1)
3. Madawaska (3)
4. Masardis (1)
5. New Sweden (1)
6. Presque Isle (3)
7. Sherman (1)

3. Cumberland (11)
1. Brunswick (4)
2. Freeport (1)
3. Harpswell (1)
4. Naples (1)
5. Portland (1)
6. South Portland (1)
7. Windham (1)
8. Yarmouth (1)

4. Hancock (10)
1. Deer Isle (1)
2. Ellsworth (5)
3. Gouldsboro (1)
4. Sullivan (1)
5. Surry (1)
6. Trenton (1)

5. Kennebec (11)
1. Albion (1)
2. Augusta (2)
3. China (1)
4. Gardiner (2)
5. Monmouth (1)
6. Oakland (1)
7. Waterville (1)
8. W Gardiner (1)
9. Winthrop (1)

6. Lincoln (10)
1. Boothbay (2)
2. Bristol (1)
3. Damariscotta (1)
4. Dresden (1)
5. Edgecomb (1)
6. Jefferson (1)
7. So Bristol (1)
8. Waldoboro (1)
9. Wiscasset (1)

7. Oxford (10)
1. Bethel (1)
2. Buckfield (1)
3. Fryeburg (1)
4. Hebron (1)
5. Norway (2)
6. Paris (1)
7. Peru (1)
8. Rumford (1)
9. Waterford (1)

8. Penobscot (11)
1. Bangor (3)
2. Brewer (1)
3. Dexter (1)
4. Glenburn (1)
5. Hermon (1)
6. Holden (1)
7. Lee (1)
8. Medway (1)
9. Old Town (1)

9. Somerset (11)
1. Anson (1)
2. Cornville (1)
3. Fairfield (3)
4. Norridgewock (1)
5. Palmyra (1)
6. Pittsfield (2)
7. St Albans (1)
8. Tomhegan (1)

10. Waldo (10)
1. Belfast (5)
2. Searsmont (1)
3. Unity (1)
4. Winterport (3)

11. Washington (10)
1. Baileyville (2)
2. Columbia (1)
3. Crawford (1)
4. Cutler (1)
5. E Machias (1)
6. Harrington (1)
7. Perry (1)
8. Robbinston (1)
9. Topsfield (1)

12. York (11)
1. Alfred (1)
2. Arundel (1)
3. Hollis (1)
4. Kennebunk (1)
5. Kennebunkport (1)
6. Kittery (1)
7. Saco (1)
8. Waterboro (1)
9. Wells (2)
10. York (1)

APPENDIX B: HISTORY OF OCCUPANT PROTECTION LAWS

YEAR	LAW
1983	Children aged 0 to 4 years must be secured in a child safety seat.
1987	Children aged 4 to 13 years must be secured in a child safety seat or safety belt.
1989	Law expanded to include children 4 to 16 years.
1991	Law expanded to include persons 4 to 19 years.
1993	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).
1993	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).
1994	Driver made responsible for securing children under 4 years in a child safety seat.
1995	With the implementation of Title 29A, the child safety seat law and seat belt law were combined into one law.
1995	A statewide referendum requiring adults 19 and older to use safety belts passed in November. 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.
1997	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.
1997	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.
2003	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.
2007	Primary enforcement law takes effect; ticketing began on April 1, 2008.

APPENDIX C: MAINE SEAT BELT OBSERVATION FORM

Maine Seat Belt Observation Form

SITE NUMBER:_____ SITE:_____

NOTES:_____

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

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

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

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

	DRIVER			PASSENGER			DRIVER			PASSENGER	
Veh. #	Vehicle C = car T = truck S = suv V = van	Sex M = male F = female U = unsure	Use + = yes - = no U = unsure	Sex M = male F = female U = unsure	Use + = yes - = no U = unsure	Veh. #	Vehicle C = car T = truck S = suv V = van	Sex M = male F = female U = unsure	Use + = yes - = no U = unsure	Sex M = male F = female U = unsure	Use + = yes - = no U = unsure
1						36					
2						37					
3						38					
4						39					
5						40					
6						41					
7						42					
8						43					
9						44					
10						45					
11						46					
12						47					
13						48					
14						49					
15						50					
16						51					
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22						57					
23						58					
24						59					
25						60					
26						61					
27						62					
28						63					
29						64					
30						65					
31						66					
32						67					
33						68					
34						69					
35						70					

MAINE SEAT BELT SURVEY
FORM 2004

Page: _____of_____

About the Muskie School of Public Service

The Muskie School of Public Service is Maine's distinguished public policy school, combining an extensive applied research and technical assistance portfolio with rigorous undergraduate and graduate degree programs in geography-anthropology; policy, planning, and management (MPPM); and public health (MPH). The school is nationally recognized for applying innovative knowledge to critical issues in the fields of sustainable development and health and human service policy and management, and is home to the Cutler Institute for Health and Social Policy.

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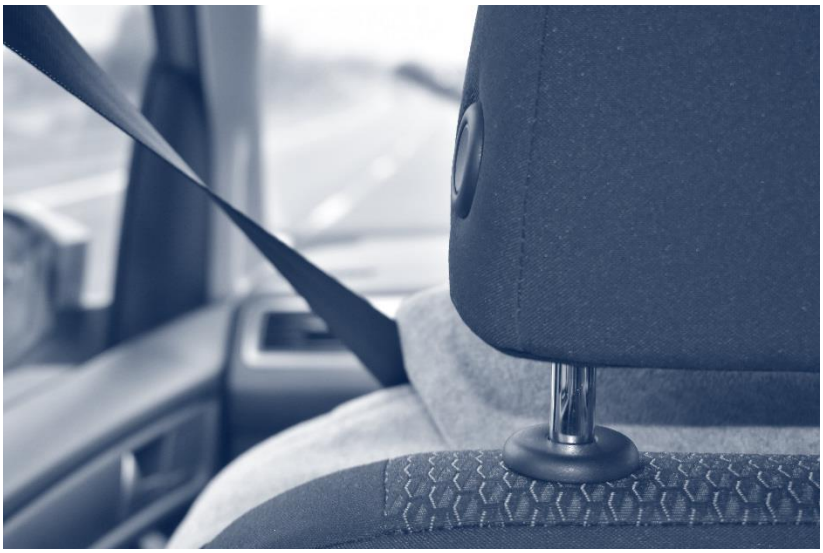
The Survey Research Center provides technical expertise and assistance to support the generation, processing, and analysis of quantitative data in the social sciences, human services, and public opinion fields. The Center provides a wide range of research and technical assistance services to federal, state, and municipal governments, private nonprofit agencies, businesses, and University faculty and departments. Services include proposal preparation, market research, needs assessments, program evaluation, policy analysis, and information system design.



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UNIVERSITY OF SOUTHERN MAINE
Muskie School of Public Service

Night Seat Belt Use in Maine, June 2019

September 19, 2019

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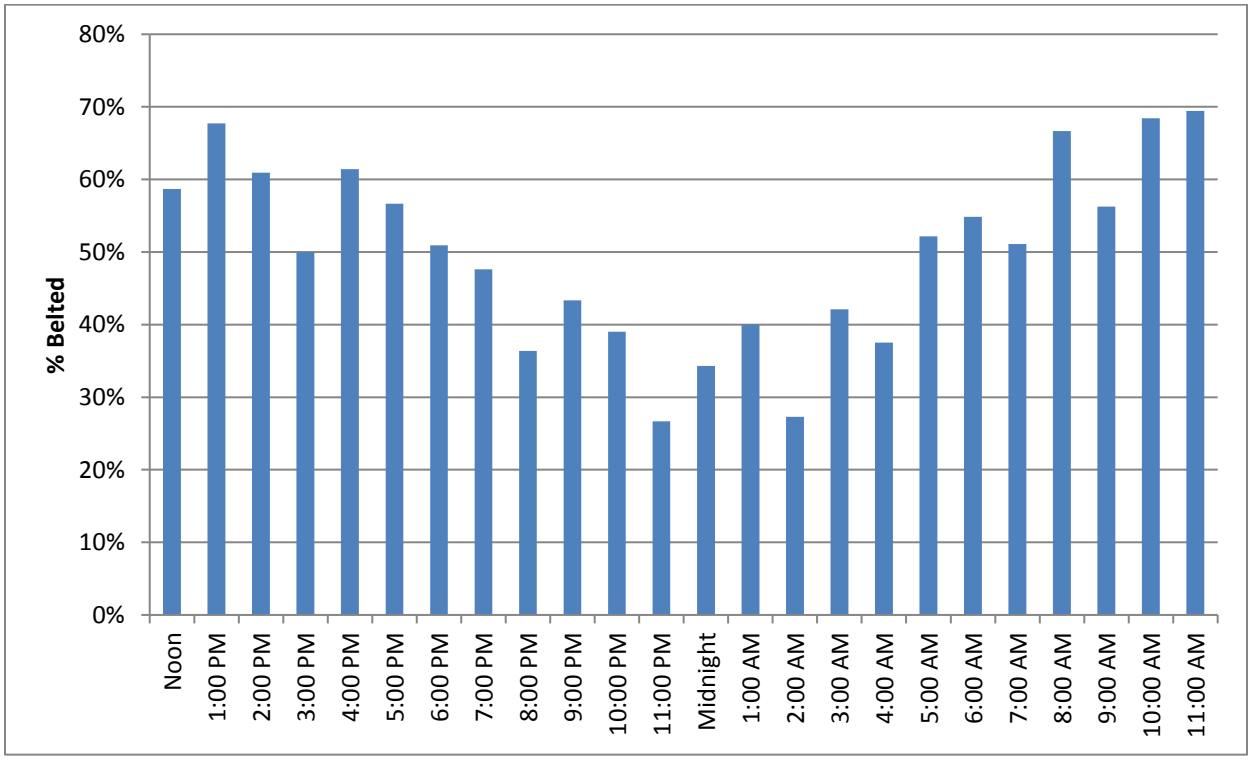
Introduction

There are compelling reasons for addressing nighttime seat belt use for the betterment of highway safety. Nighttime belt use rates are consistently lower than daytime belt use rates. 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% vs. 77%). Solomon, Chaudhary, and Preusser (2007) showed a similar day to night difference (6.2 percentage points) in New Mexico using similar observation techniques.

In addition, nighttime fatalities are disproportionately frequent compared to the amount of nighttime driving that is actually done. 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). Maine shows this exact same pattern. Figure 1 shows this effect using 2008-2017 FARS data. Belt use among fatally injured occupants (in outboard seating positions) is uniformly highest during daytime hours, with the lowest rates found from 7:00 p.m. to 5:59 a.m.

Figure 1. Percent Belt Use Among Fatally Injured Front Seat Outboard Occupants of Passenger Vehicles, By Hour, Maine, 2008-2017



The current study continues a previously employed methodology. Nighttime sites were sampled from those selected for the 2012 daytime survey (Chaudhary et al., 2012). It should be noted that new sites were selected for the 2017 statewide daytime belt use study. Maine's current night belt sites were selected from the larger daytime sample, last updated two years ago (2017).

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 sites 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 is 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 previous nighttime measurements. 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 criterion rendering the final analysis to be based on 29 sites. These 29 sites were repeated for the 2015 through 2017 night belt observations.

In 2017, NHTSA required a "resample of sites" used in the 2012 design. Using the same method described above, 35 of these new sites were selected for nighttime observations. Four of these sites had fewer than 5 observations. These 4 sites were excluded from analysis. All results from the 2019 nighttime observations are based on the remaining 31 sites.

Site information, including county name, city/town/area identifier, exact roadway location, date, day of week, time, weather condition, direction of traffic flow and roadway lane(s) was documented by observers. 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 one was present. Multiple pages could be used to record belt use in any observation session as needed.

Preusser Research Group, Inc. (PRG) provided experienced observers to collect the data. All were trained to follow the procedures shown in Appendix A. Specifically, observers were

trained to observe proper shoulder belt use (vs. improper or no use) of the driver and, if present, a right "outboard" (aka window-adjacent) front seat passenger. Observations were made for passenger vehicles and certain commercial vehicles. These same methods have been used in Maine since 2012 for both daytime and nighttime belt use observations and in numerous other states where PRG conducts similar work.

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 where 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, traffic crash, etc.), but they did not need to make such adjustments in 2019. 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 at each location. Each observer was given a detailed schedule that included site description, mapping/location information, and observation times 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 night for observations, although geographical proximity was given some consideration for travel to locations that required substantial travel times. Each day and time had an equal probability of selection.

When needed (e.g. in zero overhead lighting locations), military grade night vision goggles and 2 million candle-power handheld infrared spotlights were used. Two staff members were needed when using this specialized night vision equipment during 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 June 7 – 20, 2019. The numbers of observed occupants at the sites ranged from 5 to 98. In all, there were 1,100 passenger vehicle drivers along with 304 passengers, or a total of 1,404 vehicle occupants. Weighted belt use was calculated using an average of the belt use percentages at the 31 sites, resulting in an overall nighttime statewide belt use rate of 90.6 percent. The standard error of measurement was calculated as the standard error of the means; which was 0.83 percent. The 95 percent confidence interval for the statewide night belt use value was 89.4 percent – 92.6 percent. Table 1 places these observations in context with those made in 2008 (Chaudhary et al., 2010), through 2019.

Night belt use in 2019 was about 2.3 percentage points higher than during the comparable time period in 2018. The difference between 2018 and 2019 has overlapping 95% confidence intervals suggesting that the difference is within chance parameters. The current use rate represents the highest nighttime rate measured to date.

Table 1. Statewide Night Belt Use, by Wave (Weighted)

	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 10	5/29-6/1/2015	Post-CIOT	84.0%
Wave 11	6/4-6/17/2016	Post-CIOT	81.6%
Wave 12	6/8-6/15/2017	Post-CIOT	86.8%
Wave 13	6/6-6/22/2018	Post-CIOT	88.3%
Wave 14	**6/7-6/20/2019**	**Post-CIOT**	**90.6%**

Table 2 shows belt use rate differences (using unweighted data) 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) = 40.90, p < 01). The results mimic typical daytime patterns where pickup truck use rates (80.2%) were the lowest of all vehicle types. Car use was 91.7 percent, SUV use was 95.0 percent and, and Van use was 91.4 percent.

Female occupants had higher use rates (94.6%) than male occupants (88.2%) and is significant (χ^2 (1) = 17.17, p < .01). Passenger use (92.4%) and driver use (90.6%) is not

significant. There were similar not significant results in 2015, 2016 and 2017. The difference in use for female drivers (95.2) versus female passengers (96%) was not significant. The difference between male drivers (86%) and male passengers (87%) was also not significant. The interaction effect (as per a binary logistic regression) was significant ($p > 0.01$).

Table 2. Night Belt Use, June 2019, by Road Type, Vehicle Type, Person Type, and Role[1]

Road Functional Class Category	**N**	**Night Belt Use**
Expressways	284	91.2%
Urban Other Arterials	534	89.9%
Rural Other Arterials	307	91.5%
Collectors	289	92.5%
Vehicle Type**		
Passenger Cars	636	91.7%
Pickups	217	80.2%
SUVs	481	95.0%
Vans	70	91.4%
Sex x Driver-Passenger**		
Male Drivers	684	87.9%
Female Drivers	416	95.2%
Male Passengers	107	90.6%
Female Passengers	197	93.4%
Sex**		
Male	791	88.2%
Female	613	94.6%
Driver-Passenger		
Driver	1110	90.6%
Passenger	304	92.4%

[1] Raw (unweighted) percentages.

* Significance level p< .05

** Significance level p< .01

Discussion

The observed use rate in 2019 was higher than the rate in 2018. The rate observed in 2019 was the highest yet recorded. The sites used in 2019 are the same resampled sites used in 2018. It should be noted that although the sites used in 2018 and 2019 were all new, the distribution of observations by sex, person type, vehicle type and roadway type were remarkably similar to the distribution in 2017 (see 2017 report).

Generally speaking, the use rates since 2012 have failed to show any consistent pattern. It could be useful to increase the time spent during observation periods to increase the Ns (e.g. observe sites for 1-hour or 1.5-hours instead of 45 minutes).

Also, of some note is the fact that nighttime rates do not appear to differ between the varying roadway types. Daytime rates tend to be higher on the higher volume roadways. Yet the typical daytime difference found between sex and vehicle type were present at night. Consistent with previous data collection efforts, pickup truck drivers were least likely to wear seat belts compared to drivers of other vehicle types and male occupants had lower use rates than female occupants.

Nighttime seat belt use in Maine was higher than the daytime rate (88.5%). A higher night use rate than daytime is unusual. There are relatively few night observations but with more than 1,000 we should not see too much fluctuation. Data checks indicated that there was not a statistically significant difference in the observed rate of the two observers. Additionally, the raw use rate (91.0%) was nearly identical to the weighted rate. It should also be noted that the weighting procedures for day and night data are different and daytime observations contain local roadways (which typically have the lowest belt use rates). It could be that the exclusion of local roads (a necessity due to traffic volume) may inflate the rate at night relative to day but this inconsistency has been present for all prior studies.

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Appendix A. Maine Seat Belt 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.

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.

DISTRACTED DRIVING:
Cell Phone Use While Driving in Maine (2019)

August 5, 2019

Prepared for:

The Maine Bureau of Highway Safety (Dept. of Public Safety)

&

Al Leighton, Manager

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Trumbull, Connecticut 06611

Introduction

According to National Highway Traffic Safety Administration (NHTSA) estimates, distracted driving caused an estimated 3,450 deaths in 2016 and about 391,000 injuries in 2015. (NHTSA, 2018). There was a 9 percent decline in "distracted-affected" deaths in 2017 (NHTSA, 2019). However, it is important to note that NHTSA believes the overall number of reported distracted driving fatalities underestimates the actual number. NHTSA also estimates that 10 percent of fatal crashes, 18 percent of injury crashes, and 16 percent of all police-reported motor vehicle traffic crashes in 2013 were reported as effects of driver distraction. State legislatures are responding to the safety threat, as indicated by the Governor's Highway Safety Association's tracking of distracted driving and other traffic safety law implementation. As of February 2016, there are 14 States along with the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands that prohibit drivers of all ages from using handheld cell phones while driving. All of these laws allow primary enforcement, which grants law enforcement the ability to stop motorists solely for cell phone use while driving. Forty-six States, the District of Columbia, Puerto Rico, Guam and the U.S. Virgin Islands ban text messaging for drivers of all ages (all but five have primary enforcement).

NHTSA's high-visibility enforcement (HVE) model is a proven technique to change driver behavior and enhance the effect of traffic laws. With this model, program funds pay for overtime hours so a strong force in ticketing (highly visible and highly focused law enforcement activity) can be demonstrated. The point of this is to increase the public's perceived likelihood to receive a ticket and to increase perceptions of strictness in police enforcement of a law, both thought to impact law adherence. Targeted media advertising prior to the campaign educates the public about laws and associated fines while also publicizing increased law enforcement efforts. Evaluation of the impact of the HVE campaign requires two activities. The public's perceptions are assessed before (Pre) and after (Post) the campaign regarding 1) how strictly laws are enforced, 2) awareness of media messages and 3) awareness of campaign slogans. Increases in awareness provide one form of evidence of the effectiveness and strength of the media campaign. Observation and documentation of driver behavior related to a law Pre/Post campaign is used to determine whether the program resulted in changing the targeted driving behavior(s).

Pre-existing research provides strong evidence that primary laws and HVE efforts are effective at quickly increasing seat belt use (Shults et al., 2004) while recent research indicates that HVE programs targeted specifically at handheld cell phone use can reduce observed usage rates. One of the first large-scale campaigns attempting to address the problem of cell phone use while driving found dramatic reductions in distracted driving in Syracuse, New York and Hartford, Connecticut (Chaudhary, Casanova-Powell, Cosgrove, Reagan & Williams, 2012). NHTSA-sponsored HVE campaigns were conducted four times over the course of a year during this particular project.

Observational surveys and public awareness surveying before and after each of four waves in Syracuse revealed that public awareness increased and handheld cell phone use and texting behind the wheel declined (3.7% to 2.5%). After an initial increase in use for Hartford there was a 57 percent drop in handheld use (from 6.8% to 2.9%) and texting behind the wheel dropped by nearly three-quarters.

A similar campaign also funded by NHTSA expanded the HVE method to a much larger implementation level, assessing cell phone use while driving in 13 California counties in the Sacramento area and in the state of Delaware (Chaudhary, Connolly, Tison, Solomon & Elliott, 2015). The Highway Safety Offices in both States coordinated three HVE waves within an 18-month project period. This study found observed handheld cell phone use in California decreased significantly from 4.1 to 2.7 percent Pre to Post campaign, reflecting a drop of 33 percent. Drivers in Delaware showed a similar, significant decrease in observed handheld phone use Pre/Post campaign from 4.5 to 3.0 percent reflecting a 33 percent reduction in use. Increased awareness of police enforcement, media messages and of the campaign slogan occurred in both states over the course of the programs.

This study follows the same design implemented in April 2018. In addition to estimating the incidence of distracted driving on Maine roadways for 2019, the study also sought to track changes from the 2018 survey. Effective September 19, 2019, it will become illegal for a driver to use a hand-held cell phone while driving. These data were collected prior to that law becoming effective. The results of this survey may also serve as a baseline to evaluate the impact of the law on hand-held cell phone use. Maine has a ban on texting while driving that was in effect during the data collection for this study (and the 2018 study). Observations were conducted in April 2019 at eighty sites in 12 Maine counties.

A. Method/Design

The State of Maine conducted its inaugural distracted driving survey in April 2018. The second such survey was conducted one year after in April 2019. The design was based on selecting sites from the existing seat belt survey which utilized a probability proportionate to size sampling method designed to observe sites that are representative of the state's traffic flow. Distracted driving observations occurred at 80 of these sites. Observations were conducted using the method developed by Preusser Research Group, Inc. for the most recent NHTSA demonstration project examining the impact of enforcement on driver cell phone use in Delaware and the Sacramento area in California. The methods were a modification of the NOPUS method used for roadside seat belt use data collection. Specifically, whereas NOPUS observes stopped traffic the modified method observes moving traffic. Details for site selection and observations are found below.

B. Site Selection

Eighty observation locations were selected from the 102 non-local road sites used for the annual statewide seat belt survey. The proportion of sites per functional class strata in the seat

belt survey was kept constant for this distracted driving survey. This resulted in 11 sites from interstates, 23 from principle arterials, 21 from other arterials and 25 from collectors. Only sites that had at least 20 vehicles observed during the 2017 seat belt survey were eligible for inclusion. A random number was used to select from available sites.

The selection resulted in a range of 9 to 5 sites in each county (see Table 1). Counties without any seat belt sites were excluded. Table 2 shows the individual sites selected and their N observed during the statewide study. The observation sites in 2019 were the same as those in 2018.

C. Observations

Appendix A shows the instructions provided to the observers (who also underwent in-depth classroom training and field training). Driver use of hand-held cell phones while driving was observed for 60 minutes at each of the 80 sites. All data were recorded on paper forms (see **Appendix B**). Three types of cell phone use were recorded: hand-held phone, in-ear device, or manipulating a device. Hand-held were coded when a cell phone was held in the general proximity of the driver's ear. Ear devices were coded when the visible ear contained an "ear bud" (e.g., wired headset or wireless/Bluetooth). Manipulating was coded when the device was held in the drivers' hand but not in the general vicinity of the head. Manipulating could include texting, dialing, checking e-mail, using a mobile GPS application or other activities. No attempt was made to distinguish between these activities.

Categories are not mutually exclusive. Drivers could be observed manipulating with an ear device present or talking on their phone with an ear device in (for example). Observers also coded type of vehicle (car, pickup truck, sport utility, van), driver's sex and estimated age category (<25, 25-59, >59).

A reference point far enough down the road where the vehicle, but not the driver, can be seen driving on the observed roadway was used to select the next vehicle to be observed. Only one vehicle at a time was recorded. Once the data for a vehicle was recorded, the observer looks back to the predetermined reference point to select the next vehicle to be observed. This procedure ensures that the next vehicle to be observed was randomly selected from the traffic stream without knowledge of driver cell phone use. Only passenger vehicles were observed (excluding police, fire, and ambulance). Only vehicles traveling in the nearest lane were coded as device use that is below the steering wheel cannot be seen as vehicles get further away from the observer due to the change in visual angle.

Table 1. Sites Selected by County

County Code	County	N Selected
1	**Androscoggin**	7
3	**Aroostook**	5
5	**Cumberland**	8
7	Franklin	0
9	**Hancock**	9
11	**Kennebec**	8
13	Knox	0
15	**Lincoln**	5
17	**Oxford**	7
19	**Penobscot**	6
21	Piscataquis	0
23	Sagadahoc	0
25	**Somerset**	5
27	**Waldo**	6
29	**Washington**	6
31	**York**	8

Results

There was a total of 13,173 drivers observed in 2019 (13,568 in 2018). The tables below show how those observations were distributed across various categories by year. Data coded as Unsure/Unknown are excluded from these tables.

Table 2. N and Distribution of Observations by Category

		2018		2019	
		N	%	N	%
Vehicle Type	Car	5130	38%	4379	33%
	Pickup	3113	23%	3268	25%
	SUV	4488	33%	4610	35%
	Van	836	6%	912	7%
Age Category	Under 25	1107	8%	1731	13%
	25 to 59	10475	77%	9511	72%
	60+	1969	15%	1924	15%
Road Type	Interstate	1460	11%	1483	11%
	Principle Arterial	4537	33%	4203	32%
	Other Arterials	4425	33%	4307	33%
	Collectors	3146	23%	3180	24%
Day of Week	Weekend	3752	28%	2166	16%
	Weekday	9816	72%	11007	84%
Sex of Driver	Male	7903	58%	7718	59%
	Female	5623	42%	5446	41%

Table 3. N and Distribution of Observations by County

	2018		2019	
	N	%	N	%
Androscoggin	1113	8%	1148	9%
Aroostook	699	5%	633	5%
Cumberland	1124	8%	1243	9%
Hancock	1450	11%	1685	13%
Kennebec	1122	8%	994	8%
Lincoln	1356	10%	1387	11%
Oxford	854	6%	731	6%
Penobscot	1578	12%	1475	11%
Somerset	485	4%	477	4%
Waldo	1482	11%	1534	12%
Washington	515	4%	541	4%
York	1790	13%	1325	10%

Different types of "use" were calculated. *Hand-held* refers to a cell phone held to one's ear. *Ear Device* examines whether the observer was able to identify an ear bud, Bluetooth device (etc.) in an ear. *Manipulating* describes if an individual was actively holding a phone but not to their ear (e.g. texting, dialing, reading). *Any Use* examines whether an individual was manipulating or had a phone to her or his ear (it does not include the presence of a device in the ear). The tables below provide use rates by category for each of the use rates. The focus, however, is on *Any Use*. Chi Square analyses were conducted to explore differences in Any Use between levels of a category. It should be reiterated that the "Hand-held" and "Manipulating" categories are not mutually exclusive. In instances when a driver is holding a phone close to their lips and talking (presumably using the speaker phone on the device) both hand-held and manipulating were selected. Thus, the "Any Use" classification will not necessarily be the sum of hand-held and manipulating.

Observations indicated that 3.7 percent of Maine drivers had a phone to the ear (i.e. Hand-held use) in 2018 compared to 3.8 percent in 2019 ($\chi^2 = 0.099$, N.S.). A very small percentage of drivers were coded as driving with an in-ear device (0.7%) in 2018 and in 2019 (0.9%; $\chi^2 = 2.779$, N.S.). Manipulation of a phone was coded as occurring 3.1 percent of the time for both 2018 and 2019 ($\chi^2 = 0.019$, N.S.). "Any Use" (Hand-held or Manipulating) was seen among 6.3 percent of the drivers in 2018 and 6.1 percent of drivers in 2019 ($\chi^2 = 0.195$, N.S.).

The remainder of the results will focus on data collected in 2019. See Chaudhary & Raboin (2018b) for the results for the 2018 survey. Table 4 shows that use was highest in Lincoln County (8.2%) and lowest in Washington County (4.1%). Overall county differences were significant ($\chi^2 = 49.436$, $p < .001$). Table 5 shows that there was also a significant difference in measured use on weekdays (6.4%) compared to weekend days (4.8%) ($\chi^2 = 7.607$, $p < .01$).

Table 4. Phone Use Category by County

	% Use			
County	**Hand Held**	**Ear Device**	**Manipulating**	**Any Use**
Androscoggin	3.3%	0.0%	2.3%	**5.1%**
Aroostook	2.1%	1.1%	3.8%	**5.2%**
Cumberland	2.7%	0.1%	1.7%	**4.2%**
Hancock	3.1%	0.9%	2.7%	**5.2%**
Kennebec	3.2%	0.6%	2.4%	**5.5%**
Lincoln	4.4%	1.7%	5.3%	**8.2%**
Oxford	6.3%	0.0%	2.1%	**7.9%**
Penobscot	4.6%	2.2%	4.1%	**7.5%**
Somerset	3.6%	0.0%	1.0%	**4.4%**
Waldo	4.7%	1.6%	4.2%	**8.0%**
Washington	3.1%	0.2%	1.3%	**4.1%**
York	3.5%	0.3%	2.6%	**5.7%**

Table 5. Phone Use by Type of Day

	% Use			
Type of Day	**Hand Held**	**Ear Device**	**Manipulating**	**Any Use**
Weekday	3.9%	1.0%	3.2%	**6.4%**
Weekend	3.0%	0.1%	2.1%	**4.8%**

Use rates between roadway types (e.g. Interstate, Arterials) were not significantly different ($\chi^2 = 2.786, p > .05$). There was a small difference from the highest use rate class Collectors: 6.7%) and the lowest (Interstates: 5.7%). There was also no significant difference between use among drivers in different types of vehicles ($\chi^2 = 7.654, p > .05$). There was a moderate use rate difference observed between Van operators (7.1%) and SUV drivers (5.7%) but given the relatively small number of van drivers observed, the difference was not significant.

Table 6. Phone Use by Road Type

	% Use			
Road Type	**Hand Held**	**Ear Device**	**Manipulating**	**Any Use**
Interstate/Freeways	3.3%	0.9%	3.0%	**5.7%**
Principal Arterials	3.6%	0.8%	3.1%	**6.1%**
Other Arterials	3.8%	0.9%	2.7%	**5.9%**
Collectors	4.2%	0.8%	3.5%	**6.7%**

Table 7. Phone Use by Vehicle Type

	% Use			
Vehicle Type	**Hand Held**	**Ear Device**	**Manipulating**	**Any Use**
Car	3.2%	0.5%	3.2%	**5.8%**
Truck	4.6%	1.3%	3.2%	**6.9%**
SUV	3.5%	0.8%	2.6%	**5.7%**
Van	4.8%	1.5%	3.9%	**7.1%**

Observers estimated the age of drivers (see Table 8). Cell phone use rates were highest among those deemed to be under 25 years-old (8.3%) and lowest among those judged to be 60 years-old or older (2.1%) with those judged to be between 25 and 59 years-old landing in the middle (6.6%). This difference in ages was indeed significant ($\chi^2 = 71.812, p < .001$). Observers also coded whether the driver was male or female (Table 9). Results indicated that female drivers had higher use rates than male drivers (Female: 6.6%; Male: 5.8%) but the difference (unlike 2018) was not significant (p = 0.56) ($\chi^2 = 3.638$, *N.S.*).

Table 8. Phone Use by Age

	% Use			
	Hand Held	**Ear Device**	**Manipulating**	**Any Use**
Under 25	5.1%	0.5%	4.3%	**8.1%**
25 to 59	4.0%	0.8%	3.3%	**6.6%**
60+	1.4%	0.3%	0.7%	**2.1%**

Table 9. Phone Use by Sex

	% Use			
	Hand Held	**Ear Device**	**Manipulating**	**Any Use**
Male	3.5%	0.9%	2.9%	**5.8%**
Female	4.1%	1.0%	3.2%	**6.6%**

Discussion

The overall use rate, across all counties and categories for any use was 6.1 percent, only slightly different from the 2018 rate of 6.3 percent. The National Occupant Protection Use Survey (Pickrell & Li, 2017) conducted in 2016 indicates that approximately 5.4 percent of the Nation were either talking on a hand-held phone (3.3%) or manipulating a phone (2.1%). The results in 2019 were remarkably like those in 2018.

Recent data collection in Louisiana indicates a much higher use rate with about 7 percent of drivers manipulating a phone and 6 percent holding a phone to their ear. California drivers were shown to either manipulate a phone (1.5%) or talk while holding a phone to their ear (2.4%) a total of 3.6 percent of the time in 2017. These use rates increased in 2018 with total usage reaching 4.5 percent (2.7 % manipulation; 1.8% handheld). Both of these rates however are down starkly from the peak measured rate in 2016 of 7.6 percent.

As with other studies (Chaudhary & Raboin, 2018), use among the youngest drivers was highest and older drivers had relatively low use. Recent data in Connecticut (unpublished data) indicate that the age disparity is even greater there. The difference shown between male and female drivers in Maine is somewhat inconsistent with other studies. Some studies have shown female drivers engaging in significantly higher use. A recent observation study in Louisiana (Tison et al., 2018) showed significantly higher use among female drivers than male drivers (mostly from phone manipulation). Another study, (Kidd et al., 2016) showed that female drivers had higher overall engagement of secondary behavior, but did not show a difference specifically related to phone use. Recent data collected using the same methods used in Maine did not show any difference between male and female drivers and showed male driver use as being slightly higher than female driver use. There is a possibility that sex of driver and age of driver combined influence use. When examining the Maine data, the incidence of any use in the youngest age group showed higher use among male drivers (8.2%) compared to the youngest female drivers (7.8%) and the reverse was true for the middle age group drivers (Male: 6.5%; Female: 7.4%). None of these simple differences, nor interactions, were significant. Ironically, the same analysis using Connecticut data shows that while male and female younger drivers do not differ statistically in their use rates (noting young female use was a bit higher than male driver use) the rates among the middle age category drivers was opposite of that measured in Maine; male middle aged drivers in CT had significantly higher use than female drivers in the same age category.

Maine results also indicate a bigger distracted driving problem during weekday traveling versus driving on Saturday and Sunday. Other research indicates that driving with passengers results in lower use (Tison et al, 2018; Kidd et al., 2016) than when driving alone. This may be due to weekend driving involves more social outings while weekday trips include more commutes to work.

Of some interest is that the pattern of risk associated with distracted driving does not always follow the risk pattern associated with driving while unbelted. The data reported here show no difference in cell phone use while driving between roadway type and vehicle type.

Numerous studies, include data collected in Maine, indicate that seat belt use is higher on higher volume roads and lowest among pickup truck drivers.

Summary

The State of Maine conducted its first distracted driving roadside survey in April 2018 with a follow up study in 2019. Eighty observation locations were selected from the 102 non-local road sites used for the statewide annual seat belt survey. Observers from both Preusser Research Group, Inc. (PRG) and the University of Southern Maine (Muskie School of Public Service) were trained and collected all observation data. PRG conducted all training and provided all data collection materials (forms, observer schedules, instructions, maps, law enforcement letters, etc.).

A total of 13,568 drivers in 2018 and 13,173 in 2019 were observed. The overall "Any Use" rate, across all counties and categories, was 6.3 percent in 2018 and 6.1 percent in 2019. Female drivers had significantly higher use rates than male drivers in 2018 but the differences between sex of drivers diminished in 2019, making the higher use among female drivers not significantly different than use among male drivers. Cell phone use rates were highest among those deemed to be under 25 years-old and lowest among those judged to be 60 years-old or older. Differences in use rates between varying roadway and vehicle types were not statistically significant and not consistent year over year. Driver cell phone use was highest in Somerset County and lowest in Hancock County in 2018. The highest (Lincoln County) and lowest (Washington County) were different in 2019. Results also indicate a bigger distracted driving problem during weekdays as opposed to weekend travel.

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APPENDIX A:

2018 MAINE DISTRACTED DRIVING/CELL PHONE USE:
ROADSIDE OBSERVATION PROTOCOL

See Google Maps link below for pinned site locations:
https://www.google.com/maps/@45.2205518,-70.3631188,7z/data=!3m1!4b1!4m2!6m1!1s1MOnBLkQEqQ-In64Jk93trRFW7nIXjTK4

For each site, choose one direction of traffic to observe for the whole observation period and indicate this info on the data collection form (the direction you choose for the Pre will determine which direction will be observed during future observations at the same sites).

Include a quick sketch of where you stood & observed on the back of observation forms for each site. Note any helpful landmarks or parking suggestions for future reference.

Please see "Observer Schedule" document for details on dates, day of week, data collection times, and site location information.

DD Observation Instructions

- Each observation period will last for one hour (60 minutes).
- Fill out the top of each observation form completely. Staple multiple pages.
- Observe all vehicles except emergency vehicles (police, fire, ambulance), mid-size, box, and heavy trucks (defined as six or more tires), and/or buses.
- Choose a spot on the designated roadway and observe traffic in the lane *closest to you* (i.e., observe the traffic coming toward you, not cars on the opposite side of the road).
- Select a "reference point" far enough down the road so you can't see the driver. Each vehicle that crosses this point is yours. Use the reference point to randomly select the next vehicle you will observe. Record one vehicle at a time. The goal is not to record every vehicle that passes, but to collect data on a consistently random selection of drivers in that particular area during a specific timeframe.
- Do not observe turn lanes. If your observation area has one, move further down the street to a spot before the turn lane begins.
- Record the following information: type of vehicle (car, pickup truck, sport utility, van,), driver's age category (<25, 25-59, >60), gender, and type of use.
- Check off the type of phone use you observe: Handheld Use, Bluetooth Use, and/or Manipulating. "Yes" will be recorded as **X**. Note: a Bluetooth may be worn while also manipulating the phone; in this scenario, both columns should be marked. Another example: if someone is holding their phone in front of their face and speaking (on speakerphone) this should also have two checks – one for Manipulation and one for Handheld Use.

- Do not observe in a steady rainfall, snow, sleet, or heavy fog. If it begins to rain (or snow or sleet) steadily during an observation, stop collecting data and wait 15 minutes for the precipitation to subside. If it stops, resume observations and extend the observation period to make up for the missed time. If the bad weather continues, notify Katie or Neil that the site will need to be made up and proceed to your next scheduled observation. Do not start your next site earlier than scheduled. If observations are interrupted due to inclement weather, complete the sheet you are using, noting the end time. If you resume observations, begin a new sheet, with a new start time.
- If an intersection is seriously compromised due to construction, a crash, etc., call PRG for further instructions. Your site will either be rescheduled or an alternate site may be selected on the spot.

APPENDIX B:

Sample ME Distracted Driving Cell Phone Observation Data Collection Form

SITE ID NUMBER: _____ **OBSERVER:** _____ **CITY:** _____

LOCATION: _____
(Street) *(Cross Street or other landmark)*

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

WEATHER CONDITION: 1 Clear / Sunny 2 Light Rain 3 Cloudy 4 Fog 5 Clear/Wet

START TIME: _____ **(Observation period will last exactly 60 minutes)**

	Vehicle Type C = Car T= Pick Up S = SUV V = Van	**Age** 1 = < 25 2= 25-59 3= > 60 4= Unsure	**Sex** M=male F=female U=unsure	**Handheld Use**	**Bluetooth Use**	**Manipulating**		**Vehicle Type** C = Car T= Pick Up S = SUV V = Van	**Age** 1 = < 25 2= 25-59 3= > 60 4= Unsure	**Sex** M=male F=female U=unsure	**Handheld Use**	**Bluetooth Use**	**Manipulating**
1							20						
2							21						
3							22						
4							23						
5							24						
6							25						
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16							35						
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18							37						
19							38						

Page:_____ of _____

State of Maine

2020
Impaired Driving
Strategic Plan

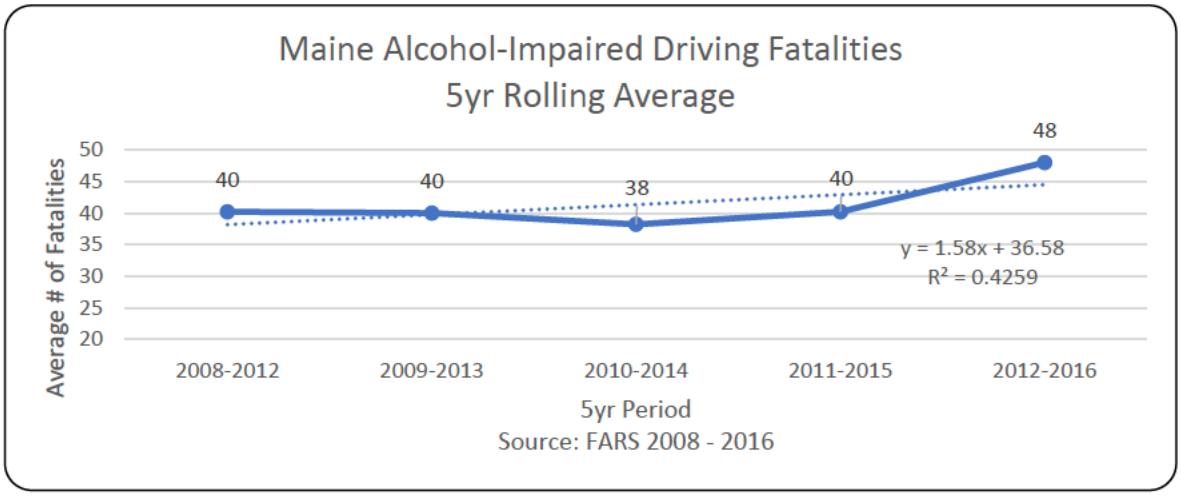
Approved by the
Maine Impaired Driving Task Force
on: May 21, 2019

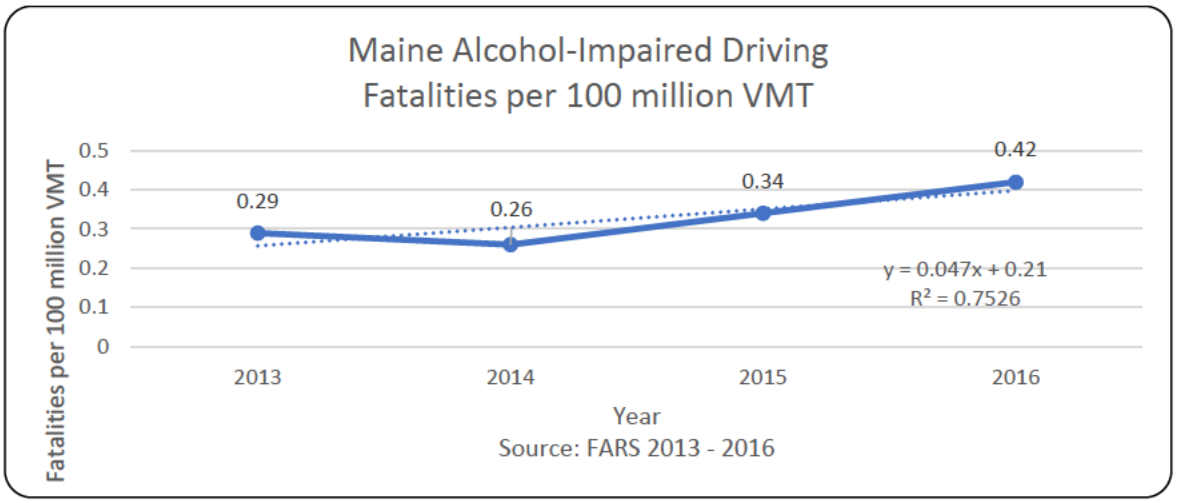
Table of Contents

Executive Summary

Operating Under the Influence (OUI) refers to operating or attempting to operate a motor vehicle while affected by alcohol and/or drugs, including prescription drugs, over-the-counter medicines, or illicit substances. The Maine impaired driving program focuses on individuals operating a motor vehicle under the influence of alcohol and/or drugs. In Maine, it is unlawful for a person under the age of 21 to operate a motor vehicle with a blood-alcohol or breath-alcohol level above 0.00 (referred to as zero tolerance) and at or above 0.08 for drivers 21 and older. Maine's impaired driving program provides guidance and funding for various impaired driving countermeasures that include OUI enforcement activities, awareness and education campaigns, proactive teen/young adult focused OUI education and outreach, and specialized law enforcement and prosecution programs to increase OUI adjudication.

Despite continued efforts to reduce traffic-related fatalities and serious injuries in Maine over the past several years, the number of alcohol-involved crashes, fatalities, and injuries continues to be a challenge in our goal to reach zero fatalities. On average, approximately 31% of all fatalities in Maine involve an alcohol-impaired driver. This proportion ranged from a low of 28% in 2013 and 2014 to a high of 39% in 2016.





1.0 Program Management and Strategic Planning

1.1 Maine Impaired Driving Task Force

In 2005, the Maine Bureau of Highway Safety (MEBHS) established the Maine Impaired Driving Task Force (MIDTF) to identify and prioritize the State's most pressing impaired driving issues, review proven strategies, and identify deficiencies in the impaired driving program. The MIDTF was established under the authority of the Maine Governor's designated Highway Safety Representative (GR) and direction of the Maine Bureau of Highway Safety (MEBHS).

In 2019, the MIDTF released its first Impaired Driving Strategic Plan based on the Uniform Guidelines for State Highway Safety Programs for Impaired Driving No. 8 (NHTSA, 2006) in response to the recent increase in alcohol-impaired driving crashes and fatalities. The Impaired Driving Strategic Plan maximizes the State's ability to impact impaired driving crashes, and oversee implementation of the plan. Stakeholders from various agencies and organizations responsible for critical components of Maine's impaired driving program participate in the MIDTF.

The MIDTF meets on a quarterly basis and remains in constant communication when issues involving impaired driving arise. The MIDTF Charter is included in Appendix A, and the list of members and their affiliations are available in Appendix B.

1.1.1 Maine Impaired Driving Task Force Mission

The Maine Impaired Driving Task Force Mission is to eliminate impaired driving injuries and fatalities in Maine through prevention, education, enforcement, and adjudication.

1.2 Impaired Driving Strategic Planning

Maine's Impaired Driving Strategic Plan utilizes targeted, evidence-based countermeasures to ensure a comprehensive effort towards Maine's overall safety goal of zero deaths. Maine's Impaired Driving Strategic Plan focuses on the following overarching strategies:

1. Collaborate with stakeholders such as the Maine Center for Disease Control, Bureau of Alcoholic Beverages and Lottery Operations, local schools, employers and other community-based coalitions to prevent impaired driving.
2. Identify high-risk populations and locations through extensive impaired-related crash data analysis.
3. Reduce impaired driving behavior through targeted high-visibility enforcement, effective prosecution, enhanced penalties for subsequent offenses resulting from impaired driving.
4. Combine high-visibility enforcement with increased public awareness of the dangers, costs, and consequences of impaired driving with emphasis on high-risk populations and locations.
5. Mandate persons with one or more alcohol and/or drug-related motor vehicle offenses to undergo the Driver Education and Evaluation Program (DEEP).

1.3 Program Management

1.3.1 Implementation of Evidence-Based Strategies

MEBHS (and its law enforcement partners) use a combination of overtime enforcement checkpoints and saturation patrols, which are found in the NHTSA Ninth Edition, 2017 *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices* to address the identified traffic safety problem(s). Non-law enforcement partners also use the guide to implement evidence-based strategies that will result in a reduction in crashes and injuries for a focus demographic (i.e. young drivers) or an increase in voluntary compliance of traffic laws.

1.3.2 Documentation and Tracking

All grant funded activities including: summonses, warnings, hours spent on the project, contacts made, resources utilized, and other details of all project efforts are collected at the state level and are used for determining value of efforts, future grant awards and return on investment.

1.3.3 Continuous Monitoring

MEBHS Highway Safety Coordinators use progress reports and information collected during telephone and on-site monitoring to ensure grant funded projects are effective. Monthly, quarterly and final progress reports received from each subrecipient receiving grant funding are used to ensure achievement of the goals and outcomes of each project. These reports include data on the activities conducted, such as the area and times worked, the focus demographic reached, any problems encountered, and for law enforcement the number of warnings and citations issued. MEBHS uses various available data systems, i.e. Maine Crash Reporting System, the Public Query Crash Website, and the Fatality Analysis Reporting System (FARS) to monitor crashes and fatalities. MEBHS will advise law enforcement, and other partners, if there are increases or decreases that would require a change in strategy in a particular jurisdiction. This continuous follow-up allows for subtle or major adjustments, thereby ensuring the best use of resources to address the stated priority traffic safety problem(s).

1.3.4 Resources

MEBHS has developed procedures to ensure enforcement resources are data-driven and awarded federal funds are used efficiently and effectively to support the goals of the state's highway safety program. Maine incorporates an evidence-based approach in its statewide enforcement program through the following components:

Data Driven Problem Identification

A statewide problem identification process is used in the development of the Highway Safety Plan (HSP). The data analyses are designed to identify the high-risk populations in crashes and who, what, when, where and why crashes are occurring.

MEBHS utilizes a three-prong approach to identify problem high-risk populations and locations. This three-prong approach is outlined below:

1. Due to the State of Maine's geographic size, the state is divided into eight regions. To proportionately divide the state based on geography alone, the current State of Maine district court regions were utilized.
2. The eight geographic regions vary significantly in population density, which in turn affects their respective crash rates. To account for population density in each of these regions, the Maine Bureau of Highway Safety calculates the proportion of vehicle miles travelled in each region as compared to the total vehicle miles traveled in the State of Maine. Each region is then assigned a specific number of grants based upon those percentages and the total number of grants decided upon for each program area in the state. For example, Region 1 (York County) accounted for 15.73% of the total vehicle miles travelled in the entire State of Maine. This allocated six grants to Region 1 out of the 35 high-visibility enforcement grants decided upon for the impaired driving program area.
3. To identify problem areas within each geographic region, the Maine Bureau of Highway Safety utilized different tools to analyze data. Crash data spanning the five-year period from 2013-2017 is averaged for each program area. The data includes crashes that resulted in possible injuries, evident injuries, serious injuries, and fatalities.

Geographic Information Systems (GIS) are used to map the top problem areas in the state to further assist in problem identification. This step helps identify the major roads that have high crash rates. Law enforcement agencies located in the problem areas identified for each region are offered grant opportunities as tier 1 agencies. Sheriff's offices and the Maine State Police in the tier 1 areas are also identified to assist with tier 1 problem areas outside of local jurisdictions. Tier 2 problem areas are identified based on their proximity to tier 1 areas using crash data as outlined above. Law enforcement agencies in the tier 2 problem areas are offered grant opportunities if an agency in the tier 1 agency does not apply for a grant. The intent for tier 2 agencies is to have an impact on crash numbers in areas identified as tier 1 due to their proximity and shared roadways.

All enforcement agencies requesting MEBHS grant funding to support additional overtime patrols, must also present a data driven approach to identifying the traffic safety problems in their jurisdictions. Data documenting the highway safety concern must be included in the funding application submitted to MEBHS, along with proven strategies and countermeasures that will be implemented and evaluated to address the problem.

1.3.5 Data and Records

A complete traffic records program is necessary for planning, problem identification, operational management, and evaluation of a state's highway safety activities. MEBHS and its partners collect and use traffic records data to identify highway safety problems, select the most appropriate countermeasures and evaluate their effectiveness. Electronic Traffic Records Systems such as: Fatality Analysis Reporting System (FARS), Maine Crash Reporting System (MCRS), e-Citation and Electronic Run-Reporting are used to collect data. The MEBHS share electronically collected data and receive reports analyzing crash, fatal and injury data for the various reports, and for statewide use in crash analysis.

1.3.6 Communication Program

The MIDTF works with stakeholders, members, and partners to support comprehensive communications. Promotion and support for the NHTSA "Drive Sober or Get Pulled Over" and the MEBHS "Drive Sober, Maine" is coordinated between the MIDTF and its partners. These and other impaired driving messages surrounding the dangers and consequences of impaired driving are spread through paid media, earned media, social media, and other various outlets. Communications are executed in an effort to influence behavioral changes and gain voluntary compliance with all impaired driving laws.

2.0 Prevention

2.1 Promotion of Responsible Alcohol Service

Enforcement of Underage Drinking Laws Program

The Maine Center for Disease Control provides grant funding administrative oversight for the *Enforcement of Underage Drinking Laws* (EUDL) program in the State of Maine. The goal of EUDL is to reduce underage drinking in communities around the State of Maine by systematically implementing best or promising practices that attain the objectives of increasing the enforcement of underage drinking laws and enhancing research-based prevention planning.

Underage alcohol compliance check enforcement operations are conducted throughout the state by local, county and State law enforcement agencies to ensure that liquor license establishments do not sell or serve alcohol to minors.

Other planned EUDL activities include:

- Enforcement of illegal transportation & juvenile OUI criminal & administrative violations
- Large underage party patrol, identification, and dispersal training
- Source investigation
- Retail liquor license training
- Shoulder Taps
- High visibility enforcement

Law Enforcement Training:

Training for law enforcement is an important part of the EUDL program. Officers and local coalition members receive up-to-date training on underage drinking prevention and enforcement strategies from other experienced law enforcement officers. The trainings also allow the officers to network with one another, especially if they are from neighboring towns.

Responsible Beverage Server Training for On-Premise Licensees

The "Alcohol Server Training" is a state approved program designed to educate owners, managers, servers, and sellers at alcohol establishments about strategies to avoid illegally selling alcohol to underage youth or intoxicated patrons. It is required for all establishments that serve alcohol in the State of Maine.

2.2 Promotion of Transportation Alternatives

MEBHS promotes alternative transportation options throughout the State of Maine through social media and public service announcements. These programs include:

- Designated drivers
- Taxi
- Lyft, Uber, and other ride-share programs
- Fixed-route shuttles
- Limousines/party buses
- Use of NHTSA's SaferRide app
- Public transportation

MEBHS will also be exploring new options in 2019 and 2020 to help promote taxi and other ride-share programs where impaired driving has been identified as a problem.

2.3 Community-Based Programs

2.3.1 Schools

Choices Matter Maine

MEBHS offers the "Choices Matter Maine" program to Maine schools through a contract with Alliance Sports Marketing. The "Choices Matter Maine" program covers all highway safety programs targeted towards young/teen drivers. Impaired Driving is one component of the program. The following are summaries of the concepts and strategies used to implement the program:

School Presentation Tour

The "Choices Matter Maine" program includes a school presentation tour that visit Maine schools each year. The presenters draw from their life experiences and expertise to explain why "Choices Matter." They demonstrate the impact those choices they make can have on their physical and mental performance and ultimately their life.

Interactive School Display

As a part of the school presentation tour, Alliance sets up and coordinates an interactive display branded with the campaign message at the schools. Students are invited to take part in interactive elements, such as an impaired driving simulator, impaired vision goggles, and other campaign related interaction.

Peer-to-Peer Influencers

Alliance works with school administrators at each of the tour stops to identify student influencers within the school who will assist Alliance with peer-to-peer communication. This consists of their participation in the presentation, interactive display, and wearing donated campaign branded t-shirts promoting the campaign message.

Student Leadership Conference

The program sponsors a student leadership conference to help grow and foster the group of

peer-to-peer influencers. The leadership conference provides a platform to educate students about the importance of the highway safety message and create advocates for the campaign within the schools and communities across the state.

"Choices Matter" Coaches and Captains Playbook

Alliance distributes a "Choices Matter" playbook that educates the coaches and administrators about the program and is distributed to schools across the state. This playbook provides coaches a resource that includes the facts about the teen driving problem, who is most at risk, and why teens have an increased crash risk. It also equips the coaches and administrators with knowledge of how to prevent these problems from happening as well as how to handle problems should they occur. Alliance creates a similar "Choices Matter" playbook that is distributed to the team captains providing them with a foundation of knowledge and information about dealing with issues such as underage drinking and the dangers of unsafe driving behaviors.

Coaches & Administrators Conferences

The "Choices Matter Maine" program is introduced and promoted to the coaches and administrative professionals at conferences and meetings. The conferences provide a platform to engage the coaches and administrators and begin to build their support through things such as campaign materials, resources, and a brief presentation to the general session of the conference.

Activities Pledge

The principals and activities directors in each school are encouraged to require that all the participants in extra-curricular activities sign a pledge to always drive sober, always wear their seat belts and never drive distracted. The pledges are collected online.

Digital Curriculum

The program will have a digital curriculum for the coaches and administrators. The digital curriculum will be in the form of a website and an application and will feature videos, facts and figures and an engaging interactive element that allows the users to put themselves into real-life scenarios. The digital curriculum will begin in the program's first year and will be continually developed over the program's first four years to reach the complete design.

Drug Impairment Training for Educational Professionals (DITEP)

The goal of the DITEP course is to enable the secondary educational professional to:

- Recognize the signs and symptoms of drug and/or alcohol impairment
- To reduce the number of underage alcohol and/or drug related traffic fatalities
- Prevent an impaired student from driving away from campus
- To serve as a treatment intervention tool to reduce future instances of DWI

This training will ultimately reduce the number of underage alcohol and/or drug related traffic fatalities. The information and procedures presented in this course are for administrative purposes only. They are designed to aid in the assessment and documentation of drug and/or alcohol impairment in students. The subject matter presented will touch upon some, but not all the factors a Drug Recognition Expert (DRE) considers when examining a drug-impaired individual. This training is not designed as an enforcement tool and will not qualify the participant as a Drug Recognition Expert (DRE).

2.3.2 Employers

Drug-Free Workplace Program

The Drug-Free Workplace Program works collaboratively with the Department of Labor, Maine Center for Disease Control and other key stakeholders to address the effects of substance use in the workplace. The goals of the program are:

- To reduce workplace accidents, death, injury, disability and health care costs due to substance use;
- To reduce employee substance use and stress; and
- To improve responsible attitudes towards drinking and social support for drinking reduction; increase employee knowledge and use of healthier stress reduction techniques; and enhance help-seeking behaviors by encouraging the use of employee assistance programs or community service providers.

Products of this program include WorkAlert, an online resource for employers wishing to develop a drug-free workplace policy and Healthy Maine Works (HMW). HMW is a web-based wellness tool that uses evidence based strategies and resources to address targeted health risk factors. Resistance to address substance use is reduced by including substance use prevention in a wellness model.

2.3.3 Community Coalitions and Traffic Safety Programs

Maine Alliance for Prevention of Substance Abuse

The mission of the Maine Alliance to Prevent Substance Abuse (MAPSA) is to build a unified statewide voice for substance use prevention. MAPSA members are a diverse group of prevention specialists, service providers, community coalition members and individuals with an interest in and a commitment to substance use prevention.

MAPSA works with members, allies and key stakeholders to assess and strengthen Maine's infrastructure for substance use prevention by:

- Sharing information on the need for and benefit of consistent funding for substance use prevention;
- Supporting a climate where Maine communities are empowered to address substance use issues;
- Demonstrating that substance use prevention should be a statewide public health priority;
- Providing a network for members to identify and act on common issues;
- Sharing current research, best practices, publications and resources; and
- Identifying opportunities for state and federal resources.

3.0 Criminal Justice System

The criminal justice system is a vital component to the mission of eliminating impaired driving

injuries and fatalities. Maine's criminal justice system includes impaired driving laws, enforcement, prosecution, adjudication, administrative sanctions and driver licensing programs.

3.1 Laws

The State of Maine is committed to ensuring its impaired driving laws clearly define offenses to ensure effective and efficient enforcement, prosecution, and adjudication. This strategic plan includes the enforcement and prosecution of all of Maine's impaired driving laws, which include the following statutes:

- M.R.S. Title 29-A, §2081 Use of Safety Seat Belts
    - Maine's primary seat belt law which does not require law enforcement officers to observe or cite a driver for a separate offense other than a seat belt violation
- M.R.S. Title 29-A, §2112-A Open Container; Drinking in a Vehicle Prohibited
    - Law prohibits the operator of a motor vehicle on a public way from consuming or possessing an open alcoholic beverage in the passenger area of a motor vehicle.
- M.R.S. Title 29-A, §2411 Criminal OUI
    - This statute defines the criminal offense of operating under the influence of alcohol and/or drugs in Maine.
    - Sets the alcohol per se limit of 0.08 grams or more of alcohol per 100 milliliters of blood or 210 liters of breath.
    - Outlines enhanced penalties for high BAC tests of 0.15 or higher.
    - Creates increasing sanctions for repeat offenders with subsequent offenses.
    - Allows for enhanced penalties when a person operates a vehicle under the influence of alcohol and/or drugs and causes serious bodily injury or death of another person.
- M.R.S. Title 29-A, §2412-A Operating While License Suspended or Revoked
    - Outlines enhanced penalties for operating after suspension when the suspension was for operating under the influence
- M.R.S. Title 29-A, §2453: Administrative suspension for OUI (Alcohol)
    - Maine administratively suspends drivers who operate with an excessive alcohol level (.08 or higher), independent of court action.
- M.R.S. Title 29-A, §2453-A: Administrative suspension for OUI (Drugs)
    - Maine administratively suspends drivers who operate under the influence of drugs (or a combination of alcohol and drugs), independent of court action.

- M.R.S. Title 29-A, §2454 Homicide; revocation of license
    - Increased administrative sanctions for a person causing the death of another person while operating a motor vehicle under the influence
- M.R.S. Title 29-A, §2472 Juvenile Provisional License
    - Makes it illegal for a person under the age of 21 to operate a motor vehicle with an alcohol level of more than 0.00 (zero tolerance)
- M.R.S. Title 29-A, §2521 Implied Consent
    - Requires a person to submit to and complete a test to determine alcohol levels and/or the presence of a drug through analysis of breath, blood, or urine when there is probable cause to believe a person has operated a motor vehicle under the influence of intoxicants.
    - Outlines increased sanctions including administrative license suspension for test refusals
- M.R.S. Title 29-A, §2522 Accidents
    - Requires law enforcement to conduct testing of all drivers involved in fatal crashes to determine alcohol level or presence of a drug

3.2 Enforcement

Sobriety Checkpoints

MEBHS encourages law enforcement agencies to conduct multi-agency sobriety checkpoints in high-risk locations during periods of high-risk activity which are identified through impaired crash data and arrest statistics. The purpose of checkpoints is to deter driving after drinking by increasing the perceived risk of arrest. To do this, checkpoints are highly visible, publicized extensively, and conducted regularly, as part of an ongoing sobriety checkpoint program.

Roadside Testing Vehicle

The Maine Bureau of Highway Safety Roadside Testing Vehicle (RTV) and 18 agency message trailers are utilized when assisting other departments at various events and sobriety checkpoints throughout the state.

Breath Testing Devices

MEBHS coordinates with the Department of Health and Human Services, Health and Environmental Testing Lab to continuously maintain, monitor, monitor, perform calibration verifications, and approve all 91 Intoxilyzers in the State of Maine. MEBHS also purchases and distributes all the required supplies for the 91 Intoxilyzers.

Law Enforcement Training

MEBHS supports specialized training and supplies necessary for law enforcement officers to detect, apprehend, and prosecute motorists suspected of operating under the influence of alcohol and/or drugs. The Maine Impaired Driving Task Force has identified that a best practice methodology for OUI investigation dictates a three-pronged approach:

1. The NHTSA approved curriculum in Standardized Field Sobriety Testing (SFST) which is mandatory for all new police officers trained at the Maine Criminal Justice Academy's Basic Law Enforcement Training Program;
2. The Advanced Roadside Impaired Driving Enforcement (ARIDE) program offered to experienced patrol officers who desire better awareness of OUI drug cases;
3. The Drug Recognition Expert (DRE) program for those police officers who excel in OUI enforcement. In addition to providing the basic funding for instructors, materials and supplies, this program provides travel expenses for DRE candidates to complete their field certifications in more densely populated States to ensure they meet the proficiency requirements without undue delay.

MEBHS also funds select attendance at the annual DRE conference critical for keeping DREs current and proficient in utilizing best practices. The MEBHS recognizes the need to retain and increase DREs and is actively working toward that goal. These projects are administered jointly with the Maine DRE and impaired driving training coordinator at the Maine Criminal Justice Academy (MCJA).

MEBHS also works with MCJA to provide Breath Testing Device (BTD) site coordinator training to all law enforcement agencies that house and maintain a BTD.

Maine Annual Impaired Driving Summit

MEBHS, with its partners, intends to increase awareness of the growing issue of drug impaired driving by hosting annual summits similar to previous successful summits. Impaired Driving Summits are attended by over 200 people. Several out-of-state national speakers present at the conference. The goal is to increase the attendance at the Impaired Driving Summits and to encourage greater judicial and legislative attendance. The summits generate a significant amount of earned media and the after-event surveys provide useful recommendations for ongoing annual Maine summits.

State Police Impaired Driving Reduction Enforcement (SPIDRE) Team

The State Police Impaired Driving Reduction Enforcement Team (SPIDRE) is comprised of members of the Maine State Police who are proficient in NHSTA Standardized Field Sobriety Training and ARIDE. Several are certified as Drug Recognition Experts. SPIDRE consists of a team leader and team members available statewide. The SPIDRE Team increases OUI saturation patrols and checkpoints, with a focus on scheduled events where there is a significant potential for impaired drivers.

Regional Impaired Driving Enforcement (RIDE) Teams

These Regional Teams conduct saturation patrols and sobriety checkpoints in selected

locations (using evidence based traffic safety methods) throughout identified jurisdictions. Exact patrol locations are determined and agreed upon by the Highway Safety Coordinator and Law Enforcement Liaison in partnership with individual RIDE administrators. MEBHS monitors the grant's success as it is being conducted to determine if modifications need to be implemented to ensure the activity is producing results.

Evidence Based Impaired Driving High Visibility Enforcement Campaigns

MEBHS administers grants to support dedicated overtime costs for law enforcement agencies (LEA's), selected by data analysis, to participate in impaired driving enforcement saturation patrols and checkpoints including those that support NHTSA's national campaigns in August and December (holiday season). The "Drive Sober, Maine!" campaign is designed to further address the impaired driving problem in Maine outside of the two two-week national campaigns based on an analysis of crash and fatality data involving alcohol and drugs.

Statewide Impaired Driving Reduction Trooper (Maine State Police)

This project supports one Maine State Police Trooper position within the Maine State Police Traffic Safety Unit. This position assists MEBHS, the Maine State Police and all county and municipal law enforcement agencies with the creation, administration and improvement of various traffic safety programs aimed at reducing impaired driving by alcohol and drugs. This position works closely with various partners and committees such as the MEBHS, MCJA, MIDTF, Maine Bureau of Motor Vehicles, Law Enforcement Liaison (LEL), Judicial Outreach Liaison (JOL) and the Traffic Safety Resource Prosecutor (TSRP), to deliver the best possible impaired driving reduction products and information that save lives. This will include, but not be limited to, the DRE program, blood technician program, OUI/SFST instruction, ARIDE, impaired driving enforcement, educational speaking engagements, PSAs, awareness and prevention programs and monitoring of legislative issues.

Law Enforcement Call-Out Reimbursement for DREs and Forensic Phlebotomy Technicians

This project increases the availability of Drug Recognition Experts and Forensic Phlebotomy Technician personnel by reimbursing overtime expenses when they are called-out from off-duty to assist on-duty officers investigating OUI cases.

DHHS Health and Environment Testing Lab (HETL) Staff Positions

This project provides funding for the costs of additional lab staffing (chemist and toxicologist) who can analyze blood samples for drugs at the Maine Health and Environmental Testing Lab and provide expert toxicological or pharmacological testimony for Maine prosecutors as needed.

Forensic Phlebotomy Technician Training

Maine, like many other states, has faced challenges in obtaining evidential blood draws in impaired driving cases. The medical community (both pre-hospital and hospital) have grown increasingly reluctant to assist law enforcement in obtaining non-medical related blood draws. In response to this problem, Maine has created a hybrid program that includes call-out pay for civilian phlebotomists, and a training program that trains law enforcement officers as forensic

phlebotomy technicians to conduct evidentiary blood draws in the field.

3.3 Prosecution and Adjudication

Traffic Safety Resource Prosecutor

Maine's Traffic Safety Resource Prosecutor (TSRP) facilitates a coordinated, multi-disciplinary approach to the prosecution of traffic crimes with a strong focus on impaired driving. Maine's TSRP assists Maine law enforcement, prosecutors, motor vehicle hearings examiners, DHHS lab technicians, and other state agencies with training, investigation and prosecution of traffic safety and impaired driving-related crimes. The TRSP also assists with the implementation and coordination of the Impaired Driving Special Prosecutors within selected Maine prosecutorial districts. The TSRP is encouraged by NHTSA and proven effective in the fight against impaired driving.

Impaired Driving Special Prosecutors

Impaired Driving cases are one of the most heavily litigated and complex cases within the criminal justice system. The State of Maine has recognized this as a significant concern and has coordinated a project to ensure that highly trained prosecutors are reviewing and prosecuting impaired driving cases.

An Impaired Driving Special Prosecutor (IDSP) is a member in good standing of the Maine State Bar Association with knowledge, education and experience in the prosecution of OUI crimes. The IDSP works directly with selected Maine prosecutorial districts to assist with the prosecution of OUI crimes. The IDSPs participate in the State DRE School, the Impaired Driving Summit, and the basic law enforcement academy Standardized Field Sobriety Testing School. Some prosecutors conduct ride-alongs with local law enforcement to observe impaired driving arrests in person and others have started a state brief bank containing impaired driving related briefs on repeated evidence and trial issues. All IDSPs have worked closely and communicate regularly with Maine's Traffic Safety Resource Prosecutor in grappling with some of the issues Maine faces in OUI enforcement and prosecution. This multi-jurisdictional effort has increased all Maine prosecutors ability to more efficiently handle their OUI caseload and understand the complex and technical issues associated with drug impaired driving prosecution. This is especially important as Maine becomes the seventh state to implement voter legalized recreational marijuana.

Judicial Outreach Liaison

The Judicial Outreach Liaison (JOL) is responsible for developing a network of contacts with judges and judicial educators to promote judicial education related to sentencing and supervision of OUI offenders, court trial issues, and alcohol/drug testing and monitoring technology. In addition, the JOL makes presentations at meetings, conferences, workshops, media events and other gatherings that focus on impaired driving and other traffic safety programs. The JOL identifies barriers that hamper effective training, education or outreach to the courts and recommends alternative means to address these issues and concerns. With the help of the Traffic Safety Resource Prosecutor, the JOL achieves uniformity with regard to impaired driving prosecution throughout Maine.

Maine Judicial Education Training

Trial judges responsible for deciding disputes arising from prevention, detection, apprehension and correction of impaired driving may have no familiarity with the science, best technical practices and related constitutional and evidentiary issues raised in court before trial. Maine Judicial Education Training includes:

- DRE procedures and toxicology related to drugged driving;
- The pros and cons on admissibility of testimony from specially trained police officers absent medically or toxicologically trained experts;
- Electronic monitoring and judicial supervision, early-intervention, DWI Courts and alternative DUID/DUIA sentencing, and pre-trial release options;
- Constitutional challenges, search & seizure and any other topical judicial/factual/ legal issues arising in court out of traffic safety enforcement, such as, but not limited to, distracted driving and passenger protection.

Courtroom Training in OUI Drug Cases for DREs, Prosecutors, and Toxicologists

Maine's Traffic Safety Resource Prosecutor, has created a two-day class relevant to OUI enforcement and investigation for Maine prosecutors, toxicologists, and law enforcement. This 16-hour course is intended to prepare prosecutors, toxicologists and law enforcement officers (with certification as Drug Recognition Experts) to excel in the courtroom during testifying and cross examination on drug-impaired driving cases.

3.4 Administrative Sanctions and Driver Licensing Programs

The State of Maine utilizes administrative license and vehicle sanctions as an effective method to deter, prevent, and reduce recidivism in impaired driving cases. Maine also has many driver licensing programs as part of its overall impaired driving program. The following countermeasures are currently in place in Maine:

- Suspension or revocation of an offender's driver's license
- Forfeiture of motor vehicles for OUI
- Motor vehicle registration suspension
- Enhanced administrative penalties for refusal of a chemical test
- Voluntary ignition interlock device program
- Graduated driver's license program (GDL) for young novice drivers, which includes a component for impaired driving.
- Maine's zero-tolerance law for minors
- Education programs that explain how alcohol and drugs can impair the ability to drive

4.0 Communications Program

MEBHS has long recognized paid and earned media as an essential component to a successful highway safety plan. The MEBHS works with multiple vendors to ensure that it effectively utilized resources and direct messaging towards impaired driving. MEBHS supports educational events and advertising at sporting venues. During these events, impaired driving is addressed via public service announcements, signage, informational displays, and personal interaction with the public using local

law enforcement and MEBHS staff. Other communication programs including paid media (television, radio, print, digital, social) associated with the impaired driving program, support the following campaigns:

- NHTSA's "Drive Sober or Get Pulled Over" campaign periods over the Labor Day and December holidays that increase awareness of and compliance with impaired driving laws and the consequences of failing to do so.
- The "Drive Sober, Maine!" campaign designed to further address the impaired driving problem in Maine outside of the two-week national campaigns based on an analysis of crash and fatality data involving alcohol and drugs.

5.0 Alcohol & Drug Misuse: Screening, Assessment, Treatment and Rehabilitation

Maine Driver Education and Evaluation Programs for OUI Offenders (DEEP)

The Driver Education and Evaluation Programs (DEEP) are the Legislatively mandated (5 MRSA c.521, Sub-c. V) Operating Under the Influence (OUI) countermeasures programs in the State of Maine. The program's goal is to lessen the incidence of injury, disability and fatality that results from alcohol and other drug related motor vehicle crashes, and to reduce the risk of re-offense for OUI. Maine has instituted the following programs for individuals who have been convicted of an OUI:

The Risk Reduction Program (PRIME for Life)
21 years of age or older at the time of offense, or youthful offenders who have reached the age of 21 or older when they register to take a program.

All adult offenders, with a first offense or more than one offense within a period of 10 years are required to take the 20-hour DEEP Risk Reduction Program, including completion of the "PRIME for Life" curriculum. Participants in the Risk Reduction Program will receive in-depth education regarding high-risk alcohol and drug choices to assist them in identifying and changing high-risk behaviors. Participants will complete a preliminary assessment instrument designed to screen for risk factors for substance use problems. Individuals found to be at higher risk will be referred to a DEEP-certified community-based service provider for a clinical substance use evaluation to determine if there is evidence of a problem that needs treatment. If there is a substance use problem evident, the individual will be referred to counseling and required to complete the prescribed treatment services, which are determined according to DEEP's regulatory guidelines and the needs of the individual.

The "Under 21" Program
Under 21 years of age at the time of the offense and under 21 when they register to take a program.

Individuals under the age of 21 years with an alcohol or drug related motor vehicle offense will attend the Under 21 Program, DEEP's 16-hour education and assessment program for youthful offenders. Participants will receive in-depth education regarding risks and consequences of alcohol and drug use, and will complete a preliminary assessment instrument designed to screen for risk factors for substance use problems. Individuals found to be at higher risk will be referred to a DEEP certified community-based service provider for a clinical substance use evaluation to determine if there is

evidence of a problem that needs treatment. If there is a substance use problem evident, the individual will be referred to counseling and required to complete the prescribed treatment services, which are determined according to DEEP's regulatory guidelines and the individual's needs.

Maine's Adult Drug Treatment Courts (ADTC)

Implemented in 2001, the ADTCs are specialty dockets given the responsibility to manage cases involving high-risk/high-need individuals with serious substance use and co-occurring disorders involved with the criminal justice system through rigorous judicial monitoring, community supervision, drug testing, specialized and comprehensive treatment services, and immediate sanctions and incentives. In exchange for a guilty plea, an individual may enter the ADTC and following graduation expect a greatly reduced sentence. However, if unsuccessful in the court, the previously agreed upon sentence associated with this outcome will be imposed.

6.0 Program Evaluation and Data

The Maine Impaired Driving Task Force in conjunction with the State Traffic Records Coordinating Committee (TRCC) and MEBHS will conduct an overall evaluation of all MEBHS funded and other non-funded impaired driving projects annually through the MEBHS annual report to NHTSA. The MIDTF will also review crash data, citation data, conviction data and other impaired-driving data provided through federal, state, and local data sources. The thorough review of the MEBHS annual report and other data will be utilized to track trends in impaired driving. The trends and data will be used to evaluate program effectiveness and targets set forth in the State of Maine Strategic Highway Safety Plan, MEBHS Highway Safety Plan, and this Impaired Driving Strategic Plan.

Appendix A:

Maine Impaired Driving Task Force Charter
(As Approved on May 21, 2019)

Article I. Mission
The mission of the State of Maine Impaired Driving Task Force is to prevent and eliminate impaired driving fatalities and injuries in Maine.

Article II. Authority
The Maine Impaired Driving Task Force (herein after referred to as the "MIDTF") was established under the authority of the Maine Governor's designated Highway Safety Representative (GR) and direction of the Maine Bureau of Highway Safety (MeBHS).

Article III. Objective
The MIDTF's objective is to reduce and eventually eliminate impaired driving related crashes and fatalities. To accomplish this objective, the MIDTF will approve, monitor, and evaluate the progress of the Impaired Driving Strategic Plan.

Article IV. Membership
Section 1. The MIDTF membership includes key representatives from various stakeholder groups which shall be comprised of governmental and non-governmental agencies, offices, and organizations, each of whom possesses a demonstrated interest in the elimination of impaired driving.

Section 2. The Maine Bureau of Highway Safety will determine representation and approve all members of the MIDTF based on the needs of the MIDTF. Current members may recommend representation from other governmental and non-governmental entities to be approved by the Maine Bureau of Highway Safety.

Article IV. Board of Directors
Section 1. Officers

- Chair – The MIDTF Chair shall be appointed by the Director of the Bureau of Highway Safety and is responsible for scheduling and coordinating MIDTF meetings along with the distribution of materials and meeting notes to members.

Section 2. The business, affairs and property of the MIDTF shall be managed by a Board of Directors of no fewer than eight (8), nor more than fifteen (15). The number of directors may be increased or decreased by a majority vote of the Board of Directors. No such resolution may impair the rights of a sitting Board member.

Appendix B:

MAINE

IMPAIRED DRIVING TASK FORCE

MIDTF Membership

Chair
Jamie Dionne
Highway Safety Coordinator, MEBHS

Department/Agency/Organization	Name	Title
AAA	Patrick Moody	Public Affairs & Government Relations Manager
Androscoggin County District Attorney's Office	Patricia Mador Jessica Hollenkamp	Impaired Driving Special Prosecutor Impaired Driving Special Prosecutor
Attorney (retired)	Theodore Hoch	Attorney (retired)
Brunswick Police Department	John Roma	Detective / DRE
Cumberland County District Attorney Office	Brendan O'Brien	Impaired Driving Special Prosecutor
Cumberland County Sheriff's Office	Scott Stewart	Captain / DRE
Department of Health and Human Services Maine Center for Disease Control and Prevention	Cheryl Cichowski	Substance Use Prevention Team Manager
Department of Health and Human Services Health and Environmental Testing Laboratory	Heather Dyer Ellen Fraser Nicole Ingalls Robert Morgner Maria Pease	Chemist Chemist Chemist Chemist Chemist
Department of Public Safety Maine Criminal Justice Academy	James Lyman Edwin D. Finnegan	Training Coordinator Training Coordinator
Department of Public Safety Bureau of Highway Safety	Lauren Stewart Jaime Pelotte	Director Contract Grant Specialist / FARS Supervisor
Department of the Secretary of State Bureau of Motor Vehicles	Benjamin Tucker Lynne Gardner	Director of Legal Affairs Assistant Director of Legal Affairs
Dirigo Safety, LLC	Scot Mattox Thomas Reagan David Kennedy	Traffic Safety Resource Prosecutor Law Enforcement Liaison Judicial Outreach Liaison
Kennebec County District Attorney's Office	Meaghan Maloney Kristin Murray-James	District Attorney Impaired Driving Special Prosecutor
Maine State Police	Bruce Scott Seth Allen	Lieutenant, Traffic Safety Impaired Driving Reduction Specialist

Penobscot County District Attorney's Office	Marianne Lynch Mercedes Gurney Alice Clifford	District Attorney Impaired Driving Special Prosecutor Impaired Driving Special Prosecutor
Portland Police Department	Christopher Shinay	Officer
Sagadahoc County Sheriff's Office	Matthew Sharpe	Deputy / DRE
South Portland Police Department	Robert Libby	Officer / DRE
York County District Attorney's Office	Sheila Nevells	Impaired Driving Special Prosecutor

State of Maine
Traffic Records Strategic Plan for FFY2020

July 1, 2019

State Traffic Safety Information System Improvement

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Table of Contents

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Maine Traffic Records Strategic Plan

1. Executive Summary

The State of Maine Traffic Records Coordinating Committee (TRCC) is comprised of stakeholders in the traffic safety community. These stakeholders include highway safety, traffic safety data collectors, managers, and law enforcement. Each of the core traffic records data systems are represented within the State of Maine TRCC. These data systems consist of Crash, Driver, Vehicle, Roadway, Citation/Adjudication, and Injury Surveillance.

The State of Maine completed the NHTSA Traffic Records Assessment on April 25, 2016 and has accepted the various recommendations related to improving the State's traffic records data systems. In 2019, the TRCC held strategic planning workshops to develop strategic goals, strategies to achieve the identified goals, and the expected improvement outcomes for each core data system (see Section 4 of this document). Additionally, the TRCC has reviewed and responded to each recommendation and will use the strategic goals to plan improvements to the traffic records data systems during the course of the next several plan years.

In CY2019, in response to a NHSTA Traffic Records Assessment recommendation, the Maine TRCC developed the *State of Maine Traffic Records Inventory,* (see Appendix A). This document is being used to provide stakeholders with up-to-date system information; including data governance, system documentation, data dictionaries, and user documentation. This information will assist in the TRCC's efforts to improve the accessibility, completeness, uniformity, accuracy, integration, and timeliness of Maine's traffic records data.

In the third quarter of CY2018, the State of Maine deployed Maine eCitation, an electronic citation system, to the Maine State Police and Farmington Police Department. This is the first use of electronic citations in the State and is a major step forward in improving one of the State's core traffic records data systems. Plans are being made to deploy the system to additional Troopers, as well as county and municipal law enforcement agencies.

As of May 15, 2019, 3,671 electronic citations (eCitations) were issued totaling 4,398 violations. The average timeliness of 2019 eCitations, from the time of issuance to arrival in the Maine Department of Public Safety Statewide eCitation database, is 51 minutes. After eCitations arrive in the Statewide eCitation database, they are electronically transmitted to the Maine Judicial Branch, Violation Bureau's court case management system within fifteen minutes.

The Maine Crash Public Query Tool website continues to serve advanced crash analytics to highway safety stakeholders and the public. The system provides Crash Statistics, Mapping, and High Crash Location analysis that is accessible to the public (no login required) or via an advanced user functionality (login required). The website currently has 116 advanced users, an increase from 78 users at this point last year. This project continues to increase the accessibility of Maine's crash data to the public and highway safety stakeholders (a core NHTSA performance area).

The Electronic Collection of EMS Run Report Data project (MEFIRS) has deployed a system upgrade in the first half of 2017 that brings the EMS run reporting system to NEMSIS 3 (National EMS Information System) compliance. This deployment increases the uniformity of the MEFIRS system with the latest NEMSIS standards (a core NHTSA performance area). An EMS Uniformity performance measure included herein demonstrates EMS NEMSIS V3 compliance is at 95%, an improvement of 24% over the previous 12-month period.

Maine's progress in improving the State's traffic records data systems are detailed in Section 4 of this plan. The performance measures in Section 5.1 demonstrate continued improvements in Crash Completeness and Crash Uniformity as well as the improvement in EMS Uniformity.

Any grant funds awarded under FAST Act, Section 405c shall be used to make quantifiable, measurable progress improvements in the accuracy, completeness, timeliness, uniformity, accessibility, or integration of data in a core highway safety database.

2. Mission & Vision Statements

2.1 Mission Statement

The Maine Traffic Records Coordinating Committee's mission is to provide multi-agency coordination that oversees improvements to the State's traffic records data systems.

These improvements will provide highway safety professionals and stakeholders the analysis capabilities they require to effectively develop, deploy, and evaluate safety countermeasures that reduce motor vehicle crashes, injuries, and deaths within the State.

2.2 Vision Statement

The TRCC's vision for Maine's traffic records data systems is to provide highway safety stakeholders with the information and advanced analysis capabilities needed to implement effective safety countermeasures that reduce crashes and their resultant costs, injuries, and deaths.

To make this vision a reality, Maine's traffic records data systems will need to provide the timeliest, most accurate, complete, uniform, accessible, and integrated data to the highway safety community.

3. Traffic Records Coordinating Committee

3.1 TRCC Charter

State of Maine
Traffic Records Coordinating Committee Charter
Executive and Technical

Whereas various state and local government agencies have recognized the need to work together to integrate Highway Safety Information Systems to enhance decision making and save lives and injuries on Maine's highways.

And whereas various state and local government agencies have agreed to collaborate in the development and implementation of a Highway Safety Information System improvement program to provide more timely, accurate, complete, uniform, integrated, and accessible data to the traffic safety community.

And whereas various state and local government agencies have agreed to collaborate in the development and implementation of a Highway Safety Information System strategic plan that insures that all components of state traffic safety are coordinated.

Therefore the following Charter is created to establish a Traffic Records Committee in accordance with the requirements of FAST Act, Section 405c and as agreed upon by the participating agencies.

Objective:

To establish a multi-agency Traffic Records Committee composed of voting members from the Maine Bureau of Motor Vehicles, Maine EMS, Maine Department of Transportation, Maine Judicial Branch, State and local law enforcement agencies, local Emergency Medical Services, and other federal and non-federal partners, whose purpose is to provide direction on all matters related to the Maine Highway Safety Information System.

Traffic Records Committee Goal:

To improve the timeliness, accuracy, completeness, uniformity, integration, and accessibility of traffic related data needed to identify priorities for national, state, and local highway and traffic safety programs.

Traffic Records Committee Functions:

The Traffic Records Coordinating Committee shall-

Have authority to review any of the State's highway safety data and traffic records systems and any changes to such systems before the changes are implemented;

Consider and coordinate the views of organizations in the State that are involved in the collection, administration, and use of highway safety data and traffic records systems, and represent those views to outside organizations;

Review and evaluate new technologies to keep the highway safety data and traffic records systems current;

Approve annually the membership of the TRCC, the TRCC coordinator, any changes to the State's multi-year Strategic Plan required under paragraph (c) of this section, and performance measures to be used to demonstrate quantitative progress in the accuracy, completeness, timeliness, uniformity, accessibility, or integration of a core highway safety database.

Whereas various state and local government agencies have recognized the need to work together to integrate Highway Safety Information Systems to enhance decision making and save lives and injuries on Maine's highways.

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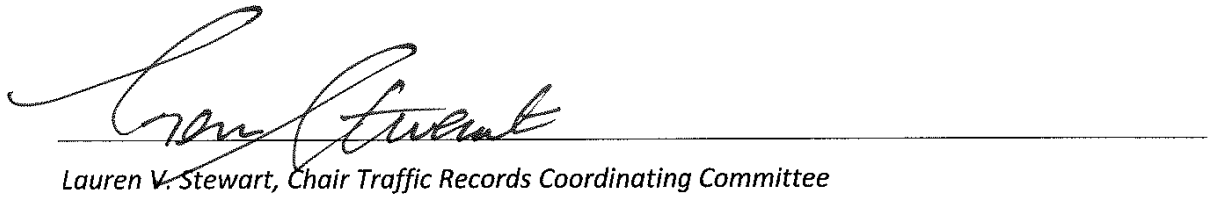
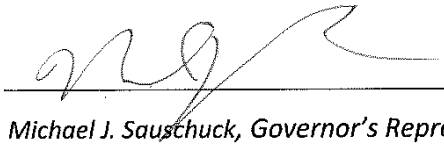
Review and evaluate new technologies to keep the highway safety data and traffic records systems current;

Approve annually the membership of the TRCC, the TRCC coordinator, any changes to the State's multi-year Strategic Plan required under paragraph (c) of this section, and performance measures to be used to demonstrate quantitative progress in the accuracy, completeness, timeliness, uniformity, accessibility, or integration of a core highway safety database.



Lauren V. Stewart, Chair Traffic Records Coordinating Committee

Director, Maine Bureau of Highway Safety



Michael J. Sauschuck, Governor's Representative

Commissioner, Maine Department of Public Safety

3.2 Traffic Records Improvement Program Coordinator

Name: Ms. Lauren Stewart
Title: Director
Agency: Bureau of Highway Safety, Department of Public Safety
Address: 164 State House Station
City, Zip: Augusta 04333
Phone: 207-626-3840
Email: lauren.v.stewart@maine.gov

3.3 TRCC Committee Members

3.3.1 Executive Committee

Name / Title	Agency	System Represented
James Glessner *State Court Administrator*	Maine Judicial Branch	Citation
Matthew Dunlap *Secretary of State*	Office of the Secretary of State	Driver/Vehicle
Bruce Van Note *Commissioner*	Maine Department of Transportation	Crash/Roadway
Michael J. Sauschuck *Commissioner*	Maine Department of Public Safety	Crash/Citation/ Highway Safety/ Injury Surveillance System

3.3.2 Technical Committee

Name / Title	Agency	System Represented
Douglas Bracy *Chief*	Maine Chiefs of Police Association	Law Enforcement
Vacant *Director*	Department of Public Safety, Maine EMS	Injury Surveillance System
Linda Grant *Senior Section Manager*	Maine Bureau of Motor Vehicles	Driver/Vehicle
Karen Knox *Systems Team Leader*	Maine Office of Information Technology	Information Technology

Name / Title	Agency	System Represented
Al Leighton *CODES and Data Analyst*	University of Southern Maine, Muskie School	Highway Safety
David Poulin *Systems Section Manager*	Maine Office of Information Technology	Information Technology
Emile Poulin *Senior Information Systems Support Specialist*	Maine Office of Information Technology	Information Technology
Bruce Scott *Lieutenant, Traffic Safety*	Maine State Police	Crash/Citation TRCC Co-Chair
John Smith *Manager*	Maine Violations Bureau	Citation
Lauren Stewart *Director*	Maine Bureau of Highway Safety	Highway Safety TRCC Co-Chair TRCC Coordinator
Jaime Pelotte *Senior Contract Grants Specialist*	Maine Bureau of Highway Safety	Highway Safety

3.4 TRCC Functions

The legislation & Federal Register call for certification that the TRCC continues to operate. Please provide the following information about your TRCC's structure and operation.

Do you have an executive (policy level) TRCC? Yes

If so, how often does it meet? As Needed.

Do you have a technical (working level) TRCC? Yes

If so, how often does it meet? Three times a year minimum.

Does your TRCC have in place documents that demonstrate that the TRCC meets the following requirements of the legislation & Federal register?

Yes The TRCC has the authority to approve the Strategic Plan.

Yes The TRCC has the authority to review any of the State's highway safety data and traffic records systems and to review changes to such systems before the changes are implemented.

Yes The TRCC includes representative from highway safety, highway infrastructure, law enforcement and adjudication, public health, injury control and motor carrier agencies and organizations.

Yes The TRCC provides a forum for the discussion of highway safety data and traffic records issues and report on any such issues to the agencies and organizations in the State that create, maintain, and use highway safety data and traffic records.

Yes The TRCC considers and coordinates the views of organizations in the State that are involved in the administration, collection and use of the highway safety data and traffic records systems.

Yes The TRCC represents the interests of the agencies and organizations within the traffic records system to outside organizations.

Yes The TRCC reviews and evaluates new technologies to keep the highway safety data and traffic records systems up-to-date.

3.5 TRCC Operation

(The legislation & Federal Register call for certification that the TRCC continues to operate. Please provide the following information about your TRCC's structure and operation.)

Do you have an executive (policy level) TRCC?	Yes
If so, how often does it meet?	Quarterly
Do you have a technical (working level) TRCC?	Yes
If so, how often does it meet?	Quarterly
Does your TRCC have in place documents that demonstrate that the TRCC meets the following requirements of the legislation & Federal register?	
The TRCC has the authority to approve the Strategic Plan.	Yes
The TRCC has the authority to review any of the State's highway safety data and traffic records systems and to review changes to such systems before the changes are implemented.	Yes
The TRCC includes representative from highway safety, highway infrastructure, law enforcement and adjudication, public health, injury control and motor carrier agencies and organizations.	Yes
The TRCC provides a forum for the discussion of highway safety data and traffic records issues and report on any such issues to the agencies and organizations in the State that create, maintain, and use highway safety data and traffic records.	Yes
The TRCC considers and coordinates the views of organizations in the State that are involved in the administration, collection and use of the highway safety data and traffic records systems.	Yes
The TRCC represents the interests of the agencies and organizations within the traffic records system to outside organizations.	Yes
The TRCC reviews and evaluates new technologies to keep the highway safety data and traffic records systems up-to-date.	Yes

3.6 Past TRCC Meetings

Maine held TRCC meetings on the following dates:

November 7, 2018

February 6, 2019

May 1, 2019

3.7 Future TRCC Meeting Schedule

The future TRCC meetings are scheduled for:

November 6, 2019

February 5, 2020

May 6, 2020

3.8 NHTSA Traffic Records Assessment

The State completed a NHTSA Traffic Records Assessment on April 25, 2016. The State's response to each recommendation is listed in Section 4. If a project plans to address a recommendation within the next FFY plan year, the related project is listed. See related project for performance measures.

4. Traffic Records Strategic Plan

4.1 Maine Traffic Records Coordinating Committee

4.1.1 TRCC Overview

The Maine Traffic Records Coordinating Committee (TRCC) is established by a Charter signed by the Director of the Maine Bureau of Highway Safety and by the Commissioner of the Maine Department of Public Safety (Governor's Representative). The Charter describes the mission of the TRCC along with principles of operation. Annually, the Maine TRCC produces the Traffic Records Strategic Plan that lists the planned projects selected to improve the State's traffic records data systems.

The TRCC includes both an executive and technical committees with representation for the six core traffic records systems.

The Director of the Maine Bureau of Highway Safety serves as Coordinator and Co-Chair of the TRCC while a representative from the Maine State Police serves as the other Co-Chair. The TRCC meets three times per year.

The Maine TRCC influences policy decisions that affect the traffic records system and provides the leadership and coordination necessary to develop, implement, and monitor the Traffic Records Strategic Plan. The Maine Bureau of Highway Safety and the TRCC oversee and allocate federal traffic records improvement funds.

The TRCC regularly reviews traffic records data system performance measures. These performance measures track the improvements to the core data systems and are included within the Traffic Records Strategic Plan.

Representatives of the Maine Office of Information Technology (OIT) participate within the TRCC and provide assistance and consultation on all technical TRCC projects. As an organization, OIT must approve and oversee the implementation of all State technology projects and must sign off on them. As a recent example, OIT members are actively involved in the planning and implementation of the Maine eCitation system.

Over the course of the last plan year, the Maine TRCC developed a State of Maine Traffic Records Inventory document. The most recent NHTSA Traffic Records Assessment recommended development of the inventory and is being used to provide stakeholders with up to date system information; including data governance, system documentation, data dictionaries, and user documentation. This information will assist in the TRCC's efforts to improve the accessibility, completeness, uniformity, accuracy, integration, and timeliness of Maine's traffic records data.

4.1.2 Assessment Recommendations

There were no recommendations for the Traffic Records Coordinating Committee Management from the Maine's Traffic Records Assessment that was conducted on April 25, 2016.

4.1.3 TRCC Goals

Goal 1: Encourage presentations of core traffic records data systems at TRCC meetings.

Strategy: Perform outreach to core traffic records data system and schedule demos at TRCC meetings for each data system.

Outcome: Demos of data systems and their capabilities will foster a deeper understanding of integration opportunities with the overall goal of increasing traffic records data system performance and analysis capabilities.

4.2 Maine Traffic Records Data Systems

The Maine Traffic Records Data Systems are comprised of the Crash, Vehicle, Driver, Roadway, Citation/Adjudication, and Injury Surveillance component data systems. This section discusses the goals that span these core data systems and includes an overview of traffic records data use and integration.

4.2.1 System Overview

Maine's traffic records data systems is comprised of various discrete data systems; driver, vehicle, citation/adjudication, crash, roadway, and several injury surveillance data systems (EMS run reporting, hospital discharge, emergency department, vital records, and trauma registry).

The table below details each system along with any applicable comments.

Data System	System Name	Host Agency	Remarks
Driver	Driver Services System	Maine Bureau of Motor Vehicles	
Vehicle	Vehicle Services System	Maine Bureau of Motor Vehicles	
Citation	Maine eCitation	Maine Department of Public Safety	Initial Deployment – August 2018
Crash	Maine Crash Reporting System (MCRS)	Maine Department of Public Safety	Recent – Key data elements updated to MMUCC V5
Roadway	METRANS	Maine Department of Transportation	
EMS Run Reporting	MEFIRS	Maine Emergency Medical Services	NEMSIS 3.x Compliant
Trauma Registry	Maine Trauma Registry	Maine Emergency Medical Services	NTDS Compliant

4.2.2 Data Use & Integration Overview

Maine decision-makers have access to data and personnel to help them use the individual traffic records data systems. There is an established linkage of crash and roadway data files, but most of the data used by traffic safety partners and the public is from single data systems. Creation of, and access to, integrated data systems would help planners to better understand the overall traffic safety picture.

Analysts utilize the array of information related to drivers and vehicles contained within the crash database, but complete integration remains of the applicable data sets is a goal of the TRCC. Integration combining data from multiple systems to form a complete traffic records dataset will provide enhanced analytics that can be used in developing effective safety countermeasures.

The Maine Office of Information Technology plays a role on the Traffic Records Coordinating Committee and consults on traffic data system projects. The inclusion of this office, with its State-established policies and regulations for data governance can be leveraged to facilitate access to other traffic records systems for analysis and integration.

Finally, the Maine Crash Public Query Tool website has provided stakeholders and the public with access to advanced crash analytics bolstered by the linked crash and roadway data sets.

4.2.3 Assessment Recommendation for Data Use and Integration

The following recommendation is from the Maine's Traffic Records Assessment conducted on April 25, 2016.

1. *Improve the traffic records systems capacity to integrate data to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

State Accepts Recommendation. State Response: The State of Maine has deployed a Maine Crash Public Query Tool website that integrates crash and roadway data and makes analysis of this data accessible to the highway safety stakeholders and the public.

Maine plans to integrate the Crash and Citation data systems with the METRO state switch for the purpose of auto populating driver and vehicle data. This will result in increased data accuracy of the respective systems.

During the course of the last plan year, Maine has developed a State of Maine Traffic Records Inventory document. This document will be used in the TRCC's efforts to improve the integration of Maine's traffic records data.

Countermeasure Strategy: Improves Integration

Related Project: ME-P-00015 Public Access Reports – Traffic

Related Performance Measure: Crash Integration

4.2.4 Data Use & Integration Goals

Goal 1: Integrate Driver and Vehicle data within the Maine eCitation system.

Strategy: Maine DPS will lead the effort to add auto population of vehicle and driver data to the Maine eCitation system.

Outcome: Increased accuracy and integration of citation, vehicle, and driver data.

Activity: Planned.

Goal 2: Update the Maine Crash Public Query Tool website to add additional user-requested analytic capabilities.

Strategy: Identify and develop enhancements. Work with Maine OIT in deploying enhancements to test and production web servers.

Outcome: Increased integration and additional analytics for users of the Maine Crash Public Query Tool.

Activity: Underway.

4.3 Crash Data System Plan

4.3.1 System Overview

The Maine Crash Reporting System (MCRS) statewide crash repository is consolidated in a Microsoft SQL Server database hosted by Maine Office of Information Technology with data governance ownership being the Maine Department of Public Safety.

Maine has achieved 100% electronic crash reporting to the State and paper reports are no longer accepted, a goal that many other states continue to strive to achieve. Crash data is collected by either the MCRS client system that is installed at an agency or an agency's RMS system (currently TriTech/IMC is the only RMS vendor with a compliant crash module). Both systems use the same validation rules and schema to transmit xml data to the state portal.

The MCRS web portal provides dashboards including statistics and logging that provide useful information to the systems administrators to track performance of the statewide system. These dashboards include days since an agency last uploaded crash data to the portal, average number of days for each agency to upload, and average number of days to upload statewide (across all agencies). Additionally, the portal provides standard pre-built reports as well as ad-hoc reporting capabilities.

Crash data collected in MCRS is shared with the Maine Department of Transportation (MaineDOT) and with local law enforcement agencies and traffic safety professionals via the MCRS web portal. The portal allows for crash report tracking, and error and rejection handling.

The crash system has many strong validation rules and edit checks in place to ensure the accuracy, completeness, and timeliness of crash reports.

The State of Maine TRCC reviews emerging trends and the national MMUCC guidelines to determine if the crash form is in need of update. The TRCC's process for updating the crash form is to convene the Crash Form Design working group of the TRCC that includes various crash data stakeholders. This working group decides on new and deleted crash data elements, approves the crash form modifications, and forwards the recommendations to the Maine Department of Public Safety for implementation and updating of data collection systems.

Maine utilizes MMUCC, ANSI D-16, and D-20 as primary sources for defining its crash system. Maine submitted its latest crash form for a NHTSA-sponsored MMUCC V5 mapping review in April 2018. The result of this review was used as the basis for a crash form revision that was released in September 2018 that complies with the latest MMUCC Version 5 Guideline for select elements (e.g., Distracted By Source, Distracted By Action, Injury, and autonomous driving system dynamic elements).

The State maintains a crash reporting manual, data dictionary, and XSL/XSD schemas to provide reference data to the various users and stakeholders of the system. Documentation is continuously updated in coordination with system updates.

With access to 100% electronically submitted crash data in Maine, Maine's crash data is accurate, complete, and timely. Data accessibility for end users is a key component to any crash system. Allowing local agencies quick and easy access to their crash data through the MCRS web portal provides opportunities for law enforcement to expand its use of crash and traffic safety data and implement data-driven initiatives and more comprehensive data analytics programs. This facilitates targeted enforcement, enables focusing of engineering efforts in areas with the greatest crash risk thereby allowing law enforcement and transportation professionals to have a greater impact on traffic safety in communities.

Many crash risks and trends are unique to Maine and the State has implemented a number of countermeasure programs relating to the use of roundabouts, crashes involving moose, and implementation of rumble strips.

Given the rising importance of traffic safety data, Maine Department of Public Safety and the Maine Department of Transportation have partnered to create a publicly-accessible crash data analytics portal (i.e. Maine Public Crash Query Tool) that provides highway safety stakeholders, regional planning organizations, and the general public with geo-located crash data analysis.

4.3.2 Assessment Recommendations for Crash

The following recommendations for crash are from the Maine's Traffic Records Assessment conducted on April 25, 2016.

1. *Improve the data dictionary for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

State Accepts Recommendation. State Response: The State has published a State of Maine Crash Data Dictionary document that provides a comprehensive listing of all crash data elements, crash data business rules and edit checks. This document is the primary source used for identifying the currently collected crash data elements in the State. The document will be updated to reflect any future improvements made to the crash form to increase its MMUCC-compliance.

Maine has completed a NHTSA Go Team MMUCC review to determine compliance and find improvement opportunities with the MMUCC V5 standard. In August 2017, Maine added the MMUCC V4 Distracted By element and in 2018 replaced that element with the Distracted By Source and Distracted By Action elements to comply with MMUCC V5.

In August 2016, Maine added (for MMUCC/NHTSA compliance) a new Distracted Driving fields. Maine plans to update the on-line 'State of Maine Traffic Crash Reporting Manual' and explain the unique Maine attribute 'Distracted by Unknown Cause'.

Countermeasure Strategy: Improves Uniformity

Related Project: ME-P-00006 MCRS Upgrade

Related Performance Measure: Crash Uniformity

2. *Improve the interfaces with the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

State Accepts Recommendation. State Response: The State will look for opportunities to expand system interfaces and data integration efforts in an effort to improve data quality across core component traffic records systems.

In order to improve data integration and accessibility of crash safety data (a key goal of the TRCC), Maine is updating the State of Maine Public Crash Query Tool. This publicly available crash analysis website is getting wide spread use by DOT, LEA's, MPO's, etc. and receiving positive reviews. The State is currently developing several enhancements to this website.

Countermeasure Strategy: Improves Integration

Related Project: ME-P-00006 MCRS Upgrade

Related Performance Measure: Crash Integration

3. *Improve the data quality control program for the Crash data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

State Accepts Recommendation. State Response: The State currently provides some high level data quality feedback to law enforcement reporting agencies and State data managers. The State has recently updated its Maine Crash Reporting System portal to include additional data quality reports such as Timeliness, and detailed upload log data.

The State will also investigate ways of providing additional data quality reports to reporting agencies.

MaineDOT continues to monitor crash submissions by agency and in cooperation with Maine State Police sends quarterly crash report submission summaries to every agency, highlighting those that show variances from historical averages. MaineDOT and Maine State Police call select agencies when significant variances are identified to help confirm variances and seek reporting and/or system solutions.

Countermeasure Strategy: Improves Accuracy

Related Project: ME-P-00006 MCRS Upgrade

Related Performance Measure: Crash Accuracy

4.3.3 Crash Goals

Goal 1: Implement Maine Crash Reporting System to Driver/Vehicle Interface.

Strategy: Implement Maine Crash Reporting System to Driver/Vehicle Interface to auto populate data fields.

Outcome: Increased accuracy and usability of Maine Crash Reporting System.

Activity: Planned.

Goal 2: Improve mapping of crashes in MaineCRASH system and MDOT Data Warehouse system for crashes occurring on rural dirt roads, parking lots.

Strategy: Add ability to map non-public road crashes within the MaineDOT MaineCRASH system.

Outcome: This will assist in comparing numbers and can help explain disparities with Highway Safety counts.

Activity: Planned.

Goal 3: Collaborate with crash data partner agencies to develop data quality management reports.

Strategy: Document existing data quality processes at Maine Department of Transportation, MSP Traffic Division, and Highway Safety FARS and develop data quality management reports that may include sample based audits, and periodic comparative and trend analyses.

Outcome: Provide data quality management reports to the TRCC for regular review of data system performance.

Activity: Planned.

Goal 4: Improve tracking of revised crash reports.

Strategy: Add the ability to track revised crash reports entered into the MCRS system. Add report listing the amended crash reports by date range.

Outcome: Highway safety analysts will be able to verify that the crash database has the latest available data.

Activity: Planned.

Goal 5: Implement electronic export of Maine Crash Reporting System crash date to NHTSA.

Strategy: Add process to export MCRS crash data to the NHTSA Crash Data Export service.

Outcome: Provides increased analysis capabilities through NHTSA crash portal and auto population of FARS using submitted crash data.

Activity: Ongoing.

4.4 Vehicle Data System Plan

4.4.1 System Overview

The Maine Bureau of Motor Vehicles (BMV), within the Department of the Secretary of State, is the custodian of the vehicle data system. The vehicle data system is separate from the driver system. The two do not use the same naming and access conventions. However, the Department of Public Safety has established queries for title and registration that selects and formats the data for crash and citation reports. Auto dealer query title and registration information are available through INFORME for Query Title transactions. The registration document has a barcode that contains the tax receipt number that can be used by data entry personnel to load the record for scanning and edits. Registration data is purged after five years, older data is archived.

There are multiple types of record retrieval requests and the VIN, title number, license plate number, and person names are major search keys for those requests. Since vehicles may be owned by entities other than persons, other keys include company name and/or EIN, DBA, tax receipt number, and DOT number.

The BMV uses Polk's VINA verification as a standard process and queries NMVTIS manually before issuing new titles. Maine is NMVTIS certified. NMVTIS certification and participation protects customers and improves business and investigative processes related to titling and registration.

BMV tracks timeliness of registration data from municipalities and uses the data to monitor and address timeliness issues. Data quality checks are performed upon loading from any source (e.g. municipality, branch). Title data is checked for accuracy, daily timeliness and weekly reports (vehicle data issues, title issues) are reviewed. Titling follows up with dealers, branches, and municipalities for timeliness and data quality issues.

Municipalities and non-governmental agents are monitored based on change of agent, lack of timeliness, missing data, inaccuracies of inventory (e.g. plates and stickers), and workflow and business processes deficiencies. BMV contacts the municipality and may perform on-site visits, downgrade authority, and other punitive action up to and including revocation of authority.

BMV has taken efforts to modify business processes to reduce the use of duplicate registration plate numbers across plate types; however, duplication in older plate types do exist.

BMV has manuals used by all municipalities, branches, and BMV staff that document existing procedures. Procedures address electronic and manual reporting requirements, all title and registration transactions, and inventory. BMV is in the process of developing and/or updating a manual for job duties

4.4.2 Assessment Recommendations for Vehicle

The following recommendations are from the Maine's Traffic Records Assessment conducted on April 25, 2016.

1. *Improve the interfaces with the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

   State Accepts Recommendation. State Response: The Maine BMV accepts the recommendation. The Maine BMV's goal is to standardize the naming and access conventions for driver and vehicle. In addition, it is a BMV goal to integrate the Vehicle and Driver systems into a "customer-based" system, which would standardize naming and accessing conventions.

   The Maine BMV has not made progress towards integration of the vehicle and driver systems. Since this recommendation was accepted, questions have surfaced as to whether a customer-based system would support business requirement and provide consistent and reliable Vehicle data for its users. The BMV could not adequately serve its customers, including law enforcement and their accident-reporting efforts, if access to the Vehicle system did not remain consistent and reliable at the level provided by the current system.

   In 2001, the Bureau attempted to build a customer-based system. Integration of the Vehicle system was unsuccessful and the project was abandoned in 2006. Later, the BMV built the current Vehicle system. The system was designed to support business requirements including consistent and reliable access to records.

   Based on a preliminary assessment, we need to resolve a major issue before we can make committed and continued progress for a 2D barcode implementation. The majority of registrations are issued at municipal offices. There are 334 towns that send data electronically. There are 147 towns that send data manually. Electronic towns generate registrations using vendor software. That software does not have the capability to print barcodes.

The agency has recently revised registration forms to accommodate laser printing. Accordingly, vendors have changed their systems to allow for laser printing to comply with BMV business requirements and print specifications. Consequently, all towns have changed from impact printers to laser printers.

Countermeasure Strategy: Improves Integration

Related Project: Not directly addressed in FFY2020 funded projects

Related Performance Measure: Vehicle Integration

2. *Improve the data quality control program for the Vehicle data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

State Accepts Recommendation. State Response: The Maine BMV accepts the recommendation. The Bureau has completed a major project to improve its data quality control program by adding a status reason of Inactive/Expired to the Vehicle database. The Bureau has changed the status of "active" registrations that have been expired for more than one year to "inactive."

These updates have significantly improved the timeliness, accuracy, and reliability of data in our vehicle registration database. The updates also improve the ability to retrieve the applicable record for analysis, including accident reporting.

BMV currently uses VIN decoding software to update vehicle information (year, make, model, etc.) on our title records. The agency intends to use the same software to update vehicle information on registration records, continuing to improve its data quality control program.

The Maine TRCC encourages the Bureau of Motor Vehicle to integrate sample-based audits, trend analysis, and performance measures into the State's Vehicle Registration system.

Municipalities and non-governmental agents are monitored based on change of agent, lack of timeliness, missing data, inaccuracies of inventory (e.g. plates and stickers), and workflow and business processes deficiencies. BMV contacts the municipality and may perform on-site visits, downgrade authority, and other punitive action up to and including revocation of authority.

BMV is analyzing trends and/or sample-based audits and measures (% increase/ decrease) on the following data elements:

- Plate configurations and plate corrections (global analysis and manual updates).
- Trends in Registration plate type/class counts by source & geographic location.
- Trends in Registrations counts by year, make, model, and fuel type.

- Timeliness – The amount of time it takes to make registrations available to users by source.
- Make code standardization (sample-based audits).
- Standardization to models and fuel type for hybrid and electric vehicles (sample-based audits).

BMV has a goal to use VIN decoding software to measure and correct errors in VIN, year, make, model, and fuel type on Vehicle registration records (% increase/ decrease by source).

Additionally, a fully integrated Vehicle/Driver system, with unique identifiers, would better enable the BMV to retrieve data to perform sample-based audits, trend analysis, and measurable performance standards that help support traffic records data systems.

There are challenges in successfully deploying a "customer-based" Vehicle/Driver system. However, a single customer record, for driver, registrant, titled owner, company, motor carrier, etc., would better enable the BMV to retrieve consistent and reliable data to perform sample-based audits, trend analysis, and measurable performance standards..

Countermeasure Strategy: Improves Accuracy

Related Project: Not directly addressed in FFY2020 funded projects

Related Performance Measure: Vehicle Accuracy

4.4.3 Vehicle Goals

Goal 1: Create a unified, customer-based linkage of the Driver and Vehicle data systems.

Strategy: Develop a method that uniquely identifies vehicles, drivers and other transactions across program areas.

Outcome: Improved name information within vehicle data system, improved history data, Oversize and Overweight Permitting, Fuel Tax licensing.

Activity: Planned.

Goal 2: Add an automated interface to NMVTIS for Titles.

Strategy: Obtain and schedule IT resources to add automated interface to NMVTIS for Titles.

Outcome: Improved timeliness and accuracy of Title information.

Activity: Planned.

Goal 3: Add data quality checks for all Registrations through VIN decoding software.

Strategy: Obtain and schedule IT resources to add data quality checks for registrations through VIN decoding software.

Outcome: Improved accuracy of Registration data.

Activity: Planned.

Goal 4: Eliminate duplicate plate numbers across plate classes.

Strategy: Continue with new business process restricting duplicate numbers.

Outcome: Improved querying of plate data from out of state tolling authorities and law enforcement queries.

Activity: Ongoing.

Goal 5: Review and update process flow diagrams for Registration and Titling.

Strategy: Review and update process flow diagrams in existing procedural documentation, including alternate data flows and timelines in diagrams.

Outcome: Improved understanding and documentation of existing processes.

Activity: Ongoing.

Goal 6: Migrate remaining manual registration towns to electronic transmission.

Strategy: Build a simple, internet based registration system for current manual towns to provide a path to electronic transmission.

Outcome: Improved accuracy and timeliness of registration data.

Activity: Planned.

Goal 7: Complete plans for electronic lien release and titling.

Strategy: Currently, BMV is working on a lien holder database to for electronic lien release and titling. BMV is gathering data from other states in order to develop this new business process. BMV is reviewing related law and rule changes to support this effort.

Outcome: Improved accuracy and timeliness of title data.

Activity: Ongoing.

4.5 Driver Data System Plan

4.5.1 System Overview

The Maine Bureau of Motor Vehicles (BMV), within the Department of the Secretary of State, is the custodial agency for the driver record system. The BMV has a system in place that maintains critical driver identities, histories, and licensing information for all records within the system. Linkages and electronic transmissions exist for both the crash and citation data systems. There is interaction with the National Driver Register's Problem Driver Pointer System, Social Security Administration Online Verification System (SSOLV) and Systematic Alien Verification for Entitlements (SAVE), US Passport Verification Service (USPVS) and the Commercial Driver Licensing Information System.

The driver data system contents are documented with fields having established definitions with values that are updated periodically. Policies and procedures that govern the BMV driver data system are defined, documented, and verified. Security and fraud detection policies and procedures are also fundamentally established and documented.

The BMV driver data system has automated edit checks and validation rules to ensure that entered data falls within a range of acceptable values. The driver data system undergoes independent sample-based auditing of driver records annually by the Federal Motor Carrier Safety Administration (FMCSA) using a random sampling of CDL records to review program functionality.

Monthly audits of the commercial driver data are performed using CDLIS that check a variety of data quality and timeliness components (e.g. convictions, withdrawals, master pointer information).

4.5.2 Assessment Recommendation for Driver

The following recommendation is from the Maine's Traffic Records Assessment conducted on April 25, 2016.

1. *Improve the interfaces with the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

   State Accepts Recommendation. State Response: The Maine BMV's goal is to standardize the naming and access conventions for driver and vehicle. Also, it is a BMV goal to integrate the Vehicle and Driver systems into a "customer-based" system, which would standardize naming and accessing conventions.

   Countermeasure Strategy: Improves Integration

   Related Project: Not directly addressed in FFY2020 funded projects

   Related Performance Measure: Driver Integration

2. *Improve the data quality control for the Driver data system to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

   State Accepts Recommendation. State Response: The Maine TRCC encourages the Bureau of Motor Vehicle to integrate sample-based audits, trend analysis, and performance measures into the State's Driver Records system.

   Additionally, a fully integrated Vehicle/Driver system, with unique identifiers, would better enable the BMV to retrieve data to perform sample-based audits, trend analysis, and measurable performance standards that help support traffic records data systems.

   Countermeasure Strategy: Improves Accuracy

   Related Project: Not directly addressed in FFY2020 funded projects

   Related Performance Measure: Driver Accuracy

4.5.3 Driver Goals

Goal 1: Create a unified, customer-based linkage of the Driver and Vehicle data systems.

Strategy: Develop a method that uniquely identifies vehicles, drivers and other transactions across program areas.

Outcome: Improved name information within vehicle data system for improved linkage with the driver data system. This will provide improved history data.

Activity: Planned.

Goal 2: Implement full electronic data linkage between the driver data system and the court data system.

Strategy: BMV will implement interfaces with the Maine Judicial court case management system for the electronic transmission of all driver history related court adjudication data including suspensions, adjudications (including alcohol-related offense convictions) and compliance components.

Outcome: The BMV and customers will benefit from more accurate and timely driver history data.

Activity: Planned.

4.6 Roadway Data System Plan

4.6.1 System Overview

The Federal Highway Administration (FHWA) has indicated that the collection and integration of useful data sets is integral to developing a strong data program and necessary for making informed decisions about safety strategies and investments. Roadway data is an essential

component of this process. Maine has developed a robust roadway data program that is utilized for safety decisions.

The roadway data is maintained by the Maine Department of Transportation (MaineDOT) who maintain a linear reference system that manages their entire roadway system. All public roadways are on one compatible linear referencing system that is online and available to the public and the State's partners. This online tool has an interactive map where one can click on a section of the map and bring up roadway information. It includes the roadway data, traffic data, railroad crossings, location reference, bridge, and pavement data. The Bentley AssetWise system and GIS is used to link all of these systems together. Crash data is located based on this roadway network. Through their Asset Management Warehouse, MaineDOT are able to link crashes and roadway data to produce ad-hoc analysis and support annual reporting needs including high crash location reports.

Maine collects all of the fundamental data elements (FDE's) that comprise the Minimum Inventory for Roadway Inventory (MIRE). The State also collects additional elements and estimate that they are collecting about 40% of these for both the State and non-State roads. They have documented the FDE's and additional MIRE elements in both the METRANS_Data_Summary (data dictionary) and LRS_summary documents.

The State is collecting roadway data for all roadways, not just the State owned system. Therefore, they do not rely on local or municipalities to collect and transmit data. With this process, MaineDOT does not need to worry about imported data complying with their database or need to develop performance measures for imported data. Roadway data from 2002 is archived annually by the Information Services division.

The data dictionary is updated as new assets are added to or removed from the system. The State consults with internal stakeholders before any additional elements are included in the document and within the databases.

Documentation is available that shows who is responsible for collecting each of the data elements. Documentation is also available showing the steps for collecting data. An example of the lane asset is available to show the guidelines provided for collection of data.

Weekly data quality reports are run to look at attribute and geometry validation and data structure integrity. An attribute validation is performed during input by the Bentley AssetWise product. Errors are addressed as they are encountered during entry or batch processing. Critical errors are documented and prioritized using the State's Job Tracking System. Quality control information is shared within the agency only. There is no need to share quality control information with outside sources as MaineDOT collects all related data. Maine is currently in the process of developing a data governance processes.

MaineDOT has a website containing roadway data and allows the public access to this information. MaineDOT Google Analytics provides performance statistics on customer usage.

Statistics from a recent month revealed that there were 189 sessions outside of the State's firewall indicating that the public is accessing this website.

4.6.2 Assessment Recommendations for Roadway

The following recommendations are from the Maine's Traffic Records Assessment conducted on April 25, 2016.

1. *Improve the data quality control for the Roadway data system to reflect best practices identified in the Traffic Records Assessment Advisory.*

   State Accepts Recommendation. State Response: The ME TRCC will promote the establishment of Roadway performance measures as a tool to measure improvements to the roadway data system.

   Countermeasure Strategy: Improves Accuracy

   Related Project: Not directly addressed in FFY2020 funded projects

   Related Performance Measure: Roadway Accuracy

4.6.3 Roadway Goals

Goal 1: MaineDOT will increase the percentage of additional MIRE data elements integrated within the roadway network.

Strategy: MaineDOT will develop a schedule and implement a plan to increase the number of additional MIRE Data Elements added to the roadway data system.

Outcome: The MaineDOT increase in the roadway network's MIRE compliance will improve analysis capabilities.

Activity: Planned.

Goal 2: MaineDOT will implement a roadway network data governance model.

Strategy: MaineDOT will finalize and implement a roadway network data governance model. MaineDOT will leverage its current efforts to utilize data stewards for each internal datasets.

Outcome: The MaineDOT and all highway safety stakeholders will benefit from periodic stakeholder engagement, documentation, and data quality improvements.

Activity: Ongoing.

4.7 Citation/Adjudication Data System Plan

4.7.1 System Overview

Maine has a unified court system and the courts use two records management systems. The Judicial Branch is in a phased implementation of the Odyssey Court Case Management System that provides significant improvements such as online public access, e-filing, in courtroom processes and reporting abilities. Additionally, real-time interfaces with external systems will be implemented as part of this effort.

The Maine Judicial Branch is knowledgeable about the record-keeping needs in the courts. It participated in the development of NCSC guidelines. The Maine Judicial Branch contract with Tyler Technologies for the Odyssey Court Case Management System includes requirements from NCSC and COSCA standards to address Key Performance Indicators such as (but not limited to) NCSC CourTools and the Court Statistics Project.

Currently, the Judicial Branch notifies the Bureau of Motor Vehicles with daily, electronic notifications of traffic convictions, suspensions, and license restorations. The Judicial Branch and Bureau of Motor Vehicle plans to implement real-time interfaces for these areas.

Historically, the Judicial Branch has reported criminal convictions, suspensions, and license restorations manually by paper, which has presented challenges in complying with Federal Motor Carrier Safety Administration (FMCSA) reporting requirements. When the Judicial Branch Odyssey system is fully deployed, these notifications will be electronically transmitted.

The Maine Department of Public Safety (DPS) has deployed an electronic citation data collection client (i.e. Maine eCitation) that allows Maine State Police, county, and municipal local law enforcement agency to issue electronic traffic infraction citations and automatically transmit them to the Maine DPS eCitation repository. Once in the repository, the electronic citations are periodically transmitted (every 15 minutes) to the Maine Judicial Branch, Violation Bureau's Secure FTP (SFTP) site for processing by the Maine Judicial Branch's Odyssey Court Case Management System.

4.7.2 Assessment Recommendations for Citation/Adjudication

The following recommendations are from the Maine's Traffic Records Assessment conducted on April 25, 2016.

1. *Improve the data dictionary for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

   State Accepts Recommendation. State Response: The Maine TRCC has developed a citation schema and is in the process of deploying a statewide citation system. The TRCC will investigate obtaining a formal data dictionary for the Court Case Management System.

Countermeasure Strategy: Improves Uniformity

Related Project: ME-P-00011 e-Citation

Related Performance Measure: Citation Uniformity

2. *Improve the procedures/process flows for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

   State Accepts Recommendations. State Response: As part of the eCitation effort, the State will be updating the procedures/process flows for the Citation and Adjudication system.

   Countermeasure Strategy: Improves Completeness

   Related Project: ME-P-00011 e-Citation

   Related Performance Measure: Citation Completeness

3. *Improve the interfaces with the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

   State Accepts Recommendation. State Response: The State has developed an interface between the eCitation law enforcement data collection system and the court's new court case management system.

   Countermeasure Strategy: Improves Integration

   Related Project: ME-P-00011 e-Citation

   Related Performance Measure: Citation Integration

4. *Improve the data quality control program for the Citation and Adjudication systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

   State Accepts Recommendations. State Response: The State is using NHTSA Standard Performance Measures to document the improvements resulting from the new eCitation system. The State has also planned for inclusion of Key Performance Indicators in their new court case management system.

   Countermeasure Strategy: Improves Accuracy

   Related Project: ME-P-00011 e-Citation

   Related Performance Measure: Citation Accuracy

4.7.3 Citation/Adjudication Goals

Goal 1: Investigate obtaining formal Citation Data Dictionary from Court Case Management System Vendor.

Strategy: Reach out to vendor to determine if they can provide data dictionary.

Outcome: A formal data dictionary that can be used by Maine Judicial and citation data stakeholders.

Activity: Planned.

Goal 2: Develop Automated Disposition Reporting to Law Enforcement.

Strategy: Maine Judicial Branch to develop an automated disposition reporting module that provides law enforcement with disposition reports.

Outcome: Law enforcement will have access to disposition information for analysis.

Activity: Planned.

Goal 3: Develop eCitation performance measures.

Strategy: Maine Judicial Branch to develop performance measures, including timeliness across paper and electronic citations, and a timeliness measure based on dismissals (paper vs. electronic).

Outcome: Improved understanding of the performance of the electronic citation system vs the paper based citation system.

Activity: Planned.

Goal 4: Develop Maine eCitation Security Infrastructure Documentation.

Strategy: Maine Department of Public Safety to develop security infrastructure documentation for Maine eCitation and add it to the System Inventory page.

Outcome: Detailed security information available to eCitation stakeholders.

Activity: Planned.

Goal 5: Implement Maine eCitation to Driver/Vehicle Interface.

Strategy: Implement Maine eCitation to Driver/Vehicle Interface to auto populate data fields.

Outcome: Increased accuracy and usability of Maine eCitation system.

Activity: Planned.

Goal 6: Implement Court Case Management to BMV Real Time Interface.

Strategy: Maine Judicial and Maine BMV to develop interface requirements and allocate development resources.

Outcome: Increased timeliness of citation dispositions.

Activity: Planned.

Goal 7: Additional Reporting and Analysis Capabilities.

Strategy: Add reporting and analysis functionality to the Maine Judicial Court Case Management System.

Outcome: A more robust reporting system capable of providing improved reporting and analysis capabilities to internal and external stakeholder (e.g. highway safety).

Activity: Planned.

4.8 EMS/Injury Surveillance Data System Plan

4.8.1 System Overview

An ideal statewide Injury Surveillance System (ISS) is comprised of data from five core components: pre-hospital emergency medical services (EMS), trauma registry, emergency department, hospital discharge, and vital records. This data provides more detailed information on the nature and extent of injuries sustained in a motor vehicle crash than can be found in other components of the traffic records system. Consequently, this information is invaluable when determining the severity, cost, and clinical outcomes of the individuals involved. Overall, Maine collects and maintains information on four of the five components. No interfaces are currently in place between any of the State's injury surveillance data system.

Maine EMS Patient Care Reporting

The Maine Emergency Medical Services (Maine EMS) is a bureau within the Maine Department of Public Safety and is the sole entity that is responsible for the collection and compilation of the State's EMS Data.

The Maine EMS patient care reporting system, Maine EMS and Fire Incident Reporting System (MEFIRS), complies with all current National EMS Information System (NEMSIS) 3.4.3 requirements and submits data quarterly to the NEMSIS national database. The system is used by 275 of the 276 licensed EMS agencies in Maine to document all pre-hospital emergency and transport medical care. The system includes tracking of the frequency, severity, and nature of

injuries sustained in motor vehicle crashes. Providers use a web-based application to document all assessments, findings and treatments provided in the course of each patient contact and/or incident. MEFIRS has been the system used since April 2017. As of May 1, 2019, there are currently over 498,000 records in MEFIRS. Providers are required to complete a patient care report for every call for service within one business day.

NEMSIS-compliant EMS report data is shared with the Medical Examiner's Office, Maine CDC, Bureau of Highway Safety, Office of the State Fire Marshal, and other approved research projects. The State utilizes the NEMSIS data dictionary V3.4 for common data elements and a state-specific data dictionary is currently being developed.

Maine Trauma Registry

Maine EMS has purchased a statewide trauma registry system and is currently encountering challenges with implementation and hospital trauma center participation due to privacy concerns. Currently, the trauma centers only submit data to the National Trauma Data Bank (NTDB) and the State does not have access to that data.

The Maine EMS statewide trauma patient registry is a web-based system used to collect specific information about patients that have experienced significant traumatic events. Hospitals in Maine may participate at no cost. The trauma registry is a secure system to ensure submitted data remains confidential and the confidentiality of patients is maintained throughout the processes. Only authorized personnel have access to submit data to the registry.

Data from the trauma registry will be used to create annual reports on the trauma system in Maine. The annual report will include the details such as:

- Injury severity; and
- Facility care provided and performance; and
- Outcomes.

The Maine Trauma Advisory committee is responsible for Evaluation and Quality Improvement. The data could be used by hospitals to drive performance improvement activities. Aggregate data from the registry could be used by the trauma service areas to help inform overall improvements to the trauma system.

Maine Hospital Data

The Maine Health Data Organization (MHDO) is responsible for collecting all hospital encounter data, which includes emergency department visits, and inpatient stays. The State's emergency department and hospital discharge data both conform to the Uniform Billing Standard. The State relies on the MHDO Rule Chapter 241 as its data dictionary for emergency department and hospital discharge data. The "Hospital Inpatient Data Sets" and "Hospital Outpatient Data Sets"

are the formal documentation that provides a summary dataset for each along with information on how it is collected, managed, and maintained.

Maine Vital Records

The Maine Center for Disease Control & Prevention (Maine CDC), Division of Public Health Systems, Department of Health and Human Services maintains the State's vital records repository. The State includes the Maine Integrated Youth Health Survey (which includes the Maine Youth Risk Behavior Survey) and the Behavioral Risk Factor Surveillance System in its injury surveillance system. The Maine CDC Injury Prevention Program occasionally uses EMS run reporting data and medical examiner data for special projects, but these have not been motor vehicle related.

4.8.2 Assessment Recommendations EMS/Injury Surveillance

The following recommendations are from the Maine's Traffic Records Assessment conducted on April 25, 2016.

1. *Improve the interfaces with the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

   State Accepts Recommendation. State Response: The Maine TRCC will review the elements of its Injury Surveillance System and evaluate opportunities for integration of the various data sets for the goal of increasing safety-related analysis.

   Countermeasure Strategy: Improves Integration

   Related Project: ME-P-00014 Maine CODES, ME-P-00025 EMS Trauma Registry

   Related Performance Measure: EMS Integration

2. *Improve the data quality control program for the Injury Surveillance systems to reflect best practices identified in the Traffic Records Program Assessment Advisory.*

   State Accepts Recommendation. State Response: The Maine TRCC will identify goals for the various elements of the Injury Surveillance System to track the frequency, severity, and nature of injuries sustained in motor vehicle crashes in the State.

   Countermeasure Strategy: Improves Accuracy

   Related Project: ME-P-00024 Highway Safety/FARS/EMS Data Quality Analysis

   Related Performance Measure: EMS Accuracy

4.8.3 EMS/Injury Surveillance Goals

Goal 1: Encourage trauma center participation with the Statewide Trauma Registry by revising existing legislation.

Strategy: Develop legislation that facilitates improved data collection from trauma centers.

Outcome: Improved integration and accessibility of statewide trauma data and injury surveillance related to trauma.

Activity: Planned.

Goal 2: Complete development of a state-specific data dictionary for MEFIRS (EMS patient care reporting).

Strategy: Maine EMS has is in the planning stages of developing a state-specific data dictionary for MEFIRS. Increased resource availability would be necessary for completion of this project.

Outcome: A state specific data dictionary for the EMS patient care reporting component databases will include the variable names and definitions including characteristics, values, limitations, and exceptions.

Activity: Ongoing.

Goal 3: Decrease EMS patient care report required completion/submission time for agencies and providers to within twenty-four hours.

Strategy: Maine EMS is developing plans to seek approval for rule changes that would reduce the reporting time from one business day to twenty-four hours.

Outcome: Improved timeliness of EMS patient care data.

Activity: Planned.

Goal 4: Maine EMS patient care reporting interface with HealthInfoNet.

Strategy: Maine EMS has started the process of integrating EMS patient care reports with HealthInfoNet.

Outcome: Improved accessibility for health care facilities and physicians to EMS patient care data.

Activity: Ongoing.

5. Progress

5.1 Traffic Records Performance Measures

5.1.1 Crash Completeness

Label: C-C-02
Status of Improvement: Demonstrated Improvement
Active Status: Active
***Revision Date*:** May 30, 2019
Related Project: Maine Crash Reporting System (MCRS)

Narrative

This performance measure is based on the C-C-02 model performance measure.

Maine will improve the Completeness of the Crash system as measured in terms of an increase in:

The percentage of crash records with latitude and longitude values entered by the officer.

The state will show measureable progress using the following method:

Count the number of crash reports with latitude and longitude values (count only non-null and non-zero values) for all reporting agencies in the State during the baseline period and the current performance period. Then, count the total number of reports for all reporting agencies in the State for the same periods. Divide the total number of reports by the count of reports with latitude and longitude and multiply by 100 to get the percentage of reports with latitude and longitude for each period.

The baseline period is from April 1, 2017 to March 31, 2018 limited to reports entered into the database by April 30, 2018.

The current performance period is from April 1, 2018 to March 31, 2019 limited to reports entered into the database by April 30, 2019.

The numbers in this performance measure represent all crashes entered into the state crash database from all state reporting agencies.

The baseline period had 26,946 reports with latitude and longitude values out of a total 41,375 reports resulting in 65.13% completeness.

The current period had 27,613 reports with latitude and longitude values out of a total 42,250 reports resulting in 65.36% completeness.

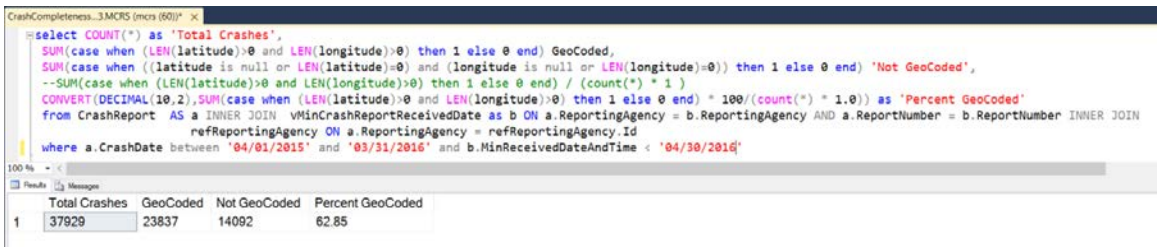
The result is an increase in completeness of 0.23%.

Measurements

Start Date	End Date	Lat/Long Reports	Total Reports	Completeness (%)
April 1, 2013	March 31, 2014	23,256	37,530	61.97%
April 1, 2014	March 31, 2015	24364	38827	62.75%
April 1, 2015	March 31, 2016	23,837	37,929	62.85%
April 1, 2016	March 31, 2017	26,189	40,833	64.14%
April 1, 2017	March 31, 2018	26,946	41,375	65.13%
April 1, 2018	March 31, 2019	27,613	42,250	65.36%

Supporting Materials (Backup)

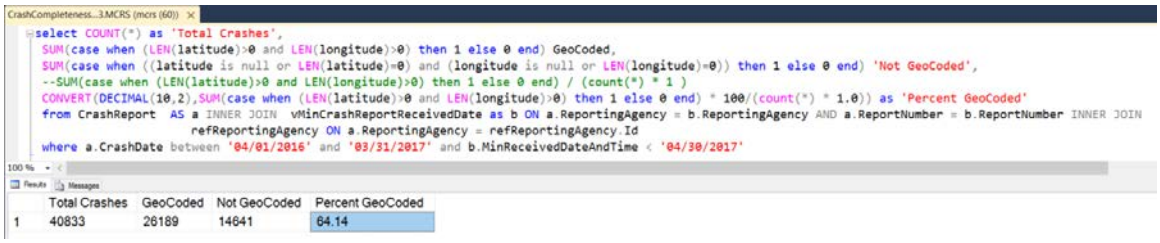
2016



```
select COUNT(*) as 'Total Crashes',
 SUM(case when (LEN(latitude)>0 and LEN(longitude)>0) then 1 else 0 end) GeoCoded,
 SUM(case when ((latitude is null or LEN(latitude)=0) and (longitude is null or LEN(longitude)=0)) then 1 else 0 end) 'Not GeoCoded',
 --SUM(case when (LEN(latitude)>0 and LEN(longitude)>0) then 1 else 0 end) / (count(*) * 1 )
 CONVERT(DECIMAL(10,2),SUM(case when (LEN(latitude)>0 and LEN(longitude)>0) then 1 else 0 end) * 100/(count(*) * 1.0)) as 'Percent GeoCoded'
 from CrashReport  AS a INNER JOIN  vMinCrashReportReceivedDate as b ON a.ReportingAgency = b.ReportingAgency AND a.ReportNumber = b.ReportNumber INNER JOIN
                    refReportingAgency ON a.ReportingAgency = refReportingAgency.Id
 where a.CrashDate between '04/01/2015' and '03/31/2016' and b.MinReceivedDateAndTime < '04/30/2016'
```

	Total Crashes	GeoCoded	Not GeoCoded	Percent GeoCoded
1	37929	23837	14092	62.85

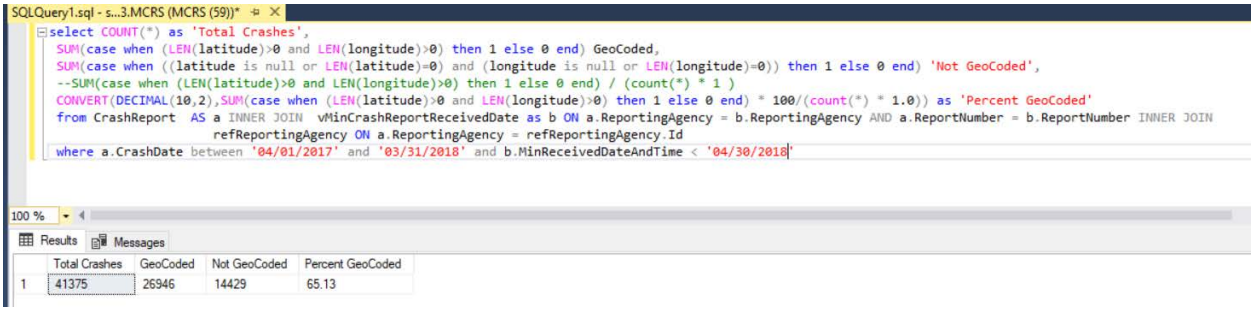
2017



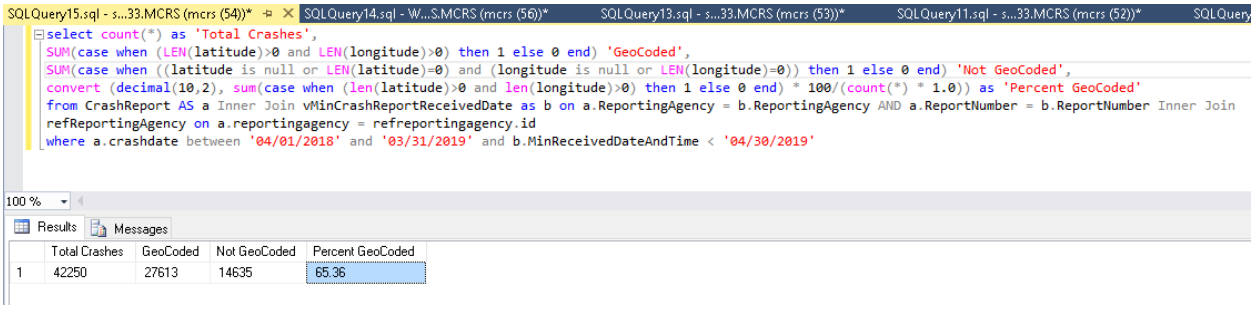
```
select COUNT(*) as 'Total Crashes',
 SUM(case when (LEN(latitude)>0 and LEN(longitude)>0) then 1 else 0 end) GeoCoded,
 SUM(case when ((latitude is null or LEN(latitude)=0) and (longitude is null or LEN(longitude)=0)) then 1 else 0 end) 'Not GeoCoded',
 --SUM(case when (LEN(latitude)>0 and LEN(longitude)>0) then 1 else 0 end) / (count(*) * 1 )
 CONVERT(DECIMAL(10,2),SUM(case when (LEN(latitude)>0 and LEN(longitude)>0) then 1 else 0 end) * 100/(count(*) * 1.0)) as 'Percent GeoCoded'
 from CrashReport  AS a INNER JOIN  vMinCrashReportReceivedDate as b ON a.ReportingAgency = b.ReportingAgency AND a.ReportNumber = b.ReportNumber INNER JOIN
                    refReportingAgency ON a.ReportingAgency = refReportingAgency.Id
 where a.CrashDate between '04/01/2016' and '03/31/2017' and b.MinReceivedDateAndTime < '04/30/2017'
```

	Total Crashes	GeoCoded	Not GeoCoded	Percent GeoCoded
1	40833	26189	14641	64.14

2018


SQLQuery1.sql - s...3.MCRS (MCRS (59))*
select COUNT(*) as 'Total Crashes',
SUM(case when (LEN(latitude)>0 and LEN(longitude)>0) then 1 else 0 end) GeoCoded,
SUM(case when ((latitude is null or LEN(latitude)=0) and (longitude is null or LEN(longitude)=0)) then 1 else 0 end) 'Not GeoCoded',
--SUM(case when (LEN(latitude)>0 and LEN(longitude)>0) then 1 else 0 end) / (count(*) * 1)
CONVERT(DECIMAL(10,2),SUM(case when (LEN(latitude)>0 and LEN(longitude)>0) then 1 else 0 end) * 100/(count(*) * 1.0)) as 'Percent GeoCoded'
from CrashReport AS a INNER JOIN vMinCrashReportReceivedDate as b ON a.ReportingAgency = b.ReportingAgency AND a.ReportNumber = b.ReportNumber INNER JOIN
refReportingAgency ON a.ReportingAgency = refReportingAgency.Id
where a.CrashDate between '04/01/2017' and '03/31/2018' and b.MinReceivedDateAndTime < '04/30/2018'
100 %
Results
Messages
Total Crashes
GeoCoded
Not GeoCoded
Percent GeoCoded
1
41375
26946
14429
65.13

2019


SQLQuery15.sql - s...33.MCRS (mcrs (54))*
SQLQuery14.sql - W...S.MCRS (mcrs (56))*
SQLQuery13.sql - s...33.MCRS (mcrs (53))*
SQLQuery11.sql - s...33.MCRS (mcrs (52))*
select count(*) as 'Total Crashes',
SUM(case when (LEN(latitude)>0 and LEN(longitude)>0) then 1 else 0 end) 'GeoCoded',
SUM(case when ((latitude is null or LEN(latitude)=0) and (longitude is null or LEN(longitude)=0)) then 1 else 0 end) 'Not GeoCoded',
convert (decimal(10,2), sum(case when (len(latitude)>0 and len(longitude)>0) then 1 else 0 end) * 100/(count(*) * 1.0)) as 'Percent GeoCoded'
from CrashReport AS a Inner Join vMinCrashReportReceivedDate as b on a.ReportingAgency = b.ReportingAgency AND a.ReportNumber = b.ReportNumber Inner Join
refReportingAgency on a.reportingagency = refreportingagency.id
where a.crashdate between '04/01/2018' and '03/31/2019' and b.MinReceivedDateAndTime < '04/30/2019'
100 %
Results
Messages
Total Crashes
GeoCoded
Not GeoCoded
Percent GeoCoded
1
42250
27613
14635
65.36

5.1.2 Crash Uniformity

Label: C-U-1
Status of Improvement: Demonstrated Improvement
Status: Active
Last Updated: April 5, 2019
Related Project: Maine Crash Reporting System (MCRS)

Narrative

I-U-2: C-U-1: The number of MMUCC-compliant data elements entered into the crash database or obtained via linkage to other databases.

This Performance Measure evaluates the uniformity of the Maine Crash Reporting System by using the NHTSA MMUCC Mapping results to count the percentage of MMUCC V5 compliant crash data elements captured in the State of Maine Crash Form during the baseline period. It then compares that number to the number of MMUCC V5 compliant data elements captured in the form during the performance period.

Since NHTSA does not compile results to one percentage, but rather breaks them out by area, we are just averaging the reported percentages to simplify the comparison.

MMUCC V5 Compliance	April 1, 2017-March 31, 2018	April 1 2018 - March 31, 2019
Crash	70.70%	74.44%
Vehicle	59.09%	58.40%
Person	52.89%	56.94%
Roadway	22.92%	22.92%
Fatal Section	22.49%	22.49%
Large Vehicles & Hazardous Materials Section	24.09%	34.61%
Non-Motorist Section	40.53%	40.29%
Dynamic Data Elements	0.00%	32.20%
Average Compliance	**36.59%**	**42.79%**

Measurements

Start Date	End Date	Percent Compliance
April 1, 2017	March 31, 2018	36.59%
April 1, 2018	March 31, 2019	42.79%

Supporting Materials (Backup)

The following table contains the MMUCC V5 Mapping results from the NHTSA MMUCC Mapping reports.

April 1, 2017 to March 31, 2018

Maine MMUCC Mapping Scores

Total Percent Mappable for All Elements

Data Structure Name	System	Percent (%)
Maine Crash Data Standard and Crash Form	Crash	70.7 %
Maine Crash Data Standard and Crash Form	Vehicle	59.09 %
Maine Crash Data Standard and Crash Form	Person	52.89 %
Maine Crash Data Standard and Crash Form	Roadway	22.92 %
Maine Crash Data Standard and Crash Form	Fatal Section	22.49 %
Maine Crash Data Standard and Crash Form	Large Vehicles & Hazardous Materials Section	24.09 %
Maine Crash Data Standard and Crash Form	Non-Motorist Section	40.53 %
Maine Crash Data Standard and Crash Form	Dynamic Data Elements	0 %

April 1, 2018 to March 31, 2019

Maine MMUCC Mapping Scores

Total Percent Mappable for All Elements

Data Structure Name	System	Percent (%)
Maine Crash Data Standard and Crash Form	Crash	74.44 %
Maine Crash Data Standard and Crash Form	Vehicle	58.4 %
Maine Crash Data Standard and Crash Form	Person	56.94 %
Maine Crash Data Standard and Crash Form	Roadway	22.92 %
Maine Crash Data Standard and Crash Form	Fatal Section	22.49 %
Maine Crash Data Standard and Crash Form	Large Vehicles & Hazardous Materials Section	34.61 %
Maine Crash Data Standard and Crash Form	Non-Motorist Section	40.29 %
Maine Crash Data Standard and Crash Form	Dynamic Data Elements	32.2 %

5.1.3 EMS Uniformity

Label: I-U-1
Status of Improvement: Demonstrated Improvement
Active Status: Active
***Last Updated*:** May 30, 2019
Related Project: MEFIRS

Narrative

This performance measure is based on the I-U-1 NHTSA Model Performance Measure.

Maine will improve the Uniformity of the EMS system as measured in terms of an Increase of:

The percentage of records on the State EMS data file that are National Emergency Medical Service Information System 3.x (NEMSIS)-compliant.

The state will show measureable progress using the following method:

> Compare the percentage of NEMSIS 3.x EMS reports entered during the baseline period of April 1, 2017 to March 31, 2018 as compared to the percentage of NEMSIS 3.x EMS reports entered during the performance period of April 1, 2018 to March 31, 2019.

The result is an increase in NEMSIS 3.X compliance of 24.08%.

Measurements

Start Date	End Date	NEMSIS 3.x Reports	Total Reports	NEMSIS 3.x Compliant Percentage
April 1, 2016	March 31, 2017	2,575	292,911	0.87%
April 1, 2017	March 31, 2018	201,692	287,858	70.06%
April 1, 2018	March 31, 2019	263,403	277,661	94.86%

Supporting Materials (Backup)

NEMSIS 3.x Counts

2017

Elite maine

Count of Records - MEFIRS (Elite)

Count of Records
2,575

Report Filters

Incident Date: is between '04/01/2016' and '03/31/2017'

Description

This provides the total count of records in MEFIRS for a specified Date Range.

2018

Elite maine

Count of Records - MEFIRS (Elite)

Count of Records
201,692

Report Filters

Incident Date: is between '04/01/2017' and '03/31/2018'

Description

This provides the total count of records in MEFIRS for a specified Date Range.

2019

Elite maine

Count of Records - MEFIRS (Elite)

Count of Records
263,403

Report Filters

Incident Date: is between '04/01/2018' and '03/31/2019'

Description

This provides the total count of records in MEFIRS for a specified Date Range.

NEMSIS 3.x Non-Compliant Counts

2017

EMS_Maine

Count of Reports MEMSRR (State Bridge)

Count of Reports
290,336

Report Filters

Incident Date (It5.44): is between '04/01/2016' and '03/31/2017'

Description

Provides a count of individual reports based on a specified date range.

2018

EMS_Maine

Count of Reports MEMSRR (State Bridge)

Count of Reports
86,166

Report Filters

Incident Date (It5.44): is between '04/01/2017' and '03/31/2018'

Description

Provides a count of individual reports based on a specified date range.

2019

EMS_Maine

Count of Reports MEMSRR (State Bridge)

Count of Reports
14,258

Report Filters

Incident Date (It5.44): is between '04/01/2018' and '03/31/2019'

Description

Provides a count of individual reports based on a specified date range.

5.2 Traffic Records Performance Targets

5.2.1 Target for Crash Completeness

The target for crash records with latitude and longitude values entered by the officer is:

Start Date	End Date	Completeness (%)
April 1, 2019	March 31, 2020	66%

5.2.2 Target for Crash Uniformity

The target for Crash Uniformity to the MMUCC V5 crash data standard is:

Start Date	End Date	Completeness (%)
April 1, 2019	March 31, 2020	44%

5.2.3 Target for EMS Uniformity

The target for EMS Uniformity to the NEMSIS 3.x standard is:

Start Date	End Date	Completeness (%)
April 1, 2019	March 31, 2020	96%

6. TRCC Projects

The State of Maine TRCC reviewed each system's deficiencies and developed goals, projects, and tasks to address the deficiencies identified during the April 25, 2016 Traffic Records Assessment. As a result of this review, the State of Maine TRCC has identified and prioritized the projects listed in the following table.

State of Maine TRCC FFY 2020 Traffic Records Project List

*Refer to the Maine Highway Safety Plan for FFY 2020 project budget information.

FFY 2020 405c Funded Projects
ME-P-00006 – Maine Crash Reporting System (MCRS) Upgrade
ME-P-00011 – e-Citation
ME-P-00015 – Public Access Reports – Traffic
ME-P-00024 – Highway Safety / FARS / EMS Data Quality Analysis

6.1 ME-P-00001 –Trauma Registry

Contact
Title: Director
Agency: Maine Emergency Medical Services
Address: 152 State House Station
City, Zip: Augusta 04333

Lead Agency
Maine Emergency Medical Services, Department of Public Safety

Status
Active

Project Description
In the Maine EMS Pre-Hospital NEMSIS compliant reporting system, we have access to information related to a crash scene and preliminary information about patients seen by EMS, however, we do not have access to information concerning the medical outcomes of patients injured in traffic-related trauma. We lack a statewide trauma registry to collect this information from Maine's three trauma centers and trauma system participating hospitals.

Maine EMS will contract with a data systems vendor (e.g. Image Trend) to develop a trauma database that all hospitals can access via the web. Each hospital will enter demographic information, incident details, and medical information for each patient whose traumatic injuries lead to death, surgery, admission to the hospital or ICU. Information from the pre-hospital EMS database will automatically carry over into the hospital database report in an effort to facilitate data entry and ensure accuracy and consistency of the record.

The database will be housed and maintained by the vendor. Since the database will be accessible online, hospitals are not required to purchase additional hardware or software. We will provide training to the hospitals and work with them to develop a schedule for data reporting that is mutually convenient. We anticipate that the three trauma centers will directly enter information into the trauma database to allow near real-time reporting of patient status and outcomes.

By linking data in the hospital record to crash scene details, we will have the ability to match patient outcomes to specific locations, crash types, use of safety devices, time of day, etc. We have the opportunity to design the database to include the data elements and create the reports that are most relevant to our state needs. Instituting a state trauma registry will also allow us to contribute to national trauma research efforts by giving us the opportunity to submit our state data to the National Trauma Data Bank.

The American College of Surgery, the Institute of Medicine, and various federal agencies support the development and implementation of state trauma registries. The 2006 article *"Are statewide trauma registries comparable? Reaching for a national trauma dataset"* from the Society for

Academic Emergency Medicine found that 32 states already had a centralized trauma registry. Maine was one of the few remaining states that did not have a trauma registry.

The information collected in this database will allow us to see the actual medical impact of traffic related trauma in our state. By linking the information in pre-hospital reports with a trauma registry, we can specifically identify medical risks of various environmental and behavioral factors. This will also aid in our ability to track the health impact of our intervention strategies. Specific benefits to our growing data pool are:

ACCURACY – Since the trauma database will be integrated into our pre-existing EMS data system, it will add an additional layer of verification. The system will flag any data inconsistencies between the two programs. This will prompt the user to confirm with an outside source which is the correct information.

COMPLETENESS – We have been missing the final page of the story on most traffic injury incidents. Unless there is a fatality, the medical costs of traffic-related trauma have not been known. This database will allow us to evaluate the medical impact for every roadway incident.

INTERGRATION – The trauma registry will be designed from the outset to integrate with our existing EMS database. Ultimately we can work to more seamlessly connect these databases to other related systems.

TIMELINESS – The hospitals will enter the information into the trauma registry at frequent intervals. We will have immediate access to that data. We can monitor injury trends and potential response to policy, law, or roadway changes rather than waiting for generic annual reports that may be based on national rather than state data.

UNIFORMITY – Providing a uniform reporting form and training to all hospitals will ensure consistency in the data collected. We will utilize the data dictionary and guidelines already developed by the National Trauma Data Bank so that there is a wealth of consistent, readily-available guidance to hospital data abstractors.

ACCESSIBILITY – Hospitals have a wealth of information within their medical records about the health impacts of roadway trauma. Given the confidential nature of medical information, access to records tends to be very restricted. To access the records is time consuming and legally confusing. Each request must be made individually. Developing a centralized, HIPAA-compliant data repository will allow public safety experts unprecedented access to valuable patient outcome information.

As described above; a trauma registry will increase the accuracy, completeness, integration, timeliness, uniformity, and accessibility of data concerning traffic related injury. We will have improved ability to monitor the true medical costs of roadway trauma and be able to significantly contribute to the national pool of trauma knowledge.

Core System and Performance Area

	Performance Area					
Core System	**Accuracy**	**Completeness**	**Integration**	**Timeliness**	**Uniformity**	**Accessibility**
Trauma Registry	✓	✓			✓	

Activity Report

Report Start	**Report End**	**Provided By**
11-3-2016	11-3-2016	Shaun St. Germain
Activity	*The statewide Trauma Registry is a new initiative. Shaun St. Germain said Jon Powers is working on a number of projects with a goal of January 1, 2017.*	

Report Start	**Report End**	**Provided By**
11-4-2016	05-03-2017	Shaun St. Germain
Activity	*The Trauma Registry is now operational and Maine EMS is actively soliciting hospital participation.*	

Report Start	**Report End**	**Provided By**
05-04-2017	11-08-2017	Shaun St. Germain
Activity	*The Trauma Registry is ready to begin receiving data. A training session was done in September, which was well received by everyone. A popular feature is the fact that the system is web-based and can be used without the need for dedicated server connection. Central Maine Medical Center is prepared to being using the system January 1, 2018. Trauma Registrars from Eastern Maine Medical Center want to use the system; however, EMHS has concerns about the data security and privacy issues. Maine Medical Center and Eastern Maine Medical Center have indicated that they are open to importing data at the same time they export data to the NTDB, quarterly. The disadvantage of this is we wouldn't have "real time" data. However, over time as the data accumulates, trends would become evident.* *Goals: 1. Facilitate hospital import of data from their existing trauma registry product. 2. Get each level 1 trauma center to use the state registry as their data gathering tool.*	
Problems	*HIPAA and mandated reporting continue to be roadblocks.*	

Report Start	**Report End**	**Provided By**
11-09-2017	02-07-2018	Lauren Stewart
Activity	*Maine deployed the trauma registry and is trying to get hospitals to submit their data into the system. Currently, there is no mandate to use the system. Lauren Stewart spoke with Tim Nangle and Shawn St. Germain and discussed if there was a way to create an intranet to take their hospital patient information and populate that data into the trauma registry.*	
Problems	*Confidentiality is still an issue.*	

Report Start	**Report End**	**Provided By**
02-08-2018	05-09-2018	Tim Nangle
Activity	*Tim Nangle said they settled a couple of issues so far. Two hospitals no longer have a security issue and agreed (in concept) to start using the trauma registry. As of today, there are zero records in the system.*	

Report Start	**Report End**	**Provided By**
05-10-2018	11-07-2018	Tim Nangle
Activity	*Tim Nangle said there are three trauma centers that are interested in using the trauma registry, but they have concerns about the system security. Tim is currently working with the Maine Medical Center; hoping that it will then be a model for the other two centers.*	

Report Start	**Report End**	**Provided By**
11-08-2018	02-06-2019	Tim Nangle
Activity	*Tim Nangle said they are still running into problems receiving patient identifiable data from trauma hospitals. This is partly due to HIPPA regulations and the fact that there is no mandate for hospitals to submit data to the trauma registry.*	

Report Start	**Report End**	**Provided By**
02-07-2019	05-01-2019	Tim Nangle
Activity	*Tim Nangle said the trauma advisory committee could possibly introduce legislation, but nothing has come of that yet.*	

Schedule

October 1, 2019 through September 30, 2020

Performance Measures
I-C-03 – Trauma Registry Completeness

Status of Improvement: TBD
Active Status: Planned
Last Updated: 10-JUN-2015

This performance measure is based on the I-C-03 model.

Maine will improve the Completeness of the Injury Surveillance / EMS system as measured in terms of a Decrease of:

The percentage of unknowns or blanks in critical data elements for which unknown is not an acceptable value. This measure also is also applicable to the following files: State Emergency Dept. File, State Hospital Discharge File, State Trauma Registry File, and State Vital Records.

The state will show measureable progress using the following method:

The percentage of unknowns or blanks in critical data elements for which unknown is not an acceptable value. This measure also is also applicable to the following files: State Emergency Dept. File, State Hospital Discharge File, State Trauma Registry File, and State Vital Records.

6.2 ME-P-00004 – Online Registration Renewal

Contact
Name: Ms. Linda Grant
Title: Senior Section Manager
Agency: Bureau of Motor Vehicles, Maine Office of the Secretary of State
Address: 101 Hospital Street
City, Zip: Augusta 04333-0152
Phone: 207-624-9095
Email: linda.grant@maine.gov

Lead Agency
Maine Bureau of Motor Vehicles

Status
Active

Project Description
The BMV is undertaking a project that will study the impact of direct mailings to registrants in an effort to increase online renewals. Increased use of the online renewal system will directly improve the timeliness of registration data. All registrants in selected municipalities will receive a postcard approximately 6 weeks prior to the expiration of their vehicle registration. The postcard will identify relevant vehicle data and provide easy instructions to renew online.

The number of online renewals will be compared to a control group that does not receive the renewal postcard. The goal is to achieve at least a 10% increase in online transactions above anticipated normal growth. If this goal is reached, it is anticipated that the project will continue and expand in 2007.

Update: The BMV is expanding a project that will measure the impact of direct mailings to registrants in an effort to increase online registration renewals. Increased use of the online renewal system will directly improve the timeliness of registration data. Registrants in selected municipalities will receive a postcard approximately 6 weeks prior to the expiration date of their vehicle registration. The post card will identify relevant vehicle data and provide easy instructions to renew online. The project will start October 1, 2007 and end September 30, 2008. Of the total number of renewals due, the number of online renewals among selected municipalities that receive the renewal post card is expected to reach at least 10% for FY 2008.

Basis:
This project will impact upon the timeliness of vehicle data available in the BMV database.

Expected Impact:
This project will impact upon the timeliness of vehicle data available in the BMV database.

Core System and Performance Area

	Performance Area					
Core System	**Accuracy**	**Completeness**	**Integration**	**Timeliness**	**Uniformity**	**Accessibility**
Vehicle	✓			✓		

Activity Report

Report Start	**Report End**	**Provided By**
06-16-2007	06-15-2008	Catherine Curtis
Activity	*Using the Rapid Renewal service, the percent of online registration renewals was 7% in 2006 and 17% in 2007.* *Progress achieved in 2007 compared to 2006: A 10% increase in the number of online registrations available in Database in 1 day.*	

Report Start	**Report End**	**Provided By**
06-16-2008	09-15-2008	Lauren Stewart
Activity	*On-line registration renewal is now in place using the Rapid Renewal website.*	
Comments	*This project has improved re-registration data availability to less than 24 hours for re-registrations performed online.*	

Report Start	**Report End**	**Provided By**
03-16-2009	06-15-2009	Richard Nickless
Activity	*In 2008, BMV added 4 towns to the Online Registration Renewal project. So far, in 2009, BMV has added two additional towns to the Online Registration Renewal System.*	
Plans	*Efforts are underway to encourage additional towns to join the Online Registration Renewal System. The number of towns offering rapid renewal service is 132 leaving 318 towns that do not. The goal for this year is to increase participation from 132 towns to 150, but the increase may not amount to many renewals because populations are likely to be smaller than those already in the program.*	

Report Start	**Report End**	**Provided By**
06-16-2009	09-15-2009	Richard Nickless
Activity	*In 2008, BMV added 4 towns to the Online Registration Renewal project. So far, in 2009, BMV has added five additional towns to the Online Registration Renewal System.*	

Report Start	**Report End**	**Provided By**
06-16-2009	09-15-2009	Richard Nickless
Plans	*Efforts are underway to encourage additional towns to join the Online Registration Renewal System. The number of towns offering rapid renewal service is 13, leaving 314 towns that do not. The goal for this year is to increase participation from 132 towns to 150, but the increase may not amount to many renewals because populations are likely to be smaller than those already in the program.*	
Comments	*Registrants can register their trailer fleets (5 or more) using the online registration renewal system as opposed to registering trailers one at a time. Whether or not the additional functionality will increase the number of renewals is unknown.*	

Report Start	**Report End**	**Provided By**
09-16-2009	12-15-2009	Richard Nickless
Activity	*Efforts are underway to encourage additional towns to join the Online Registration Renewal System. The current number of towns offering rapid renewal service is 137 leaving 313 towns that do not, but the increase may not amount to many renewals because populations are likely to be smaller than those already in the program.*	
Plans	*Efforts are underway to encourage additional towns to join the Online Registration Renewal System. The number of towns offering rapid renewal service is 13, leaving 314 towns that do not. The goal for this year is to increase participation from 132 towns to 150, but the increase may not amount to many renewals because populations are likely to be smaller than those already in the program.* *In 2008, BMV added 4 towns to the Online Registration Renewal project. So far, in 2009, BMV has added five additional towns.*	
Problems	*Online Registration Renewals are a well-established customer service within Maine municipalities and the BMV does not anticipate any problems.*	
Plans	*Vehicle database timeliness continues to be a valid measure of project performance. The percentage of registration renewals available in the database within one day is expected to increase again in 2009.*	
Comments	*Registrants can register trailer fleets (5 or more) using the online registration renewal system as opposed to registering trailers one at a time.* *Rapid renewal online registrations completed were 75,528 (for 2007) and 86,972 (for 2008) respectively. Approximately, 96,105 registrations have been renewed for 2009. Of the 2009 total, trailer fleets accounted for 1,564 renewals or 1.6%.*	

Report Start	**Report End**	**Provided By**
12-16-2009	03-15-2010	Richard Nickless
Activity	*Efforts are underway to encourage additional towns to join the Online Registration Renewal System.*	

Report Start	**Report End**	**Provided By**
12-16-2009	03-15-2010	Richard Nickless
	In 2008, BMV added 4 towns to the Online Registration Renewal project. In 2009, BMV added 5 additional towns. *The current number of towns offering rapid renewal is 137 leaving 313 towns that do not.* *It is unlikely that adding several towns each year will result in significant increases in the amount of renewals. Populations will be smaller because larger cities and towns are already in the program.* *The number of online renewals as a percentage of total renewals are as follows:* *2009 - 99,795 online renewals divided by 1,144,720 total renewals = 8.7%* *2008 - 86,972 online renewals divided by 1,106,632 total renewals = 7.9%* *2007 - 75,528 online renewals divided by 1,090,467 total renewals = 6.8%.*	
Problems	*Online Registration Renewals are a well-established customer service within Maine municipalities and the BMV does not anticipate any problems.*	
Plans	*Vehicle database timeliness continues to be a valid measure of project performance. The percentage of registration renewals available in the database within one day was 8.7% in 2009 (as shown above), and this percentage is expected to increase again in 2010.*	
Comments	*The total number of renewals are generated directly from our BULL mainframe database each year. There is a Re-Reg flag (Y/N) on the registration record and we use this flag to separate renewals from new registrations.* *Registration renewal yearly totals are selected using the following criteria:* *Re-Reg = Y (Y means the registration type is a renewal).* *Effective Date = (Date range is the calendar year e.g. 01/01/09 to 12/31/09).* *Status = A (A means "Active" registration renewals on the BMV system).* *These yearly totals do not include any non-renewal registrations (such as first-time registrations of newly purchased vehicles, or first-time-in-Maine registrations of vehicles from out of State).* *The BMV relies on Information Resource of Maine (InforME) for the number of yearly online renewals. The yearly totals (as shown above) represent a completed "Rapid Renewal" transaction done by a user of the online application. The totals do not include off-line renewals completed by BMV branch offices which may or may not be updated on the system within a 24 hour period.*	

Report Start	**Report End**	**Provided By**
03-16-2010	06-15-2010	Richard Nickless
Activity	*Efforts are underway to encourage additional towns to join the Online Registration Renewal System.* *In 2008, BMV added 4 towns to the Online Registration Renewal project.*	

Report Start	**Report End**	**Provided By**
03-16-2010	06-15-2010	Richard Nickless
	In 2009, BMV added 5 additional towns. *As of April 30, 2010, no additional towns have been added to the system.* *The current number of towns offering rapid renewal is 137 leaving 313 towns that do not.* *It is unlikely that adding several towns each year will result in significant increases in the amount of renewals. Populations will be smaller because larger cities and towns are already in the program.* *The number of online renewals as a percentage of total renewals are as follows:* *2009 - 99,795 online renewals divided by 1,144,720 total renewals = 8.7%* *2008 - 86,972 online renewals divided by 1,106,632 total renewals = 7.9%* *2007 - 75,528 online renewals divided by 1,090,467 total renewals = 6.8%* *According to BMV records, there were 32,175 registrations renewed from Jan 1 to April 30, 2009 compared to 34,732 renewals in 2010 for the same time period.*	
Problems	*Online Registration Renewals are a well-established customer service within Maine municipalities and the BMV does not anticipate any problems.*	
Plans	*The percentage of registration renewals available in the database within one day was 8.7% in 2009 (as shown above), and this percentage is expected to increase again in 2010. The BMV expects the number of participating towns to increase as well.*	
Comments	*Vehicle database timeliness, increasing the number of registration renewals updated on the system within 24 hours, continues to be a valid measure of project performance.* *The total number of renewals are generated directly from the BMV BULL mainframe database each year. A Re-Reg flag (Y/N) on the registration record is used to separate renewals from new registrations.* *Registration renewal yearly totals are selected using the following criteria:* *Re-Reg = Y (Y means the registration type is a renewal).* *Effective Date = (Date range is the calendar year e.g. 01/01/09 to 12/31/09).* *Status = A (A means "Active" registration renewals on the BMV system).* *These yearly totals do not include any non-renewal registrations (such as first-time registrations of newly purchased vehicles, or first-time-in-Maine registrations of vehicles from out of State).* *The BMV relies on Information Resource of Maine (InforME) for the number of yearly online renewals. The yearly totals (as shown above) represent a completed "Rapid Renewal" transaction done by a user of the online application. The totals do not include off-line renewals completed by BMV branch offices which may or may not be updated on the system within a 24 hour period.*	

Report Start	**Report End**	**Provided By**
10-01-2010	12-31-2010	Linda Grant
Activity	*Efforts are underway to encourage additional towns to join the Online Registration Renewal System.* *In 2008, BMV added 4 towns to the Online Registration Renewal project.* *In 2009, BMV added 5 additional towns.* *As of April 30, 2010, no additional towns have been added to the system.* *The current number of towns offering rapid renewal is 137 leaving 313 towns that do not.* *It is unlikely that adding several towns each year will result in significant increases in the amount of renewals. Populations will be smaller because larger cities and towns are already in the program.* *The number of online renewals as a percentage of total renewals are as follows:* *2009 - 99,795 online renewals divided by 1,144,720 total renewals = 8.7%* *2008 - 86,972 online renewals divided by 1,106,632 total renewals = 7.9%* *2007 - 75,528 online renewals divided by 1,090,467 total renewals = 6.8%* *According to BMV records, there were 32,175 registrations renewed from Jan 1 to April 30, 2009 compared to 34,732 renewals in 2010 for the same time period.*	
Problems	*Online Registration Renewals are a well-established customer service within Maine municipalities and the BMV does not anticipate any problems.*	
Plans	*The percentage of registration renewals available in the database within one day was 8.7% in 2009 (as shown above), and this percentage is expected to increase again in 2010. The BMV expects the number of participating towns to increase as well.*	
Comments	*Vehicle database timeliness, increasing the number of registration renewals updated on the system within 24 hours, continues to be a valid measure of project performance.* *The total number of renewals are generated directly from the BMV BULL mainframe database each year. A Re-Reg flag (Y/N) on the registration record is used to separate renewals from new registrations.* *Registration renewal yearly totals are selected using the following criteria:* *Re-Reg = Y (Y means the registration type is a renewal).* *Effective Date = (Date range is the calendar year e.g. 01/01/09 to 12/31/09).* *Status = A (A means "Active" registration renewals on the BMV system).* *These yearly totals do not include any non-renewal registrations (such as first-time registrations of newly purchased vehicles, or first-time-in-Maine registrations of vehicles from out of State).* *The BMV relies on Information Resource of Maine (InforME) for the number of yearly online renewals. The yearly totals (as shown above) represent a completed "Rapid Renewal" transaction done by a user of the online application. The totals do not*	

Report Start	**Report End**	**Provided By**
10-01-2010	12-31-2010	Linda Grant
	include off-line renewals completed by BMV branch offices which may or may not be updated on the system within a 24 hour period.	

Report Start	**Report End**	**Provided By**
01-01-2011	03-31-2011	Richard Nickless
Activity	*Efforts are underway to encourage additional towns to join the Online Registration Renewal System.* *In 2008, BMV added 4 towns to the Online Registration Renewal service.* *In 2009, BMV added 5 towns.* *In 2010, BMV added 9 towns.* *The current number of towns offering rapid renewal is 147 leaving 303 towns that do not.* *It is unlikely that adding several towns each year will result in significant increases in the amount of renewals. Populations will be smaller because larger cities and towns are already in the program.* *The number of online renewals as a percentage of total renewals are as follows:* *2007 - 75,528 online renewals divided by 1,090,467 total renewals = 6.8%* *2008 - 86,972 online renewals divided by 1,106,632 total renewals = 7.9%* *2009 - 99,795 online renewals divided by 1,144,720 total renewals = 8.7%* *2010, 108,593 online renewals divided by 1,054,720 total renewals = 10%.*	
Problems	*Online Registration Renewals are a well-established customer service within Maine municipalities and the BMV does not anticipate any problems.*	
Plans	*The percentage of registration renewals available in the database within one day was 10% in 2010 (as shown above), and this percentage is expected to increase again in 2011. The BMV expects the number of participating towns to increase as well.*	
Comments	*Vehicle database timeliness, increasing the number of registration renewals updated on the system within 24 hours, continues to be a valid measure of project performance.* *The total number of renewals are generated directly from the new Vehicle Registration database. Total renewals will be generated on a monthly basis in the future, and we will continue to produce a yearly report showing the number of rapid renewal registrations as a percentage of total renewals captured in the database. A Re-Reg flag (Y/N) on the registration record is the indicator used to separate renewals from new registrations.* *Registration renewal yearly totals are selected using the following criteria:* *Re-Reg = Y (Y means the registration type is a renewal).* *Effective Date = (Date range is the calendar year e.g. 01/01/10 to 12/31/10).* *Status = A (A means "Active" registration renewals on the BMV system).*	

Report Start	**Report End**	**Provided By**
01-01-2011	03-31-2011	Richard Nickless
	Class Code = CO (commercial vehicles registered from 12,001 to 100,000 pounds '21,472 records'). Class Code = TR (Tractor '1,638 records') which are not available for processing online Rapid Renewal transactions. *These yearly totals do not include any non-renewal registrations (such as first-time registrations of newly purchased vehicles, or first-time-in-Maine registrations of vehicles from out of State).* *The BMV relies on Information Resource of Maine (InforME) for the number of yearly online renewals. The yearly totals (as shown above) represent a completed "Rapid Renewal" transaction done by a user of the online application. The totals do not include off-line renewals completed by BMV branch offices which may or may not be updated on the system within a 24 hour period.*	

Report Start	**Report End**	**Provided By**
11-04-2012	01-19-2012	Linda Grant
Activity	*Online registration project continues and is steadily adding new towns.*	

Report Start	**Report End**	**Provided By**
01-20-2012	03-15-2012	Linda Grant
Activity	*BMV reports that the Online Vehicle Registration system usage has steadily increased as evidenced by the Interim Progress Report benchmarks.*	

Report Start	**Report End**	**Provided By**
03-15-2012	06-28-2012	Linda Grant
Activity	*Ms. Linda Grant stated that BMV has recently added another town to the online vehicle registration system. The online service, "Rapid Renewal", has recently been improved to handle registrations using mobile devices.* *BMV has also recently improved their processes for people going into town offices for vehicle registrations for those towns that handle registrations electronically.*	

Report Start	**Report End**	**Provided By**
06-29-2012	09-19-2012	Linda Grant
Activity	*Two towns have been added to the Rapid Renewal system.*	

Report Start	**Report End**	**Provided By**
09-20-2012	01-17-2013	Linda Grant
Activity	*An additional two towns have been added to the Rapid Renewal system.*	

Report Start	**Report End**	**Provided By**
01-18-2013	06-12-2013	Linda Grant
Activity	*An additional three towns have been added to the Rapid Renewal system.*	

Report Start	**Report End**	**Provided By**
06-13-2013	02-26-2014	Linda Grant
Activity	*Maine BMV reported that there were 178 towns participating in the online registration rapid renewal program and there were approximately 940,000 renewals processed online.*	

Report Start	**Report End**	**Provided By**
02-27-2014	09-24-2014	Linda Grant
Activity	*The number of towns participating in the DMV online registration renewal system has increased since last reported, over a million registrations have been processed online.*	

Report Start	**Report End**	**Provided By**
09-24-2014	01-22-2015	Linda Grant
Activity	*Towns were recently added. There are currently 196 municipalities and over a million registrations done online. A huge percentage of towns have already come on board, now working to get the smaller towns online.*	

Report Start	**Report End**	**Provided By**
01-23-2015	05-03-2016	Linda Grant
Activity	*Linda Grant said 214 municipalities are offering the service, which is not quite 50%. There have been 1,249,719 transactions conducted to date.*	

Report Start	**Report End**	**Provided By**
05-04-2016	11-03-2016	Linda Grant
Activity	*Linda Grant said 220 municipalities are offering the service. There have been 1,319,000 transactions conducted to date.*	

Report Start	**Report End**	**Provided By**
11-04-2016	02-08-2017	Linda Grant
Activity	*Linda Grant said 224 municipalities are offering the service. There have been more than 1,364,305 transactions conducted to date. Continuing the roll out to new municipalities.*	

Report Start	**Report End**	**Provided By**
02-09-2017	05-03-2017	Linda Grant
Activity	*Linda Grant said 226 municipalities are offering the service. There have been more than 1,406,216 transactions processed to date.*	

Report Start	**Report End**	**Provided By**
05-04-2017	11-08-2017	Linda Grant
Activity	*Linda Grant said 233 municipalities are offering the service. There have been more than 1,487,772 transactions processed to date; continuing the roll out to new municipalities.*	

Report Start	**Report End**	**Provided By**
11-09-2017	02-07-2018	Linda Grant
Activity	*Linda Grant said 235 municipalities are offering the service. There have been more than 1,526,012 transactions processed to date; continuing the roll out to new municipalities.*	

Report Start	**Report End**	**Provided By**
02-08-2018	05-09-2018	Linda Grant
Activity	*Project is on-going. Rapid renewal has over 238 agencies online and over 1,569,897 transactions to date; continuing the roll out to new municipalities.*	

Report Start	**Report End**	**Provided By**
05-10-2018	11-07-2018	Linda Grant
Activity	*Project is on-going. Rapid renewal has over 247 agencies online and over 1,666,603 transactions to date; continuing the roll out to new municipalities.*	

Report Start	**Report End**	**Provided By**
11-08-2018	02-06-2019	Linda Grant
Activity	*Project is on-going. Rapid renewal has over 249 municipalities online and over 1,698,868 transactions; continuing the roll out to new municipalities.*	

Report Start	**Report End**	**Provided By**
02-07-2019	05-01-2019	Linda Grant
Activity	*Project is on-going. Rapid renewal has over 251 municipalities online and over 1,734,858 transactions; continuing the roll out to new municipalities.*	

Schedule
October 1, 2019 through September 30, 2020

Performance Measures
V-T-02 – Vehicle Registration Timeliness

Status of Improvement: No new data
Active Status: On Hold
Last Updated: June 17, 2015

This performance measure is based on the V-T-02 model.

Maine will improve the Timeliness of the Vehicle Registration system as measured in terms of an Increase of:

The percentage of vehicle record updates entered into the database within XX days after the critical status change. *e.g. 1, 5, 10 days

The state will show measureable progress using the following method:

ME-M-00012 - Vehicle Registration / Timeliness

"Rapid Renewal" registrations are the only registrations posted to the vehicle registration database within one day. Using this information and the counts below:

July 1, 2010 to December 31, 2010: 52,097 online renewals divided by 584,515 total renewals = 8.9%.

July 1, 2011 to December 31, 2011: 58,210 online renewals divided by 462,597 total renewals = 12.5%

These yearly totals do not include any non-renewal registrations (such as first-time registrations of newly purchased vehicles, or first-time-in-Maine registrations of vehicles from out of State).

Each online renewal represents a completed "Rapid Renewal" transaction done by a user of the online application.

6.3 ME-P-00006 – Maine Crash Reporting System Upgrade

Contact
Name: Ms. Lauren Stewart
Title: Director
Lead Agency: Bureau of Highway Safety, Department of Public Safety
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City, Zip: Augusta 04333
Phone: 207-626-3840
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Lead Agency
Bureau of Highway Safety, Department of Public Safety

Status
Active

Project Description
The Maine Crash Reporting System (MCRS) Upgrade project goals are to: update the technical foundation of the system, increase MMUCC compliance of the data collected; and incorporate a common data schema for ease of data transfer between the variety of software programs and agencies that use crash data.

The goals of this project are to improve the overall data handling processes, reduce redundancy, reduce data manipulation, minimize human intervention, and improve efficiency throughout the system. This will also create opportunities for increased interoperability with other data systems.

Core System and Performance Area

	Performance Area					
Core System	**Accuracy**	**Completeness**	**Integration**	**Timeliness**	**Uniformity**	**Accessibility**
Crash	✓	✓	✓	✓	✓	✓

Activity Reporting

Report Start	**Report End**	**Provided By**
06-16-2009	09-15-2009	Lauren Stewart
Activity	*The MCRS Upgrade Phase II amendment was signed at the end of August 2009.*	

Report Start	**Report End**	**Provided By**
09-16-2009	12-15-2009	Lauren Stewart
Activity	*Began development of the BMV XML Export service.* *Began development of the MDOT Crash Analysis System Update.* *Began development of the MDOT Synchronization Update.*	
Plans	*Continue development of the MDOT and MDPS components of the Maine Crash Reporting System Upgrade project.*	

Report Start	**Report End**	**Provided By**
12-16-2009	03-15-2010	Lauren Stewart
Activity	*Began development of the Crash Analysis System Update.* *Continued development of the BMV XML Export service.* *Continued development of the MDOT Synchronization Update.* *Completed development of the Crash Reports PDF Web Services.*	
Plans	*Continue development of the Maine Crash Reporting System Upgrade.*	

Report Start	**Report End**	**Provided By**
03-16-2010	06-15-2010	Lauren Stewart
Activity	*Continued development of the Crash Analysis System Update.* *Completed development of the MDOT Synchronization Update.* *Completed development of the BMV XML Export service.*	
Plans	*Complete development of the Crash Analysis System Update.* *Complete development of the MCRS Reporting and Analysis components.*	

Report Start	**Report End**	**Provided By**
10-01-2010	12-31-2010	Lauren Stewart
Activity	*Completed development of the MCRS .NET Crash Location Module.*	

Report Start	**Report End**	**Provided By**
10-01-2010	12-31-2010	Lauren Stewart
	Completed development of the MCRS .NET Client Upgrade. *Completed development of the MDOT Synchronization Update.* *Completed development of the BMV XML Export service.* *Completed development of the Search/Print Web Module.* *Completed development of the Crash Reports PDF Web Service.* *Completed development of the Web-based Standard Reports.*	
Plans	*With completion of the above activities, Phase II development is complete.* *Moving all modules from test servers to production servers is planned for 1st quarter CY2011.*	
Comments	*Lt. Brian Scott (Maine State Police, Traffic Division) stated that MCRS 2 was well received during the MCJA training. Lt. Scott stated that the mobile training environment was setup and will be used for training of the new MCRS 2 program. Lt. Scott said that IMC build 17 has been sent to local law enforcement agencies that use the IMC Records Management System. IMC Build 17 contains the new crash form data elements. The MCRS 2 Email Processor is currently running in test mode and is ready to receive any data that may be sent to the State. The MCRS 2 mapping features will improve crash location accuracy with the addition of Google satellite imagery.*	

Report Start	**Report End**	**Provided By**
10-01-2010	12-31-2010	Lauren Stewart
Activity	*FMCSA Commercial Vehicle Lookup* *Added capability to MCRS to auto fill commercial vehicle carrier name by querying FMCSA website.* *1. Add an auto-fill button on the commercial screen near where the USDOT number is entered.* *2. This kicks off query to retrieve commercial vehicle information from FMCSA website.*	

Report Start	**Report End**	**Provided By**
10-01-2010	12-31-2010	Lauren Stewart
	3. Any data retrieved from the site would be used to populate the commercial screen. *4. Any information retrieved can be overwritten by the user if need be.* *5. The data elements retrieved for auto populating include:* *Carrier name* *Address* *City* *State* *Zip* *MC/MX number* *Interstate Carrier (checkbox)* *System Management Screen* *Add a screen to the MCRS client that is visible only to administrators that displays basic system information including:* *Total number of reports in system.* *Total number of reports in system for current calendar year.* *Number of approved reports.* *Number of reports pending approval.* *Number of approved reports not exported to the state. Clicking on number will open a window that displays a list of these reports.* *Number of MCRS users in Agency.*	
Plans	*Continue with implementation of remaining Phase III tasks.*	

Report Start	**Report End**	**Provided By**
01-01-2011	03-31-2011	Lt. Brian Scott
Activity	*The MCRS 2 rollout has been going very smoothly with virtually all of the State Troopers trained on the new system. State Police have also conducted Train the Trainer classes with local law enforcement throughout the State. The State Police database currently has 477 crash reports in the new MMUCC compliant data format. Lt Scott reports that the new program is easy to use, collects more data, forces officers to enter information correctly, and that the mapping feature facilitates improved crash location assignments.* *At this point, ten agencies have performed MCRS 2 installations with some already submitting crash reports and others waiting until their personnel are fully trained.*	
Plans	*Continue the rollout of MCRS 2 to local Maine police agencies.*	

Report Start	**Report End**	**Provided By**
04-01-2011	06-08-2011	Lt. Brian Scott
Activity	*Deploying MCRS 2 to local agencies. Currently at 55 agencies installed, up from 10 agencies on April 14th. Agencies are coming online in anticipation of the June 30th cutoff date for using the old MCRS system.*	
Plans	*Continue local deployments until all agencies are submitting MCRS 2 data.*	

Report Start	**Report End**	**Provided By**
04-01-2011	11-03-2011	Lauren Stewart
Activity	*Continued deployment of MCRS 2 to local law enforcement agencies by remotely installing the Maine Crash Reporting System server and client components.* *Completed development of the Alcohol and Drug Alert Notification module for MCRS.* *The notification service automatically notifies MDPS personnel when:* *1. BAC Test results coded as Pending and are 30 days past the date of the crash report*	

Report Start	**Report End**	**Provided By**
04-01-2011	11-03-2011	Lauren Stewart
	2. Drug Test Results coded as Pending and are 8 weeks past the date of the crash report. *Candidate crash reports must be formally submitted to the state. The notification service will query the State Crash Data Repository for crash data meeting the conditions above. Any crash reports meeting those conditions will be summarized in a report and emailed to MDPS personnel in a timely fashion.* *The notification service will be developed to execute as a stand-alone scheduled task and be configurable. The notification service will have its own event log to store and report any generated exceptions. The notification service will be configurable to control the location of the State Crash Data Repository, event log name, and SMTP address.*	

Report Start	**Report End**	**Provided By**
11-04-2012	01-19-2012	Lauren Stewart
Activity	*Continued deployment of MCRS 2 to local law enforcement agencies by remotely installing the Maine Crash Reporting System server and client components for four local police agencies.* *Continued development and testing of data migration from MCRS 1 to MCRS 2.* *Completed development of the VIN Decoding module for MCRS. The VIN Decoding module fills an auxiliary Units VIN table containing all data retrieved from a VIN decoding web service query. The following data can be retrieved for valid VINs:* *VIN, VehicleMake, Model, ModelYear, Trim, BodyStyle, EngineType, CountryOfManufacture, DecodeStatus, DecodeMessage, DecodeStatusCode, VINWasCorrected, TankCapacity, MPGCity, MPGHighway, DriveLine, ABS, Seating, Length, Width, Height.* *Modified the MDOT Crash Synchronization service and Ad Hoc Reporting tools to include the UnitVINData database table.*	
Plans	*Complete production data migration from MCRS 1 to MCRS 2.*	

Report Start	**Report End**	**Provided By**
01-20-2012	03-15-2012	Lt. Brian Scott
Activity	*Lt. Brian Scott stated that the rollout of MCRS 2 has completed and is deployed statewide.*	
Comments	*Mr. Duane Brunell added that it was the goal to get all the police departments signed on to the new crash system by the end of 2011 and that goal was achieved. Also, MDOT and Deep River LLC are in the process of migrating historical data and should have that completed shortly.*	

Report Start	**Report End**	**Provided By**
03-16-2012	06-28-2012	Lt. Brian Scott
Activity	*Duane Brunell stated that the MCRS project is essentially complete. Recent efforts included work on the MCRS legacy data migration and internal IT work on MDOT side to work with the in-house query system. Mr. Brunell said they were overall satisfied with the results of the migration.*	
Problems	*Lt. Scott said that there is a need for the addition of a delete feature so that MSP Traffic Division could delete duplicate and other types of problem reports from the system. The delete function would need to work across systems from MSP Traffic Division to MDOT MaineCRASH system as well as notification to BMV.*	

Report Start	**Report End**	**Provided By**
03-26-2013	06-17-2013	Duane Brunell
Activity	*All departments adopted the Maine Crash Reporting System upgrade in 2011. There have been no system issues with the statewide provided system or any of the vendor products. The overall upgrade was a complete success as well as the data migration effort.* *The upgrade has gone according to plan and is now reaching a mature state.*	

Report Start	**Report End**	**Provided By**
06-18-2013	02-26-2014	Lt. Brian Scott
Activity	*Maine Crash Reporting System Phase 4 development report: All crash software has been upgraded to the latest version of Visual Studio (.net), implemented FIPS Security Standard 140-2. Next will be adding the client based standard reports. Google maps stopped supporting the older mapping API used in the MCRS client application and this resulted in satellite images not being displayed on the location map component; a fix is currently being worked on.*	

Report Start	**Report End**	**Provided By**
02-27-2014	05-07-2014	Lt. Brian Scott
Activity	*The development environment for Maine Crash has been updated to the latest version of Visual Studio (2013). Dan also mentioned that the MCRS application now includes the following enhancements:* *Standard reports displaying various statistics.* *FIPS 140-2* *Ambulance Codes Favorites* *Enhance Search* *License Endorsements and Restrictions Audit check* *Auto Update* *Barcode Enhancements* *An update is being done to the Map feature in MCRS to allow the officer to enter the offset from an intersection.*	
Plans	*An update is being done to the Map feature in MCRS to allow the officer to enter the offset from an intersection.*	

Report Start	**Report End**	**Provided By**
05-07-2014	09-24-2014	Lt. Brian Scott
Activity	*Updated the group on Maine Crash Phase 4 development.*	

Report Start	**Report End**	**Provided By**
05-07-2014	09-24-2014	Lt. Brian Scott
	The mapping tool within MCRS has been updated to use the new Google Maps API. *The Latitude/Longitude can be saved for any location including off roadway. The barcode reader interface has been improved.* *All deleted reports are now automatically archived.* *Installation software for servers supporting MCRS has been improved.* *Lt. Scott also asked about including the date of birth in the report for the owner. This is affecting data matching for the Bureau of Motor Vehicles. Owner records from crash reports are not matching up with BMV records because of no date of birth provided.* *Dan Schuessler suggested making the owner date of birth required.*	

Report Start	**Report End**	**Provided By**
09-25-2014	01-22-2015	Lt. Brian Scott
Activity	*The MCRS upgrade is nearing completion, including the client application. The web site upgrades are also being worked on including the integrated delete functionality between the Highway Safety and DOT databases. This process will replace the current manual process and will be administered by Deb McMaster as the central authority.*	

Report Start	**Report End**	**Provided By**
01-22-2015	04-23-2015	Lt. Brian Scott
Activity	*Lt. Scott said that the BMV had requested changes to the license restrictions and endorsements at one of the prior meetings. The new AAMVA standard list is in effect beginning July 8th. The Crash system is being modified to accommodate those changes, as well as the requirement for date of birth on owner records for crash. Appriss is currently working with Lt. Scott and Linda on developing those changes.*	

Report Start	**Report End**	**Provided By**
04-24-2015	01-19-2016	Lauren Stewart
Activity	*Appriss gave a brief demo of the additional features added to the MCRS Website. Appriss added support for the FARS Group to designate a crash report as being a FARS fatality. For instance, when FARS analysts go into the system, they can check off the FARS button and search for FARS reports. Once Highway Safety designates all FARS reports, then users can run a set of FARS related Standard Reports selected by the Bureau of Highway Safety. This will replace the spreadsheets that FARS analysts have been using.* *Appriss also added the ability to manage deletion of crash reports. Reviewers at DOT can log in and search and click on a crash and request to delete. It doesn't delete the crash report, but it goes to MSP Traffic Division to view the request for deletion.* *Major Scott asked if an email will be sent back to the PD when a request was made. Dan said a notification will go to anyone in the email list, but is not typically the PD's at this point. Currently, there isn't an email for every PD. Appriss said that would be a good thing to add in. Any deletions will be listed with the report number, date and time of deletion, who requested it, and the reason for deletion.* *MSP Traffic Division can now manage the POC's for any agency. MSP Traffic Division can go in and fill in any gaps that currently exist in the email contacts in the system.* *The Police Departments can now go in and view their own status. They can view crash timeliness performance measures and track crash reports by year or any date range. MSP Traffic Division and PD's can also click on the upload log to see the status of what was uploaded. Users can also view the upload log crash data XML for troubleshooting purposes.*	

Report Start	**Report End**	**Provided By**
01-20-2016	05-03-2016	Lauren Stewart
Activity	*There is a new MCRS release out. It will be rolling out to some of the smaller towns, as well as the State Police soon. The release has the latest maps and also includes the DOB and the new restrictions and endorsement codes.*	

Report Start	**Report End**	**Provided By**
05-04-2016	11-03-2016	Lauren Stewart
Activity	*Updated the Distracted Driver technology to be MMUCC compliant. Even though Maine added one additional attribute (non-MMUCC) to the Driver Distracted By list, NHTSA determined that the Driver Distracted By element was MMUCC compliant.*	

Report Start	**Report End**	**Provided By**
11-04-2016	02-08-2017	Lauren Stewart
Activity	*The MCRS client update is ready to send out for deployment. Lt. Bruce Scott will notify Sgt. Darren Foster to get the client out over the network or by laptop deployment. Note: It is important to update the troopers in the field first or do the deployment simultaneously to all. Otherwise, the audit function will go into a continuous loop if the DOB field is not filled in for vehicle owners.*	

Report Start	**Report End**	**Provided By**
02-09-2017	05-03-2017	Lauren Stewart
Activity	*Several updates were done over the last several months. The latest change was to the public access website. State police are deploying the latest version.*	

Report Start	**Report End**	**Provided By**
05-04-2017	11-08-2017	Lauren Stewart
Activity	*NHTSA requested the latest Data Dictionary and related documents for the MMUCC Version 5 review. The MCRS User's Manual hasn't been updated since about 2010. The manual needs to be updated to reflect minor changes such as the Distracted Driver and License Restrictions & Endorsements. Lt. Scott will check with Lt. Darren Foster about getting the manual.* *Lt. Scott talked about the need for information on secondary crashes. Jaime Pelotte mentioned that FARS does collect information on secondary crashes and that information would be helpful.* *NHTSA has a program that states can supply their crash data by exporting up to the NHTSA service, which would autofill some of the FARS information into*	

Report Start	**Report End**	**Provided By**
05-04-2017	11-08-2017	Lauren Stewart
	reports. Another benefit is that NHTSA has standard reports on their website that may have additional reporting capabilities.	

Report Start	**Report End**	**Provided By**
11-09-2017	02-07-2018	Lauren Stewart
Activity	*Lauren Stewart said that the MCRS five year contract is at LexisNexis for signature. Some of the planned MCRS enhancements include:* • *MMUCC V5 Update – Data elements to be added are the Secondary Crash and Injury Degree attributes, as well as the Distracted Driving element.* • *Client Updates – Add NHTSA VPIC web services.* • *Website Enhancements – Increase the number of dashboards.* • *XML Schema Data Standard – Update to reflect MMUCC V5 updates.* • *NHTSA Crash Data Export – Develop an export service to export crash data to NHTSA. Crash reports exported to NHTSA will allow Maine to run NHTSA developed crash analytical reports and auto-populate select FARS fields.* *Lauren Stewart said that the Distracted Driving element must be MMUCC V5 compliant by July 1, 2018 in order for Maine to get additional funding for other projects that are not under Section 405c.* *Once NHTSA is done with the MMUCC V5 review of Maine's crash form, a form redesign meeting will be scheduled in early April 2018. Representatives from Highway Safety, State & Local Police, DOT, and BMV will meet to focus on the data elements and discuss what needs to be changed.*	

Report Start	**Report End**	**Provided By**
02-08-2018	05-09-2018	Lauren Stewart
Activity	*MMUCC V5 review was completed by NHTSA. A form redesign meeting was held on April 4th to review the Maine's crash form. Representatives from*	

Report Start	**Report End**	**Provided By**
02-08-2018	05-09-2018	Lauren Stewart
	Highway Safety, State & Local Police, DOT, and BMV met to discuss what needs to be changed. LexisNexis will implement the MMUCC changes in the software which will include updating the client, website, database, and DOT Oracle database. LexisNexis will also send an updated schema to Tri-Tech.	

Report Start	**Report End**	**Provided By**
05-10-2018	11-07-2018	Lauren Stewart
Activity	*As a result of the Form Redesign meeting held in April 2018, minor updates were added to MCRS. The update is scheduled for the back end servers and then the client will be updated. For 2019, MCRS will interface with a crash data export to NHTSA's federal repository. The NHTSA system will provide enhanced reporting capabilities for crash reports from participating states.*	

Report Start	**Report End**	**Provided By**
11-08-2018	02-06-2019	Lauren Stewart
Activity	*At the end of last year, a new MCRS update was rolled out to a couple of towns. Some data fields were added to comply with the latest MMUCC V5 Crash Data Standard. Vendor will be working with Emile Poulin to deploy the client to the rest of the state police.*	

Report Start	**Report End**	**Provided By**
02-07-2019	05-01-2019	Lauren Stewart
Activity	*The latest version of MCRS with the new MMUCC V5 data elements has been deployed. It's rolling out to different agencies as they call in to schedule updates. Some of the updates include secondary crash, updated distracted driving elements, injury codes, autonomous vehicle data collection, and extrication for FARS. As part of the upgrade, a NHTSA Crash Data Export service will export all Maine reportable crash data to NHTSA, who will then parse out the FARS eligible reports and auto-populate some of the fields for the FARS analyst to use. Testing will happen next week and then deployment a week later.*	

Schedule
October 1, 2019 through September 30, 2020

Performance Measures
Crash Timeliness

Label: C-T-01B
Status of Improvement: No Improvement
Active Status: Active
***Last Updated*:** May 1, 2019

Narrative

This performance measure is based on the C-T-01B model.

Maine will improve the Timeliness of the Crash system as measured in terms of a Decrease of:

The average number of days from the crash date to the date the crash report is entered into the crash database within a period determined by the State.

The state will show measureable progress using the following method: The average number of days from the crash date to the date the crash report is entered into the crash database using a baseline period of April 1, 2017 to March 31, 2018 and a current period of April 1, 2018 to March 31, 2019. **Note:** Both the baseline and current periods are limited to reports entered into the database by April 30, 2018 (baseline) and April 30, 2019 (current).

Numbers in this performance measure represent all crashes entered into the state crash database from all state reporting agencies.

There were 41,375 crash reports during the baseline period with an average timeliness of 6.14 days. There were 42,257 crash reports during the current period with an average timeliness of 11.66 days.

Measurements

Start Date	End Date	Total Reports	Average Number of Days
April 1, 2012	March 31, 2013	34,271	12.1
April 1, 2013	March 31, 2014	37,588	8.5
April 1, 2014	March 31, 2015	38,811	7.5
April 1, 2015	March 31, 2016	37,935	6.69

April 1, 2016	March 31, 2017	40,833	6.48
April 1, 2017	March 31, 2018	41,375	6.14
April 1, 2018	March 31, 2019	42,257	11.66 *

* The increase in the average number of days was due to deploying TLS 1.2 Security Update and working through resulting export issues at multiple agencies.

Supporting Materials (Backup)

--Maine Crash Timeliness Query Supporting Details

```
--2013
SELECT    Round(SUM(case when DATEDIFF(day,  a.crashdate, b.uploaddatetime )<0 then 0 else DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),3) as DayCount,
 round(AVG(case when DATEDIFF(day,  a.crashdate, b.uploaddatetime )<0 then 0.00 else DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),1) AS "Avg Number of Days for Submittal",
  count(*) "Number of Report"
FROM        CrashReport AS a INNER JOIN
                  (SELECT     Min(ReceivedDateAndTime) AS uploaddatetime, ReportingAgency, ReportNumber
                    FROM         UploadLog
                    GROUP BY ReportingAgency, ReportNumber) AS b ON a.ReportingAgency = b.ReportingAgency
AND a.ReportNumber = b.ReportNumber INNER JOIN
                refReportingAgency ON a.ReportingAgency = refReportingAgency.Id
 where CrashDate between '04/01/2012' and '03/31/2013' and uploaddatetime<'04/30/2013'

--2014
 SELECT    Round(SUM(case when DATEDIFF(day,  a.crashdate, b.uploaddatetime )<0 then 0 else DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),3) as DayCount,
 round(AVG(case when DATEDIFF(day,  a.crashdate, b.uploaddatetime )<0 then 0.00 else DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),1) AS "Avg Number of Days for Submittal",
  count(*) "Number of Report"
FROM        CrashReport AS a INNER JOIN
                  (SELECT     Min(ReceivedDateAndTime) AS uploaddatetime, ReportingAgency, ReportNumber
                    FROM         UploadLog
                    GROUP BY ReportingAgency, ReportNumber) AS b ON a.ReportingAgency = b.ReportingAgency
AND a.ReportNumber = b.ReportNumber INNER JOIN
                refReportingAgency ON a.ReportingAgency = refReportingAgency.Id
 where CrashDate between '04/01/2013' and '03/31/2014' and uploaddatetime<'04/30/2014'

 --2015
 SELECT    Round(SUM(case when DATEDIFF(day,  a.crashdate, b.uploaddatetime )<0 then 0 else DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),3) as DayCount,
 round(AVG(case when DATEDIFF(day,  a.crashdate, b.uploaddatetime )<0 then 0.00 else DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),1) AS "Avg Number of Days for Submittal",
  count(*) "Number of Report"
FROM        CrashReport AS a INNER JOIN
                  (SELECT     Min(ReceivedDateAndTime) AS uploaddatetime, ReportingAgency, ReportNumber
                    FROM         UploadLog
```

```
                GROUP BY ReportingAgency, ReportNumber) AS b ON a.ReportingAgency = b.ReportingAgency
AND a.ReportNumber = b.ReportNumber INNER JOIN
            refReportingAgency ON a.ReportingAgency = refReportingAgency.Id
 where CrashDate between '04/01/2014' and '03/31/2015' and uploaddatetime<'04/30/2015'

--2015 - Total crashes during current period
select count(*) from crashreport c
 inner join vMaxCrashReportReceivedDate v
  on c.crashreportid=v.crashreportid
   where c.crashdate between '04/01/2014' and '03/31/2015'
   and v.MaxReceivedDateAndTime < '04/30/2015'

--2016
 SELECT    Round(SUM(case when DATEDIFF(day,  a.crashdate, b.uploaddatetime )<0 then 0 else DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),3) as DayCount,
 round(AVG(case  when  DATEDIFF(day,   a.crashdate,  b.uploaddatetime  )<0  then  0.00  else  DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),1) AS "Avg Number of Days for Submittal",
  count(*) "Number of Report"
FROM        CrashReport AS a INNER JOIN
                (SELECT     Min(ReceivedDateAndTime) AS uploaddatetime, ReportingAgency, ReportNumber
                  FROM         UploadLog
                  GROUP BY ReportingAgency, ReportNumber) AS b ON a.ReportingAgency = b.ReportingAgency
AND a.ReportNumber = b.ReportNumber INNER JOIN
            refReportingAgency ON a.ReportingAgency = refReportingAgency.Id
 where CrashDate between '04/01/2015' and '03/31/2016' and uploaddatetime<'04/30/2016'

--2016 - Total crashes during current period
select count(*) from crashreport c
 inner join vMaxCrashReportReceivedDate v
  on c.crashreportid=v.crashreportid
   where c.crashdate between '04/01/2015' and '03/31/2016'
   and v.MaxReceivedDateAndTime < '04/30/2016'

--2017
 SELECT    Round(SUM(case when DATEDIFF(day,  a.crashdate, b.uploaddatetime )<0 then 0 else DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),3) as DayCount,
 round(AVG(case  when  DATEDIFF(day,   a.crashdate,  b.uploaddatetime  )<0  then  0.00  else  DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),1) AS "Avg Number of Days for Submittal",
  count(*) "Number of Report"
FROM        CrashReport AS a INNER JOIN
                (SELECT     Min(ReceivedDateAndTime) AS uploaddatetime, ReportingAgency, ReportNumber
                  FROM         UploadLog
                  GROUP BY ReportingAgency, ReportNumber) AS b ON a.ReportingAgency = b.ReportingAgency
AND a.ReportNumber = b.ReportNumber INNER JOIN
            refReportingAgency ON a.ReportingAgency = refReportingAgency.Id
 where CrashDate between '04/01/2016' and '03/31/2017' and uploaddatetime<'04/30/2017'

--2017 - Total crashes during current period
select count(*) from crashreport c
 inner join vMaxCrashReportReceivedDate v
  on c.crashreportid=v.crashreportid
   where c.crashdate between '04/01/2016' and '03/31/2017'
   and v.MaxReceivedDateAndTime < '04/30/2017'
```

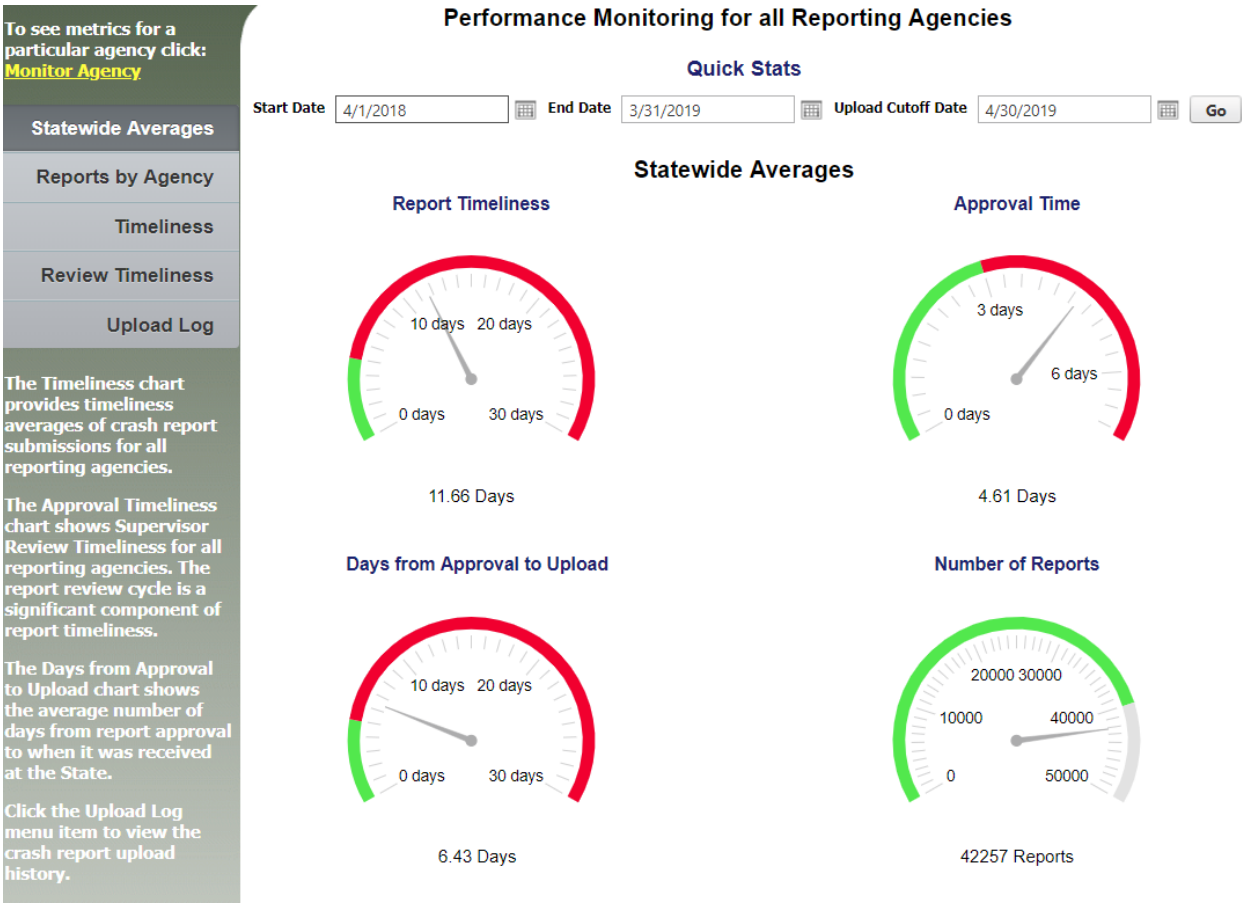
```
--2018
 SELECT    Round(SUM(case when DATEDIFF(day,  a.crashdate, b.uploaddatetime )<0 then 0 else DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),3) as DayCount,
 round(AVG(case  when  DATEDIFF(day,    a.crashdate,  b.uploaddatetime  )<0  then  0.00  else  DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),1) AS "Avg Number of Days for Submittal",
  count(*) "Number of Report"
FROM        CrashReport AS a INNER JOIN
                  (SELECT     Min(ReceivedDateAndTime) AS uploaddatetime, ReportingAgency, ReportNumber
                    FROM         UploadLog
                    GROUP BY ReportingAgency, ReportNumber) AS b ON a.ReportingAgency = b.ReportingAgency
AND a.ReportNumber = b.ReportNumber INNER JOIN
               refReportingAgency ON a.ReportingAgency = refReportingAgency.Id
 where CrashDate between '04/01/2017' and '03/31/2018' and uploaddatetime<'04/30/2018'

--2018 - Total crashes during current period
select count(*) from crashreport c
 inner join vMaxCrashReportReceivedDate v
  on c.crashreportid=v.crashreportid
   where c.crashdate between '04/01/2017' and '03/31/2018'
   and v.MaxReceivedDateAndTime < '04/30/2018'

--2019
 SELECT    Round(SUM(case when DATEDIFF(day,  a.crashdate, b.uploaddatetime )<0 then 0 else DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),3) as DayCount,
 round(AVG(case  when  DATEDIFF(day,    a.crashdate,  b.uploaddatetime  )<0  then  0.00  else  DATEDIFF(day,
a.CrashDate, b.uploaddatetime ) end),1) AS "Avg Number of Days for Submittal",
  count(*) "Number of Report"
FROM        CrashReport AS a INNER JOIN
                  (SELECT     Min(ReceivedDateAndTime) AS uploaddatetime, ReportingAgency, ReportNumber
                    FROM         UploadLog
                    GROUP BY ReportingAgency, ReportNumber) AS b ON a.ReportingAgency = b.ReportingAgency
AND a.ReportNumber = b.ReportNumber INNER JOIN
               refReportingAgency ON a.ReportingAgency = refReportingAgency.Id
 where CrashDate between '04/01/2018' and '03/31/2019' and uploaddatetime<'04/30/2019'

--2019 - Total crashes during current period
select count(*) from crashreport c
 inner join vMaxCrashReportReceivedDate v
  on c.crashreportid=v.crashreportid
   where c.crashdate between '04/01/2018' and '03/31/2019'
   and v.MaxReceivedDateAndTime < '04/30/2019'
```

Screenshot of query run



Crash Accuracy

Label: C-A-01
Status of Improvement: On Hold
***Revision Date*:** 02-MAY-2018

Narrative

This performance measure is based on the C-A-01 model.

Maine will improve the Accuracy of the Crash system as measured in terms of an Increase of:

The percentage of crash records with no errors in critical data elements. An error is defined as a crash report not meeting the State's MMUCC-compliant data standard.

The state will show measureable progress using the following method: The percentage of crash records with no errors in critical data elements. An error is defined as a crash report not meeting the State's MMUCC-compliant data standard.

Count the number of crash reports with no errors in critical data elements as defined by the State's MMUCC-compliant data standard (schema and audit rules) during the baseline period and the current performance period. Then, count the total number of reports for the same periods. Divide the total number of reports by the count of reports with no errors and multiply by 100 to get the percentage of reports with no critical errors for each period.

The baseline period is from April 1, 2015 to March 31, 2016 limited to reports entered into the database by April 30, 2016.

The current performance period is from April 1, 2016 to March 31, 2017 limited to reports entered into the database by April 30, 2017.

Numbers in this performance measure represent all crashes entered into the state crash database from all state reporting agencies.

The baseline period had 16 reports with critical errors plus 40,811 reports with no errors for a total 40,827 reports resulting in an accuracy of 99.960%.

The current period had 16 reports with critical errors plus 40,891 reports with no errors for a total 40,907 reports resulting in an accuracy of 99.961%.

The result is an increase in accuracy of 0.001% indicating an extremely high accuracy of 99.961%.

Measurements

Start Date	End Date	Errors	Total Reports	Accuracy (%)
April 1, 2012	March 31, 2013	296	34,271	99.14%
April 1, 2013	March 31, 2014	24	37,588	99.94%
April 1, 2014	March 31, 2015	12	38,811	99.97%
April 1, 2015	March 31, 2016	3	37,935	99.992%
April 1, 2016	March 31, 2017	16	40,827	99.960%
April 1, 2017	March 31, 2018	16	40,907	99.961%

Supporting Materials (Backup)

```
--2014 Errors

select COUNT(*) from

(

select  ReportingAgency + ReportNumber as ReportNumber, COUNT(*) as
NumberOfErrorsPerReport from UploadLog where

cast(convert(varchar(10),substring(REPLACE(REPLACE(CAST(CAST( OriginalCrashReport as
XML).query('/MaineCrashReport/CrashReport/CrashDate') as
VARCHAR(MAX)),'<CrashDate>',''),'</CrashDate>',''),1,10),101) as DateTime)

 between '04/01/2013' and '03/31/2014' and ReceivedDateAndTime < '04/30/2014' and
UploadStatus in  (4,5)

 group by ReportingAgency + ReportNumber

) a


--2015 Errors

select COUNT(*) from

(

select  ReportingAgency + ReportNumber as ReportNumber, COUNT(*) as
NumberOfErrorsPerReport from UploadLog where
```

```
cast(convert(varchar(10),substring(REPLACE(REPLACE(CAST(CAST( OriginalCrashReport as
XML).query('/MaineCrashReport/CrashReport/CrashDate') as
VARCHAR(MAX)),'<CrashDate>',''),'</CrashDate>',''),1,10),101) as DateTime)

 between '04/01/2014' and '03/31/2015' and ReceivedDateAndTime < '04/30/2015' and
UploadStatus in  (4,5)

 group by ReportingAgency + ReportNumber

) a


--2016 Errors

select COUNT(*) from

(

select ReportingAgency + ReportNumber as ReportNumber, COUNT(*) as
NumberOfErrorsPerReport from UploadLog where

cast(convert(varchar(10),substring(REPLACE(REPLACE(CAST(CAST( OriginalCrashReport as
XML).query('/MaineCrashReport/CrashReport/CrashDate') as
VARCHAR(MAX)),'<CrashDate>',''),'</CrashDate>',''),1,10),101) as DateTime)

between '04/01/2015' and '03/31/2016' and ReceivedDateAndTime < '04/30/2016' and
UploadStatus in (4,5)

group by ReportingAgency + ReportNumber

) a


--2016 - Total crashes during current period

select count(*) from crashreport c

inner join vMaxCrashReportReceivedDate v

on c.crashreportid=v.crashreportid

where c.crashdate between '04/01/2015' and '03/31/2016'

and v.MaxReceivedDateAndTime < '04/30/2016'
```

```
--2017 Errors

select COUNT(*) from

(

select ReportingAgency + ReportNumber as ReportNumber, COUNT(*) as
NumberOfErrorsPerReport from UploadLog
wherecast(convert(varchar(10),substring(REPLACE(REPLACE(CAST(CAST( OriginalCrashReport as
XML).query('/MaineCrashReport/CrashReport/CrashDate') as
VARCHAR(MAX)),'<CrashDate>',''),'</CrashDate>',''),1,10),101) as DateTime)between
'04/01/2016' and '03/31/2017' and ReceivedDateAndTime < '04/30/2017' and UploadStatus in
(4,5) group by ReportingAgency + ReportNumber

) a


--2017 - Total crashes during current period

select count(*) from crashreport c inner join vMaxCrashReportReceivedDate v on
c.crashreportid=v.crashreportid where c.crashdate between '04/01/2016' and '03/31/2017' and
v.MaxReceivedDateAndTime < '04/30/2017'


--2018 Errors

select COUNT(*) from

(

select ReportingAgency + ReportNumber as ReportNumber, COUNT(*) as
NumberOfErrorsPerReport from UploadLog
wherecast(convert(varchar(10),substring(REPLACE(REPLACE(CAST(CAST( OriginalCrashReport as
XML).query('/MaineCrashReport/CrashReport/CrashDate') as
VARCHAR(MAX)),'<CrashDate>',''),'</CrashDate>',''),1,10),101) as DateTime)between
'04/01/2017' and '03/31/2018' and ReceivedDateAndTime < '04/30/2018' and UploadStatus in
(4,5) group by ReportingAgency + ReportNumber

) a
```

--2018 - Total crashes during current period

```
select count(*) from crashreport c inner join vMaxCrashReportReceivedDate v on
c.crashreportid=v.crashreportid where c.crashdate between '04/01/2017' and '03/31/2018' and
v.MaxReceivedDateAndTime < '04/30/2018'
```

6.4 ME-P-00011 – E-Citation

Contact
Ms. Lauren Stewart
Title: Director
Agency: Bureau of Highway Safety, Department of Public Safety
Address: 164 State House Station
City, Zip: Augusta 04333
Phone: 207-626-3840
Email: lauren.v.stewart@maine.gov

Lead Agency
Maine Department of Public Safety

Status
Active

Project Description
The E-Citation project is comprised of several phases including:

E-Citation legislative efforts,
E-Citation TRCC Working Group,
E-Citation Data Collection,
E-Citation Reporting

The E-Citation Legislation effort will survey E-Citation legislation used in other states to facilitate and authorize collection of citation data electronically. The goal is to develop any needed legislative language recommendations to support E-Citation in the State of Maine.

The E-Citation TRCC Working Group will develop a State of Maine E-Citation Data Standard that defines the E-Citation data elements, relationships, edit criteria, and business rules to allow for the exchange of E-Citation data within the State. The E-Citation data standard will be platform independent and will take advantage of the latest XML Schema Definition (XSD) and Extensible Stylesheet Language (XSL) standards. The XSD technology will be used to define the format and organization of the XML E-Citation data document. The XSL technology will be used to programmatically validate the XML E-Citation data document and identify any errors in the citation at the point of entry. The E-Citation Data Standard will take advantage of any existing national E-Citation standards based on the National Information Exchange Model or Global JXDM.

The E-Citation TRCC Working Group will examine the existing citation paper-based data flow from the writing of the citation to submission and handling at the courts and ultimately the disposition and sharing of data with other state agencies. The study will make recommendations concerning handling of data security, electronic signature requirements, data exchange methods, law enforcement business rules and workflow.

The E-Citation Data Collection component will develop a law enforcement E-Citation data collection information system. The E-Citation system will support mobile ticketing and issuing of citations via laptop computers. The E-Citation system will be capable of creation, printing, and electronic wireless transmission of ticket data to the centralized E-Citation database.

The E-Citation system will comply with the State of Maine E-Citation Data Standard which details the data format and business rules. Data validation will occur at the point of data entry. The Data Standard will be the basis for data exchange with external systems such as any future Violations Bureau citation management system. The E-Citation system will include an interface to the Violations Bureau system for the transfer of electronic citation data.

The E-Citation Reporting component will augment the E-Citation Data Collection system by providing a set of standard web-based reports with filtering capabilities. The E-Citation Reporting component will add 15 Standard Reports with the capability to filter on items such as town, law enforcement agency, type of infraction, officer Id, etc. The E-Citation Reporting component will also provide for a web-based Ad Hoc Reporting capability that will allow users to perform "on the fly" report creation capabilities. The system will allow saving of Ad Hoc reports for future use.

Core System and Performance Area

	Performance Area					
Core System	**Accuracy**	**Completeness**	**Integration**	**Timeliness**	**Uniformity**	**Accessibility**
Citation	✓	✓		✓	✓	

Activity Reporting

Report Start	**Report End**	**Provided By**
01-01-2011	03-31-2011	Lauren Stewart
Activity	*The E-Citation TRCC Working Group was officially formed at the April 14, 2011 TRCC Meeting.*	
Plans	*Meet regularly to define E-Citation requirements for the State of Maine.*	

Report Start	**Report End**	**Provided By**
04-15-2011	11-03-2011	Lauren Stewart
Activity	*The TRCC E-Citation Working Group met on November 3, 2011 and December 1, 2011. The working group discussed general e-citation high level requirements and began a review of the existing Citation form.*	

Report Start	**Report End**	**Provided By**
11-04-2012	01-19-2012	Lauren Stewart
Activity	*The E-Citation TRCC working group has met two times; the first meeting covered the high level objectives of the group while the second meeting began a review of the citation form.* *The second meetings goal was to determine whether any revisions to the form were necessary prior to deploying an electronic system. The meeting made a lot of progress and made it most of the way through the forms data elements.* *The goals of the working group are to come up with a set of requirements and a data standard for E-Citation within the State of Maine. The intent of the data standard is to define the data elements to be collected and to define a common format for data transfer and exchange within the state.*	

Report Start	**Report End**	**Provided By**
01-20-2012	03-15-2012	Lauren Stewart
Activity	*On February 16th, the E-Citation TRCC working group met. The working group and is in the process of developing a set of base requirements; including form data element review, print requirements, RMS E-Citation requirements, and electronic signatures.*	

Report Start	**Report End**	**Provided By**
03-15-2012	06-28-2012	Lauren Stewart
Activity	*The working group reviewed a draft of the NIEM-based data standard, e-citation system requirements, and e-citation vendor certification requirements.*	

Report Start	**Report End**	**Provided By**
06-29-2012	03-05-2013	Lauren Stewart
Activity	*The working group has met several times and continues to develop and refine E-Citation requirements, including; electronic signature, printing, software and hardware, and business requirements.*	

Report Start	**Report End**	**Provided By**
03-06-2013	06-12-2013	Lauren Stewart
Activity	*The working group is nearing completion. The group is refining their specifications for such items as the printed form. The draft for the general requirements will be reviewed by the group. Comments will be provided by each member at the next meeting.* *John Smith indicated that the legislation required for e-citation will be approved by September.*	

Report Start	**Report End**	**Provided By**
06-13-2013	02-26-2014	Lauren Stewart
Activity	*The Maine TRCC E-Citation Working Group has developed a draft set of recommendations and requirements. One of the requirements developed was a data exchange standard for transferring e-citations. Other requirements revolved around paper specifications and formats, security, and signature requirements. There were several phone conferences revolving around security. Legislation has been enacted to enable e-citation. The defendant's signature was no longer required on the citation. A key issue was the signature requirement of the officer. The Chief Judge was provided various options regarding security requirements for an ecitation system.*	

Report Start	**Report End**	**Provided By**
02-26-2014	05-07-2014	Lauren Stewart
Activity	*The TRCC Working Group meeting held on May 7, 2014 established a timeline for the entire e-citation project which will provide a roadmap for completion.* *There were also comments and suggestions that were discussed and will be incorporated into the final requirements and RFP.*	

Report Start	**Report End**	**Provided By**
05-07-2014	04-23-2015	Lauren Stewart
Activity	*Lauren Stewart asked John Smith if there were any updates. John said no significant updates. John said at the last group meeting back in December, there were a couple of emerging questions that needed to be resolved. After the data definition phase was completed the phase of the project has shifted. Next, the group needs to revisit project management for the next phase of the project. Lauren asked what needs to be done to get E-Citation back on track. John said we need to clearly identify what outstanding E-Citation questions remain. Two big components of whose going to own it and where will it reside. On the application side, who will be issuing the RFP? A level of effort is needed to write the RFP.*	

Report Start	**Report End**	**Provided By**
04-24-2015	01-19-2016	Lauren Stewart
Activity	*John Smith discussed the court case management system. He is working with partner agencies to understand how that will impact them. They have many interfaces or data interchanges currently and some that they do not have; E-Citation is one of them. In the RFP, there are specific requirements for those data exchanges (some optional, some not). It is also a requirement for the vendor to develop the interface to take that data into the system. The courts are in the process of reviewing proposals and this will be a multi-year role out. John asked Major Scott about the Records*	

Report Start	**Report End**	**Provided By**
04-24-2015	01-19-2016	Lauren Stewart
	Management System (RMS). Major Scott said they contracted with Spillman, and the go live date is 2017.	

Report Start	**Report End**	**Provided By**
01-04-2016	05-03-2016	Lauren Stewart
Activity	*A meeting was held on May 3, 2016 regarding e-citation interfacing with the courts. The meeting went over a draft project document by Chris Oberg detailing the responsibilities of each organization and timeline. The vendor is in the initial design phases of the web site and the database design. John Smith asked if an e-Citation working group could reconvene. The vendor suggested that a core project team should decide when milestones have been met and then present status and progress to the e-Citation working group members. At that point, the working group members will have something to review and comment on. The last general requirements document will be updated and sent out to everyone.*	

Report Start	**Report End**	**Provided By**
05-04-2016	11-03-2016	Lauren Stewart
Activity	*A meeting was held on November 2, 2016. A demonstration of the system was given to the working group members. John Smith brought up some good points on the different violations and calculated amounts of the citations. John developed a new draft of the citation form that will print out on an 8 ½ x 11. Lt. Bruce Scott will coordinate with John Smith to run a print test of the citation on thermal printer to see what needs to be tweaked. More work needs to be done with the form. There were some questions of what happens when an officer signs; not about what they are signing, but what they are certifying. Lt. Scott will give John additional clarification on the roadside identification process and what the procedures are. Lt. Scott wrote up some procedures on gathering credentials roadside and will pass it along to the Chief Judge for review.*	

Report Start	**Report End**	**Provided By**
11-04-2016	02-08-2017	Lauren Stewart
Activity	*An e-Citation meeting was held in the morning of February 8, 2017. LexisNexis gave a demonstration of the client system to the working group members. The schedule has been pushed out about one month timeframe, because the form has not been finalized. The courts are working on that and should be done in a couple of weeks. The testing period will be reduced from 6 weeks down to about 2-3 weeks.*	

Report Start	**Report End**	**Provided By**
02-09-2017	05-03-2017	Lauren Stewart
Activity	*The courts requested the addition of License Class and the updates to the eCitation client software have been completed. There are three outstanding issues:* *1. The courts need to finalize form.* *2. There is no tasking for the interface between state repository and the DPS Citation database and for exporting to the courts. We need to define the interface and provide tasking on the DSP side.* *3. Interface with the Spillman and the METRO message switch.*	

Report Start	**Report End**	**Provided By**
05-04-2017	11-08-2017	Lauren Stewart
Activity	*A meeting was held on November 8, 2017. A quick demo of the eCitation client system was given to the group. The state is waiting on contract negotiations before proceeding with plans to deploy to law enforcement.*	

Report Start	**Report End**	**Provided By**
11-09-2017	02-07-2018	Lauren Stewart
Activity	*Adding Two Factor authentication to Maine eCitation system and redeploying eCitation Test web server to Maine OIT DMZ.*	

Report Start	**Report End**	**Provided By**
02-08-2018	05-09-2018	Lauren Stewart
Activity	*There was a couple of changes in the requirements. A Two-factor authentication was added to the Maine eCitation system. The first factor is the username and password. The second factor is certificates. We will be dedeploying eCitation Test web server to Maine OIT DMZ.*	

Report Start	**Report End**	**Provided By**
05-10-2018	11-07-2018	Lauren Stewart
Activity	*The roll out has gone very well. It's being rolled out troop by troop. There are about 700 plus citations in the system. The system went live on August 20th and 48 troopers currently using it. Some troopers have given great feedback on suggestions for improvement, which are being put into the next build. A next step for eCitation would create an interface with DMV and/or NCIC data to repopulate driver/vehicle information. eCitation does have bar code capability; however, use of bar code scanners can be problematic due to hardware configurations and switching between*	

Report Start	**Report End**	**Provided By**
05-10-2018	11-07-2018	Lauren Stewart
	barcode-enabled applications. It was also suggested to have training on the Mapping section of eCitation.	

Report Start	**Report End**	**Provided By**
11-08-2018	02-06-2019	Lauren Stewart
Activity	*Lt. Bruce Scott said the eCitation system has been working very well, and has had only 2 or 3 updates since it went live in late October/early November of 2018. The latest update addressed any issues or concerns that have come up. Some refinements were made to make the system more easily useable. There are five agencies that have eCitation, but only two agencies (State Police and Fairfield) that are using the system. The state police will strategize on how to roll it out to the rest of the state.*	

Report Start	**Report End**	**Provided By**
02-07-2019	05-01-2019	Lauren Stewart
Activity	*The eCitation system deployed the latest changes to test a few weeks ago. Due to issues, deployment is scheduled for next week. Currently, there are a few thousand citations in the system. Vendor showed the latest changes made in the eCitation system. New dashboards were added to the system. By using the drop down, you can pick citations by county or by violation type.*	

Schedule
October 1, 2019 through September 30, 2020

Performance Measures
C/A-U-02 – Citation Uniformity

Status of Improvement: TBD
Status: Planned
Revision Date: 7-June-2018

This performance measure is based on the C/A-U-02 model.

The percentage of citation records entered into the database with common uniform statewide violation codes.

6.5 ME-P-00014 – Maine CODES

Contact
Ms. Lauren Stewart

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Lead Agency
University of Southern Maine, Muskie School of Public Service

Status
On Hold

Project Description
The Crash Outcome Data Evaluation System (CODES) system gives States and local Safe Community projects information about resources needed to develop capabilities for linking crash, injury outcome, and other traffic records data.

Activity Reporting

Report Start	**Report End**	**Provided By** Joseph Riddick
Activity	*The Maine CDC CODES project has received 2009 hospital data and ED data from the Maine Health Data Organization.*	
Problems	*Initial plan was to have all of the computational issues worked out by the end of December 2010; but due to software upgrade and vendor issues that are also affecting other states was are now in April and can't move forward until these issues are resolved. The current projection is for mid-summer before analysis can begin on the Maine CODES project.*	
Plans	*Maine CDC is in final negotiations with MHDO on hospital discharge data.*	
Comments	*In August, CODES will be finishing up a three-year cooperative agreement with NHTSA.*	

Report Start	**Report End**	**Provided By**
04-15-2012	01-19-2012	Joseph Riddick
Activity	*Maine CDC reported that their annual review with NHTSA in December focused on their presentation at the annual grantee meeting in September. The presentation was a formative analysis on a startup of a CODES state.* *Maine CDC had difficulties in getting the system to work for them; it may be related to the newer CODES 2000 software. The amount of available technical support from CODES may not be adequate for getting a new state online with the system. Maine CDC had started off with one month of data; did all of the analysis and could not get the numbers to work.*	

Report Start	**Report End**	**Provided By**
01-20-2012	03-15-2012	Joseph Riddick
Activity	*Maine CODES has recently completed one year of data linkage and are waiting on feedback on that linkage.*	
Problems	*Mr. Riddick was informed the CODES program will have to cut back one-third of their project states and since Maine is one of the newest project states that they are in that one-third. Mr. Riddick explained that although Maine was one of the first states to participate in CODES approximately 20 years ago that since Maine CDC took over the Maine CODES project and since no data records have been carried over from the previous Maine CODES project, NHTSA considers Maine a new CODES state.*	
Plans	*Mr. Riddick stated that between now and July 31st they will be focusing on elder driver issues and will be using the multiple data sets on hand for that purpose.*	
Comments	*There has been some discussion of performing linking using other means besides CODES software.*	

Report Start	**Report End**	**Provided By**
03-15-2012	06-28-2012	Joseph Riddick
Activity	*Mr. Joseph Riddick stated the Maine CODES project has linked hospital ED deaths to crash data and they have also provided data to the University of Maryland to obtain scores on drug/alcohol use from all of the hospital and ED*	

Report Start	**Report End**	**Provided By**
03-15-2012	06-28-2012	Joseph Riddick
	data. The University of Utah will perform imputation on missing variables in the data set. It will calculate and give us what the best score should be. *Mr. Riddick said that by the end of July, Maine CODES will have a report on elder drivers focusing on three research questions including injury severity scores, ED, and hospital records to see if there is a variance between injury severity and medical outcomes. CODES will also be looking at trauma to different body regions in that population.*	
Problems	*Mr. Riddick stated that the national CODES program's future is in question. Although, the CODES efforts at the state level does not have to end if a state continues funding.*	

Report Start	**Report End**	**Provided By**
03-26-2013	06-12-2013	Al Leighton
Activity	*The University of Maine, Muskie School is currently in discussions with personnel involved with the prior implementation of CODES and are setting up a discussion with a CODES user from Utah who worked with the Maine CODES personnel. They are interesting in finding out the positives and negatives regarding the previous CODES project. The group is looking to see if there are alternatives to CODES as opposed to trying to recreate or re-establish CODES. Re-creating CODES would be a large effort due to its level of complexity.*	

Report Start	**Report End**	**Provided By**
06-13-2013	02-26-2014	Al Leighton
Activity	*Muskie School is planning to have a conference call with CODES users in Nebraska and Rhode Island. This will assist in developing a strategy on how to link the various data sources.* *The Northeast Mobile Health ambulance service and South Portland are in the process of implementing a data linkage between EMS and hospital data.*	

Report Start	**Report End**	**Provided By**
02-27-2014	05-7-2014	Al Leighton
Activity	*Muskie School is in various discussions with CODES personnel from other states and is evaluating all of the variables for the process of linking data with the assistance of a statistician to create a CODES system.* *Muskie School is currently evaluating the latest version of CODES versus developing a customized in-house system.*	

Report Start	**Report End**	**Provided By**
05-08-2014	09-24-2014	Al Leighton
Activity	*Al Leighton indicated that his statistician data analytics specialist will be building a database to examine ways to determine match cases when all data fields do not match.* *Al said that his group was unable to get in touch with the CODES personnel to review the CODES design. Lauren Stewart offered to get in touch with the Region 1 administrator to help get in touch with CODES personnel.*	

Report Start	**Report End**	**Provided By**
09-25-2014	04-23-2015	Al Leighton
Activity	*Al Leighton said they were at a standstill and need to contact the CODES support person. Charlene was going to find out the status/contact info of the CODES support person.*	

Report Start	**Report End**	**Provided By**
04-24-2015	05-03-2016	Al Leighton
Activity	*Al Leighton said there are three options to start CODES again. 1) Go with original designer of CODES; 2) Use another program that other states are using or 3) Design our own program. Al talked with states using the CODES program and with states who developed their own. So far the design your own is the weakest approach. The cost of the CODES program is not as high as anticipated - $3,000 for a license. Al is still investing the best option to move forward.*	

Report Start	**Report End**	**Provided By**
05-04-2016	02-08-2017	Robyn Dumont
Activity	*Robyn Dumont said that CODES is not part of the current contract, but prior to the old contract ending we talked with two states who tried to develop their own CODES-like program. They had very limited success, at best. We spoke with Mike McGlincy about his CODES program. We now know most of the costs and the services he could provide. We had discussions with CA and UT about their experiences with his program (which were generally favorable). We reached out to a couple of states using other programs. If we're awarded a new contract, we'll be ready to quickly finish contacting other states and prepare an explanation of what programs offer what services, how much they cost, etc.*	

Report Start	**Report End**	**Provided By**
02-09-2016	02-07-2018	Robyn Dumont
Activity	*No status at this time.*	

Report Start	**Report End**	**Provided By**
02-08-2018	05-09-2018	Al Leighton
Activity	*No contract for CODES at this time.*	

Report Start	**Report End**	**Provided By**
05-10-2018	05-01-2019	Al Leighton
Activity	*No contract for CODES at this time.*	

Performance Measures
I-I-1 – EMS/Crash Integration

Status of Improvement: TBD
Status: Planned
Revision Date: 04-June-2019

This performance measure is based on the I-I-1 model. Maine will improve the integration of the EMS and Crash data.

The state will show measureable progress using the following method:

The percentage of appropriate records in the EMS database that are linked to the crash database.

6.6 ME-P-00015 – Public Access Reports – Traffic

Contact
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Lead Agency
Maine Department of Transportation

Status
Active

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

Full data queries are too complex for the casual user and if not developed properly, can easily lead to erroneous data findings. This project would create standard web-based data queries and mapping capabilities that would be structured to provide the user 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.

Core System and Performance Area

	Performance Area					
Core System	**Accuracy**	**Completeness**	**Integration**	**Timeliness**	**Uniformity**	**Accessibility**
Crash						✓

Activity Reporting

Report Start	**Report End**	**Provided By**
03-15-2012	06-28-2012	Duane Brunell
Activity	*Mr. Duane Brunell provided background on the need for public access to basic traffic records analysis. Mr. Brunell said that there is a need for a working*	

Report Start	**Report End**	**Provided By**
03-15-2012	06-28-2012	Duane Brunell
	group to further define the requirements for increasing the accessibility of the data. Ms. Stewart stated that there is a need for having end-users (e.g. NPOs, DHS, and county and municipal law enforcement) involved in the working group. *Mr. Brunell said that they have a starting point for this effort with the existing MCRS Standard Reports and also the mapping tools.* *Ms. Stewart said she and Duane would work on forming the working group.*	
Comments	*Ms. Stewart said she and Duane would work on forming the working group.*	

Report Start	**Report End**	**Provided By**
06-29-2012	03-05-2013	Duane Brunell
Activity	*There have been two meetings with the working group looking into what types of public access reports would be available. Duane Brunell has drafted a set of data elements for public access.*	

Report Start	**Report End**	**Provided By**
03-06-2013	06-12-2013	Duane Brunell
Activity	*The working group described the current process for getting crash statistics. Personnel at BHS or DOT manually query the data systems and provide the results back to the asking party.* *The existing query tools were not intended for the general public.* *Interviews have been conducted with police, local and metropolitan planning organizations to identify various crash needs. The group has now defined the scope of the project and is close to developing an RFP.* *A number of solutions are being reviewed including ones from both Michigan and Connecticut.*	

Report Start	**Report End**	**Provided By**
06-13-2013	02-26-2014	Lauren Stewart
Activity	*The site will be designed to allow public access to crash data. Other data users with special permissions will have access to more functionality and analysis. The State intends to amend the existing Crash contract to complete the work.*	

Report Start	**Report End**	**Provided By**
02-27-2014	05-07-2014	Lauren Stewart
Activity	*Purchasing has approved an amendment to the existing contract with Appriss, Inc. for developing the Public Access Web Site.* *Some of the features in the new site include a mapping feature that will display crashes on a Google Map.* *The development will begin sometime in July and will be focused on ease-of-use for public users.* *Lt. Scott told the group that he hopes the site will help explain the strategy for law enforcement in terms of resources used in areas of high crash locations. It was decided by the group that the data source for the public access web site will be the DOT crash repository.*	

Report Start	**Report End**	**Provided By**
05-08-2014	09-24-2014	Lauren Stewart
Activity	*Appriss, Inc. is developing the new Public Access Reports web site including using new technologies and storyboarding the site flow and navigation.*	

Report Start	**Report End**	**Provided By**
09-25-2014	01-22-2015	Lauren Stewart
Activity	*Appriss, Inc. demonstrated the Public Access Crash Report web site. The site was designed to operate by both novice and advanced users. The three primary components of the site that were demonstrated are:*	

Report Start	**Report End**	**Provided By**
09-25-2014	01-22-2015	Lauren Stewart
	Statistics – Provides various statistics in chart (line, bar, pie) formats based on location, Injury degree, and time constraints. Shows statistics for both a single year and trends. *Mapping – Presents crash locations in map format based on location, type of crash, Injury degree, and time constraints. The map automatically clusters crashes together based on the zoom level.* *High Crash Location – Provides high crash location statistics in matrix format both section and intersections. Sections and intersections are ranked across town, county, and state.* *Dan suggested running the site in-house for a period of time before exposing the site to the public.*	

Report Start	**Report End**	**Provided By**
01-23-2015	04-23-2015	Lauren Stewart
Activity	*Duane Brunell stated that Appriss demo'd the system at the last TRCC meeting. Appriss then re-demo'd the system to the stakeholders at DOT; Greg Costello and IT people were in attendance. Duane stated that the system was well received. Duane said that there were several things to still work through; one is how to get a pilot up and running relatively quickly. Once the system is out there and online, the question is who will maintain it.*	

Report Start	**Report End**	**Provided By**
04-24-2015	11-04-2015	Duane Brunell
Activity	*Duane Brunell asked Appriss when the Public Access Reports website will be completed. Appriss said the update to the Public Access website will be done by the end of December 2015.*	

Report Start	**Report End**	**Provided By**
11-05-2015	01-19-2016	Duane Brunell
Activity	*Duane Brunell said the Public Access website is in the final stage of development. The system is designed for people beyond the state police, DOT, and BHS; for users that can access fatality or other crash information and obtain basic information from the public access site. It has data capabilities; where you can drill down to towns and particular locations and determine types of crashes, etc. You can report on multiple areas of interest with one query. The system has mapping capabilities, which allows you to find where fatalities, moose crashes, etc. are occurring. The system also has the ability to display and filter crashes using Google Maps. The system still has to go through a security review from OIT, but is expected to go live June 30th.*	

Report Start	**Report End**	**Provided By**
01-20-2016	05-03-2016	Duane Brunell
Activity	*Duane Brunell gave an update on the Crash Data Public Access website. They are shooting for a July 1st release. The website has three modules: Crash Statistics, Mapping, and identifying High Crash Locations. All modules are queryable by location or crash type. None of it is downloadable yet, just screen displays. A lot of time of was spent on data and map accuracy. Duane shared the website with New Hampshire last week; it's a hot topic for many states to make the data in-house available and accessible to the public. OIT will be doing a security review for vulnerabilities.* *The advanced user can register on site and get the basic access. On the back-end, the system admin will get an email and review the credentials and grant the advanced user access. With this access, they can do study areas and do more advanced queries. Duane thanked all the players who made this project successful.*	

Report Start	**Report End**	**Provided By**
05-04-2016	11-03-2016	Duane Brunell
Activity	*Duane Brunell gave an update on the Crash Data Public Access website. It is an easy and intuitive system where the basic user can access Maine Crash Data in three modules: Crash Statistics, Mapping, and identifying High Crash Locations. Mapping is available that has a cluster balloon effect that shows*	

Report Start	**Report End**	**Provided By**
05-04-2016	11-03-2016	Duane Brunell
	accidents in a centralized area. This is a great tool for countermeasures in looking at a specific intersection. The Advanced User capability allows a user to do study areas and more advanced queries. Advance Users are required to sign up and get approved by the system administrator. A few tweaks need to be done before it goes live. The system has not been launched officially, but it is currently being used by a select few test users.	

Report Start	**Report End**	**Provided By**
11-04-2016	02-08-2017	Duane Brunell
Activity	*The public query website has been well received and going well.* *Lt. Scott requested Advanced User Access. It was suggested he check with Duane Brunell to see if the access was for just the test site.*	

Report Start	**Report End**	**Provided By**
02-09-2017	05-03-2017	Duane Brunell
Activity	*Duane Brunell said the public query website has been well received and Phase 1 is going well. There are 40 advanced users – police departments and DOT users. There is a link now at the top of the screen on the home page for User Notes. Duane is now working on new ideas for Phase 2. It was discussed to incorporate a performance measure of recording the number of user queries to track program usage.*	

Report Start	**Report End**	**Provided By**
05-04-2017	11-08-2017	Duane Brunell
Activity	*Duane Brunell put together system improvements/ enhancements and additional functionality for the next phase. Lauren Stewart asked Chief Doug Bracy if his agency or any other agencies are looking at the Public Access website. Chief Bracy said he would bring it up at the next Board meeting*	

Report Start	**Report End**	**Provided By**
05-04-2017	11-08-2017	Duane Brunell
	coming up in February 2018. Duane asked Lauren if any grant applications use the data from the Public Access.	

Report Start	**Report End**	**Provided By**
11-09-2017	02-07-2018	Duane Brunell
Activity	*Duane Brunell said the system has been well received. There are basic users and about 70 advance sign-on users that are comprised of municipalities, Police Departments, and educational folks. Duane said there has been no negative feedback.*	

Report Start	**Report End**	**Provided By**
02-08-2017	05-09-2018	Lauren Stewart
Activity	*Lauren Stewart said there are scheduled improvements to the system. Once the MMUCC changes are complete, then the improvements will start.*	

Report Start	**Report End**	**Provided By**
05-10-2018	11-07-2018	Lauren Stewart
Activity	*Lauren Stewart said there are scheduled improvements to the system in 2019.*	

Report Start	**Report End**	**Provided By**
11-08-2018	02-06-2019	Lauren Stewart
Activity	*The Crash Data Public Access project is a website that is available to the general public to get crash stats and be able to map crashes that occur in the state. It is successfully utilized by Highway Safety stakeholders and interested members of the public. System users can apply for advanced user status to get more detailed reporting capabilities. The website ties into the Maine DOT"s crash database to generate crash statistics. By doing so, the website takes advantage of the Maine DOT geo-located crash data. Maine DOT crash reviewers geo-locate crash data and the system uses the resulting data to*	

Report Start	**Report End**	**Provided By**
11-08-2018	02-06-2019	Lauren Stewart
	generate High Crash Locations and to map crashes. Enhancements are scheduled to be implemented in the second quarter of 2019. These improvements have been requested by the DOT and system users.	

Report Start	**Report End**	**Provided By**
02-07-2019	05-01-2019	Lauren Stewart
Activity	*Enhancements will be implemented this quarter of 2019. These improvements have been requested by the DOT and system users.*	

Schedule
October 1, 2019 through September 30, 2020

Performance Measures
C-X-1 – Crash Accessibility

Status of Improvement: TBD
Status: Planned
Revision Date: 17-June-2015

This performance measure is based on the C-X-1 model. Maine will improve the accessibility of the crash system and its data.

The state will show measureable progress using the following method:

Identify the principal users of crash data, query the users to assess their ability to obtain the data and record their satisfaction with the timeliness of the response to their request.

6.7 ME-P-00024 – Highway Safety/FARS/EMS Data Quality Analysis

Contact
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Lead Agency
Maine Bureau of Highway Safety

Status
Active

Project Description
The Highway Safety Office plans to use data from various traffic records sources to collect in databases to facilitate highway safety reports and analyses.

Core System and Performance Area

	Performance Area					
Core System	**Accuracy**	**Completeness**	**Integration**	**Timeliness**	**Uniformity**	**Accessibility**
Crash/EMS	✓	✓	✓			

Activity Reporting

Report Start	**Report End**	**Provided By**
02-27-2014	05-07-2014	Al Leighton
Activity	*EMS Data Records Review* *Al updated everyone that his group had not received the necessary EMS data from Image Trend to calculate the accuracy and timeliness of EMS reports.* *HVE (High Visibility Enforcement)* *Al indicated that his group is in the external testing phase of the HVE application. The application will ease the recording of HVE information. The State Police/York County Sheriffs will begin testing the application soon.*	

Report Start	**Report End**	**Provided By**
02-27-2014	05-07-2014	Al Leighton
	Child Passenger Safety Application *Al told the group the Child Passenger Safety Application is completed and historical data is currently being entered.* *Fatalities Database* *Al indicated that a fatalities database is being created based on the MCRS schema.* *Highway Safety Reports Robyn Dumont has been working on reports using 2013 data which should be completed by the end of June 2014.*	

Report Start	**Report End**	**Provided By**
05-08-2014	09-24-2014	Al Leighton
Activity	*Al Leighton indicated that his group designed web applications for CPS child passenger safety and HVE (High Visibility Enforcement). The sites should be made available soon.* *Al also told the group that a fatalities database is being developed. There are still refinements being performed and the testing phase is also starting.* *All said that all these systems will be tested and recommendations will be considered for future enhancements.* *Lauren Stewart suggested demonstrating the various systems at the next TRCC meeting.* *Lauren Stewart indicated that these new systems will replace manual systems and will provide more accurate and timely information.* *Emile Poulin suggested integrating these systems with the State's new RMS system.* *James Tanner discussed the limitations of the existing FARS system for performing queries. The system is unable to perform queries on a multi-year basis. Each query must be performed for one year and exported to MS-Excel.* *Lauren Stewart indicated that FARS data cannot be used unless all states have submitted their FARS data for a given year.*	

Report Start	**Report End**	**Provided By**
05-08-2014	09-24-2014	Al Leighton
	It was suggested that the database being created for fatalities could be used to perform advanced queries. *Al also described to the group their analysis of EMS run report data review. Al's group was able to calculate the number and rate of validation errors for all EMS data elements. Al also told the group that these errors could be quantified to any given service provider.*	

Report Start	**Report End**	**Provided By**
09-25-2014	04-23-2015	Al Leighton
Activity	*Al Leighton stated that Jamar is currently working on the application for the Child Seat project.*	

Report Start	**Report End**	**Provided By**
04-24-2015	05-03-2016	Al Leighton
Activity	*Al Leighton gave a presentation on the electronic collection of Highway Safety Data. Al said they have been looking at a great deal of EMS data over a long period of time. They have begun receiving MEMSRR run report data from ImageTrend to look at the timeliness of data (reports filed as quickly as can be) and the accuracy (if they are filling out the forms properly, clearly, and completely). There were 283,000 reports filed last year and over 40 million individual data entries. Every MEMSRR report has 381 fields. Each field is classified as a data entry. In 2007, 56.6% were on time. In 2013, it was 89%. The trend is getting better every year, except one year. In that particular year, the time to file was cut short.* *Al said the data is coming from years 2007 through 2013, ImageTrend has not supplied data for years 2014 and 2015 yet. Dan suggested if there were current data, it could be used for performance measures in the grant application.*	

Report Start	**Report End**	**Provided By**
05-04-2016	11-08-2016	Lauren Stewart
Activity	*Lauren Stewart said the electronic collection of highway safety data project was completed by the University of Southern Maine for the Maine annual highway safety plan. There were some complications with the data that was presented. The highway safety plan was approved, but the data wasn't comprehensive. As a result, the grant opportunities were significantly decreased. They put together a working group to review the data components to make a final determination of what data should be looked at. Going forward, the application will obtain the same data elements and data analysis. Therefore, we will not worry about leaving any agencies out or not seeing the complete picture. This is an ongoing project.*	

Report Start	**Report End**	**Provided By**
11-09-2016	02-08-2017	Robyn Dumont
Activity	*Robyn Dumont supplied the following status: 1) Muskie has requested the 2016 MEMSRR data; we've requested the full run report, as well as a subset including only those records that are related to crashes; and 2) Submitted the new seatbelt reselection material to NHTSA for certification; and 3) Requested and received (right after the TRCC meeting) the 2015 fatality dataset. Analysis of that data will begin immediately*.	

Report Start	**Report End**	**Provided By**
02-09-2017	05-03-2017	Al Leighton
Activity	*Al Leighton and Robyn Dumont talked with Tim Mangle about the EMS accuracy and timeliness work they had been doing. They have not received any data in a while. Proper approval needs to be in place before the current data can be transferred. Work has been done identifying certain fields at the ambulance service level to see if reports are getting in quicker. Once the data is coming in on a regular basis, performance measures can be done.*	

Report Start	**Report End**	**Provided By**
05-04-2017	11-08-2017	Al Leighton
Activity	*No status at this time.*	

Report Start	**Report End**	**Provided By**
11-09-2017	02-07-2018	Lauren Stewart
Activity	*Maine EMS staff is working with Image Trend to receive data files in the proper format. When the proper files are received, Muskie will update all previous analyses and provide new reports that will help identify possible improvements in training and data recording.*	

Report Start	**Report End**	**Provided By**
02-08-2018	11-06-2018	Al Leighton
Activity	*Al Leighton said that EMS staff have been working with ImageTrend to get the data files in the proper format. When the proper files are received, Muskie will update all previous analyses and provide new reports that will help identify possible improvements in training and data recording.*	

Report Start	**Report End**	**Provided By**
11-07-2018	02-06-2019	Al Leighton
Activity	*Al Leighton said they are continuing to working on the Highway Safety Plan and reports. Al is doing work with FARS related data.* *For the EMS Data Quality Analysis, Al has been working with Tim Nangle on the validation errors. They assigned a point value on all validation errors to give appropriate weighting to errors based on their seriousness. Al said he will have validation error data to show performance from the baseline period to the current period.*	

Report Start	**Report End**	**Provided By**
02-07-2019	05-01-2019	Al Leighton
Activity	*Al Leighton said the Highway Safety Plan and report are coming along. Jaime Pelotte and Robyn Dumont are meeting in a couple of days to work out the last issues with data cleansing. They have been working on the EMS Data Quality Analysis and reviewing dashboards. Since that meeting, Tim Nangle, Robyn, and Al have discussed and clarified a few things and made revisions on getting the data from ImageTrend on schedule.* *Al Leighton said the Seatbelt Observation will be starting in early June, as soon as Click-it or Ticket ends. The observation for Distracted Driving has been completed; however, no data is back yet.*	

Schedule
October 1, 2019 through September 30, 2020

Performance Measures
I-I-1 – EMS/Crash Integration

Status of Improvement: TBD
Status: Planned
Revision Date: 04-June-2019

This performance measure is based on the I-I-1 model. Maine will improve the integration of the EMS and Crash data.

The state will show measureable progress using the following method:

The percentage of appropriate records in the EMS database that are linked to the crash database.

6.8 ME-P-00022 – Registration Barcode

Contact
Ms. Linda Grant
Title: Senior Section Manager
Agency: Bureau of Motor Vehicles, Maine Office of the Secretary of State
Address: 101 Hospital Street
City, Zip: Augusta 04333-0152
Phone: 207-624-9095
Email: linda.grant@maine.gov

Lead Agency
Bureau of Motor Vehicles

Status
On Hold

Project Description
The Registration Barcode project adds a 2-D Barcode image to motor vehicle registration documents. The 2-D Barcode will adhere to the AAMVA (American Association of Motor Vehicle Administrators) 2-D Barcode standard and will encode the text data found on the registration document into the barcode image. The image will be used by various software programs to reduce data entry errors and to reduce data entry time for various state reporting requirements including motor vehicle crash and citation data collection.

Activity Reporting

Report Start	**Report End**	**Provided By**
04-23-2015	04-23-2015	Linda Grant
Activity	*Linda Grant stated that registrations are currently going through a redesign and she will inquire as to the status of barcodes.*	

Report Start	**Report End**	**Provided By**
04-24-2015	05-01-2019	Emile Poulin
Activity	*Project is not active at this time. Emile Poulin and Lt. Bruce Scott suggested revisiting this project as eCitation is being rolled out soon. It would be very helpful to scan the driver's license and import the information directly into the eCitation application. Emile also recommends involving BMV in the process.*	

Schedule
To be determined.

6.9 ME-P-00009 – Traffic Records Data Warehouse

Contact
Ms. Lauren Stewart
Title: Director
Agency: Bureau of Highway Safety, Department of Public Safety
Address: 164 State House Station
City, Zip: Augusta 04333
Phone: 207-626-3840
Email: lauren.v.stewart@maine.gov

Lead Agency
Bureau of Highway Safety

Status
Planned

Project Description
Develop a data warehouse into which all traffic records systems submit data; develop linkages between the various data sets and provide data warehouse drill down and reporting capabilities that support highway safety decision making.

Schedule
To be determined.

Performance Measures
C-I-1 Integration – Crash, Citation, Driver, Vehicle, EMS

The percentage of appropriate records in the crash database that are linked to another system or file. Linking the crash database with the five other core traffic records databases can provide important information. For example, a State may wish to determine the percentage of in-State drivers on crash records that link to the driver file.

The percentage of appropriate records in the crash database that are linked to another traffic records database (e.g. Citation, EMS, Driver, Vehicle, and Roadway).

6.10 ME-P-00010 – EMS Public Access and Data Mining

Contact
Title: Director
Agency: Emergency Medical Services, Department of Public Safety
Address: 152 State House Station
City, Zip: Augusta 04333-0152

Lead Agency
Bureau of Highway Safety

Status
Planned

Project Description
The EMS Public Access and Data Mining project will migrate many years of legacy EMS data to the current EMS dataset format creating a combined dataset that will allow for extensive query and comparison opportunities.

The project also includes a data analysis and reporting tool that provides controlled access to the data based on the user's authorization level. Full access users would be able to query all data without restriction, whereas limited access users would be able to query select data for aggregate reports.

The authorization capabilities will consist of a set of roles that allows access to specific reports within the system. New roles include Public Access, EMS Service Provider, Hospital, Local Government, and Maine EMS. The Reporting tool will use these roles to limit access to sensitive data using a set of rules designed to maintain data confidentiality.

The public access reporting portion of this project will provide 10 predefined reports to the public via the web. The public access reports will contain basic filtering capabilities (e.g., the Number of Calls report could be filtered to a particular service). The public access capability will be limited to aggregate reports and would require the report result to contain sufficient numbers to protect patient health information.

Activity Reporting

Report Start	**Report End**	**Provided By**
01-15-2012	03-15-2015	Jay Bradshaw
Activity	*EMS is continuing to explore various software options for the EMS public access & data mining project. Although it appears funding is available for the initial purchase price, we do not have the funds available within our budget for the ongoing software license fees. This continues to be a goal of ours.*	

Report Start	**Report End**	**Provided By**
03-16-2015	11-03-2016	Shawn St. Germain
Activity	*Shaun St. Germain said they are working towards the NEMSIS 3 rollout with an early January 2017 timeframe. Shaun said that they were one of the last States to get onboard with NEMSIS 3.*	

Schedule
To be determined.

Performance Measures
I-X-1 – EMS Accessibility
Status of Improvement: Planned
Status: Planned
Revision Date: 17-June-2015

This performance measure is based on the I-X-1 model.

Maine will improve the accessibility of the EMS system and its data.

The state will show measureable progress using the following method:

> Identify the principal users of EMS data, query the users to assess their ability to obtain the data and record their satisfaction with the timeliness of the response to their request.

The State will also document the method of data collection and the principal users' responses.

6.11 ME-P-00020 – CODES EMS Linkage

Contact
Ms. Lauren Stewart
Title: Director
Agency: Bureau of Highway Safety, Department of Public Safety
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City, Zip: Augusta 04333
Phone: 207-626-3840
Email: lauren.v.stewart@maine.gov

Lead Agency
Maine Department of Public Safety

Status
Planned

Project Description
The CODES EMS Linkage project will provide for the inclusion of EMS data into the CODES data set.

Schedule
To be determined.

Performance Measures
EMS Integration

Label: I-I-1
Status of Improvement: Planned
Active Status: Planned
Revision Date: 09-APRIL-2015

This performance measure is based on the I-I-1 standard performance measure from NHTSA document "Model Performance Measures for State Traffic Records Systems".

The state will improve the Integration of the Crash/EMS systems as measured in terms of an increase of the percentage of appropriate records in the EMS system that are linked to the crash system. Specifically, the percentage of records linked between Maine's pre-hospital electronic patient care reporting system and crash system.

6.12 ME-P-00025 – Electronic Collection of EMS Run Report Data

Contact
Title: Director
Agency: Emergency Medical Services, Department of Public Safety
Address: 152 State House Station
City, Zip: Augusta 04333-0152

Lead Agency
Maine Emergency Medical Services, Department of Public Safety

Status
Complete

Project Description
This project will provide laptop computers, software, and training for EMS providers to submitting EMS patient/run reports in electronic format and in compliance with NEMSIS data dictionary. MEMS data will be linked to a publicly accessible web portal. This portal will provide access to standardized reports and enable ad hoc reports with protection for confidential patient information.

Activity Reporting

Report Start	**Report End**	**Provided By**
06-17-2006	06-16-2007	Jay Bradshaw
Activity	*75 Tablet PC computers were purchased in April 2007 and made available to EMS services utilizing a formula based upon annual call volume. In addition, hundreds of field personnel have been trained in the new system and work continues with other software vendors to make their data compatible with the Maine EMS system.*	
Problems	*Because of the differences between EMS services, each installation requires considerable customization in order for the software to work properly and interface with existing systems (e.g. Computer Aided Dispatch and billing). There are also many EMS providers who have minimal computer skills and as a result, significant discomfort with the change from an established paper form to the new electronic platform. This has required an increase in staff time for training and technical support, which in turn affects expanded deployment efforts. There have also been services, primarily because of their rural location, need more computers than are currently available. Some of these services have decided to forego the e-run report conversion until they are able to obtain all the necessary equipment. Because of the uncertain nature of future grant funding, it remains to be seen what impact this will have on this project.*	

Report Start	**Report End**	**Provided By**
06-17-2006	06-16-2007	Jay Bradshaw
Plans	*There will be several "train the trainer" sessions conducted in the coming months to significantly increase the overall understanding of the EMS community about the e-run report system and build a cadre of instructors able to provide the first tier of user support in-house. Maine EMS is working with those services whose technology needs exceed available resources to help identify other potential funding sources and to develop alternative implementation plans.*	
Comments	*The Board of EMS is considering setting a deadline for making e-run reporting mandatory. This will likely motivate some services into action, but at the same time will cause an element of tension because of the initial startup costs and our limited ability to provide assistance.*	

Report Start	**Report End**	**Provided By**
06-16-2007	06-15-2008	Jay Bradshaw
Activity	*The Maine EMS Board did set a mandatory start date for electronic run reporting of 01/01/2009. A regional rollout is being worked on to spread the workload over the next 6 months. Two regions, Aroostook and Tri-County will be close to 100% electronic by 07/01/09. Kennebec Valley and Mid-Coast are scheduled for 10/01/08 and Southern Maine and Northeast for 01/01/09. Training is ongoing on a local and regional level. Import testing from NEMSIS Gold Compliant software is progressing. Currently, MEMSRR is receiving 25% of the call volume from other NEMSIS software. 54 more Panasonic Toughbooks were purchased and all have been requested by EMS services. We have recently improved the Hospital access to patient information with a software addition.*	

Report Start	**Report End**	**Provided By**
09-16-2008	12-15-2008	Jay Bradshaw
Activity	*182 EMS Services (70%) reporting electronically with the majority using the state's Image Trend software. Currently, there are 200,000 reports in the new electronic system with an additional 4,000,000 records from the paper-based system that have been entered into an earlier database (pre-NEMSIS).*	

Report Start	**Report End**	**Provided By**
09-16-2008	12-15-2008	Jay Bradshaw
	EMS has set January 1, 2009 as the date when all services should be submitting data electronically.	
Problems	*Currently 60 or 70 services, mostly small services, are not transmitting electronically and it is possible that some of them will not be transmitting by the deadline.*	
Plans	*EMS staff is actively working to help all services comply in a timely manner.*	
Comments	*Some services are using other software that has been certified by NEMSIS. These services must verify with Maine EMS that their system is capable of providing a satisfactory export before being authorized to use this for submitting reports to Maine EMS.*	

Report Start	**Report End**	**Provided By**
12-16-2008	03-15-2009	Jay Bradshaw
Activity	*242 EMS Services (91%) reporting electronically with the majority using the state's Image Trend software. Currently, there are 302,431 reports in the new electronic system with an additional 4,000,000 records from the paper-based system that have been entered into an earlier database (pre-NEMSIS).* *Maine Bureau of Highway Safety is now set up with access to the Electronic EMS Run Report system for use with FARS.*	
Plans	*EMS staff is working aggressively toward the deadline of 4/1/09 for 100% electronic reporting.*	

Report Start	**Report End**	**Provided By**
06-16-2009	09-15-2009	Jay Bradshaw
Activity	*All services were required to begin submitting run reports electronically by 4/1/09. As a result, we have 100% compliance with ePCR. As of 9/29/09, there have been 175,793 entered in calendar year 2009.*	
Problems	*There are many small services who are still struggling to understand the new ePCR system, and there are users at all levels who do not fully appreciate the importance of good data to patient care. There are also data validation issues*	

Report Start	**Report End**	**Provided By**
06-16-2009	09-15-2009	Jay Bradshaw
	with services who are exporting data into the Maine EMS Run Reporting System.	
Plans	*There will be an ongoing need for training and data quality improvement efforts. Maine EMS staff continues to provide training and technical assistance on a statewide basis. Maine EMS is an active participant in the NEMSIS project and with the NASEMSO Data Managers group. MEMS also has a Data Committee that is working with the Board of EMS to improve the data quality and integration from other systems.*	

Report Start	**Report End**	**Provided By**
09-16-2009	12-15-2009	Jay Bradshaw
Activity	*We continue to actively work with EMS services to improve both provider understanding of the system and with service administrators to reinforce why data collection is important. To both groups we provide training about the reports that are available.* *We are also working with service medical directors and potential service medical directors to help them understand the EMS data system and how quality data relates to quality patient care.* *We are working with services exporting data from other systems to assure that the values being submitted are consistent with NEMSIS.* *As of 10/1/09, the EMS Rules require that run reports are entered into our system within 3 business days. This is being monitored by Maine EMS, with regular follow-up to services who are not meeting this deadline.*	

Report Start	**Report End**	**Provided By**
12-16-2009	03-15-2010	Jay Bradshaw
Activity	*The EMS project focus is now on improving data quality coming in from the various services and increasing the number of NEMSIS data fields being imported.*	

Report Start	**Report End**	**Provided By**
12-16-2009	03-15-2010	Jay Bradshaw
	We are working with services exporting data from other systems to assure that the values being submitted are consistent with NEMSIS. *Effective April 1, 2009, all EMS services were required to submit run reports electronically.* *Effective October 1, 2009, those reports had to be submitted within 3 business days of a call.*	
Plans	*Maine EMS continues to work with service medical directors and potential service medical directors to help them understand the EMS data system and how quality data relates to quality patient care.* *Maine EMS continues working with services exporting data from other systems to assure that the values being submitted are consistent with NEMSIS.*	

Report Start	**Report End**	**Provided By**
03-16-2010	06-15-2010	Jay Bradshaw
Activity	*The EMS project focus is now on improving data quality coming in from the various services and increasing the number of NEMSIS data fields being imported.* *We are working with services exporting data from other systems to assure that the values being submitted are consistent with NEMSIS.* *The EMS Run Reporting System is 100% electronic and services are now required to submit reports within 3 business days.*	
Plans	*Maine EMS continues to work with service medical directors and potential service medical directors to help them understand the EMS data system and how quality data relates to quality patient care.* *Maine EMS continues working with services exporting data from other systems to assure that the values being submitted are consistent with NEMSIS.*	

Report Start	**Report End**	**Provided By**
10-01-2010	12-31-2010	Jay Bradshaw
Activity	*Maine EMS launched an updated run form that dynamically determines which fields are required based on previous entries. This has significantly improved EMS data quality and reduced complexity. One example of this is for a non transporting service; unnecessary fields will not be displayed or required. There are roughly 132 services using the client program and about 150 services using the web for data entry. While a majority of services are using the system, some of the larger agencies are still exporting data manually. Data quality has improved over the last half of 2010.*	
Plans	*Maine EMS continues to work with service medical directors and potential service medical directors to help them understand the EMS data system and how quality data relates to quality patient care.* *Maine EMS continues working with services exporting data from other systems to assure that the values being submitted are consistent with NEMSIS.*	

Report Start	**Report End**	**Provided By**
01-01-2011	03-31-2011	Jay Bradshaw
Activity	*The EMS project focus is now on improving data quality coming in from the various services and increasing the number of NEMSIS data fields being imported.* *There are currently over 800,000 reports in the EMS Run Reporting System.* *Ongoing training continues to improve data quality as well as the use of the new dynamic run reporting form that adapts to the required data elements for the type of call. The objective is that this will reduce the time it requires to complete the report and increase the accuracy.* *We are working with services exporting data from other systems to assure that the values being submitted are consistent with NEMSIS.* *The EMS Run Reporting System is 100% electronic and services are now required to submit reports within 3 business days.*	

Report Start	**Report End**	**Provided By**
05-25-2011	11-03-2011	Jay Bradshaw
Activity	*The EMS Run Reporting system project is progressing and is approaching 1 million records since beginning of electronic data collection.* *Some of the larger services who were initially resistant to using the recommended software package have since signed on.* *The EMS Run Reporting software will be upgraded to NEMSIS 3.0 compliance shortly.*	

Report Start	**Report End**	**Provided By**
11-4-2011	01-19-2012	Jay Bradshaw
Activity	*The EMS data collection efforts have been to maintain the system and complete updates to the software to make it more user-friendly. There is a new version of the report writer software that makes is easier for users to create ad hoc reports.*	
Plans	*The EMS software vendor is one of the leading providers of EMS software and is compliant with NEMSIS 3.0 which will eventually allow for connecting with Hospital Language 7 (HL7) in the future.* *Maine BEMS is evaluating the degree of mismatch between Maine's NEMSIS version 2.2 system versus what NEMSIS 3.0 specifies. There is currently no specific timeline for implementing NEMSIS 3.0 as they are still evaluating the mismatch and the degree of effort to get the importing services (services that aren't using ImageTrend).*	

Report Start	**Report End**	**Provided By**
01-20-2012	03-15-2012	Jay Bradshaw
Activity	*Maine EMS has a software update for the EMS Run Reporting System's state bridge, which is the software used to collect information from the EMS services.*	
Plans	*Maine EMS is continuing the dialogue with Maine HealthInfoNet, pilot testing their system, which collects patient information around the state. Maine*	

Report Start	**Report End**	**Provided By**
01-20-2012	03-15-2012	Jay Bradshaw
	HealthInfoNet is looking for places to test with EMS, which is the first step towards linking EMS records and patient records.	

Report Start	**Report End**	**Provided By**
03-12-2012	06-28-2012	Jay Bradshaw
Activity	*Mr. Jay Bradshaw stated that they are currently preparing their systems for NEMSIS 3.0. Mr. Bradshaw said there are 7 or 8 systems that are not using the same system as the State. There exist data mapping issues related to how values are translated from one program to the other. NEMSIS 3.0 implementation is about a year or so away; fortunately the vendor is deeply involved in the NEMSIS 3.0 standard. The goal is to get better data in a timely fashion and to continue the work to link the EMS system with HealthInfoNet.*	

Report Start	**Report End**	**Provided By**
06-29-2012	01-17-2013	Jay Bradshaw
Activity	*Mr. Bradshaw stated that a hospital dashboard has been rolled out and this gives hospitals access to the run reporting system. In the future, the system will use NEMSIS 3; this allows EMS data to link with the hospitals systems HL7 (Health Level 7) systems.*	
Plans	*Maine EMS sent letters to services that there are grant funds available for them to upgrade their equipment and/or software for EMS Run Reporting. Mr. Bradshaw provided a system status snapshot for the Maine indicating 1 million records in the system.*	

Report Start	**Report End**	**Provided By**
01-18-2013	06-12-2013	Jay Bradshaw
Activity	*EMS is in the process of purchasing 90 computers using TRCC funds. EMS is also planning on fulfilling approximately $470K in computer related requests from other funding sources and matching funds. Much of the funds will be for ruggedized laptop computers.*	

Report Start	**Report End**	**Provided By**
01-18-2013	06-12-2013	Jay Bradshaw
	The State now has a state-wide license for the client-based Image Trend software. The statewide license allows users to purchase an annual license fee for $175 versus the $1000 under the previous licensing agreement. This has resulted in more interest in using the ruggedized computers. *The State has changed the rules for report submission as of May 1st, 2013. Reports now have to be submitted within one business day of the call.* *EMS is working to integrate EMS run report data with Maine Health InfoNet which will allow EMS data to be accessible statewide. The integration will also allow EMS providers to access patient information in real-time. Maine is one of the first states to perform this data integration.* *As part of this year's grant process, EMS is performing a survey with each service that is receiving support from the grant. Each provider must attest that they have requested the report. The report explains how the reporting process is helping the provider with run reporting and their community. The survey asks each provider to explain their overall process.*	
Plans	*EMS should be receiving the first shipment of computers by the end of this week (June 14th). The survey will be available to providers as the computers are deployed. Jay said that the survey will be available online via SurveyMonkey.*	

Report Start	**Report End**	**Provided By**
06-13-2013	02-26-2014	Jay Bradshaw
Activity	*Maine EMS has recently deployed more Toughbook laptop computers using Section 402 and 408 grant funds to EMS services that had older computers.* *Maine EMS continues its efforts on improving data quality and preparing for NEMSIS 3.0 for the current calendar year. 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.*	

Report Start	**Report End**	**Provided By**
02-27-2014	09-24-2014	Jay Bradshaw
Activity	*The State is currently planning for NEMSIS 3.0.* *The State is working with ImageTrend to complete the transition to NEMSIS 3.0 by April 1st, 2015.* *The move to NEMSIS 3.0 will help the linkage of EMS data with health info-net and discharge data statewide.* *EMS is currently working with the Muskie School. The Muskie School is mining EMS data and is focused on improving data quality for EMS records.*	

Report Start	**Report End**	**Provided By**
09-25-2014	01-22-2015	Al Leighton
Activity	*Al Leighton presented to the group the statistics based on EMS Run Report Data provided by Image Trend and Maine EMS.* *Al first presented statistics based on timeliness of filed run reports. Al described the improvements from 2007 to 2013.* *Al then presented the group with timeliness statistics based on the number and percent of services reporting on time. Al showed the changes since 2007.* *Al's final presentation was based on 2014 data. This presentation described statistics showing data entry error validation rates based on approximately 19 million data items.*	

Report Start	**Report End**	**Provided By**
01-23-2015	06-04-2015	Jay Bradshaw
Activity	*NEMSIS 3 implementation. Data elements have been selected and approved by the Maine Board of EMS. The Maine EMS Run Reporting System is integrated with the licensing system and online learning management system, and during a beta test of the new v3 software, compatibility issues were identified. These issues are being resolved and the current plan is to implement v3 in the fall 2015.*	

Report Start	Report End	Provided By
01-23-2015	06-04-2015	Jay Bradshaw
	There are two EMS services pilot testing accessing Maine Health InfoNet. Integration of Maine EMS Run Reports into the Maine Health InfoNet will resume after implementation of NEMSIS 3 is complete. *Work continues to assess and improve the data quality and timeliness of reports. Maine EMS Rules require reports be submitted within one business day, and efforts continue to help services get closer to real time.* *See the current system summary –we're closing in on 2,000,000 records.*	

Schedule
Complete

Performance Measures
See *Section 5.1.4 EMS Uniformity* for performance measure.

I-A-01 - EMS Accuracy

Status of Improvement: No new data
Active Status: On Hold
Last Updated: 17-JUN-2015

This performance measure is based on the I-A-01 model.

Maine will improve the Accuracy of the Injury Surveillance / EMS system as measured in terms of an increase of the percentage of EMS patient care reports with no errors in critical data elements.

Maine EMS continues to improve the EMS Run Reporting system's NEMSIS business rules and minimum requirements. This has resulted in fewer critical errors in the EMS Run Report data and has resulted in improved accuracy of the EMS Run Report data.

For the baseline period there were 264,761 total reports with 228,102 that passed NEMSIS business rules (86.2%); for the current performance period there were 272,658 total reports with 255,884 that passed (93.8%) providing an increase of 7.6%.

The state will show measureable progress using the following method:

> Calculate the percentage of reports that did not have critical errors from the baseline period of April 1, 2011 through March 31, 2012 compared to the current performance period of April 1, 2012 through March 31, 2013. A critical error occurs when an EMS Run Report did not pass NEMSIS business rules and minimum requirements.

7. Traffic Records Data Standards Compliance

7.1 Model Inventory of Roadway Elements (MIRE) Compliance

In this section, Maine has incorporated specific quantifiable and measureable anticipated improvements for the collection of MIRE fundamental data elements.

7.1.1 MIRE Data Collection Status

Which MIRE fundamental data elements are currently being collected and which MIRE fundamental data elements are not being collected? On which functional classes of roads are/are not they being collected?

All MIRE fundamental data elements are currently being collected on all required roads except the Unique Interchange Identifier (MIRE number 178).

Which business office(s) in the State DOT collect, receive, and maintain the MIRE fundamental data elements? How are the data stored and managed?

Most MIRE fundamental data elements are received, stored, managed and maintained in the MaineDOT Linear Referencing System (LRS). The LRS is managed by the Results and Information Office at MaineDOT.

Who can access the MIRE fundamental data elements for safety analyses, and what steps are necessary to access the data? Are systems planned or already implemented to facilitate access to the data (e.g. online portals)?

Internal MaineDOT staff can access the MIRE fundamental data elements for safety analyses through the GIS-enabled data warehouse known as TIDE. Most users of TIDE have attended formal or informal trainings and user support is continuously available. External users of the data can access all elements through custom data requests and can access many of the MIRE FDEs through online applications and the Maine Office of GIS data catalog. There are plans to expand online data capabilities through an online open data portal.

Which agency/office/individual/committee(s) have authority and responsible for determining the improvements needed to achieve compliance with the MIRE fundamental data elements requirement?

The MaineDOT Safety Office helps to identify and manages project candidates for submittal to the annual MaineDOT capital work plan process.

7.1.2 Data Collection Methodology

For the MIRE fundamental data elements that are already being collected:

- *What methods are being used to collect the MIRE fundamental data elements?*
- *How often do they collect the data?*

- *What Quality Control/Quality Assurance processes are performed before the data is entered into the database.*

MIRE FDEs are maintained in information systems of record (mainly the LRS) and updated as necessary with changes identified in capital improvement projects, occasional error reporting and regular inventories. Information is verified through use of design plans and remote sensing (orthoimagery, ARAN van cameras, etc.).

7.1.3 Coordination with Other Agencies

For MIRE fundamental data elements that are NOT currently being collected:

- *Who owns the roads where the elements are not being collected (e.g., State, local government agencies, Trial Governments, Federal Land Management Agencies, etc.)?*
- *Do the agencies that own those roads collect any of the MIRE fundamental data elements?*
- *What mechanisms are needed to share data among those agencies that collect, store, maintain, and use the MIRE fundamental data elements?*

The Maine Turnpike Authority owns a certain section of the interstate and associated interchanges and appurtenances. Roads not covered by MIRE FDEs are private.

7.1.4 Prioritization of MIRE Fundamental Data Elements Collection

For additional data that needs to be collected to meet the MIRE fundamental data element requirement:

- *What data elements will be collected in the short (1-3 years), medium (4-6 years), and long (7-9 years) term?*

The underlying data is already collected and in the LRS. These highway sections (ramps, cuts) associated with the interchanges just need to be assigned a unique interchange identifier.

- *What collection technologies and/or methodologies are anticipated to be used?*

MaineDOT intends to use the spatial interface and tools associated with the LRS. Currently, the spatial component of our LRS is ArcGIS Desktop.

- *Who is responsible for collecting the data?*

The LRS System Administrator (Devon Witherell) is responsible for making this change before the deadline.

- *How will it be made available to the State DOT?*

N/A

- *What will be the update cycle for the collection of the data?*

The data is updated as necessary (as changes occur).

7.1.5 Costs and Resources for MIRE FDE Data Collection

What are the estimated costs, staffing, and other resource requirements to collect and maintain the MIRE fundamental data elements?

Who will incur those costs?

Costs to maintain MIRE fundamental data elements are included in MaineDOT continual costs for maintaining GIS base GIS network, associated data and tools.

7.2 Model Minimum Uniform Crash Criteria (MMUCC) Compliance

- Maine's crash repository is currently designed according to MMUCC V3 guidelines with a 2018 update that includes several MMUCC V5 data elements.
- Maine has adopted the definition for "Suspected Serious Injury (A)" from the MMUCC 4th edition.

7.3 National Emergency Medical Services Information System (NEMSIS) Compliance

The Maine EMS Run Reporting System (MEMSRR) is currently NEMSIS 3 compliant.

7.4 National Trauma Data Standard (NTDS) Compliance

The Maine Statewide Trauma Registry is maintained within Maine Emergency Medical Services (Maine EMS), a Bureau of the Maine Department of Public Safety. The trauma registry is in initial deployment and is National Trauma Data Standard (NTDS) compliant.

7.5 National Information Exchange Model (MIEM) Compliance

Maine's eCitation system was deployed in August 2018 and is National Information Exchange Model (NIEM) compliant. The eCitation data standard is based on a NIEM-compliant, State of Maine eCitation XML Schema.

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Appendix A –
Traffic Records Inventory