

The Status Of Transportation Safety In Maine



Maine Transportation Safety
Coalition
November 2010





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Maine Transportation Safety Coalition

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Dear Transportation Safety Advocate:

On behalf of the Maine Transportation Safety Coalition (MTSC), I am pleased to provide you with **The Status of Transportation Safety in Maine** report. This report is the second edition of a compendium of crash and other safety data that both qualitatively and quantitatively defines the major transportation safety issues facing our state today. It is a multi-agency effort undertaken to compile comprehensive Maine-specific transportation safety data and facts into one document. It includes sections for all the current focus areas of Maine's Strategic Highway Safety Plan.

This report was prepared by the Data Committee of the MTSC to identify focus areas for our organization and to assist our state leaders in making informed decisions on programs and activities affecting transportation safety in Maine. Sincere thanks goes to the extraordinary efforts made by the following individuals of the MTSC Data Committee, who compiled the data, wrote and edited the Report:

- Gregory J. Stone, Maine Turnpike Authority
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- Carl Hallman, Maine Department of Public Safety, Bureau of Highway Safety
- Michelle Ward, Maine Department of Public Safety, Bureau of Highway Safety
- Duane Brunell, Maine Department of Transportation, Safety Office

Special thanks also goes to the Maine Department of Public Safety, Bureau of Highway Safety, for providing the funding needed to publish this document.

The MTSC is a non-profit organization consisting of federal and state agencies, private organizations and individuals involved in transportation safety in Maine. Our Mission is "To promote safe transportation in Maine". We are committed to working collaboratively with our member agencies and others to improve safety for all Maine travelers.

If you have questions or would like additional copies of the report, please feel free to contact the MTSC at its web site, www.themtsc.org.

Katharyn Zwicker
Chair, Maine Transportation Safety Coalition



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Glossary of Terms

Crash Injury Levels:

Crash injuries are classified **K, A, B, C or PDO** as defined below, based on the injury severity observed by the responding Police Agency.

(K) FATAL INJURY OR FATALITY - any injury that results in death within 30 days of a crash.

(A) INCAPACITATING INJURY - any injury, other than a fatal injury, which prevents the injured person from walking, driving, or normally continuing the activities the person would be capable of performing before the injury occurred.

(B) NON-INCAPACITATING INJURY - any injury, other than fatal injury or an incapacitating injury, which is evident to observers at the scene of a crash in which the injury occurred.

(C) POSSIBLE INJURY - any injury reported or claimed which is not a fatal, incapacitating injury or non-incapacitating injury.

(PDO) PROPERTY DAMAGE ONLY - Damage is harm to property that reduces the monetary value of that property.

Additional Definitions

5YAA - the five year annual average crash or fatality experience (2005 through 2009)

FARS - the Fatality Analysis Reporting System (FARS) contains data derived from nation-wide fatal traffic crashes. FARS data includes the death of a person (occupant of a vehicle or a non-motorist) within 30 days of the crash.

FHWA - Federal Highway Administration

HMVM - Hundred Million Vehicle Miles traveled

MATURE DRIVERS - Drivers from 65 years old and up.

NHTSA - National Highway Traffic Safety Administration

TEEN DRIVERS - Drivers between the ages of 16 and 18.

VMT - Vehicle miles traveled

YOUNG DRIVERS - Drivers between the ages of 16 and 24.



Introduction and Overview



The Maine Transportation Safety Coalition (MTSC) is an independent, non-profit organization created in 1997. The mission of the MTSC is to promote safe transportation in Maine. In carrying out its mission, the MTSC supports a variety of activities using education, engineering, enforcement and emergency services strategies. Go to MTSC's website at www.themtsc.org for more information.

This publication updates a multi-agency effort that gathers transportation safety data and compiles it into a report to identify the priority challenges Maine faces today. Crash data (unless otherwise noted) is obtained through Fatal Analysis Reporting System (FARS) or MaineDOT. This data is obtained through crash reports submitted statewide by law enforcement agencies. Data sources include the following:

- Federal Highway Administration
- Maine Department of Transportation
- Maine Bureau of Highway Safety
- Maine State Police/Commercial Vehicle Division
- Maine Department of Health and Human Services/Center for Disease Control
- Maine Bureau of Motor Vehicles
- Maine Department of Inland Fisheries and Wildlife
- National Highway Traffic Safety Administration
- Fatal Accident Reporting System (FARS)/ National Center for Statistics and Analysis

Data included in this publication is developed from police reported crashes. The topics covered reflect many key safety issues in Maine. Maine has updated its Strategic Highway Safety Plan which covers fourteen focus areas, all of which are covered in this report.

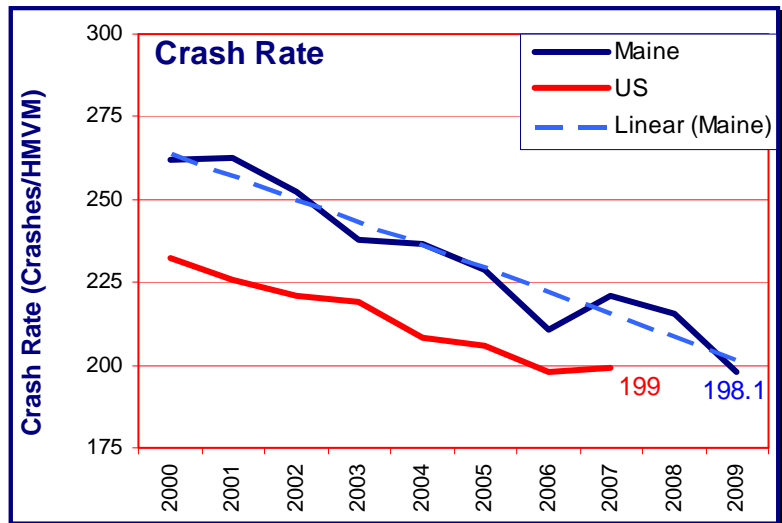




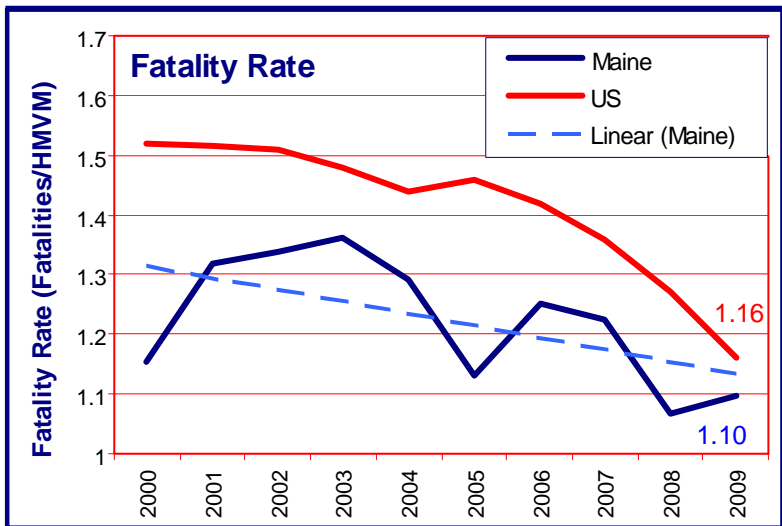
Introduction

Maine is a rural state and our highways are the lifeblood of our economic and personal lives. The impact of road crashes in Maine is very significant.

In 2009, there were about 30,000 crashes reported on Maine’s public roads. That’s almost 100 a day! All vehicle crashes in 2009 resulted in 159 fatalities and about 11,000 injuries and an estimated economic impact of \$1.0 billion. The crash numbers are substantial but the personal impact felt by the family and friends of those involved, injured or killed is immeasurable and long lasting.



Highway crashes and fatalities have decreased both in the state and nationwide during recent years. Some of this improvement may be the result of ongoing safety efforts and increased driver awareness and much may be a result of the impact on travel from the recent economic downturn. Crashes and fatalities in most of the following individual topics similarly declined in recent years. Unchanged or increasing trends noted in any of the following areas may be an indication of additional safety concern.

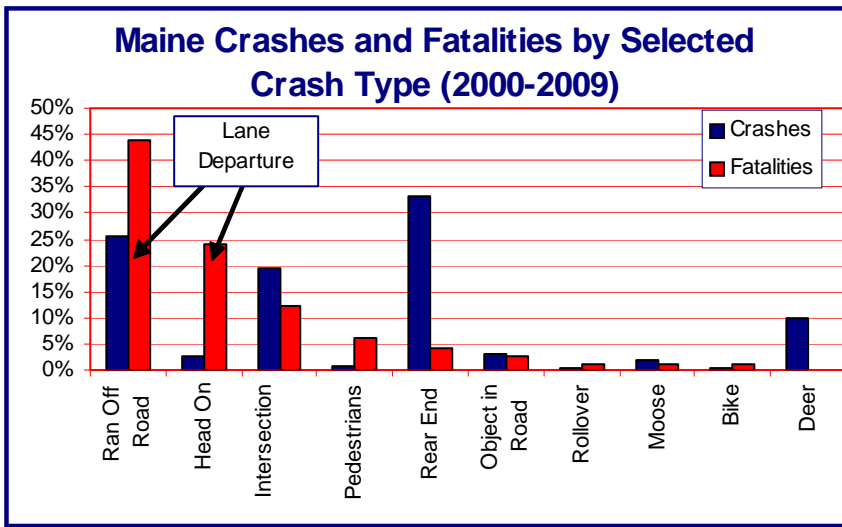


Maine’s crash rate is nearly the national average, while its traffic fatality rate is better than the national average (see Crash Rate and Fatality Rate charts).



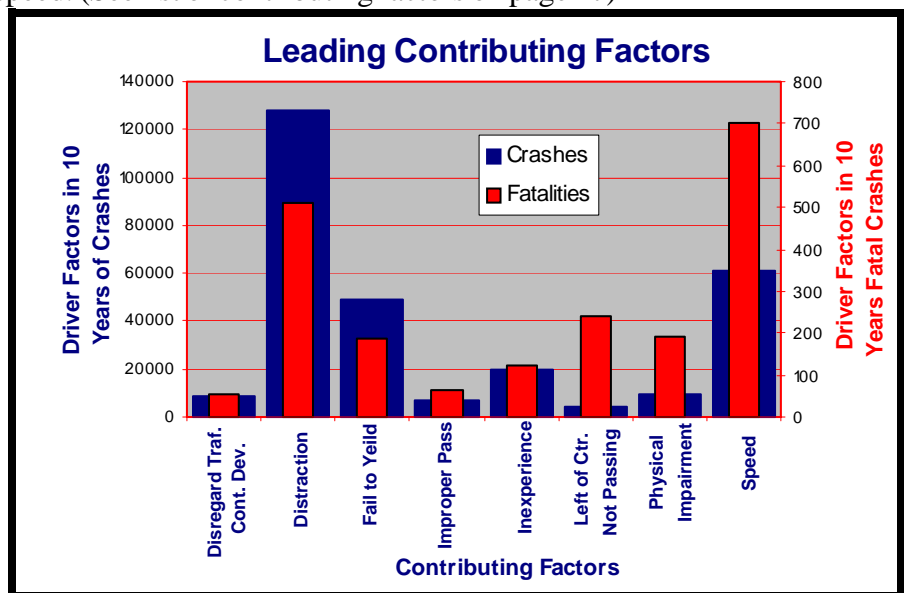


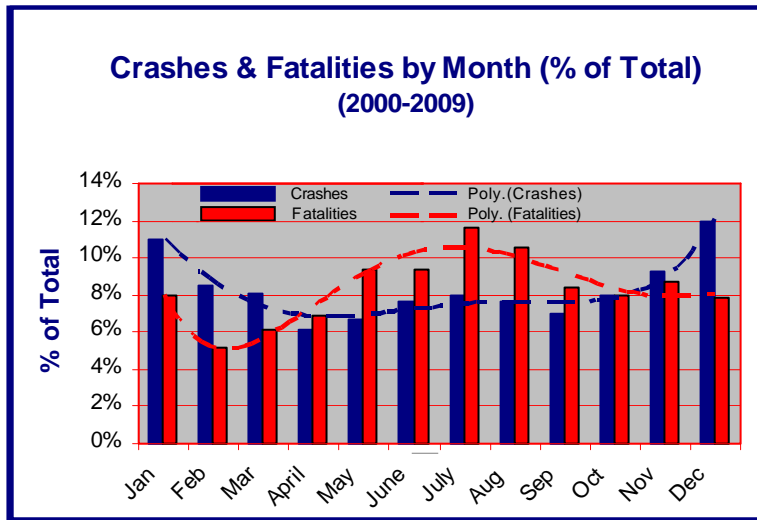
The common types of crashes that occur in Maine are shown in the chart below. Maine's most common crash type is Rear End. Maine's deadliest crash type is Run Off Road. The most severe crash types can be



identified by comparing how much higher the red (fatality) bar is than the blue (crash) bar on a relative basis. Based on the crash types illustrated to the left, Pedestrian and Head-on crashes are most likely to have severe outcomes. Lane Departure crashes are largely made up of Run Off Road and Head-On crashes, the two crash types that account for the most fatalities.

The underlying cause of most vehicle crashes involves contributing factors of the driver. Police crash reports can capture two such contributing factors for each involved vehicle unit. The following chart shows the leading reported factors. Distraction is the most frequent crash factor (blue). Speed leads to the most fatalities (red). When the red bar height is higher than the blue, it reflects a crash that will likely be more serious in nature. Examples of those severe contributing factors are improper passing, left of center/not passing, physical impairment and speed. (See list of contributing factors on page 47)





The seasonality of crashes and fatalities in Maine differ (shown above). Crashes (blue) are most common during the months of December and January. Fatalities (red) are most frequent during the months of May through August.



Summary

Crash trends of strategic interest are summarized below with the latest 2009 results shown. All crash types are important and strategic efforts in any focused safety area has merit. Maine’s Strategic Highway Safety Plan (SHSP) has identified the priority focus areas below.

The table below shows the fourteen areas included in the SHSP, reported on the most recent 5 year annual average (5YAA). The first data column shows the average number of annual crashes in the most recent 5 year period. Many safety topics are interrelated. (Using Lane Departure as an example; Lane Departure crash factors possibly involve one or more of the next nine focus areas). The next column is the average annual fatalities. The last column is an indicator of average crash severity.

The first ‘ALL CRASHES’ row serves as a benchmark to compare the relative performance of individual categories. For severity comparison, the ‘ALL CRASHES’ result of 5.4 is the average, and many focus area categories have noticeably higher rates.

LEAD FOCUS AREAS	5 Year Average Annual Crashes (05-09)	5 Year Average Annual Fatalities (05-09)	Severity Comparison Fatalities/1000 Crashes
<i>ALL CRASHES</i>	<i>31,784</i>	<i>170.8</i>	<i>5.4</i>
Lane Departure	10,462	125	11.9
Speed	6,091	71.6	11.8
Unbelted	N/A	60	N/A
16-24 Year Old	11,717	55.6	4.7
16-18 Year Old	4,284	19.2	4.5
Impaired Driving (Alcohol)	1,619	47.8	29.5
Distracted Driving	11,817	42.2	3.6
Mature Drivers (65+ years old)	4,695	41.4	8.8
Motorcycles	592	20.6	34.8
OTHER STRATEGIC AREAS			
Winter	7,054	18.6	2.6
Intersections	3,875	12.6	3.3
Large Trucks (5 axle +)	646	12.6	19.5
Pedestrians	257	11.8	45.9
Bicycles	192	2.4	12.5
Large Animal (Moose)	587	1.8	3.1
Operating After Suspension	669	10.4	18.8



Maine’s overall safety goal is to achieve a fatality rate of less than 1.0 fatalities/hundred million vehicle miles traveled by 2014. The following sections cover various focus areas. Improvement can be achieved through a coordinated plan that includes Enforcement, Education, Engineering, and Emergency Medical Service response.

The Data Committee of the Maine Transportation Safety Coalition has compiled this report to help define the traffic safety issues that Maine faces. Our hope is that this report will serve as a comprehensive source for information on traffic safety.

This publication will cover all the above areas plus a few additional. An appendix is included to show other data displays that may be of interest.

