

2006

Michigan Traffic Crash Facts



Michigan Department of State Police



This material was developed through a project funded by the Michigan Office of Highway Safety Planning and the U.S. Department of Transportation. OHSP is committed to saving lives and reducing injuries on Michigan roads through leadership, innovation, facilitation, and program support in partnership with other public and private organizations.

2006 Michigan Traffic Crash Facts

A summary of traffic crashes on Michigan roadways in calendar year 2006

Produced by:

Michigan Department of State Police
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Office of Highway Safety Planning - Traffic Safety Programs
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WWW.MICHIGAN.GOV/OHSP



Acknowledgements

The creation of this book could not have been made possible without the dedication, planning, guidance, and knowledge of the following organizations and departments:

Criminal Justice Information Center Staff

Fatality Analysis Reporting System Staff

Michigan Department of State Police

Michigan Department of State

Michigan Department of Transportation

Office of Highway Safety Planning

University of Michigan Transportation Research Institute

In addition, we wish to acknowledge the people working in law enforcement and public safety agencies who are responsible for gathering crash data in the field. We rely on their accurate completion of crash reports--without their attention to detail we would be unable to create, maintain, and distribute meaningful crash information.

FOREWORD

Michigan's 2006 mileage death rate of 1.04 is the lowest the state has ever recorded. This continues a trend that marks a decrease each year since 1999.

Contrary to the national trend, Michigan experienced a decline in motorcycle crashes, fatalities, injuries, and exposure numbers.

Begun in 2002, a comprehensive, multi-year project using federal grant funds to improve the quality, timeliness, and accuracy of traffic crash data collection and processing continues into 2007. This includes encouraging and accepting the electronic collection of data, additional error checking and quality assurance, improved crash location and a modern computer infrastructure system.

The 2006 crash data collected and processed is in the fourth year of production using this new system. The overall quality of the data has been improved, and analysis of yearly trends may be affected by this improvement.

In order to provide familiar data with the highest level of accuracy, the book retains the format used in the past, and we ask the reader to be attentive to all special notes.

Please visit www.michigantrafficcrashfacts.org for easy access to all of the 1992 through 2006 information in PDF format.

EXECUTIVE SUMMARY

The 2006 traffic fatality count was 1,084, down 4.0 percent from the 2005 figure of 1,129. Compared with 2005, injuries were down 9.5 percent and total crashes were down 10.1 percent. These figures translated into a death rate of 1.04 per 100 million miles of travel.

Exposure factors in 2006 showed increases in the travel mileage and number of drivers on Michigan roads, and a decrease in the in motor vehicle registrations. The number of licensed drivers was up 0.3 percent to 7.2 million, and vehicle miles traveled was up 0.9 percent to 104.0 billion. Motor vehicle registrations were down 1.3 percent to 8.4 million.

Consumption of alcohol continues to be a major factor in Michigan crashes, particularly the more serious crashes. In 2006, 4.0 percent of all crashes, including property damage only, were reported to involve drinking. While 19.4 percent of all crashes resulted in injury or death, 43.0 percent of alcohol-related crashes involved injury or death. 34.8 percent of fatal crashes involved drinking.

Data on crashes in this book was obtained from 2006 Michigan Traffic Crash Report Forms (UD-10) submitted by local police departments, sheriff's offices, and the Department of State Police. Other related information was obtained from the Departments of Transportation, State, and Community Health.

The University of Michigan Transportation Research Institute produced this publication with data on file at the Michigan Department of State Police as of March 30, 2007. We acknowledge, with appreciation, all involved agencies for their assistance.



UD-10 (FRONT)

Authority: 1949 PA 300, Sec. 257.622
 Compliance: Required MSP UD-10
 Penalty: \$100 and/or 90 days (Rev 1/04)

Do Not Use

Page _____ Of _____
 Incident # _____
 File Class _____
 Incident Disposition Open Closed
 Reviewer _____

STATE OF MICHIGAN TRAFFIC CRASH REPORT

ORI: MI- _____ Department Name _____

Crash Date Month Day Year MM DD YYYY	Crash Time Hour Minute HH MM	No. of Units	Crash Type <input type="radio"/> Single Motor Vehicle <input type="radio"/> Head On <input type="radio"/> Head On-Left Turn <input type="radio"/> Angle <input type="radio"/> Rear End <input type="radio"/> Rear End-Left Turn <input type="radio"/> Rear End-Right Turn <input type="radio"/> Sideswipe-Same <input type="radio"/> Sideswipe-Opposite <input type="radio"/> Other/Unknown	Special Circumstances <input type="radio"/> None <input type="radio"/> School Bus <input type="radio"/> Local <input type="radio"/> Clear <input type="radio"/> Cloudy <input type="radio"/> Fog/Smoke <input type="radio"/> Rain <input type="radio"/> Daylight <input type="radio"/> Dawn <input type="radio"/> Dusk <input type="radio"/> Dry <input type="radio"/> Wet <input type="radio"/> Icy	Special Checks <input type="radio"/> Fatal (Report All) <input type="radio"/> Corrected Copy <input type="radio"/> Replace (Entire Report) <input type="radio"/> Delete (Entire Report) <input type="radio"/> Non-Traffic Area <input type="radio"/> ORV/Snowmobile
County	Traffic Control <input type="radio"/> None of These <input type="radio"/> Signal <input type="radio"/> Stop Sign <input type="radio"/> Yield Sign	Relation to Roadway (Location of First Impact) <input type="radio"/> Shoulder <input type="radio"/> Outside of Shoulder/Curb <input type="radio"/> On Road <input type="radio"/> Median <input type="radio"/> Gore <input type="radio"/> Other/Unknown	Weather (Mark Only One) <input type="radio"/> Deer <input type="radio"/> Fleeing Police <input type="radio"/> State <input type="radio"/> Severe Wind <input type="radio"/> Snow/Blowing Snow <input type="radio"/> Sleet/Hail <input type="radio"/> Other/Unknown	Light (Mark Only One) <input type="radio"/> Dark-Lighted <input type="radio"/> Dark-Unlighted <input type="radio"/> Other/Unknown	Area Total Lanes Speed Limit Posted <input type="radio"/> Yes <input type="radio"/> No
Construction Zone (if applicable) (Mark One From Each Group) Type Lane Closed Activity <input type="radio"/> Const./Maint. <input type="radio"/> Yes <input type="radio"/> On Road <input type="radio"/> Off Road <input type="radio"/> None <input type="radio"/> Utility <input type="radio"/> No			Road Condition (Mark Only One) <input type="radio"/> Snowy <input type="radio"/> Muddy <input type="radio"/> Slushy <input type="radio"/> Debris <input type="radio"/> Other/Unknown		

Prefix Road Name Divided Roadway (N S E W) Road Type Suffix
 Distance FT North East Beginning of Ramp North East Beginning of Ramp
 MI South West End of Ramp

Prefix Intersecting Road Divided Roadway (N S E W) Road Type Suffix
 Unit Number State Driver License Number Date of Birth MM DD YYYY
 License Type Sex Total Occup Hazard Action
 O CY M F
 C F F
 M R

Unit Type Name Street Address City State Zip Phone Number
 MV B P E (train)
 Driver Condition Interlock Yes No Refused Not offered (Submit Results To FARS When Available)
 Alcohol Yes No Test Type Field PBT Breath Blood Urine Test Results
 Drugs Yes No Test Type Blood Urine Test Results

Vehicle Registration State Insurance Towed To/By
 VIN Vehicle Description Make Model Color Year
 Location of Greatest Damage (1-12) Vehicle Type Vehicle Direction Special Vehicles Private Trailer Type
 PA CY OR North South East West
 VA MO Other Truck/Bus
 PU GC SM (Complete Truck/Bus Section)
 ST

First Name Middle Last Date of Birth MM DD YYYY Sex Position Restraint Hospital
 Street Address City State Zip Phone Number
 Injury K A B C O Airbag Deployed Yes No Not Equipped

First Name Middle Last Date of Birth MM DD YYYY Sex Position Restraint Hospital
 Street Address City State Zip Phone Number
 Injury K A B C O Airbag Deployed Yes No Not Equipped

Person Advised of Damaged Traffic Control Date Time Damaged Property Public Y N
 Owner & Phone Name Address
 Name Phone Number Age Pos. Rest. Address
 Name Phone Number Age Pos. Rest. Address

UD-10 SERIAL NUMBER SERIAL # Serial Override Number
 Do Not Write or Mark in This Area

Do Not Write or Mark On This Side of The Line
 LOCATION
 UNIT / DRIVER
 PASSENGERS
 OppScan INSIGHT™ forms by Pearson NGS MM249695-2 8 GS03 Printed in U.S.A.

Do Not Write or Mark Below This Line



UD-10 (BACK)

BACK

Unit Number		State		Driver License Number		Date of Birth MMDDYYYY		License Type O <input type="radio"/> CY <input type="radio"/> C <input type="radio"/> F <input type="radio"/> M <input type="radio"/> R <input type="radio"/>		Sex M <input type="radio"/> F <input type="radio"/>		Total Occup		Hazard Action																																																											
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Do Not Write or Mark On This Side of The Line
 Michigan State Police, Traffic Crash Reporting Section,
 7150 Harris Drive, Lansing, MI 48913
 Do Not Write or Mark On This Side of The Line
 Do Not Write or Mark On This Side of The Line

Do Not Write or Mark Below This Line



MICHIGAN VEHICLE CODE Public Act 300 of 1949

Edited by the Office of Highway Safety Planning for discussion purposes.
Editorial remarks by OHSP appear in italic print.

MCL 257.622, Amended 2003 - The driver of a motor vehicle involved in an accident that injures or kills any person, or that damages property to an apparent extent totaling \$1,000.00 or more, shall immediately report that accident at the nearest or most convenient police station, or to the nearest or most convenient police officer. The officer receiving the report, or his or her commanding officer, shall immediately forward each report to the director of the Department of State Police on forms prescribed by the director of the Department of State Police (*State of Michigan Traffic Crash Report, also known as the UD-10*). The forms shall be completed in full by the investigating officer. The director of the Department of State Police shall analyze each report relative to the cause of the reported accident and shall prepare information compiled from reports filed under this section for public use. A copy of the report under this section . . . shall be retained for at least three years at the local police department, sheriff's department, or local state police post making the report. (*As the repository of the UD-10's submitted by all Michigan law enforcement agencies, the Department of State Police processes all UD-10's received at the Criminal Justice Information Center (CJIC). The CJIC retains an electronic copy of UD-10's for ten years plus the current processing year. Electronic databases containing information from UD-10's prior to this time period are purged.*)

MCL 257.624, Amended 1980 - (1) A report required by this chapter shall not be available for use in a court action, but a report shall be for the purpose of furnishing statistical information regarding the number and cause of accidents.

(2) The Office of Highway Safety Planning (OHSP) may authorize scientific studies and research for the reduction of death, injury, and property losses. All information, records of interviews, written reports, statements, notes, memoranda, or other data collected pursuant to the scientific studies and research conducted by the state, or by other persons, agencies, or organizations authorized by OHSP shall be used solely for the purpose of medical or scientific research and shall not disclose the name or identity of a person unless the person authorizes, in writing, the use of his or her name or identity. If a subject of the research study is deceased, the executor or heir of the deceased person may authorize, in writing, the disclosure of the deceased's name or identity. The furnishing of information to OHSP or to a representative of an authorized study or research project shall not subject a person, hospital, sanitarium, rest home, nursing home, or other person or agency furnishing the information to any action for damages or other relief. The information, records, reports, statements, notes, memoranda, or other data shall not be admissible as evidence in a court or before any other tribunal, board, agency, or person. A person participating in an authorized study or research project shall not disclose, directly or indirectly, the information so obtained except in strict conformity with the research project.

ABBREVIATIONS & ACRONYMS

- **BAC** **Bodily Alcohol Content.** (formerly referred to as Blood Alcohol Content or Blood Alcohol Concentration.) Determination of percent by weight of ethyl alcohol in blood. Usually measured in grams per liter or grams per milliliter depending on the test used.
- **CJDC** **Criminal Justice Data Center.** A division of the Michigan Department of State Police that administers data on the mainframe computer.
- **CJIC** **Criminal Justice Information Center.** A division of the Michigan Department of State Police formerly known as the Central Records Division.
- **CRD** **Child Restraint Device.** Also called child safety seat.
- **FHWA** **Federal Highway Administration.** A part of the United States Department of Transportation.
- **GDL** **Graduated Driver Licensing**
- **HBD** **Had Been Drinking**
- **HNBD** **Had Not Been Drinking**
- **KABC** Injury severity scale for traffic crash-related injuries: **K - Fatal, A - Incapacitating, B - Nonincapacitating, C - Possible.** See Glossary for definitions.
- **MALI** **Michigan Accident Location Index**
- **MCLS** **Michigan Crash Location System**
- **MDCH** **Michigan Department of Community Health** (formerly Michigan Department of Public Health.)
- **MDOS** **Michigan Department of State**
- **MDOT** **Michigan Department of Transportation**
- **NHTSA** **National Highway Traffic Safety Administration.** A part of the United States Department of Transportation.
- **OHSP** **Office of Highway Safety Planning.** A division of the Michigan Department of State Police.
- **OWI** **Operating While Intoxicated.** Refers to a person who is driving a vehicle while either under the influence of alcohol, a controlled substance, or both; OR has a BAC of .08 or greater.
- **PDO** **Property Damage Only.** Refers to a traffic crash lacking personal injuries.
- **UD-10** Form number ascribed to **Michigan Traffic Crash Report** form, official document used to report traffic crashes in Michigan.
- **UMTRI** **University of Michigan Transportation Research Institute**
- **USDOT** **United States Department of Transportation**
- **VMT** **Vehicle Miles Traveled.** The estimated total number of miles traveled annually by motor vehicles on Michigan trafficways.

GLOSSARY

- **Bicyclist** – “Bicycle” means a device propelled by human power upon which a person may ride, having either two or three wheels in a tandem or tricycle arrangement, all of which are over 14 inches in diameter.
- **Bus** - Any passenger-carrying vehicle designed to transport 16 or more passengers, including the driver.
- **Crash Rate** - The number of crashes per 100 million vehicle miles traveled.
- **Crash Type** - A crash is typed by the first injury or damage-producing event, which may or may not be the most serious or significant event.
- **Death Rate** - Deaths per 100 million vehicle miles.
- **Driver/Operator** - The person who is in actual physical control of a vehicle in transit.
- **Drug-Involved Crash** – Drug use prior to the crash by a driver, pedestrian, or cyclist as reported by the police, the coroner, or other accepted authorities.
- **Fatal Crash** - A fatality is counted when a person dies due to injuries from a traffic crash. Prior to 1979, deaths were counted if they occurred up to one year after the crash; in 1979 this time period was reduced to 90 days. In 1988 this was further reduced to 30 days.
- **Graduated Driver Licensing** - Michigan Public Act 387 effective April 1, 1997, phasing in teenage driving privileges.
- **Had Been Drinking (HBD) Crash** - Drinking prior to the crash by a driver, pedestrian, or cyclist as reported by the police, the coroner, or other accepted authorities. Beginning with year 2000 data, the information provided for alcohol contains data for alcohol-related crashes only. This figure DOES NOT include the combined number for alcohol and drug related crashes as has been reported in prior years.
- **Harmful Event** - A harmful event is an occurrence of injury or damage.
- **Holiday** - Refers to the length of the Holiday weekend period, including the hours of 6:00 PM to midnight of the day preceding the Holiday. Please refer to the table below for the time period connected to Holidays falling on a given day of the week.

Holiday Day	Time Period		Number of Days
	From	To	
Sunday	6:00 PM FRI	23:59 PM MON	3 1/4
Monday	6:00 PM FRI	23:59 PM MON	3 1/4
Tuesday	6:00 PM FRI	23:59 PM TUE	4 1/4
Wednesday	6:00 PM TUE	23:59 PM WED	1 1/4
Thursday	6:00 PM WED	23:59 PM SUN	4 1/4
Friday	6:00 PM THU	23:59 PM SUN	3 1/4
Saturday	6:00 PM THU	23:59 PM SUN	3 1/4

- **Ignition Interlock** - An alcohol concentration measuring device that prevents a motor vehicle from being started at any time without first determining through a deep lung sample the operator's breath alcohol level. The system shall be calibrated so that the motor vehicle may not be started if the breath alcohol level of the operator, as measured by the test, reaches a level of 0.025 grams per 210 liters of breath.
Michigan Vehicle Code, Sec. 257.6251 (6)

GLOSSARY (continued)

- **Injury Crash** - Any crash involving an injury other than a fatal injury.
- **Injury Severity**
 - K (Fatal)** - Any injury that results in death.
 - A (Incapacitating Injury)** - Any injury, other than a fatal injury, that prevents the injured person from walking, driving or normally continuing the activities the person was capable of performing before the injury occurred.
 - B (Nonincapacitating Injury)** - Any injury not incapacitating but evident to observers at the scene of the crash in which the injury occurred.
 - C (Possible Injury)** - Any injury reported or claimed that is not a fatal injury, incapacitating injury or nonincapacitating injury.
- **In Transport** - Denotes a motor vehicle in motion or on a roadway.
- **Licensed Drivers** - All valid Michigan drivers on file, including suspended, revoked, and denied drivers (as long as their license has not expired).
- **Most Severe Outcome in Crash** - The most severe injury sustained by any person involved in the crash, or property damage only.
- **Most Severe Outcome in Vehicle** - The most severe injury sustained by any person in the vehicle, or property damage only.
- **Motor Vehicle Crash** - A crash that involves a motor vehicle in transport on a public trafficway (in Michigan) and results in injury, death, or at least \$1,000 in property damage.
- **Noncollision** - A crash that does not involve a collision with another motor vehicle. Types of noncollision crashes include explosion or fire in vehicle, rollover, immersion, etc.
- **Occupant** - Any injured or killed person in or on a motor vehicle, *including* all drivers.
- **Passenger** - Any injured or killed person in or on a motor vehicle, *excluding* the driver.
- **Pedestrian** - Any person on foot; person on skis, skates or roller blades; rider of horse; horse and buggy (each occupant including the driver will be listed as a separate pedestrian unit); nonmotorized wheelchair.
- **Property Damage Only (PDO) Crash** - A crash that results in no fatalities or injuries, with a value of \$1,000 as a reporting threshold.
- **Traffic Unit** - Anything in transit on a public trafficway (i.e., motor vehicle, motorcycle, bicycle, pedestrian, snowmobile, farm equipment).
- **Transition Area** - Increase or decrease in the number of travel lanes.
- **Valid Drivers** - Excludes non-valid categories such as no license, out-of-state drivers with Michigan violations, deceased, and licenses expired three months prior to Department of State run date.
- **“Zero Tolerance”** - Law that began November 1, 1994, making it illegal for any person in Michigan under the age of 21 to consume alcohol in the presence of a law enforcement officer, or to have a BAC of 0.02 percent or more. Sometimes referred to as Michigan’s “Point Oh Two” law.

TABLE OF CONTENTS

QUICK FACTS & FIGURES

2006 Quick Facts	3
Reported Statewide Traffic Crashes by County in Michigan	5
Michigan's Crash Watch 2006	7

HISTORICAL INFORMATION

10 Year (1997-2006)

Vehicle Registrations	11
Vehicle Miles Traveled	11
Total Crashes	11
Motor Vehicle Deaths	12
Injuries in Motor Vehicle Crashes	12
Total Fatal Crashes	12
HBD Fatalities	13
HBD Injuries	13
HBD Fatal Crashes	13
Restraint Usage	14
Licensed Drivers	14
Mileage Death Rate	14
Total Crash Rate	15
Personal Injury Crash Rate	15
Property Damage Crash Rate	15
Male vs. Female Drivers in All Crashes	16
Male vs. Female Drivers in Fatal Crashes	16
Male vs. Female Drinking Drivers in All Crashes	16
All Drivers in All and Fatal Crashes	18
Teen/Young Adult Drivers in All and Fatal Crashes	18
Elderly Drivers in All and Fatal Crashes	18
All Drinking Drivers in All and Fatal Crashes	20
Teen/Young Adult Drinking Drivers in All and Fatal Crashes	20
Elderly Drinking Drivers in All and Fatal Crashes	20
Motor Vehicles in All and Fatal Crashes	22
Motorcycles in All and Fatal Crashes	22
Pedestrians in All and Fatal Crashes	22
Bicycles in All and Fatal Crashes	24
Snowmobiles on Roadway in All and Fatal Crashes	24
ORV/ATV's on Roadway in All and Fatal Crashes	24
Vehicle-Train Crashes	26
Vehicle-Deer Crashes	26
Farm Equipment Crashes	26
Death & Injury per Crash-Involved Occupant	27
Michigan, U.S. and Surrounding States - Mileage Death Rates	28
Michigan, U.S. and Surrounding States - Fatalities and VMT	29
Average Age of Drivers in Crashes	30

5 Year (2002-2006)

Age of Persons Killed, Total	31
Age of Drivers Involved in Fatal Crashes	32
Age of Drivers Involved in Single Vehicle Fatal Crashes	32
Age of Bicyclists Killed	33
Age of Pedestrians Killed	33
Action of Pedestrians Killed	33
Selected Holiday Data	34
Motor Vehicle Deaths and Mileage by Month	35

1 Year (2005-2006)	
Summary Trends	37
More Michigan Crash Facts	39
2006 Cost of Crashes in Michigan	39
Map of Where Traffic Fatalities Occurred	40
Years (1955-2006)	
Motor Vehicle Traffic Deaths in Michigan by Month	41
Motor Vehicle Traffic Crash and Related Data.....	42

SPECIAL FOCUS

RED-LIGHT-RUNNING CRASHES

Section Introduction.....	45
Speed Limit	47
Crash Type.....	47
Special Circumstances	48
Driver Conditions	48

HEAVY TRUCK/BUS

Section Introduction.....	49
Action Prior to Crash - Driver Action	51
Most Harmful Event.....	52
Crash Type.....	54
Hazardous Action	54
Relationship to Roadway	55
Time and Severity.....	55
Roadway Type.....	55
Day of Week.....	56
Driver Gender.....	56
Number of Occupants in.....	56
Vehicle Type.....	57
Hazardous Citation Issued.....	58

AGE

Person's Age and their Injury Severity by Person Type.....	61
--	----

Driver Age 16-24

Action Prior to Crash - Driver Action	65
Most Harmful Event.....	66
Crash Type.....	68
Relationship to Roadway	68
Roadway Type.....	68
Time and Severity.....	69
Hazardous Action	69
Day of Week.....	70
Driver Gender.....	70
Number of Occupants in Motor Vehicle	70
Vehicle Type.....	71

Driver Age 25-64

Action Prior to Crash - Driver Action	73
Most Harmful Event.....	74
Crash Type.....	76
Relationship to Roadway	76
Roadway Type.....	76
Time and Severity.....	77
Hazardous Action	77
Day of Week.....	78

Driver Gender.....	78
Number of Occupants in Motor Vehicle	78
Vehicle Type.....	79
Driver Age 65 & Over	
Action Prior to Crash - Driver Action	81
Most Harmful Event.....	82
Crash Type.....	84
Relationship to Roadway	84
Roadway Type.....	84
Time and Severity.....	85
Hazardous Action	85
Day of Week.....	86
Driver Gender.....	86
Number of Occupants in Motor Vehicle	86
Vehicle Type.....	87

ALCOHOL

Injury Experience for Persons Who Had Been Drinking	91
Drivers Drinking and/or Using Drugs & Injury Severity in Crash	92
All Crashes and HBD Crashes by Injury Severity	93
Death & Injury per Crash Involved Occupant	94
All Drivers and HBD Drivers Injury Severity - Ejected vs. Not Ejected.....	95
All Occupants and Occupants of HBD Crashes Injury Severity - Ejected vs. Not Ejected	96
Injury Severity & Restraint Use for Crash Involved KABC Drivers	97
Injury Severity & Restraint Use for Crash Involved KABC Occupants	98
Alcohol Involvement in Fatal Crashes	99
Alcohol Involvement in Injury Crashes	101
Reported Age of Drinking Drivers Involved in Crashes by County.....	103
Male Drivers & Injury Severity in Crash	105
Male Drinking Drivers & Injury Severity in Crash.....	106
Female Drivers & Injury Severity in Crash.....	107
Female Drinking Drivers & Injury Severity in Crash.....	108
Fatal Crashes and Fatalities with Drinking Involvement by County	109
Map of Traffic Fatalities with Drinking Involvement by County.....	111
Most Severe Outcome in HBD Crashes by County	112
County Ranking by HBD Fatal Crash Rate per 1,000 Michigan Residents.....	114
Map of County Ranking by HBD Fatal Crash Rate.....	116
Reported Statewide Alcohol Involved Traffic Crashes by County in Michigan	117

DEER

Map of Michigan Motor Vehicle-Deer Involved Crashes	121
Light Condition and Time of Day in Motor Vehicle-Deer Crashes.....	122
Monthly and Seasonal Rates for Motor Vehicle-Deer Crashes.....	123
Reported Statewide Deer Crashes by County in Michigan	124

CRASH - *Circumstances common to all traffic units in a crash*

All Crashes Injury Severity by Month.....	129
Crash Experience by Roadway Type	130
Crash Type	131
Relationship to Roadway.....	131
Time and Severity	132
Day of Week	133
Road Condition	134
Weather Condition	135
Light Condition	136
Intersection Crashes by Traffic Control Type	137

Construction Zone Crashes	138
VEHICLE/DRIVER - <i>Characteristics specific to individual traffic units</i>	
Vehicle Type Crash Involvement.....	141
Vehicle Types in Crashes by Crash Severity.....	142
Action Prior to Crash - Driver Action	143
Action Prior to Crash - Motorcyclist Action	144
Action Prior to Crash - Bicyclist Action	145
Action Prior to Crash - Pedestrian Action	146
Most Harmful Event	147
Vehicle Defects in Crash Involvement.....	149
Driver Hazardous Action	149
Michigan Bicycle Crashes	150
Michigan Pedestrian Crashes	151
Michigan Snowmobile Crashes	152
Michigan ORV/ATV Crashes.....	154
Snowmobile Driver Hazardous Action	155
ORV/ATV Driver Hazardous Action.....	155
Michigan Farm Equipment Crashes	156
Michigan Vehicle-Train Crashes	156
Michigan Motorcycle Crashes	156
Driver Gender Information - All Crashes	157
Person Age: Demographics and Crash Involvements	158
Crash Rate per Licensed Driver by Age of Driver in All Crashes	159
Reported Age of Drivers Involved in All Crashes by County	160
Driver Age.....	162
Driver Condition	163
Driver Injury Severity by Restraint, Alcohol, and Drug Use.....	163
Registration Transactions	164
OCCUPANT/PERSON - <i>Specific information on each driver and injured person in a crash</i>	
Age & Gender of Occupants Killed & Injured in Motor Vehicle Crashes	169
Reported Occupant Restraint Usage for All Drivers and Injured Passengers.....	170
Motor Vehicle Occupants & Injury Severity by Seating Position and Known Belt Usage	171
Reported Restraint Use - Children	172
Motor Vehicle Occupant Injury Severity by Known Airbag Deployment	173
Age & Gender of Motorcyclists Killed & Injured in Motor Vehicle Crashes.....	174
Motorcycle Helmet Use and Injury Severity	175
Occupant Injury Outcome by Vehicle Type	176
REFERENCES	
References and Reporting Agencies.....	179
Resources.....	180
INDEX	
Index.....	183

2006

2006

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**Quick Facts
& Figures**

2006 QUICK FACTS

- ★ Some exposure factor comparisons between 2006 and 2005 show motor vehicle registrations decreased **1.3** percent, the number of licensed drivers on Michigan roads increased **0.3** percent, and vehicle mileage increased **0.9** percent.
- ★ The 2006 death rate decreased slightly to **1.04** deaths per 100 million miles of travel, below the ten-year average of **1.3** (1997-2006).
- ★ There were **1,084** persons killed and **81,942** persons injured in **315,322** reported motor vehicle traffic crashes in Michigan during 2006. Compared with the 2005 experience, deaths decreased **4.0** percent, persons injured decreased **9.5** percent, and total reported crashes decreased **10.1** percent.
- ★ There were **315,322** reported crashes, of which **1,002** were fatal, **60,176** were personal injury, and **254,144** were property damage only crashes.
- ★ Of all fatal crashes, **25.7** percent occurred at intersections.
- ★ Of all fatal crashes, **34.8** percent involved at least one drinking operator, bicyclist, or pedestrian, **27.9** percent involved drinking but no drugs, **4.8** percent involved drugs but no drinking, and **6.9** percent involved both drinking and drugs.
- ★ Excessive speed was indicated as the hazardous action by **19.8** percent of the drivers involved in fatal crashes.
- ★ In 2006 there were **117,622** single vehicle crashes, a decrease of **6.7** percent from last year's count of **126,064**.
- ★ Of the **315,322** total crashes, **117,622 (37.3%)** involved one vehicle.
- ★ Of the **1,002** fatal crashes, **522 (52.1%)** involved one vehicle.
- ★ Of the **349** alcohol-related fatal crashes, **228 (65.3%)** involved one vehicle. This is a **10.1** percent increase from last year's figure of **207** single vehicle, alcohol-related fatal crashes.
- ★ Of the **1,551** drivers involved in fatal crashes, **11.9** percent were under 21 years of age and **21.9** percent of all drivers involved in fatal crashes were under 25 years of age.
- ★ Of the **10,095,643** persons living in Michigan [1] one out of every **9,313** was killed in a traffic crash; one out of every **123** persons was injured.
- ★ For each person killed, **75.6** persons were injured.
- ★ According to figures provided by the Michigan Department of Community Health [2], accidental death for children in motor vehicle crashes routinely outpaces the next two most frequent causes: fire and drowning.
- ★ According to the Michigan Department of Community Health, four out of five accidental deaths for teenagers and young adults (ages 15-24) are due to motor vehicle crashes.
- ★ The pedestrian death toll for Michigan stands at **137** persons, a decrease of **1** death from the 2005 figure.

- ★ For each pedestrian killed, there were **16.0** pedestrians injured.
- ★ Of the pedestrians killed, **30.7** percent were killed while crossing streets other than at intersections.
- ★ Of all pedestrians killed, **12.4** percent were under the age of 21 and **27.7** percent were 55 and older.
- ★ Children under the age of 16 accounted for **14.3** percent of the bicycle deaths.
- ★ Of the **544,952** drivers and injured passengers involved in crashes, **465,803** or **85.5** percent were *reported* to have been using occupant restraints. Restraint usage among fatal victims, where usage was known, was reported to be **62.5** percent in 2006.
- ★ Motor vehicle occupants age 75 to 110 had the highest reported restraint usage (**95.3%**) among age groups. Children age 11 to 15 had the lowest reported restraint usage (**77.1%**).
- ★ The economic loss in Michigan traffic crashes amounted to **\$8,731,508,200**. If costs were spread across the state's population this would translate into a loss of \$865 per state resident.

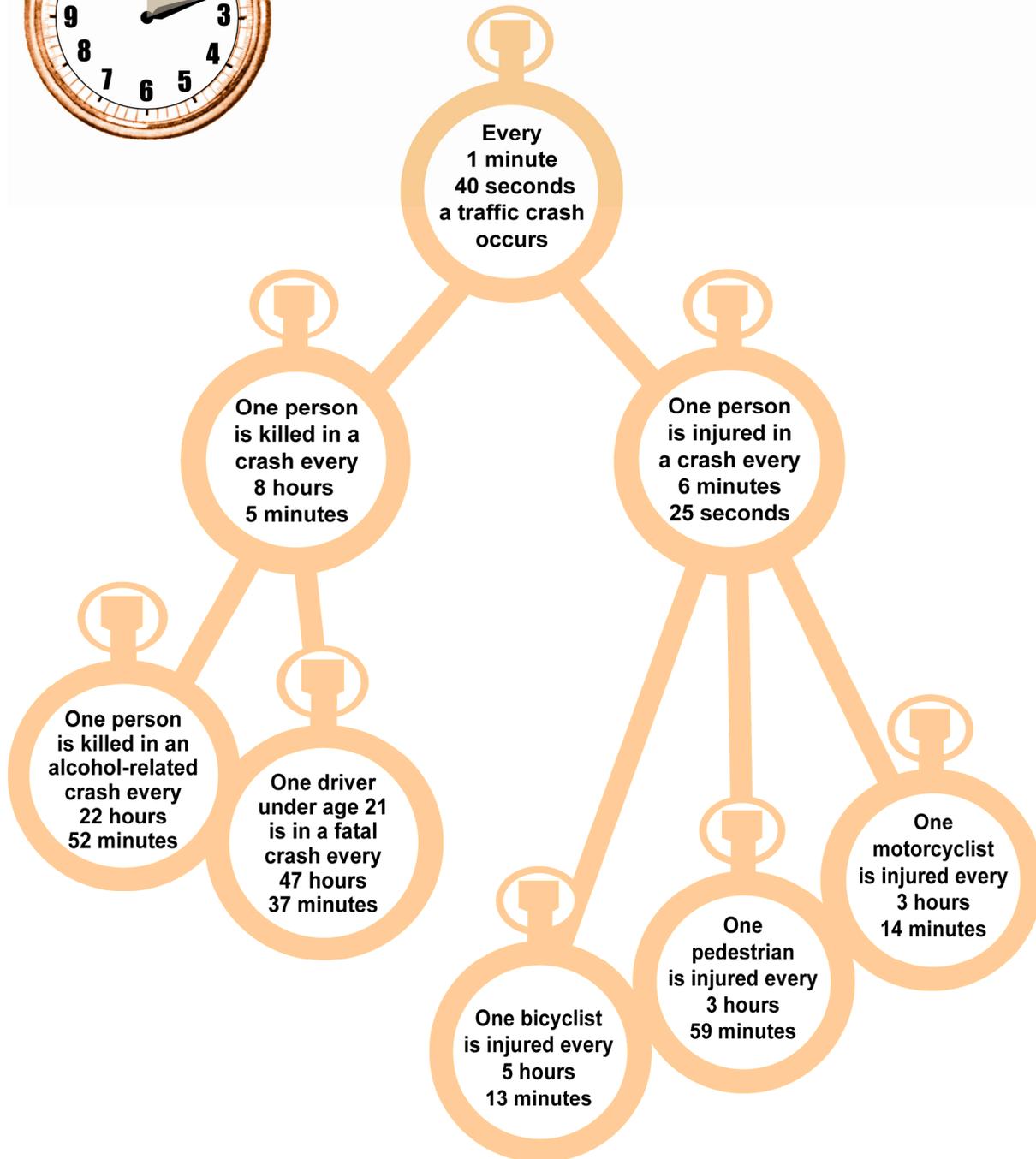
REPORTED STATEWIDE TRAFFIC CRASHES BY COUNTY IN MICHIGAN

COUNTY	All Crashes	Fatal	Injury	Property Damage	Inter-state	US Route	State Route	Local Street	Persons Killed	Persons Injured
Alcona	590	3	63	524	0	98	114	378	4	90
Alger	340	0	66	274	0	34	167	139	0	83
Allegan	3,293	15	594	2,684	216	362	708	2,007	15	840
Alpena	950	4	142	804	0	209	174	567	4	181
Antrim	935	6	125	804	0	209	184	542	6	166
Arenac	884	7	113	764	111	248	79	446	9	169
Baraga	398	1	45	352	0	152	62	184	1	66
Barry	2,131	12	318	1,801	0	0	814	1,317	13	453
Bay	3,134	7	623	2,504	279	136	1,001	1,718	7	835
Benzie	571	2	97	472	0	146	86	339	2	139
Berrien	4,567	21	921	3,625	732	502	936	2,397	21	1,294
Branch	1,780	12	282	1,486	195	389	86	1,110	12	390
Calhoun	5,246	16	737	4,493	1,071	0	1,236	2,939	20	976
Cass	1,782	11	301	1,470	0	197	513	1,072	11	424
Charlevoix	1,080	3	152	925	0	275	183	622	3	213
Cheboygan	1,102	3	217	882	182	89	248	583	3	278
Chippewa	1,240	5	226	1,009	282	0	326	632	5	304
Clare	1,330	4	148	1,178	0	364	268	698	6	211
Clinton	2,506	4	346	2,156	372	322	336	1,476	6	463
Crawford	656	5	92	559	147	20	201	288	7	128
Delta	1,724	3	203	1,518	0	564	254	906	3	256
Dickinson	1,058	4	122	932	0	347	276	435	4	158
Eaton	3,777	11	545	3,221	629	0	1,276	1,872	11	738
Emmet	1,394	2	208	1,184	6	506	103	779	2	287
Genesee	11,971	56	2,913	9,002	1,906	340	1,587	8,138	60	4,230
Gladwin	905	2	120	783	0	0	380	525	2	170
Gogebic	353	0	67	286	0	177	33	143	0	88
Grand Traverse	3,215	13	547	2,655	0	843	386	1,986	16	756
Gratiot	1,735	9	205	1,521	0	428	290	1,017	9	291
Hillsdale	1,912	10	265	1,637	0	236	403	1,273	11	354
Houghton	1,147	5	183	959	0	392	295	460	5	245
Huron	1,719	4	177	1,538	0	0	751	968	4	277
Ingham	9,584	16	1,691	7,877	1,623	452	2,028	5,481	17	2,196
Ionia	2,404	4	319	2,081	299	0	701	1,404	4	440
Iosco	908	5	147	756	0	206	223	479	5	204
Iron	680	3	73	604	0	274	112	294	3	88
Isabella	2,836	7	388	2,441	0	607	307	1,922	7	558
Jackson	6,044	21	1,021	5,002	980	345	883	3,836	22	1,357
Kalamazoo	8,446	23	1,523	6,900	1,080	554	1,475	5,337	25	2,005
Kalkaska	678	2	111	565	0	133	155	390	2	136
Kent	19,537	51	3,961	15,525	1,989	1,568	3,959	12,021	57	5,323
Keweenaw	107	0	20	87	0	49	12	46	0	26
Lake	510	1	66	443	0	99	95	316	1	81
Lapeer	3,189	7	530	2,652	189	0	771	2,229	7	733
Leelanau	628	4	80	544	0	0	275	353	4	109
Lenawee	2,725	14	523	2,188	0	533	746	1,446	15	739

REPORTED STATEWIDE TRAFFIC CRASHES BY COUNTY IN MICHIGAN (Continued)

COUNTY	All Crashes	Fatal	Injury	Property Damage	Inter-state	US Route	State Route	Local Street	Persons Killed	Persons Injured
Livingston	5,097	19	990	4,088	1,059	478	623	2,937	23	1,295
Luce	213	4	26	183	0	0	121	92	4	41
Mackinac	636	0	88	548	128	142	154	212	0	113
Macomb	22,660	57	5,059	17,544	2,459	0	6,167	14,034	61	6,914
Manistee	886	2	106	778	0	215	151	520	2	143
Marquette	2,122	6	351	1,765	0	716	333	1,073	6	505
Mason	1,439	1	180	1,258	0	521	72	846	1	239
Mecosta	2,177	6	246	1,925	0	273	703	1,201	7	358
Menominee	1,218	4	156	1,058	0	473	134	611	4	242
Midland	2,476	3	422	2,051	0	345	364	1,767	4	565
Missaukee	647	3	71	573	0	0	239	408	3	105
Monroe	3,891	17	812	3,062	519	780	491	2,101	18	1,102
Montcalm	2,851	8	355	2,488	0	110	950	1,791	8	482
Montmorency	379	2	54	323	0	0	161	218	2	73
Muskegon	5,011	20	1,159	3,832	74	971	655	3,311	22	1,570
Newaygo	1,716	9	320	1,387	0	0	603	1,113	10	437
Oakland	37,415	58	7,614	29,743	5,535	2,088	6,257	23,535	63	10,183
Oceana	1,110	3	172	935	0	261	121	728	3	251
Ogemaw	951	5	141	805	146	0	268	537	5	201
Ontonagon	412	5	49	358	0	112	188	112	5	66
Osceola	1,223	1	153	1,069	0	343	186	694	1	205
Oscoda	342	3	60	279	0	0	146	196	3	81
Otsego	995	6	162	827	225	0	277	493	8	244
Ottawa	6,978	26	1,374	5,578	736	936	649	4,657	28	1,929
Presque Isle	585	1	53	531	0	134	148	303	1	67
Roscommon	890	3	116	771	142	95	232	421	3	151
Saginaw	5,996	31	1,244	4,721	476	0	1,983	3,537	33	1,789
St. Clair	4,278	17	956	3,305	801	0	796	2,681	18	1,304
St. Joseph	1,873	13	304	1,556	0	365	477	1,031	17	417
Sanilac	1,716	7	197	1,512	0	0	711	1,005	7	297
Schoolcraft	415	3	52	360	0	128	143	144	4	74
Shiawassee	2,434	13	389	2,032	274	0	719	1,441	13	545
Tuscola	1,913	14	304	1,595	0	0	686	1,227	14	424
Van Buren	2,519	11	462	2,046	466	0	504	1,549	11	638
Washtenaw	10,344	33	2,176	8,135	1,503	1,462	895	6,484	35	2,850
Wayne	54,480	161	11,969	42,350	7,131	3,051	8,996	35,302	173	16,192
Wexford	1,333	9	218	1,106	0	433	409	491	13	302
Unknown	0	0	0	0	0	0	0	0	0	0
Totals	315,322	1,002	60,176	254,144	33,962	26,837	62,210	192,313	1,084	81,942

Michigan's Crash Watch 2006



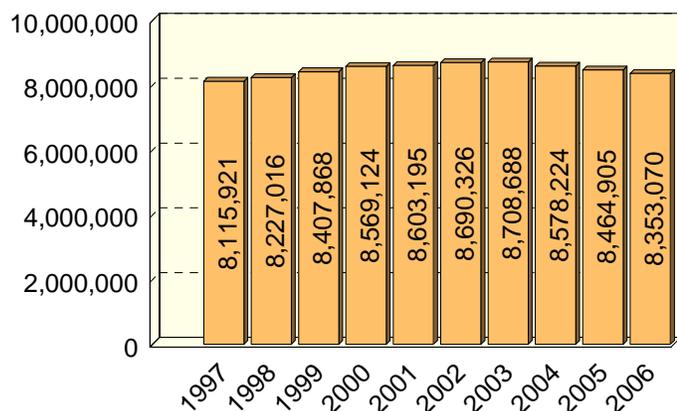
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**Historical
Information**
10-, 5-, and 1-year

10 YEAR

VEHICLE REGISTRATIONS

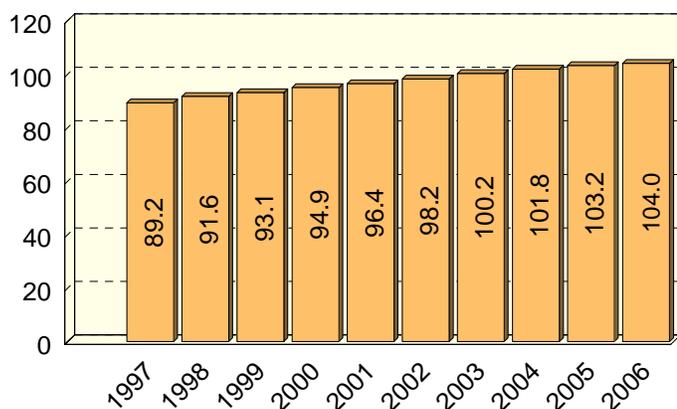
Number of Motor Vehicles



Vehicle registrations remained fairly consistent over the ten-year period, reaching a high in 2003.

VEHICLE MILES TRAVELED

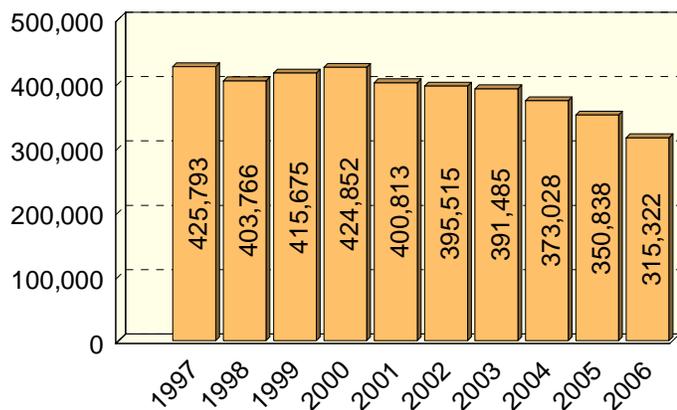
Billions of Miles



Vehicle miles traveled have increased 16.6 percent since 1997, reaching 104.0 billion miles in 2006.

CRASHES

Number of Crashes

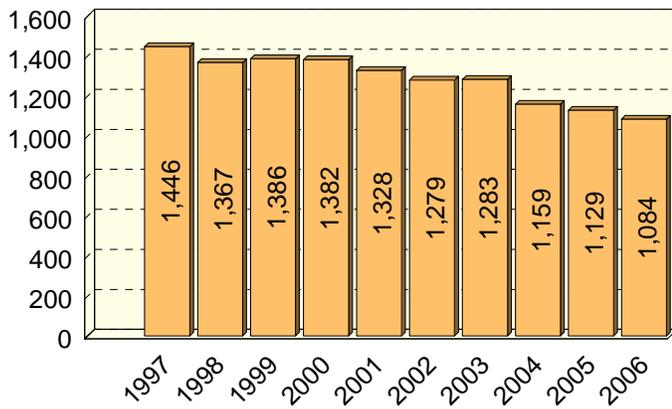


There were 315,322 total crashes statewide in 2006, a 25.9 percent decrease from 1997.

10 YEAR TRENDS (continued)

DEATHS

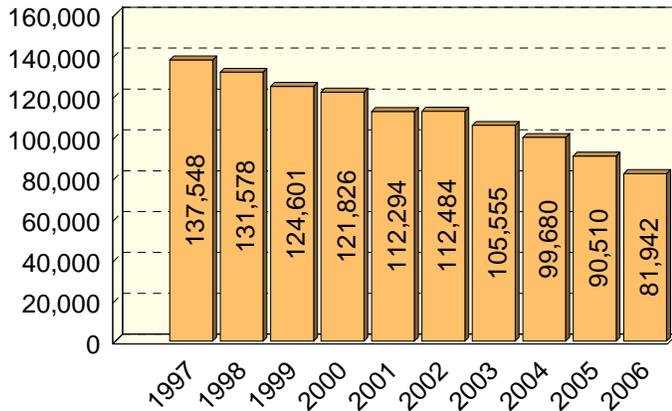
Number of Deaths



In 2006, 1,084 people died in motor vehicle crashes, a decrease of 25.0 percent from 1997.

INJURIES

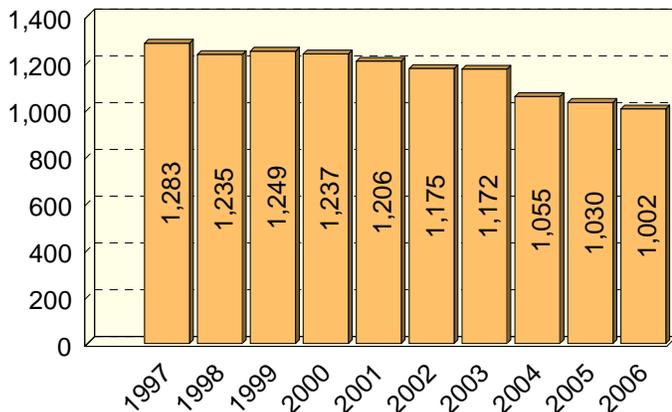
Number of Injuries



81,942 people received nonfatal injuries in motor vehicle crashes in 2006, down 40.4 percent from 137,548 in 1997.

FATAL CRASHES

Number of Fatal Crashes

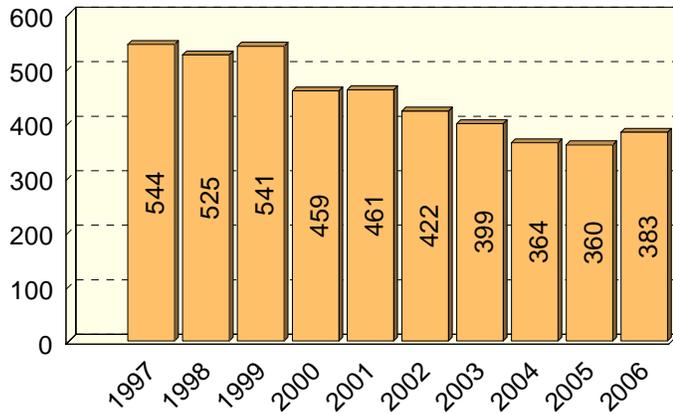


In 2006, there were 1,002 fatal crashes, down 21.9 percent from 1,283 in 1997.

10 YEAR

HBD FATALITIES

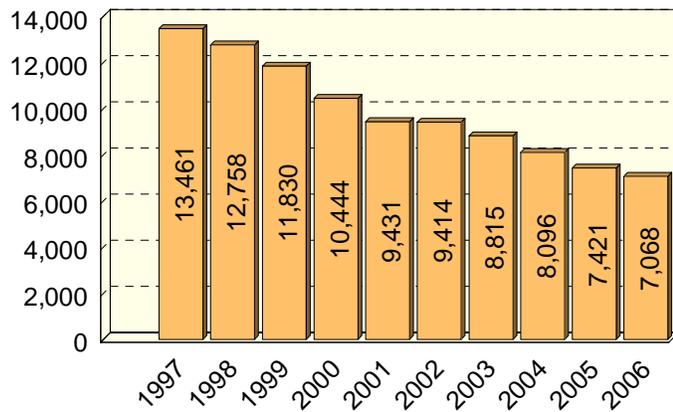
Number of HBD Fatalities



Deaths in alcohol-related crashes decreased 29.6 percent over the last ten years.

HBD INJURIES

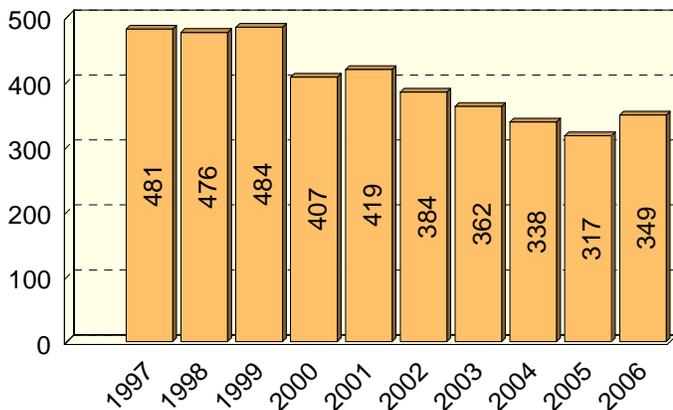
Number of HBD Injuries



Mirroring the trend in deaths, HBD injuries have decreased over the last ten years. In 2006, there were 7,068 injuries in crashes where the operator had been drinking (HBD), down 47.5 percent from 1997.

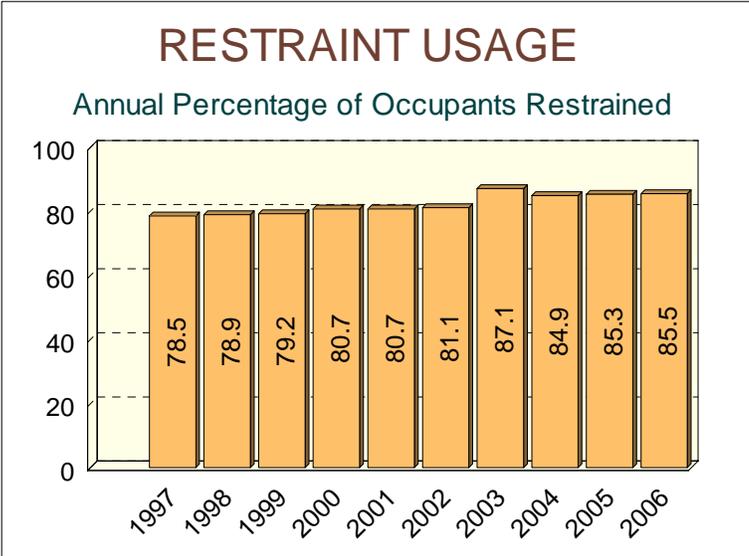
HBD FATAL CRASHES

Number of HBD Fatal Crashes

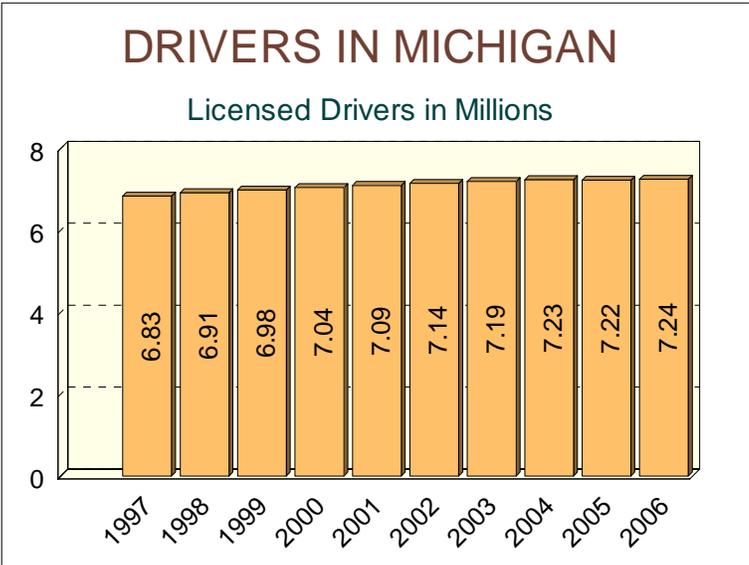


Alcohol involvement in fatal crashes has also decreased over the ten-year period. In 2006, there were 349 HBD fatal crashes where the operator had been drinking (HBD), down 27.4 percent from 1997.

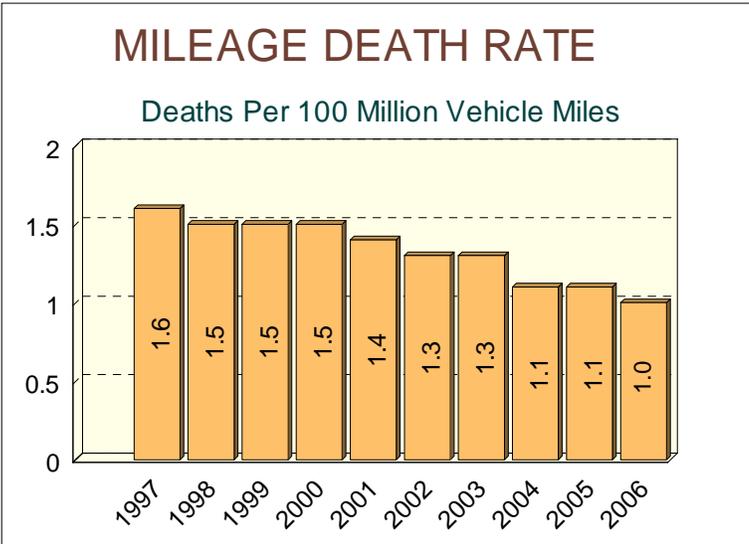
10 YEAR TRENDS (continued)



The percentage of motor vehicle occupants using restraints as reported by police in traffic crashes increased dramatically following implementation of Michigan's safety belt use law in July 1985. Restraint usage has increased 8.9 percent over the last ten years.



There were 7,238,855 licensed drivers on Michigan roadways in 2006, an increase of 6.1 percent from 1997.

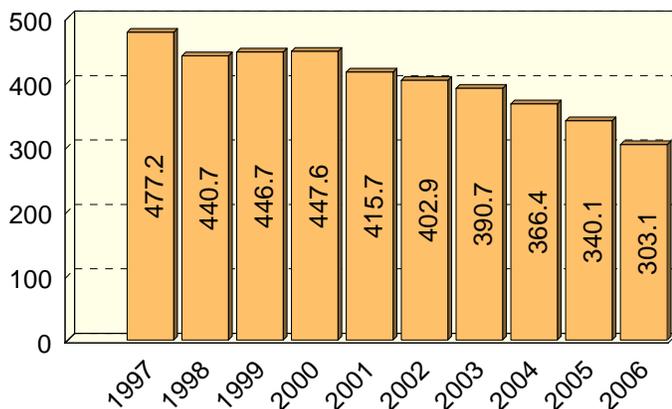


The 1.0 death rate in 2006 is a 37.5 percent decrease from the ten-year high of 1.6 in 1997.

10 YEAR

TOTAL CRASH RATE

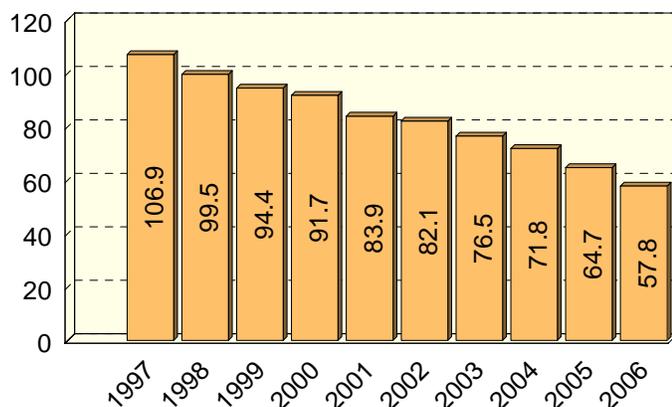
All Crashes Per 100 Million Vehicle Miles



The ten-year total crash rate peaked in 1997 at 477.2 then decreased by 36.5 percent to 303.1 in 2006.

PERSONAL INJURY CRASH RATE

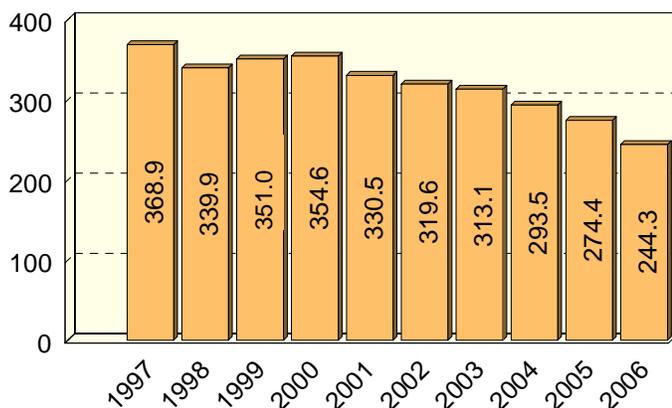
Injury Crashes Per 100 Million Vehicle Miles



The personal injury crash rate has been steadily decreasing since 1997. The 57.8 personal injury crash rate in 2006 is a 45.9 percent decrease from 1997.

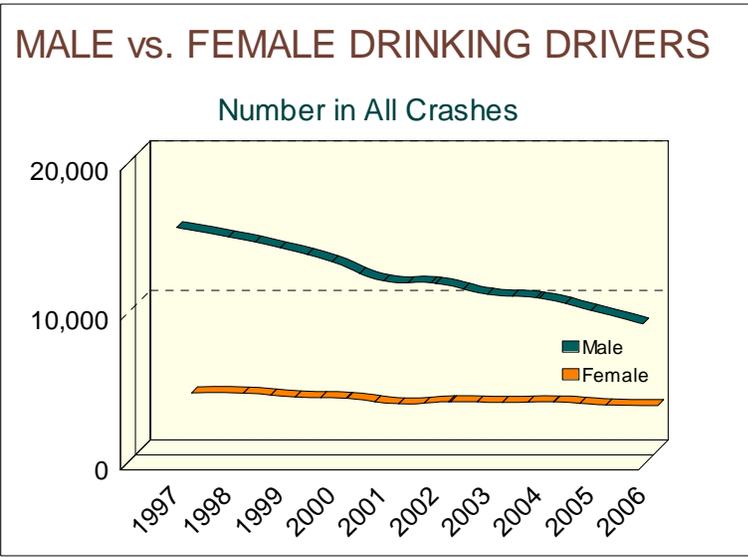
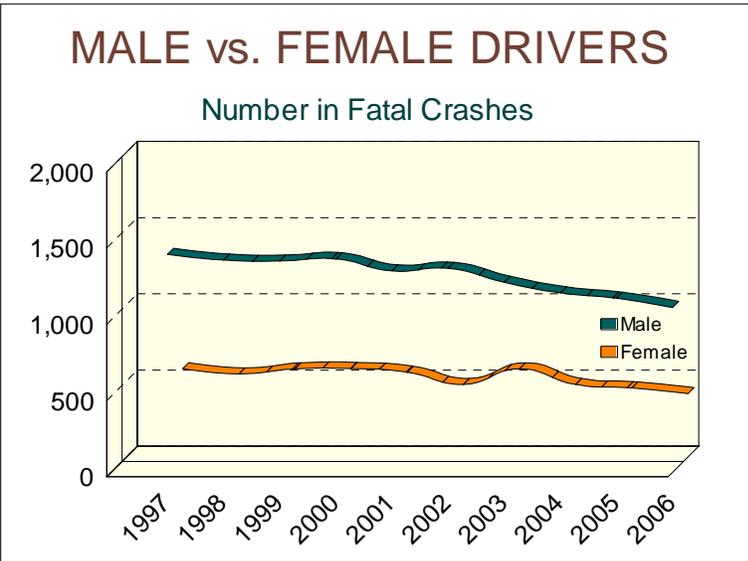
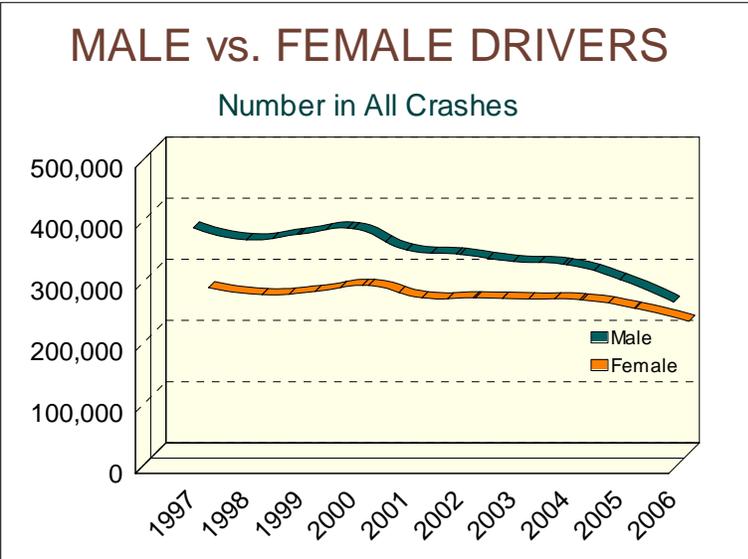
PROPERTY DAMAGE CRASHRATE

Property Damage Crashes Per 100 Million Vehicle Miles



The 244.3 property damage crash rate in 2006 is a 33.8 percent decrease from 1997.

10 YEAR TRENDS (continued)



DRIVERS IN ALL CRASHES		
	Male	Female
1997	394,044	271,131
1998	374,505	259,843
1999	383,733	264,985
2000	392,347	274,675
2001	357,684	254,636
2002	350,528	254,561
2003	338,913	252,716
2004	333,606	251,077
2005	309,487	237,343
2006	272,328	216,196

Male drivers accounted for 51.5 percent of all drivers in crashes during 2006, down slightly from 53.4 percent in 1997.

Note: 7.6 percent of all drivers (40,239) were coded as unknown gender in 2006.

DRIVERS IN FATAL CRASHES		
	Male	Female
1997	1,430	580
1998	1,391	545
1999	1,385	578
2000	1,399	580
2001	1,320	556
2002	1,337	476
2003	1,245	578
2004	1,176	475
2005	1,141	452
2006	1,080	416

Male drivers made up 69.6 percent of all drivers in fatal crashes in 2006. The 1,080 male driver count is down 24.5 percent from 1997.

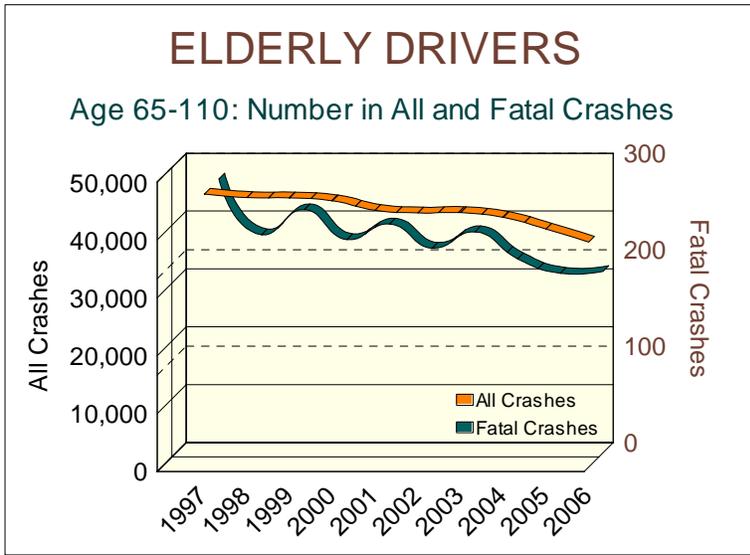
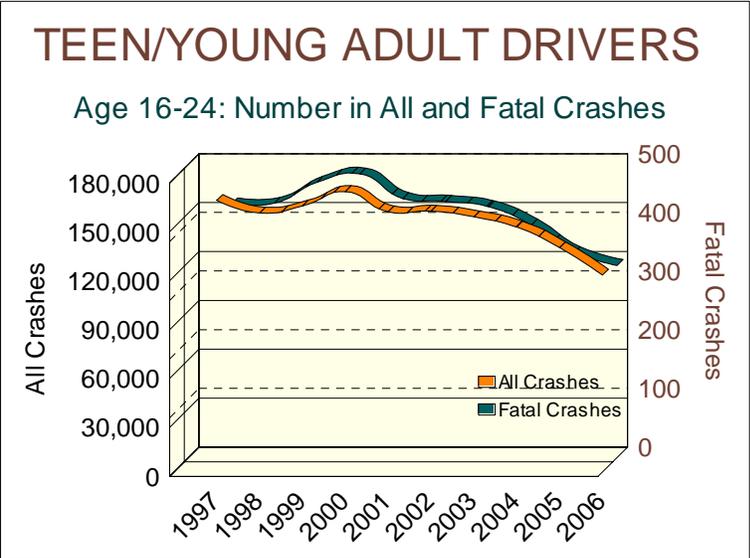
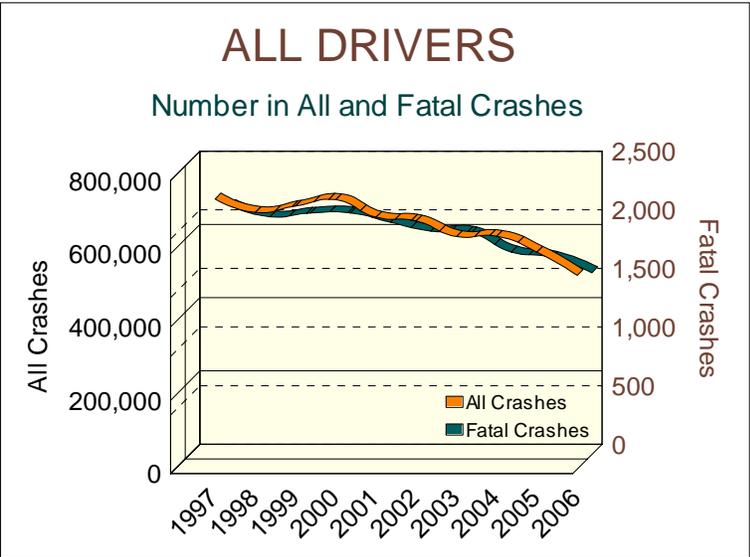
Note: 3.5 percent of drivers (55) in fatal crashes were coded as unknown gender in 2006.

DRINKING DRIVERS IN ALL CRASHES		
	Male	Female
1997	15,901	3,842
1998	15,280	3,833
1999	14,541	3,569
2000	13,609	3,474
2001	12,331	3,112
2002	12,173	3,257
2003	11,436	3,203
2004	11,179	3,242
2005	10,359	3,045
2006	9,454	2,991

Male drivers have always accounted for the majority of drinking drivers in all crashes. In 2006 males represented 75.7 percent of all drinking drivers. The 9,454 male driver count is down 40.5 percent from 1997.

Note: 0.4 percent of all drinking drivers (44) were coded as unknown gender in 2006.

10 YEAR TRENDS (continued)



10 YEAR

ALL DRIVERS		
	All Crashes	Fatal Crashes
1997	737,939	2,124
1998	701,056	2,029
1999	718,639	2,061
2000	735,664	2,062
2001	687,836	1,981
2002	677,527	1,907
2003	635,096	1,891
2004	635,913	1,728
2005	592,671	1,682
2006	528,763	1,551

Driver involvement in all crashes decreased 28.3 percent over the ten-year period.

Driver involvement in fatal crashes decreased 27.0 percent over the ten-year period.

TEEN/YOUNG ADULT DRIVERS		
	All Crashes	Fatal Crashes
1997	166,693	432
1998	158,887	433
1999	163,239	469
2000	172,059	483
2001	159,597	441
2002	160,003	436
2003	156,496	427
2004	150,220	396
2005	137,613	349
2006	120,760	327

Teen/young adult drivers (age 16-24) represent 14.5 percent of the licensed drivers in 2006.

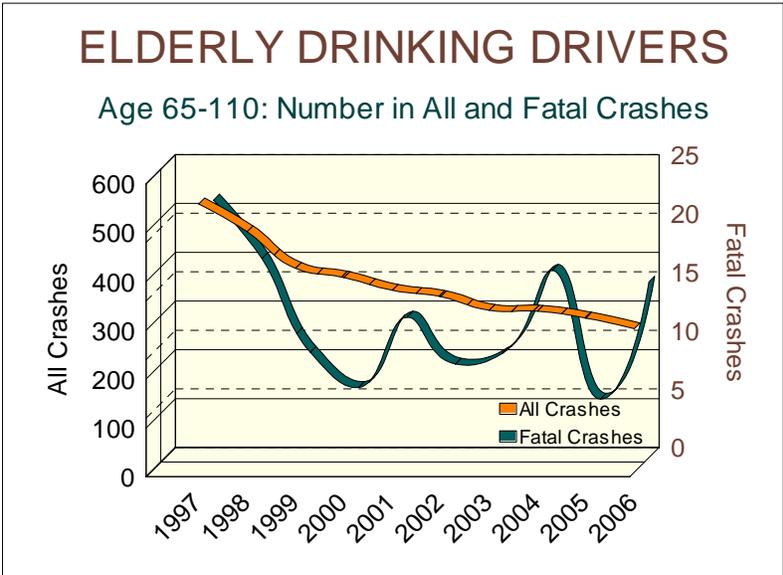
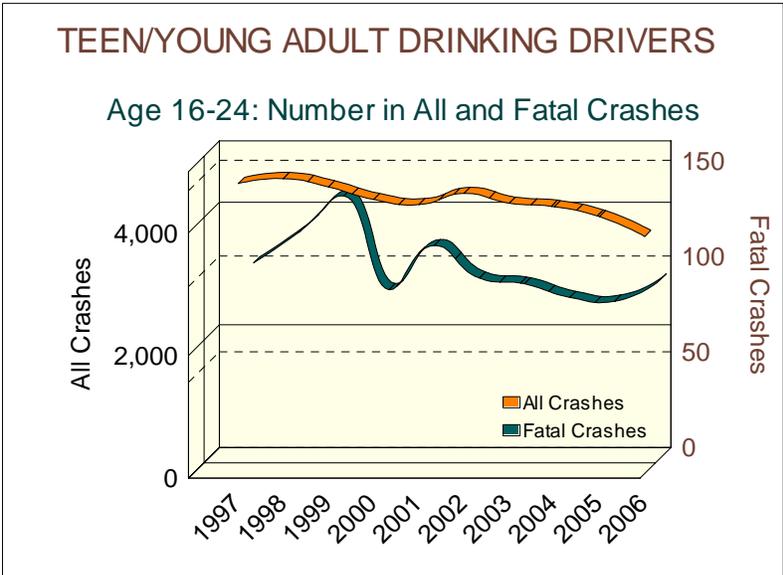
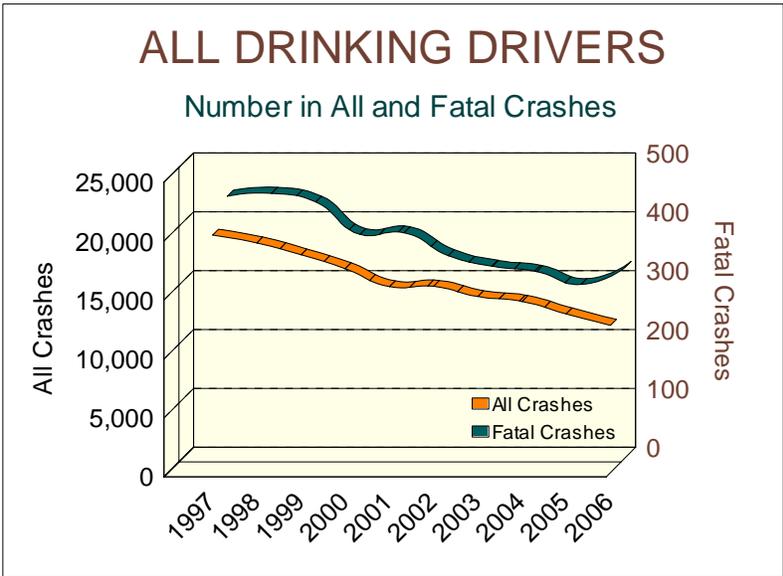
The number of teen/young adult drivers in all crashes has decreased by 27.6 percent since 1997. Their involvement in fatal crashes decreased 24.3 percent during the same time period.

ELDERLY DRIVERS		
	All Crashes	Fatal Crashes
1997	47,190	284
1998	46,582	226
1999	46,519	252
2000	46,023	221
2001	44,393	237
2002	43,923	212
2003	43,967	229
2004	43,146	201
2005	41,140	186
2006	38,899	188

Elderly drivers (age 65-110) represent 14.8 percent of the licensed drivers in 2006.

The number of drivers age 65 and older in all crashes has decreased 17.6 percent since 1997. Their involvement in fatal crashes decreased 33.8 percent during the same time period.

10 YEAR TRENDS (continued)



10 YEAR

DRINKING DRIVERS		
	All Crashes	Fatal Crashes
1997	20,139	444
1998	19,483	449
1999	18,469	434
2000	17,295	379
2001	15,760	382
2002	15,791	343
2003	14,922	325
2004	14,513	316
2005	13,452	294
2006	12,489	323

Drinking driver involvement in all crashes decreased by 38.0 percent from 1997. Drinking driver involvement in fatal crashes decreased by 27.3 percent from 1997.

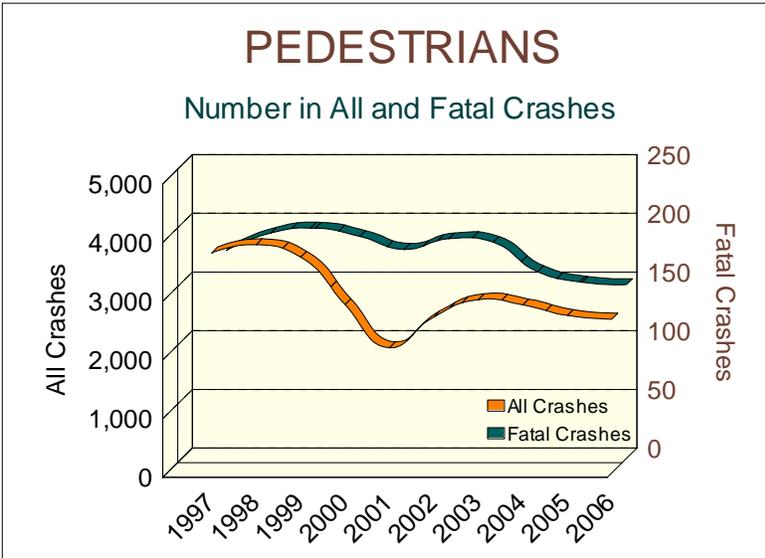
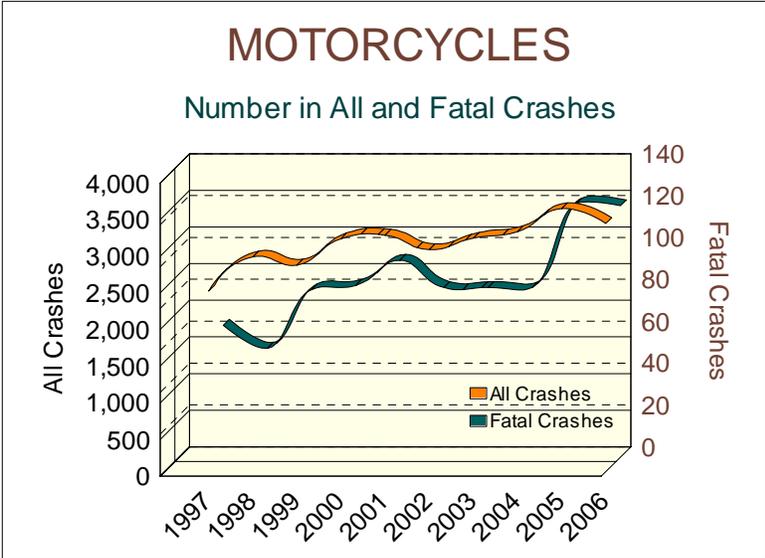
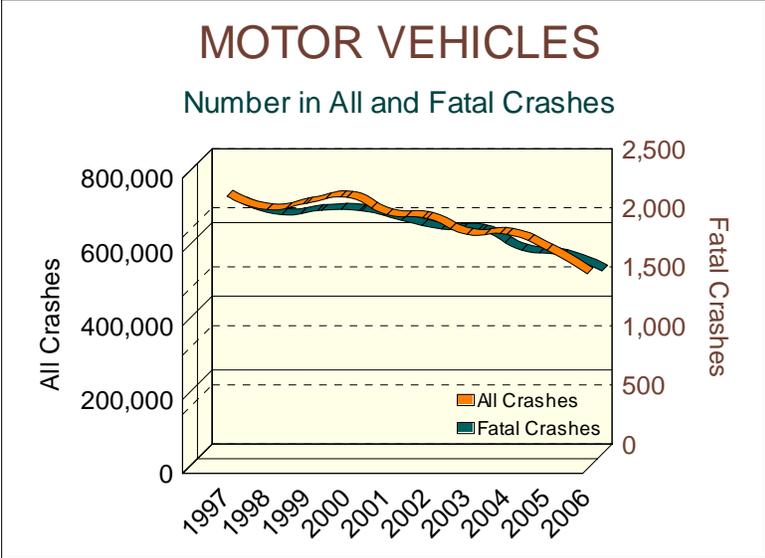
TEEN/YOUNG ADULT DRINKING DRIVERS		
	All Crashes	Fatal Crashes
1997	4,731	102
1998	4,812	118
1999	4,676	137
2000	4,470	88
2001	4,386	111
2002	4,571	94
2003	4,411	91
2004	4,353	84
2005	4,189	82
2006	3,867	93

Following the trend for all drinking drivers, the number of teen/young adult drinking drivers (age 16-24) in all crashes decreased by 18.3 percent, and their involvement in fatal crashes decreased by 8.8 percent from 1997.

ELDERLY DRINKING DRIVERS		
	All Crashes	Fatal Crashes
1997	550	22
1998	493	17
1999	418	9
2000	399	6
2001	373	12
2002	360	8
2003	332	9
2004	330	16
2005	316	5
2006	294	15

The number of elderly drinking drivers (age 65-110) in all crashes continues to decrease, reaching a ten-year low of 294 in 2006.

10 YEAR TRENDS (continued)



10 YEAR

MOTOR VEHICLES		
	All Crashes	Fatal Crashes
1997	739,538	2,126
1998	702,680	2,029
1999	720,393	2,066
2000	736,219	2,062
2001	689,122	1,981
2002	678,990	1,908
2003	635,767	1,892
2004	635,913	1,728
2005	592,671	1,682
2006	528,763	1,551

There were 1,551 motor vehicles involved in fatal crashes in 2006, down 27.0 percent from 1997.

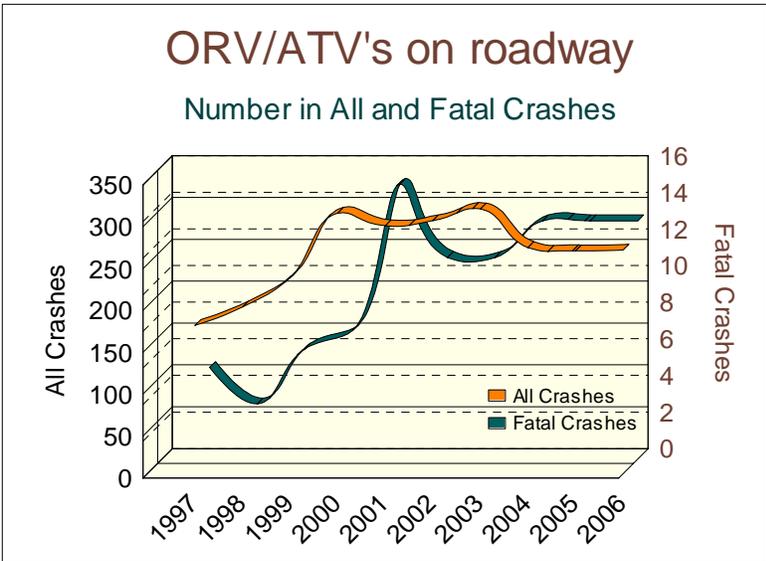
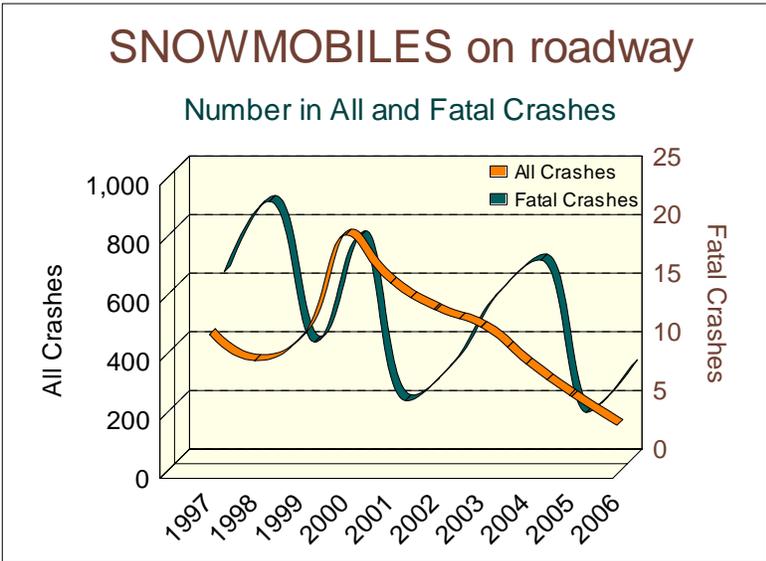
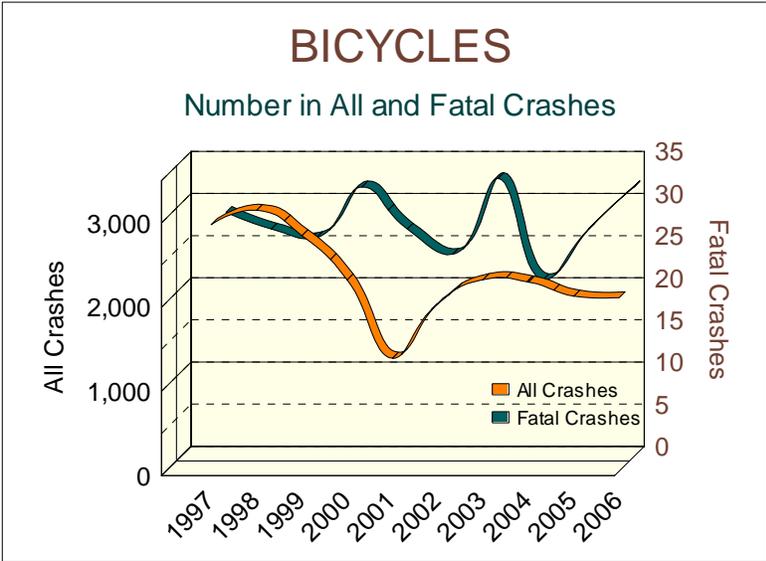
MOTORCYCLES		
	All Crashes	Fatal Crashes
1997	2,465	63
1998	2,931	52
1999	2,820	80
2000	3,180	82
2001	3,228	94
2002	3,030	81
2003	3,187	81
2004	3,276	81
2005	3,589	121
2006	3,386	120

The number of motorcycles involved in fatal crashes has increased 90.5 percent in the ten-year period.

PEDESTRIANS		
	All Crashes	Fatal Crashes
1997	3,749	177
1998	3,891	192
1999	3,677	196
2000	2,868	189
2001	2,135	178
2002	2,660	187
2003	2,953	184
2004	2,864	159
2005	2,683	150
2006	2,622	148

There were 148 pedestrians involved in fatal crashes in 2006, down 16.4 percent from 1997.

10 YEAR TRENDS (continued)



10 YEAR

BICYCLES		
	All Crashes	Fatal Crashes
1997	2,929	29
1998	3,097	27
1999	2,797	26
2000	2,271	32
2001	1,342	27
2002	1,988	24
2003	2,275	33
2004	2,246	21
2005	2,080	27
2006	2,061	32

There were 32 bicycles involved in fatal crashes in 2006, up 10.3 percent from 1997.

SNOWMOBILES on Michigan roadways		
	All Crashes	Fatal Crashes
1997	476	16
1998	387	22
1999	463	10
2000	815	19
2001	651	5
2002	559	8
2003	500	14
2004	375	17
2005	264	4
2006	166	8

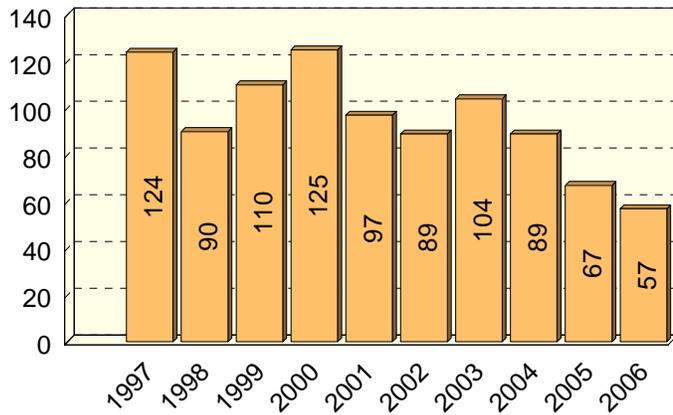
The 166 snowmobile crash count is down 65.1 percent from 1997. A ten-year low of 4 snowmobiles involved in fatal crashes on Michigan public roadways was reported in 2005.

ORV/ATV's on Michigan roadways		
	All Crashes	Fatal Crashes
1997	177	5
1998	199	3
1999	234	6
2000	311	7
2001	296	15
2002	302	11
2003	316	11
2004	270	13
2005	266	13
2006	267	13

The number of ORV/ATV's involved in all crashes and fatal crashes on Michigan public roadways has generally increased over the ten-year period.

VEHICLE-TRAIN CRASHES

Number of Crashes

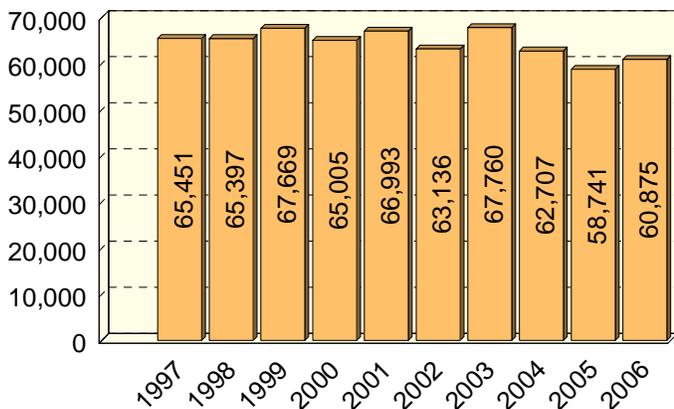


10 YEAR TRENDS (continued)

57 vehicle-train crashes occurred in 2006, a decrease of 54.0 percent in the ten-year period.

VEHICLE-DEER CRASHES

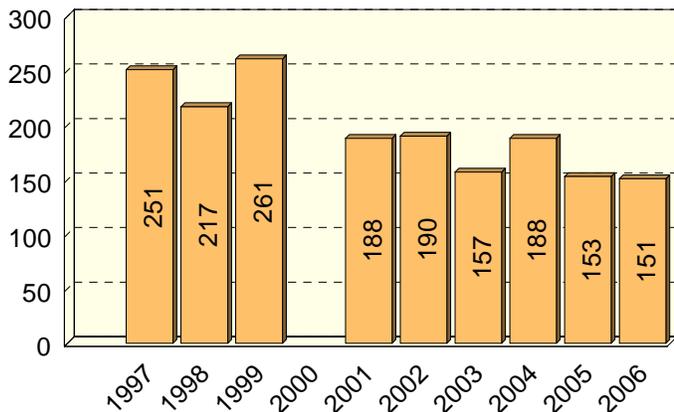
Number of Crashes



The number of vehicle-deer crashes has decreased 7.0 percent in the ten-year period.

FARM EQUIPMENT CRASHES

Number of Crashes

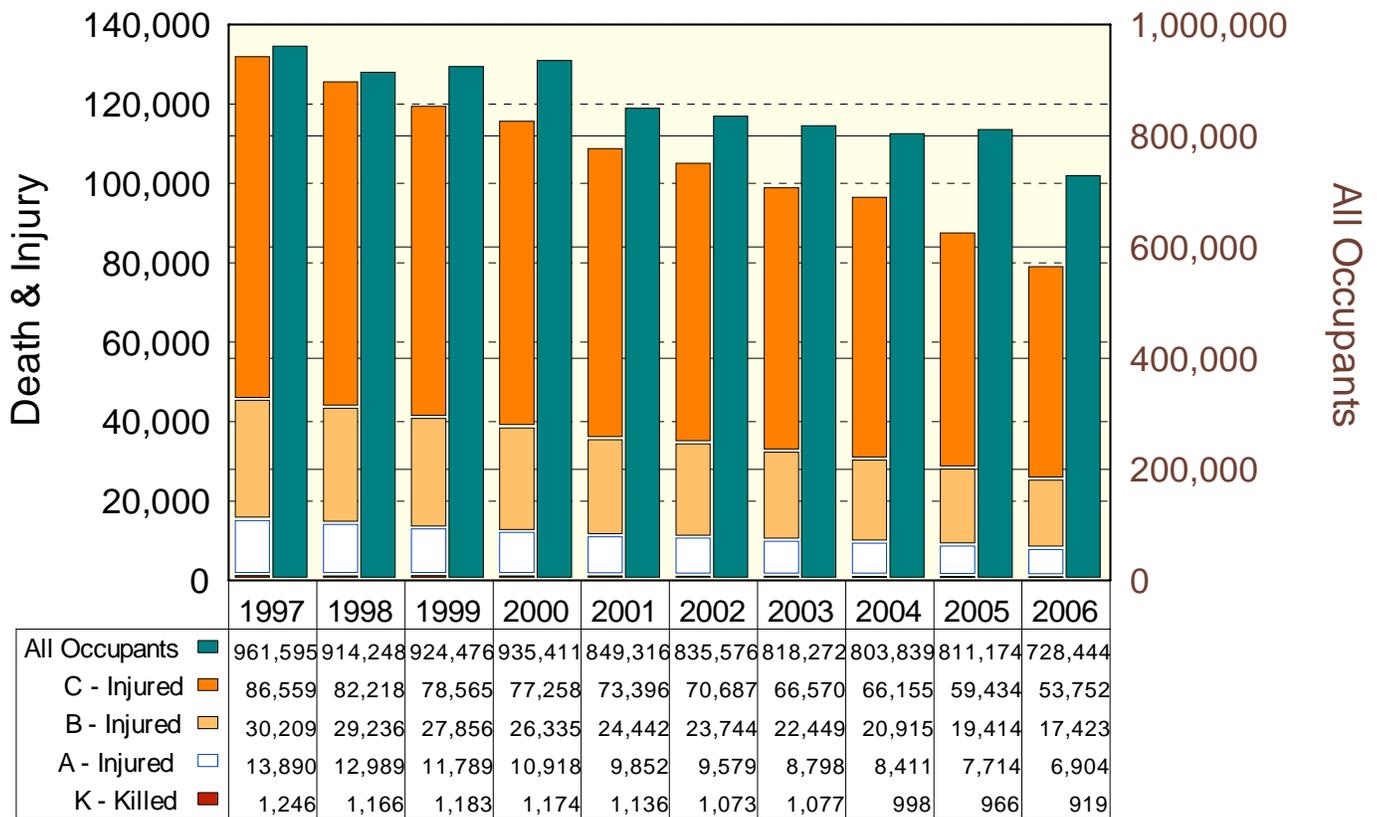


The 151 farm equipment crashes in 2006 marks a 39.8 percent decrease in the ten-year period.

Data not available for calendar year 2000 farm equipment crashes. Please refer to that year's book for details.

10 YEAR

DEATH AND INJURY FOR CRASH-INVOLVED OCCUPANTS



The proportion of death and injury to crash-involved occupants has decreased over the last ten years. The all-occupant figure is the number of occupants recorded by the police officers on the UD-10.

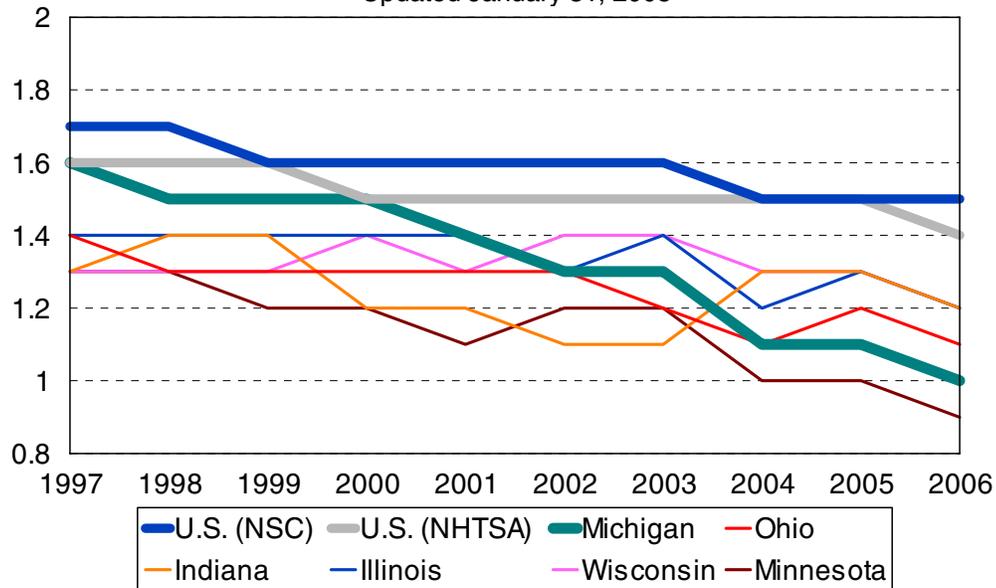
10 YEAR



MILEAGE DEATH RATES 1997 - 2006

Comparison - Michigan to U.S. and Surrounding States

Updated January 31, 2008



	U.S. (NSC*)	U.S. (NHTSA*)	Michigan	Ohio	Indiana	Illinois	Wisconsin	Minnesota
1997	1.7	1.6	1.6	1.4	1.3	1.4	1.3	1.3
1998	1.7	1.6	1.5	1.3	1.4	1.4	1.3	1.3
1999	1.6	1.6	1.5	1.3	1.4	1.4	1.3	1.2
2000	1.6	1.5	1.5	1.3	1.2	1.4	1.4	1.2
2001	1.6	1.5	1.4	1.3	1.2	1.4	1.3	1.1
2002	1.6	1.5	1.3	1.3	1.1	1.3	1.4	1.2
2003	1.6	1.5	1.3	1.2	1.1	1.4	1.4	1.2
2004	1.5	1.5	1.1	1.1	1.3	1.2	1.3	1.0
2005	1.5	1.5	1.1	1.2	1.3	1.3	1.3	1.0
2006	1.5	1.4	1.0	1.1	1.2	1.2	1.2	0.9

* National Safety Council (NSC) reports traffic and nontraffic deaths within a year of the accident. NSC numbers are current as of January 28, 2008.
National Highway Traffic Safety Administration (NHTSA) reports only traffic deaths that occur within 30 days of the accident.

U.S. data for this table and tables on the following page were provided by the National Safety Council [3], the National Highway Traffic Safety Administration [4], and the Federal Highway Administration [5]. State data for this table and tables on the following page were provided by Ohio [6], Indiana [7], Illinois [8], Wisconsin [9], and Minnesota [10].



10 YEAR

MICHIGAN AND SURROUNDING STATES COMPARISON OF FATALITIES AND VMT

Updated January 31, 2008

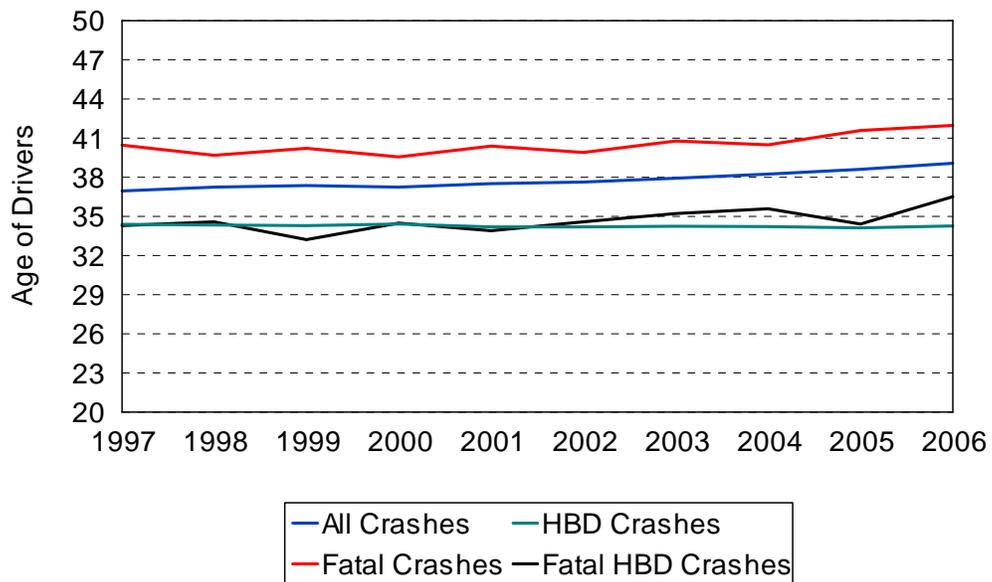
Year	U.S. (NSC) Persons Killed	U.S. (NHTSA) Persons Killed	Michigan Persons Killed	Ohio Persons Killed	Indiana Persons Killed	Illinois Persons Killed	Wisconsin Persons Killed	Minnesota Persons Killed
1997	43,458	42,013	1,446	1,439	936	1,393	721	600
1998	43,501	41,501	1,367	1,423	978	1,393	709	650
1999	42,401	41,717	1,386	1,430	1,017	1,456	744	626
2000	43,354	41,945	1,382	1,361	875	1,418	801	625
2001	43,788	42,196	1,328	1,379	895	1,414	764	568
2002	45,380	43,005	1,279	1,417	792	1,420	805	657
2003	44,757	42,884	1,283	1,278	833	1,454	836	655
2004	44,933	42,836	1,159	1,285	947	1,355	784	567
2005	45,500	43,443	1,129	1,326	938	1,360	801	559
2006	44,700	42,642	1,084	1,239	899	1,254	712	494

Year	U.S. (FHWA) VMT	Michigan VMT	Ohio VMT	Indiana VMT	Illinois VMT	Wisconsin VMT	Minnesota VMT
1997	2,560	89.2	104.8	70.4	98.7	53.7	46.9
1998	2,625	91.6	106.0	70.7	100.9	56.0	48.5
1999	2,679	93.1	106.4	71.5	101.8	57.0	50.7
2000	2,747	94.9	106.5	72.3	102.9	57.3	52.4
2001	2,796	96.4	107.0	74.1	103.1	57.3	53.2
2002	2,856	98.2	107.9	74.6	106.2	58.7	54.4
2003	2,890	100.2	109.9	74.4	106.5	59.6	55.4
2004	2,962	101.8	112.4	74.5	108.9	60.5	56.5
2005	2,990	103.2	111.5	74.3	107.9	60.0	56.5
2006	2,995	104.0	112.1	74.2	106.8	59.4	56.6

VMT described in billions of miles

10 YEAR

AVERAGE AGE OF DRIVERS IN CRASHES 1997 - 2006

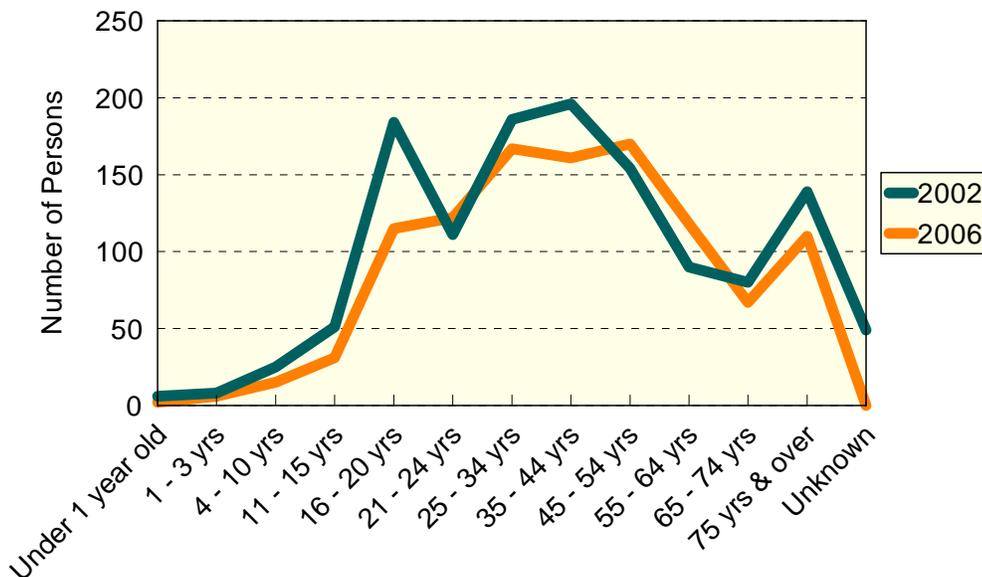


Reflecting the demographic trend of increasing age in the general population, the average age of drivers involved in all crashes, fatal crashes, and fatal HBD crashes has increased over the ten-year period. The average age of drivers in HBD crashes has remained flat.

TREND DATA FOR FATALITIES

TREND DATA FOR FATALITIES	2002	2003	2004	2005	2006
Age of Persons Killed, Total					
Under 1 year old	6	4	4	3	2
1 - 3 years	8	9	12	7	6
4 - 10 years	25	31	26	30	15
11 - 15 years	51	50	41	44	31
16 - 20 years	184	165	172	142	115
21 - 24 years	111	125	111	92	122
25 - 34 years	186	161	171	159	167
35 - 44 years	196	184	165	172	161
45 - 54 years	154	178	153	166	170
55 - 64 years	90	126	107	118	118
65 - 74 years	80	88	67	70	67
75 years and over	139	145	124	123	110
Unknown	49	17	6	3	0
Totals	1,279	1,283	1,159	1,129	1,084

Age of Persons Killed, Total



5 YEAR

TREND DATA FOR FATALITIES	2002	2003	2004	2005	2006
Age of Drivers Involved in Fatal Crashes					
13 years and under	4	5	3	5	4
14 years	7	3	2	2	1
15 years	8	7	10	6	7
16 years	50	40	29	25	16
17 years	44	48	50	37	35
18 years	57	60	50	51	39
19 years	57	46	55	45	39
20 years	51	43	44	38	43
21 - 24 years	177	190	168	153	155
25 - 34 years	336	337	297	269	270
35 - 44 years	328	356	335	292	257
45 - 54 years	255	280	259	307	264
55 - 64 years	147	161	149	169	176
65 - 69 years	48	40	50	39	38
70 - 74 years	38	53	43	38	43
75 - 79 years	53	51	38	35	42
80 - 84 years	38	46	37	43	39
85 - 89 years	20	32	25	22	17
90 years and over	15	7	8	9	9
Unknown	174	87	76	97	57
Totals	1,907	1,892	1,728	1,682	1,551

Age of Drivers Involved in Single Vehicle Fatal Crashes					
13 years and under	2	4	0	1	2
14 years	3	1	1	1	1
15 years	3	3	7	2	4
16 years	17	10	14	10	6
17 years	18	15	13	12	13
18 years	20	28	18	13	12
19 years	25	17	22	13	13
20 years	20	14	12	16	17
21 - 24 years	65	70	73	60	67
25 - 34 years	101	85	89	94	102
35 - 44 years	85	121	87	77	69
45 - 54 years	73	62	65	70	83
55 - 64 years	32	38	38	44	62
65 - 69 years	5	16	10	13	12
70 - 74 years	8	13	10	9	16
75 - 79 years	15	13	5	5	11
80 - 84 years	5	8	7	15	8
85 - 89 years	4	4	6	3	3
90 years and over	1	2	1	0	2
Unknown	39	25	23	25	19
Totals	541	549	501	483	522

5 YEAR

TREND DATA FOR FATALITIES	2002	2003	2004	2005	2006
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Age of Bicyclists Killed

Under 1 year old	0	0	0	0	0
1 - 3 years	0	0	0	0	0
4 - 10 years	0	4	4	5	2
11 - 15 years	5	6	3	2	2
16 - 20 years	1	3	0	3	2
21 - 24 years	2	3	1	0	1
25 - 34 years	3	0	1	1	0
35 - 44 years	3	4	3	9	4
45 - 54 years	1	8	7	1	8
55 - 64 years	0	2	2	1	4
65 - 74 years	3	2	0	3	4
75 years and over	2	0	0	0	1
Unknown	0	0	0	0	0
Totals	20	32	21	25	28

Age of Pedestrians Killed

Under 1 year old	0	1	1	1	0
1 - 3 years	3	2	3	2	0
4 - 10 years	10	5	5	8	3
11 - 15 years	14	10	3	6	6
16 - 20 years	11	13	11	9	8
21 - 24 years	8	8	7	6	11
25 - 34 years	23	11	18	18	15
35 - 44 years	34	33	26	26	32
45 - 54 years	25	34	20	24	24
55 - 64 years	14	23	11	16	18
65 - 74 years	13	11	9	12	8
75 years and over	16	17	21	9	12
Unknown	2	1	5	1	0
Totals	173	169	140	138	137

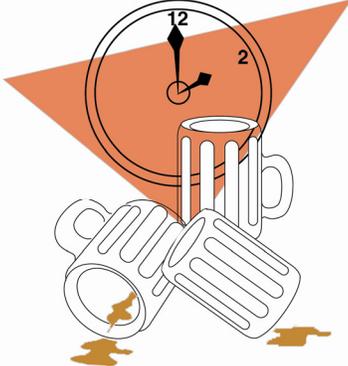
Action of Pedestrians Killed

Crossing at intersection	10	18	20	18	17
Cross not at intersection	67	74	41	49	42
Getting on/off vehicle	1	0	1	2	4
In road with traffic	19	16	24	11	16
In road against traffic	4	5	1	6	6
Standing or lying in road	13	12	11	18	17
Pushing/working on vehicle	3	5	3	4	1
Other working in road	0	3	1	2	3
Playing in road	1	0	0	0	1
In road for other reason	16	8	11	8	7
Not in road	11	9	8	10	4
Other/Unknown	28	19	19	10	19
Totals	173	169	140	138	137

5 YEAR

FATAL CRASHES AND PERSONS KILLED FOR SELECTED HOLIDAY PERIODS IN MICHIGAN

Revised February 19, 2010

HOLIDAY PERIOD	Fatal Crashes	Persons Killed	SUMMARY 2006
Memorial Day 2006 (3) MON 2005 (3) MON 2004 (3) MON 2003 (3) MON 2002 (3) MON	16 [3] 10 [7] 12 [4] 10 [5] 13 [6]	19 [4] 14 [9] 12 [4] 10 [5] 14 [6]	<p>This table shows traffic death tolls in Michigan for the past five years for the major holiday periods as defined by the National Safety Council.</p> <p>Based on the <i>total 2006</i> experience, deaths averaged 2.97 per day. Alcohol-related deaths averaged 1.05 per day.</p> <p>Based on the <i>2006 holiday period</i> experience, deaths averaged 3.55 per day. Alcohol-related deaths averaged 1.60 per day.</p> 
Fourth of July 2006 (4) TUE 2005 (3) MON 2004 (3) SUN 2003 (3) FRI 2002 (4) THU	14 [7] 16 [7] 16 [6] 15 [2] 26 [10]	15 [7] 20 [11] 19 [7] 15 [2] 30 [11]	
Labor Day 2006 (3) MON 2005 (3) MON 2004 (3) MON 2003 (3) MON 2002 (3) MON	7 [3] 15 [7] 12 [4] 14 [6] 13 [7]	7 [3] 15 [7] 15 [5] 15 [6] 13 [7]	
Thanksgiving 2006 (4) THU 2005 (4) THU 2004 (4) THU 2003 (4) THU 2002 (4) THU	20 [11] 17 [7] 11 [4] 17 [4] 18 [8]	23 [14] 18 [8] 11 [4] 20 [4] 20 [8]	
Christmas 2006 (3) MON 2005 (3) SUN 2004 (3) SAT 2003 (4) THU 2002 (1) WED	2 [0] 7 [3] 10 [3] 8 [6] 0 [0]	2 [0] 7 [3] 11 [4] 9 [6] 0 [0]	
New Years 2006 (3) MON 2005 (3) SUN 2004 (3) SAT 2003 (4) THU 2002 (1) WED	5 [4] 10 [6] 8 [6] 6 [4] 4 [0]	5 [4] 11 [7] 8 [6] 6 [4] 4 [0]	

Figures in parentheses in the 1st column show number of full days in each holiday period. Fatal crashes and deaths are for these days plus six hours of the preceding day. Figures in brackets in the 2nd and 3rd columns show the number of alcohol-related fatal crashes and deaths.

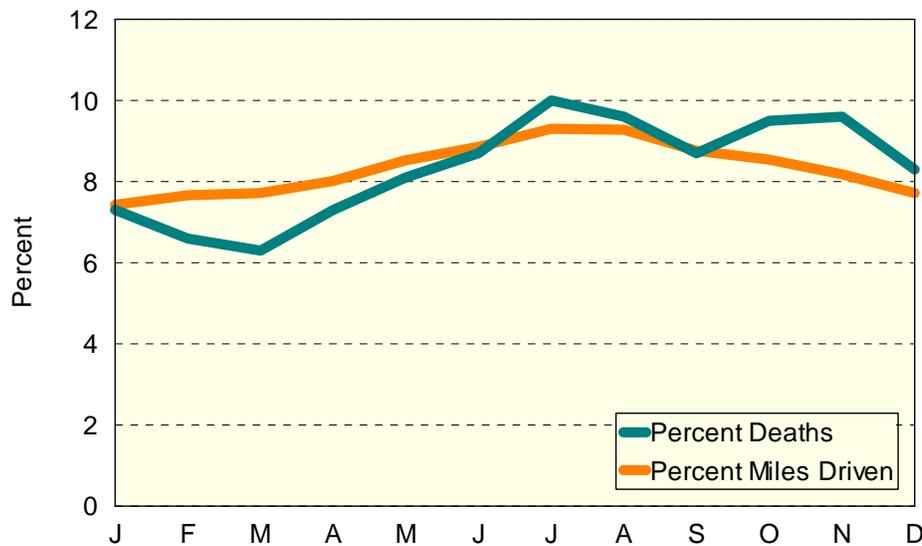
Please view the [glossary](#) for an explanation of holiday periods

5 YEAR

MOTOR VEHICLE DEATHS AND MILEAGE BY MONTH

Month	TRAFFIC DEATHS					2006 PERCENTAGES	
	2002	2003	2004	2005	2006	Percent Deaths	Percent Miles Driven
January	105	97	81	73	79	7.3	7.50
February	101	80	68	77	67	6.2	7.78
March	81	88	63	68	72	6.6	7.85
April	93	100	81	77	82	7.6	8.10
May	112	84	97	105	82	7.6	8.50
June	115	96	106	95	101	9.3	8.83
July	137	132	117	130	82	7.6	9.17
August	110	127	123	96	115	10.6	9.15
September	96	111	116	102	90	8.3	8.73
October	117	122	81	112	128	11.8	8.50
November	102	130	122	110	105	9.7	8.18
December	110	116	104	84	81	7.5	7.72
Totals	1,279	1,283	1,159	1,129	1,084	100.0	100.00

Average of Percent Deaths & Percent Miles Driven
2002 - 2006



The chart above shows that the *percent deaths* were lower for the months of January through June and September than for the other months when compared to the *percent miles driven*.

1 YEAR

2005 - 2006 SUMMARY TRENDS

- ★ Michigan experienced a **4.0** percent decrease in traffic fatalities, as well as a **9.5** percent decrease in injuries and a **10.1** percent decrease in crashes.
- ★ Deaths among vehicle occupants (drivers and passengers) decreased **5.1** percent.
- ★ Persons sustaining "A" level injuries (the most serious) decreased **10.2** percent.

	2005	2006	% CHANGE
NUMBER OF CRASHES			
Fatal Crashes	1,030	1,002	-2.7
Personal Injury Crashes	66,729	60,176	-9.8
Property Damage Crashes	283,079	254,144	-10.2
Total	350,838	315,322	-10.1
ALCOHOL-INVOLVED CRASHES			
Fatal Crashes	317	349	10.1
Personal Injury Crashes	5,335	5,076	-4.9
Property Damage Crashes	7,886	7,179	-9.0
Total	13,538	12,604	-6.9
FATAL CRASHES			
Had Been Drinking (HBD)	317 (30.8%)	349 (34.8%)	10.1
Had Not Been Drinking / Not Known If Drinking	713 (69.2%)	653 (65.2%)	-8.4
PERSONS IN CRASHES			
Killed	1,129	1,084	-4.0
Injured	90,510	81,942	-9.5
Not Injured	515,806	460,408	-10.7
Unknown Injury	89,771	79,827	-11.1
Total	697,216	623,261	-10.6
PERSONS IN ALCOHOL-INVOLVED CRASHES			
Killed	360	383	6.4
Injured	7,421	7,068	-4.8
Not Injured	14,910	13,679	-8.3
Unknown Injury	3,028	2,769	-8.6
Total	25,719	23,899	-7.1
PERSONS INJURED BY GENDER			
Male	41,242	37,324	-9.5
Female	47,857	43,280	-9.6
Unknown Gender.....	1,411	1,338	-5.2
Total	90,510	81,942	-9.5
PERSONS INJURED BY SEVERITY			
"A" Injury	8,486	7,618	-10.2
"B" Injury	20,891	18,881	-9.6
"C" Injury	61,133	55,443	-9.3
Total	90,510	81,942	-9.5

1

YEAR 2005 - 2006 SUMMARY TRENDS (continued)

	2005	2006	% CHANGE
PERSONS KILLED BY GENDER			
Male	773	763	-1.3
Female	348	319	-8.3
Unknown Gender	8	2	-75.0
Total	1,129	1,084	-4.0
PERSONS KILLED			
Driver	579	565	-2.4
Passenger	246	218	-11.4
Pedestrian	138	137	-0.7
Bicyclist	25	28	12.0
Motorcyclist	122	110	-9.8
Farm Equipment	1	1	0.0
Train Engineer	0	0	0.0
Snowmobile	4	8	100.0
ORV/ATV	12	13	8.3
Other/Unknown	2	4	100.0
Total	1,129	1,084	-4.0
BELT RESTRAINT USE BY DRIVER			
"Reported Restrained" - Killed	326	315	-3.4
"Reported Not Restrained" - Killed	195	184	-5.6
"Reported Restrained" - Injured	56,363	50,686	-10.1
"Reported Not Restrained" - Injured	2,969	2,506	-15.6
BELT RESTRAINT USE BY INJURED PASSENGER			
"Reported Restrained" - Killed	128	115	-10.2
"Reported Not Restrained" - Killed.....	79	74	-6.3
"Reported Restrained" - Injured	17,066	15,346	-10.1
"Reported Not Restrained" - Injured	2,312	2,061	-10.9
DRIVER AGE 16-19 INVOLVED			
Fatal Crashes	156	124	-20.5
Personal Injury Crashes	13,994	12,798	-8.5
Property Damage Crashes	47,183	41,753	-11.5
Total All Crashes	61,333	54,675	-10.9
Persons Killed	178	143	-19.7
Persons Injured	20,452	18,519	-9.5
DRIVER AGE 65 & OVER INVOLVED			
Fatal Crashes	177	173	-2.3
Personal Injury Crashes	8,837	8,206	-7.1
Property Damage Crashes	30,290	28,632	-5.5
Total All Crashes	39,304	37,011	-5.8
Persons Killed	191	183	-4.2
Persons Injured	12,767	11,867	-7.0

MORE MICHIGAN CRASH FACTS

CRASH FACTS	2005	2006	% Change
Licensed Drivers	7,217,208	7,238,855	0.3
Registered Vehicles in Michigan	8,464,905	8,353,070	-1.3
Michigan Population	10,120,860	10,095,643	-0.2
Drivers Involved in Crashes	592,671	528,763	-10.8
Vehicles Involved in Crashes	592,671	528,763	-10.8
Occupants Involved in Crashes	811,174	548,486	-32.4
Estimated MV Mileage Traveled (thousands)	103,158,621	104,041,668	0.9
Death Rate Per 100 Million Vehicle Miles	1.1	1.0	-9.1
Fatal Crash Rate Per 100 Million Veh Miles	1.0	1.0	0.0



2006 COST OF CRASHES IN MICHIGAN

The cost estimate for Michigan crashes in 2006 is **\$8,731,508,200**. This estimate is based on the National Safety Council's cost estimating procedures. Average comprehensive costs are based on the following figures:

Comprehensive Costs, 2006	
Death	\$4,000,000
Incapacitating injury	\$201,100
Nonincapacitating evident injury	\$50,400
Possible injury	\$24,400
No injury	\$2,200

These cost estimates are not intended for comparisons to previous years. Deaths and injuries are calculated by number of persons. "No injury" is calculated per crash.

Note: Information on the cost of crashes was provided by the National Safety Council on January 9, 2008.

MOTOR VEHICLE TRAFFIC DEATHS IN MICHIGAN BY MONTH

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1955	134	117	116	160	157	192	169	209	160	204	208	190	2,016
1956	166	136	132	140	133	115	149	159	169	144	145	158	1,746
1957	121	98	118	118	130	122	127	152	123	143	135	161	1,548
1958	94	90	95	89	92	112	120	134	132	113	165	146	1,382
1959	76	69	91	126	126	124	148	128	155	125	144	161	1,473
1960	139	76	102	105	107	133	159	154	137	186	152	154	1,604
1961	105	99	113	138	133	114	141	166	128	139	148	143	1,567
1962	94	70	115	110	123	147	166	175	170	172	118	114	1,574
1963	107	95	124	142	148	173	188	177	163	179	196	195	1,887
1964	170	159	158	144	164	167	217	197	177	199	177	193	2,122
1965	153	113	135	143	156	181	211	220	193	214	172	245	2,136
1966	147	156	179	151	207	204	212	206	203	220	205	208	2,298
1967	130	105	141	162	187	140	210	189	223	230	216	204	2,137
1968	130	147	164	150	240	214	208	233	209	248	283	166	2,392
1969	137	158	173	169	239	236	218	254	230	236	219	218	2,487
1970	167	143	160	141	214	205	197	204	213	217	178	138	2,177
1971	137	124	155	144	187	212	222	227	155	209	202	178	2,152
1972	156	161	155	150	204	209	225	210	225	219	174	170	2,258
1973	187	156	173	140	180	230	225	201	204	209	171	137	2,213
1974	111	112	107	116	144	197	189	178	200	195	201	125	1,875
1975	120	97	112	93	149	169	195	203	190	162	161	160	1,811
1976	118	102	134	150	163	169	196	227	189	171	174	162	1,955
1977	126	87	122	143	184	179	223	194	164	189	181	158	1,950
1978	98	104	128	177	178	203	206	229	214	199	183	157	2,076
1979	102	103	129	152	146	155	190	171	174	187	171	169	1,849
1980	117	131	109	116	153	170	142	183	192	152	133	176	1,774
1981	99	100	108	116	116	155	159	171	149	155	113	148	1,589
1982	98	79	93	91	114	121	154	153	128	144	131	111	1,417
1983	113	94	83	91	91	127	121	117	131	153	115	95	1,331
1984	93	84	104	94	125	143	175	174	135	153	134	142	1,556
1985	108	91	77	133	137	167	146	136	131	135	161	147	1,569
1986	86	77	103	127	131	175	186	176	131	144	159	137	1,632
1987	91	104	99	106	138	165	151	176	149	164	161	128	1,632
1988	129	107	103	104	145	152	175	158	178	159	127	167	1,704
1989	138	102	94	96	123	156	156	177	155	146	123	164	1,630
1990	99	84	122	94	135	151	165	170	141	147	130	125	1,563
1991	103	79	115	106	129	145	130	141	125	129	104	119	1,425
1992	83	81	83	86	100	122	134	119	123	129	120	120	1,300
1993	123	91	89	72	127	103	149	140	131	146	134	109	1,414
1994	106	86	82	116	111	123	126	143	132	133	123	138	1,419
1995	122	90	109	111	118	141	127	159	157	134	136	133	1,537
1996	131	98	103	98	128	135	146	121	138	135	136	136	1,505
1997	102	106	85	80	128	140	166	130	128	134	125	122	1,446
1998	116	71	97	91	113	120	133	116	123	126	117	144	1,367
1999	76	84	92	98	125	116	128	160	128	129	130	120	1,386
2000	121	83	70	107	114	136	135	133	135	124	118	106	1,382
2001	79	99	102	83	106	113	143	131	143	120	109	100	1,328
2002	105	101	81	93	112	115	137	110	96	117	102	110	1,279
2003	97	80	88	100	84	96	132	127	111	122	130	116	1,283
2004	81	68	63	81	97	106	117	123	116	81	122	104	1,159
2005	73	77	68	77	105	95	130	96	102	112	110	84	1,129
2006	79	67	72	82	82	101	82	115	90	128	105	81	1,084

MOTOR VEHICLE TRAFFIC CRASH AND RELATED DATA

Year	Deaths	Injuries	Crashes	Estimated Mileage (Millions)	Motor Vehicle Registrations*	Death Rate Per 100 million miles of travel
1955	2,016	62,234	196,812	28,282.5	3,149,323	7.1
1956	1,746	61,158	197,995	28,429.3	3,173,704	6.1
1957	1,548	60,067	191,915	29,252.2	3,256,150	5.3
1958	1,382	57,767	177,934	29,411.3	3,157,441	4.7
1959	1,473	64,873	198,771	30,679.0	3,252,492	4.8
1960	1,604	91,026	209,724	31,842.4	3,352,234	5.0
1961	1,567	93,350	199,973	32,101.5	3,395,736	4.9
1962	1,574	108,143	233,078	34,498.0	3,498,758	4.6
1963	1,887	126,896	261,794	36,452.2	3,646,080	5.2
1964	2,122	144,623	284,444	38,617.6	3,860,791	5.5
1965	2,136	155,258	310,598	40,857.4	4,066,826	5.2
1966	2,298	156,694	302,880	43,940.1	4,133,199	5.2
1967	2,137	151,297	299,004	45,053.6	4,161,573	4.7
1968	2,392	160,413	305,495	48,047.4	4,327,885	5.0
1969	2,487	175,400	331,223	50,904.9	4,560,097	4.9
1970	2,177	161,719	313,715	53,148.1	4,683,919	4.1
1971	2,152	157,664	314,015	55,539.7	4,835,146	3.9
1972	2,258	178,929	359,745	57,817.1	5,160,985	3.9
1973	2,213	169,485	350,864	58,478.4	5,442,233	3.8
1974	1,875	141,132	324,763	55,748.7	5,652,406	3.4
1975	1,811	147,299	333,560	56,260.5	5,744,441	3.2
1976	1,955	162,894	365,600	61,638.0	5,861,908	3.2
1977	1,950	166,389	374,751	64,853.0	6,138,732	3.0
1978	2,076	169,202	389,193	67,380.0	6,436,365	3.1
1979	1,849	162,571	366,435	64,882.3	6,536,246	2.8
1980	1,774	144,972	314,594	61,190.1	6,570,735	2.9
1981	1,589	136,455	302,831	62,000.0	6,140,286	2.6
1982	1,417	130,061	294,971	61,321.0	6,400,942	2.3
1983	1,331	135,811	300,797	63,560.1	6,443,499	2.1
1984	1,556	150,740	335,193	65,727.0	6,509,192	2.4
1985	1,569	157,417	386,904	68,413.0	6,857,364	2.3
1986	1,632	158,032	400,694	70,622.0	6,952,263	2.3
1987	1,632	156,318	397,224	75,715.0	7,061,339	2.2
1988	1,704	155,713	410,437	77,700.0	7,196,609	2.2
1989	1,630	154,537	417,252	79,900.0	7,233,823	2.0
1990	1,563	145,179	387,180	81,200.0	7,300,853	1.9
1991	1,425	135,830	364,847	81,900.0	7,329,789	1.7
1992	1,300	118,727	344,942	84,000.0	7,411,192	1.5
1993	1,414	134,548	363,636	85,700.0	7,495,904	1.6
1994	1,419	142,200	398,050	85,600.0	7,669,022	1.7
1995	1,537	146,303	421,073	85,699.6	7,751,336	1.8
1996	1,505	142,553	435,477	87,700.0	8,106,972	1.7
1997	1,446	137,548	425,793	89,232.0	8,115,921	1.6
1998	1,367	131,578	403,766	91,616.0	8,227,016	1.5
1999	1,386	124,601	415,675	93,060.3	8,407,868	1.5
2000	1,382	121,826	424,852	94,915.1	8,569,124	1.5
2001	1,328	112,294	400,813	96,428.1	8,603,195	1.4
2002	1,279	112,484	395,515	98,173.2	8,690,326	1.3
2003	1,283	105,555	391,485	100,192.0	8,708,688	1.3
2004	1,159	99,680	373,028	101,820.2	8,578,224	1.1
2005	1,129	90,510	350,838	103,158.6	8,464,905	1.1
2006	1,084	81,942	315,322	104,041.7	8,353,070	1.0

* Excludes trailers and trailer coaches, and includes mopeds

2006

2006

2006

2006

2006

2006

2006

2006

**Special
Focus**

**Red-Light-Running
Heavy Truck/Bus**

RED-LIGHT-RUNNING CRASHES

INTERSECTION CRASH TYPE	MOST SEVERE OUTCOME IN CRASH					PDO
	Crashes	Fatal	Injury			
			A	B	C	
Related to intersection	93,790	258	1,990	5,427	16,702	69,413
In intersection	46,371	186	1,358	3,592	9,369	31,866
With traffic control signal	21,895	66	585	1,725	4,733	14,786
With hazardous action	6,248	27	273	641	1,718	3,589

“Related to intersection” captures crashes that were related to or within 150 feet of an intersection. This corresponds to the crash information on page 137, *Intersection Crashes by Traffic Control Type*.

“In intersection” captures crashes within all types of intersections.

“With traffic control signal” captures crashes within the intersection and with a traffic control signal present.

“With hazardous action” captures crashes within the intersection, with a traffic control signal and with a hazardous action cited as “disregard of traffic control.” Information pertaining to red-light-running in the following tables is derived from this subset of **6,248** crashes.



RED-LIGHT-RUNNING - MOST SEVERE OUTCOME IN CRASH

MOST SEVERE OUTCOME IN CRASH

SPEED LIMIT*	Crashes	Fatal	Injury			PDO
			A	B	C	
5 miles per hour	0	0	0	0	0	0
10 miles per hour	0	0	0	0	0	0
15 miles per hour	3	0	0	2	0	1
20 miles per hour	3	0	0	0	1	2
25 miles per hour	742	1	19	58	193	471
30 miles per hour	952	3	25	79	260	585
35 miles per hour	1,611	4	64	140	449	954
40 miles per hour	830	3	37	87	242	461
45 miles per hour	1,412	9	70	186	383	764
50 miles per hour	257	2	26	28	71	130
55 miles per hour	319	5	25	47	87	155
60 miles per hour	0	0	0	0	0	0
65 miles per hour	0	0	0	0	0	0
70 miles per hour	2	0	0	0	1	1
75 miles per hour	1	0	0	0	1	0
Unknown	116	0	7	14	30	65
Total	6,248	27	273	641	1,718	3,589

*Posted speed limit as entered by officer on the UD-10 form.

MOST SEVERE OUTCOME IN CRASH

CRASH TYPE	Crashes	Fatal	Injury			PDO
			A	B	C	
Single Vehicle	101	2	17	32	36	14
Head on	58	0	4	4	17	33
Head on left turn	556	1	25	67	153	310
Angle	5,257	24	216	521	1,460	3,036
Rear end	42	0	4	1	8	29
Rear end left turn	6	0	0	0	0	6
Rear end right turn	4	0	0	0	1	3
Sideswipe same direction	71	0	1	3	7	60
Sideswipe opposite direction	45	0	1	2	7	35
Other/ Unknown	108	0	5	11	29	63
Total	6,248	27	273	641	1,718	3,589

RED-LIGHT-RUNNING - MOST SEVERE OUTCOME IN CRASH (continued)

SPECIAL CIRCUMSTANCES*	MOST SEVERE OUTCOME IN CRASH					
	Crashes	Fatal	Injury			PDO
			A	B	C	
School Bus Involved/Associated	12	0	2	0	3	7
Drinking Involved	211	4	29	27	65	86
Drug Use Involved	26	0	6	4	10	6
Pedestrian Involved	38	1	9	10	12	6
Bicyclist Involved	65	1	9	28	24	3
Snowmobile Involved	0	0	0	0	0	0
Motorcycle Involved	35	3	14	3	7	8
Train Involved	2	0	0	0	0	2
Truck/Bus Involved	226	5	24	29	57	111
Emergency Vehicle Involved	49	0	5	4	14	26
Driver Hazardous Citation	3,869	2	171	440	1,131	2,125

*Crashes may involve more than one special circumstance.

POSSIBLE CONDITIONS OF PERSONS IN CRASH*	MOST SEVERE OUTCOME IN CRASH					
	Conditions Coded by Police	Fatal	Injury			PDO
			A	B	C	
Appeared Normal	5,104	13	201	533	1,443	2,914
Had Been Drinking	209	4	27	30	62	86
Illegal Drug Use	24	0	2	2	9	11
Sick	11	0	1	1	3	6
Fatigue	13	0	0	2	6	5
Asleep	5	0	0	0	2	3
Medication	10	0	2	1	4	3
Driver Distracted	116	0	11	12	26	67
Using Cellular Phone	59	0	3	6	17	33
Unknown	376	9	23	28	74	242

*Drivers, pedestrians, bicyclists, and train engineers may have more than one condition, including "Appeared Normal."

HEAVY TRUCK/BUS

The crashes highlighted in this section all involve a heavy truck/bus - defined as having a Gross Vehicle Weight Rating (GVWR) over 10,000 lbs.

Heavy truck/bus crashes differ from other vehicle crashes in a number of ways, many reflecting the size and use of these vehicles. **When compared to the overall crash picture, heavy truck/bus crashes involve:**

- More turning, backing, and changing lanes (see Vehicle Section - Driver Action Prior)
- More collisions with bridge/pier/abutments, parked motor vehicles, jackknife, cargo loss/shift, and other non-collisions (see Vehicle Section - Most Harmful Event)
- Fewer collisions with ditches, trees, and animals
- Fewer single-vehicle crashes but more sideswipes (see Crash Section - Crash Type)
- Fewer drivers indicated to be speeding, failing to yield, reckless driving, disregarding traffic control, and unable to stop in assured clear distance, but more drivers indicated to be making backing, lane use, and turning errors (see Vehicle Section - Hazardous Action)
- Fewer crashes outside of the shoulder/curb (see Crash Section - Relationship to Roadway - Location of First Impact in Crash)
- More crashes between the hours of 6:00 AM and 2:59 PM, but fewer crashes between 3:00 PM and 5:59 AM (see Crash Section - Time of Day)
- More weekday crashes, and a significant drop in weekend crashes (see Crash Section - Day of Week)

HEAVY TRUCK/BUS INVOLVED CRASHES

HEAVY TRUCK/BUS DRIVER ACTION PRIOR TO CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Going straight ahead	6,234	46.0	87	68.5	1,329	53.3
Turning left	1,203	8.9	4	3.1	187	7.5
Turning right	1,103	8.1	2	1.6	88	3.5
Stopped on roadway	949	7.0	7	5.5	208	8.3
In prior crash	12	0.1	1	0.8	6	0.2
Changing lanes	575	4.2	1	0.8	77	3.1
Backing	733	5.4	3	2.4	34	1.4
Slowing/stopping on roadway	921	6.8	11	8.7	220	8.8
Slowing/stopping other	29	0.2	0	0.0	4	0.2
Starting up on roadway	295	2.2	2	1.6	69	2.8
Starting up other	14	0.1	0	0.0	2	0.1
Entering parking	25	0.2	0	0.0	0	0.0
Leaving parking	17	0.1	0	0.0	1	0.0
Entering roadway	136	1.0	0	0.0	26	1.0
Leaving roadway	21	0.2	0	0.0	3	0.1
Making U-turn	45	0.3	0	0.0	3	0.1
Overtaking or passing	97	0.7	0	0.0	10	0.4
Avoiding object	17	0.1	0	0.0	2	0.1
Avoiding animal	12	0.1	0	0.0	2	0.1
Avoiding pedestrian	7	0.1	3	2.4	4	0.2
Avoiding vehicle (front/back)	154	1.1	2	1.6	48	1.9
Avoiding vehicle (angle)	62	0.5	0	0.0	19	0.8
Driverless moving	14	0.1	0	0.0	1	0.0
Parked	272	2.0	4	3.1	57	2.3
Crossing at intersection	1	0.0	0	0.0	0	0.0
Crossing not at intersection	3	0.0	0	0.0	1	0.0
Getting on/off vehicle	1	0.0	0	0.0	1	0.0
In roadway with traffic	1	0.0	0	0.0	0	0.0
In roadway against traffic	0	0.0	0	0.0	0	0.0
Standing/lying in roadway	0	0.0	0	0.0	0	0.0
Pushing/working on vehicle	0	0.0	0	0.0	0	0.0
Other working in roadway	1	0.0	0	0.0	1	0.0
Playing in roadway	1	0.0	0	0.0	0	0.0
In roadway other reason	0	0.0	0	0.0	0	0.0
Not in roadway	0	0.0	0	0.0	0	0.0
Other	5	0.0	0	0.0	0	0.0
Unknown	606	4.5	0	0.0	91	3.6
Total	13,566	100.0	127	100.0	2,494	100.0

HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

MOST HARMFUL EVENT IN A NONCOLLISION	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Loss of control	32	0.2	0	0.0	4	0.2
Cross center/median	11	0.1	0	0.0	0	0.0
Ran off road left	24	0.2	0	0.0	1	0.0
Ran off road right	25	0.2	0	0.0	9	0.4
Re-enter road	4	0.0	0	0.0	0	0.0
Overturn	211	1.6	3	2.4	88	3.5
Separation of units	23	0.2	0	0.0	3	0.1
Fire/explosion	29	0.2	3	2.4	2	0.1
Immersion	0	0.0	0	0.0	0	0.0
Jackknife	85	0.6	0	0.0	8	0.3
Downhill runaway	7	0.1	0	0.0	1	0.0
Cargo loss/shift	151	1.1	0	0.0	10	0.4
Individual fell off	2	0.0	0	0.0	1	0.0
Other noncollision	135	1.0	0	0.0	16	0.6
NONCOLLISION Subtotal	739	5.4	6	4.7	143	5.7

MOST HARMFUL EVENT IN A COLLISION WITH A NONFIXED OBJECT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Pedestrian	70	0.5	15	11.8	50	2.0
Bicyclist	29	0.2	5	3.9	21	0.8
Motor vehicle in transport	9,595	70.7	98	77.2	1,979	79.4
Parked motor vehicle	475	3.5	0	0.0	17	0.7
Railway train	12	0.1	1	0.8	2	0.1
Animal	480	3.5	0	0.0	7	0.3
Other nonfixed objects	164	1.2	0	0.0	10	0.4
COLLISION NONFIXED Subtotal	10,825	79.8	119	93.7	2,086	83.6

HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

MOST HARMFUL EVENT IN A COLLISION WITH A FIXED OBJECT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Bridge/pier/abutment	83	0.6	0	0.0	9	0.4
Bridge parapet end	13	0.1	0	0.0	1	0.0
Bridge rail	24	0.2	0	0.0	5	0.2
Guardrail face	51	0.4	0	0.0	6	0.2
Guardrail end	11	0.1	0	0.0	3	0.1
Median barrier	47	0.3	0	0.0	11	0.4
Highway traffic sign post	58	0.4	0	0.0	1	0.0
Highway signal post	17	0.1	0	0.0	0	0.0
Luminaire/light support	36	0.3	0	0.0	0	0.0
Utility pole	140	1.0	0	0.0	9	0.4
Other pole	29	0.2	0	0.0	0	0.0
Culvert	10	0.1	0	0.0	3	0.1
Curb	20	0.1	0	0.0	4	0.2
Ditch	123	0.9	0	0.0	30	1.2
Embankment	27	0.2	0	0.0	6	0.2
Fence	13	0.1	0	0.0	2	0.1
Mailbox	14	0.1	0	0.0	0	0.0
Tree	85	0.6	2	1.6	15	0.6
Rail crossing signal	19	0.1	0	0.0	0	0.0
Building	14	0.1	0	0.0	3	0.1
Traffic island	1	0.0	0	0.0	0	0.0
Fire hydrant	27	0.2	0	0.0	0	0.0
Impact attenuator	1	0.0	0	0.0	0	0.0
Other fixed object	180	1.3	0	0.0	4	0.2
COLLISION FIXED Subtotal	1,043	7.7	2	1.6	112	4.5

	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Unknown Event	959	7.1	0	0.0	153	6.1
TOTAL MOST HARMFUL EVENT	13,566	100.0	127	100.0	2,494	100.0

HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

CRASH TYPE	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Single Vehicle	2,029	15.0	23	18.1	260	10.4
Head On	202	1.5	30	23.6	85	3.4
Head On - Left Turn	159	1.2	1	0.8	60	2.4
Angle	2,215	16.3	28	22.0	618	24.8
Rear End	3,006	22.2	23	18.1	834	33.4
Rear End - Left Turn	113	0.8	0	0.0	34	1.4
Rear End - Right Turn	134	1.0	1	0.8	16	0.6
Sideswipe - Same Direction	3,562	26.3	10	7.9	300	12.0
Sideswipe - Opposite Direct	756	5.6	5	3.9	103	4.1
Other/Unknown	1,390	10.2	6	4.7	184	7.4
Total	13,566	100.0	127	100.0	2,494	100.0

HAZARDOUS ACTION OF HEAVY TRUCK/BUS	Truck/Bus Crashes		Fatal Crashes		Injury Crashes		Hazardous Citation Issued	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury	Number of Heavy Trucks	% of Issued
None	6,284	46.3	90	70.9	1,260	50.5	20	0.9
Speed too fast	398	2.9	4	3.1	123	4.9	162	7.3
Speed too slow	11	0.1	1	0.8	0	0.0	2	0.1
Failed to yield	703	5.2	1	0.8	165	6.6	274	12.3
Disregard traffic control	150	1.1	4	3.1	54	2.2	79	3.6
Drove wrong way	6	0.0	0	0.0	1	0.0	1	0.0
Drove left of center	94	0.7	4	3.1	19	0.8	17	0.8
Improper passing	92	0.7	0	0.0	7	0.3	28	1.3
Improper lane use	664	4.9	0	0.0	66	2.6	212	9.5
Improper turn	577	4.3	1	0.8	44	1.8	200	9.0
Improper/no signal	25	0.2	0	0.0	2	0.1	10	0.4
Improper backing	582	4.3	1	0.8	18	0.7	166	7.5
Unable to stop in assured clear distance	1,193	8.8	4	3.1	355	14.2	567	25.5
Reckless driving	11	0.1	0	0.0	5	0.2	4	0.2
Careless/negligent driving	348	2.6	4	3.1	79	3.2	187	8.4
Other	1,231	9.1	6	4.7	118	4.7	259	11.7
Unknown	1,197	8.8	7	5.5	178	7.1	35	1.6
Total	13,566	100.0	127	100.0	2,494	100.0	2,223	100.0

HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

RELATIONSHIP TO ROADWAY (LOCATION OF FIRST IMPACT IN CRASH)	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
On Road	11,811	87.1	118	92.9	2,215	88.8
Median	62	0.5	2	1.6	11	0.4
Shoulder	529	3.9	3	2.4	100	4.0
Outside of Shoulder/Curb	482	3.6	2	1.6	83	3.3
Gore	22	0.2	0	0.0	5	0.2
Other/Unknown	660	4.9	2	1.6	80	3.2
Total	13,566	100.0	127	100.0	2,494	100.0

TIME OF DAY IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Midnight - 02:59 AM	424	3.1	12	9.4	77	3.1
03:00 AM - 05:59 AM	526	3.9	12	9.4	106	4.3
06:00 AM - 08:59 AM	2,406	17.7	17	13.4	458	18.4
09:00 AM - 11:59 AM	2,932	21.6	26	20.5	517	20.7
Noon - 02:59 PM	2,987	22.0	24	18.9	525	21.1
03:00 PM - 05:59 PM	2,702	19.9	21	16.5	486	19.5
06:00 PM - 08:59 PM	987	7.3	9	7.1	197	7.9
09:00 PM - 11:59 PM	534	3.9	6	4.7	117	4.7
Unknown	68	0.5	0	0.0	11	0.4
Total	13,566	100.0	127	100.0	2,494	100.0

ROADWAY TYPE IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Interstate Routes	3,304	24.4	29	22.8	653	26.2
U.S. & Michigan Roads	4,199	31.0	43	33.9	834	33.4
County & City Roads	6,063	44.7	55	43.3	1,007	40.4
Total	13,566	100.0	127	100.0	2,494	100.0

HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

DAY OF WEEK IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Sunday	408	3.0	3	2.4	69	2.8
Monday	2,324	17.1	23	18.1	423	17.0
Tuesday	2,519	18.6	19	15.0	460	18.4
Wednesday	2,507	18.5	26	20.5	478	19.2
Thursday	2,488	18.3	22	17.3	453	18.2
Friday	2,517	18.6	20	15.7	444	17.8
Saturday	803	5.9	14	11.0	167	6.7
Total	13,566	100.0	127	100.0	2,494	100.0

DRIVER GENDER IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Male	11,317	83.4	116	91.3	2,147	86.1
Female	1,395	10.3	6	4.7	232	9.3
Unknown	854	6.3	5	3.9	115	4.6
Total	13,566	100.0	127	100.0	2,494	100.0

NUMBER OF OCCUPANTS in Heavy Truck/Bus	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
1 occupant	10,642	78.4	109	85.8	1,929	77.3
2 occupants	987	7.3	8	6.3	180	7.2
3 occupants	190	1.4	1	0.8	47	1.9
4 occupants	125	0.9	0	0.0	27	1.1
5 occupants	69	0.5	2	1.6	24	1.0
6 + occupants	686	5.1	3	2.4	160	6.4
0 occupants	177	1.3	4	3.1	37	1.5
Unknown	690	5.1	0	0.0	90	3.6
Total	13,566	100.0	127	100.0	2,494	100.0

HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

VEHICLE TYPES Involved in Crash with Heavy Truck/Bus	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Vehicles	% of Subtotal	Number of Vehicles	% of Fatal	Number of Vehicles	% of Injury
Passenger Car and Station Wagon	8,440	72.5	72	53.7	1,855	71.3
Van and Motorhome	953	8.2	10	7.5	216	8.3
Pickup	1,526	13.1	20	14.9	331	12.7
Small Truck (under 10,000 lbs.)	337	2.9	2	1.5	72	2.8
Motorcycle	33	0.3	3	2.2	19	0.7
Moped	1	0.0	1	0.7	0	0.0
Go Cart	0	0.0	0	0.0	0	0.0
Snowmobile	3	0.0	0	0.0	1	0.0
Off Road Vehicle	2	0.0	0	0.0	2	0.1
Other	66	0.6	3	2.2	6	0.2
Unknown	279	2.4	23	17.2	98	3.8
Subtotal	11,640	100.0	134	100.0	2,600	100.0

HEAVY TRUCK/BUS VEHICLE TYPES	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Subtotal	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Commercial Vehicle: Group A	6,788	50.0	77	60.6	1,224	49.1
Commercial Vehicle: Group B	2,730	20.1	33	26.0	553	22.2
Commercial Vehicle: Group C	474	3.5	2	1.6	98	3.9
Other Truck	525	3.9	13	10.2	110	4.4
Unknown Truck	3,049	22.5	2	1.6	509	20.4
Subtotal	13,566	100.0	127	100.0	2,494	100.0

Total Vehicle Types in Heavy Truck/Bus Crashes	25,206		261		5,094	
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Group "A" is any vehicle that is towing a vehicle or trailer that has a gross vehicle weight rating (GVWR) over 10,000 lbs.

Group "B" is any single vehicle (including buses) with a GVWR of 26,001 lbs. or more. This would include a combination of vehicles with a combined GVWR over 26,000 lbs. when towing a trailer that has a GVWR of 10,000 lbs. or less.

Group "C" is any single vehicle with a GVWR of less than 26,001 lbs. or a combination of vehicles having a combined GVWR under 26,001 lbs. when the vehicle is required to display placards for hazardous material or designed to carry 16 passengers (including driver). Group "C" is also any vehicle carrying 15 or less people (including driver) transporting children to or from school and home on a regular basis for compensation.

HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

Hazardous Citation Issued	Heavy Truck/Bus Involved Crash						Passenger Vehicle Only Involved Crash			
	Single Vehicle Crash		Multi-Vehicle Crash			Single Vehicle Crash		Multi-Vehicle Crash		
	Number of Trucks/Buses	% of citation	Number of Trucks/Buses	% of citation	Number of Passenger Vehicles	% of citation	Number of Passenger Vehicles	% of citation	Number of Passenger Vehicles	% of citation
None	2	0.5	18	1.0	12	0.6	58	0.4	497	0.6
Speed too fast	124	30.5	38	2.1	195	9.2	5,885	42.9	2,534	3.0
Speed too slow	2	0.5	0	0.0	5	0.2	43	0.3	128	0.2
Failed to yield	13	3.2	261	14.4	419	19.8	417	3.0	23,617	28.3
Disregard traffic control	8	2.0	71	3.9	146	6.9	153	1.1	5,949	7.1
Drove wrong way	1	0.2	0	0.0	11	0.5	10	0.1	139	0.2
Drove left of center	0	0.0	17	0.9	44	2.1	86	0.6	797	1.0
Improper passing	0	0.0	28	1.5	88	4.2	31	0.2	846	1.0
Improper lane use	8	2.0	204	11.2	212	10.0	122	0.9	3,611	4.3
Improper turn	34	8.4	166	9.1	58	2.7	48	0.4	1,912	2.3
Improper/no signal	0	0.0	10	0.6	7	0.3	9	0.1	117	0.1
Improper backing	7	1.7	159	8.8	26	1.2	52	0.4	2,201	2.6
Unable to stop in assured clear distance	10	2.5	557	30.7	520	24.6	515	3.8	33,877	40.6
Reckless driving	3	0.7	1	0.1	14	0.7	690	5.0	490	0.6
Careless/Negligent driving	90	22.2	97	5.3	193	9.1	3,540	25.8	2,730	3.3
Other	92	22.7	167	9.2	126	6.0	1,675	12.2	3,048	3.7
Unknown	12	3.0	23	1.3	41	1.9	369	2.7	983	1.2
Total Cited Vehicles	406	100.0	1,817	100.0	2,117	100.0	13,703	100.0	83,476	100.0
Percent of Total Vehicles		19.3		15.9		18.6		11.7		22.3
Vehicles with No Citation Issued	1,703	80.7	9,640	84.1	9,239	81.4	103,835	88.3	290,245	77.7
Total Vehicles Involved	2,109	100.0	11,457	100.0	11,356	100.0	117,538	100.0	373,721	100.0



2006

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Age

AGE and INJURY SEVERITY by PERSON TYPE

Age	Driver			Passenger			Motorcyclist			Bicyclist			Pedestrian			
	Total	Killed	Injured	No Injury	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured
	0	185	0	4	45	167	2	165	2	0	0	1	0	0	4	0
1	0	0	0	0	179	2	177	0	0	0	2	0	1	13	0	10
2	5	0	1	4	166	1	165	0	0	0	3	0	1	14	0	12
3	1	0	0	1	235	3	232	0	0	0	2	0	2	16	0	16
4	2	0	0	2	233	1	232	0	0	0	7	0	6	19	1	16
5	6	0	0	5	255	2	253	1	0	1	15	0	13	19	0	18
6	7	0	4	3	286	2	284	3	0	3	18	0	16	45	0	39
7	8	0	3	5	259	2	257	1	0	1	24	0	19	42	1	36
8	5	0	3	2	300	2	298	1	0	1	43	0	35	35	0	32
9	7	0	4	3	310	1	309	1	0	1	56	1	46	42	1	38
10	9	0	4	5	288	0	288	2	0	2	44	1	38	36	0	32
11	17	1	8	8	342	4	338	4	0	4	67	0	60	53	2	47
12	29	0	16	12	308	3	305	3	0	3	79	0	73	61	0	52
13	77	0	32	42	351	0	351	6	0	6	98	0	82	68	0	62
14	185	1	47	132	500	3	497	9	0	9	100	2	79	82	1	71
15	851	3	126	712	723	8	715	10	0	9	92	0	78	105	3	92
16	12,041	5	1,401	10,547	870	11	859	14	0	10	79	2	62	67	1	58
17	15,113	14	1,859	13,144	862	10	852	27	0	20	51	0	46	82	2	71
18	16,599	14	2,134	14,306	801	7	794	54	1	46	59	0	51	54	1	49
19	15,194	13	2,033	13,011	661	6	655	59	0	48	50	0	42	80	3	67
20	14,010	21	1,801	12,047	508	4	504	84	3	67	46	0	40	75	1	67
21	13,234	32	1,671	11,395	460	8	452	103	3	80	51	0	43	67	3	58
22	12,091	15	1,450	10,515	430	7	423	74	2	62	43	1	40	42	0	41
23	11,470	18	1,505	9,848	375	3	372	90	4	73	39	0	35	46	3	35
24	11,008	17	1,395	9,480	363	10	353	86	1	67	27	0	22	47	5	37
25	10,666	16	1,356	9,182	299	6	293	77	3	55	29	0	25	43	2	34
26	9,972	11	1,211	8,627	289	3	286	65	0	39	26	0	24	45	2	42
27	9,603	13	1,149	8,321	266	3	263	74	1	65	12	0	11	31	0	26
28	9,273	20	1,089	8,067	239	4	235	52	2	36	19	0	17	36	1	30
29	8,982	11	1,036	7,838	208	1	207	50	2	37	20	0	16	22	2	18
30	8,331	9	1,015	7,213	183	2	181	62	2	47	21	0	19	23	2	21
31	8,664	13	1,051	7,503	178	1	177	58	5	45	17	0	15	24	0	22
32	8,511	12	1,018	7,369	186	2	184	79	4	53	11	0	11	32	1	28

Note: Driver age is calculated from birth date.
 Data entry errors may result in age "0" drivers.



AGE and INJURY SEVERITY by PERSON TYPE (continued)

Age	Driver			Passenger			Motorcyclist			Bicyclist			Pedestrian			
	Total	Killed	Injured	No Injury	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured
33	8,632	9	1,003	7,515	167	2	165	55	2	36	13	0	12	18	0	18
34	9,088	11	1,048	7,910	172	3	169	64	1	47	24	0	19	38	5	28
35	9,698	13	1,195	8,363	208	4	204	85	4	66	10	0	10	29	1	24
36	9,530	7	1,128	8,280	203	4	199	71	0	51	17	0	14	25	2	21
37	9,064	8	1,070	7,870	180	2	178	73	2	51	24	2	19	32	4	27
38	8,840	10	1,055	7,666	172	2	170	85	2	61	17	1	11	20	1	18
39	9,116	8	1,088	7,919	166	3	163	70	1	55	21	0	14	36	4	29
40	8,932	7	1,033	7,809	167	2	165	70	1	58	22	0	15	21	3	18
41	9,307	9	1,129	8,070	165	2	163	97	1	79	30	0	28	32	4	24
42	9,467	14	1,107	8,238	199	1	198	77	3	60	28	0	22	36	3	29
43	9,468	14	1,078	8,269	185	3	182	78	1	63	32	1	27	31	4	26
44	9,344	9	1,085	8,164	181	3	178	89	0	69	28	0	26	34	6	22
45	9,314	16	1,063	8,119	177	2	175	100	7	66	29	0	24	35	3	29
46	8,881	13	1,025	7,751	187	2	185	97	0	70	32	1	24	40	2	36
47	9,021	7	1,049	7,873	183	1	182	80	2	60	30	1	25	35	4	27
48	8,991	13	1,064	7,806	168	2	166	107	4	84	22	0	17	42	3	37
49	8,540	9	1,066	7,374	155	1	154	101	3	68	25	1	22	29	2	27
50	8,419	14	990	7,322	175	0	175	101	5	72	29	2	22	29	1	26
51	8,088	13	980	7,010	200	4	196	92	5	66	33	0	26	30	1	24
52	7,743	18	891	6,754	165	2	163	91	4	66	22	1	20	30	3	24
53	7,294	13	888	6,328	169	2	167	82	4	53	18	1	15	25	1	22
54	7,110	6	835	6,188	144	0	144	83	1	56	24	1	21	36	4	31
55	6,638	13	831	5,715	156	3	153	69	3	55	21	0	19	19	4	15
56	6,384	10	805	5,506	151	2	149	69	2	55	18	2	12	21	0	17
57	6,007	10	731	5,202	129	3	126	76	5	53	12	1	11	21	1	18
58	5,870	6	710	5,092	134	1	133	62	2	52	10	0	10	21	1	19
59	5,945	13	676	5,198	144	1	143	58	4	42	7	1	4	26	1	22
60	4,593	4	563	3,969	145	1	144	30	0	21	5	0	4	18	0	14
61	4,067	6	473	3,543	96	0	96	30	0	25	5	0	5	18	5	13
62	3,921	6	469	3,412	112	1	111	33	1	30	8	0	6	11	2	9
63	3,954	10	478	3,422	125	1	124	37	3	27	7	0	7	20	2	13
64	3,475	5	454	2,976	105	0	105	18	0	16	7	0	6	9	2	6
65	3,062	5	367	2,658	95	1	94	15	1	11	7	1	5	9	0	9



AGE and INJURY SEVERITY by PERSON TYPE (continued)

Age	Driver			Passenger			Motorcyclist			Bicyclist			Pedestrian			
	Total	Killed	Injured	No Injury	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured
66	2,768	4	317	2,416	96	1	95	13	2	10	2	0	1	11	1	9
67	2,534	4	280	2,224	81	1	80	18	0	14	1	0	1	8	1	7
68	2,461	6	277	2,147	74	0	74	13	1	8	6	1	4	5	0	5
69	2,203	3	273	1,901	60	0	60	10	0	8	6	1	5	15	4	11
70	2,027	4	279	1,715	83	3	80	6	0	4	2	0	2	8	0	7
71	2,068	4	260	1,780	87	1	86	3	0	3	5	1	3	8	1	5
72	1,790	4	212	1,560	73	4	69	2	0	1	3	0	3	6	0	6
73	1,764	4	226	1,514	65	1	64	1	0	1	5	0	5	10	1	9
74	1,757	5	227	1,501	69	0	69	5	0	3	3	0	3	4	0	4
75	1,682	4	229	1,431	57	2	55	0	0	0	1	0	1	6	4	2
76	1,687	3	209	1,460	82	2	80	1	0	0	4	0	4	5	0	5
77	1,545	6	195	1,327	49	1	48	1	0	1	4	0	4	3	0	3
78	1,571	6	198	1,342	60	1	59	0	0	0	2	0	2	7	0	7
79	1,502	3	194	1,285	62	2	60	0	0	0	1	0	1	7	2	4
80	1,379	3	192	1,174	75	3	72	2	0	2	2	0	2	6	0	5
81	1,221	9	163	1,035	56	2	54	0	0	0	3	0	3	8	1	7
82	1,052	5	137	899	61	1	60	1	0	1	0	0	0	6	2	4
83	995	5	133	846	51	3	48	1	0	0	1	0	1	4	1	3
84	884	3	134	739	47	0	47	0	0	0	2	0	2	5	2	3
85	668	2	113	545	50	1	49	0	0	0	1	0	1	3	0	3
86	586	2	95	481	32	0	32	0	0	0	0	0	0	0	0	0
87	457	1	61	391	26	1	25	0	0	0	0	0	0	2	0	2
88	389	4	52	331	24	2	22	0	0	0	1	0	1	0	0	0
89	270	4	41	222	24	0	24	0	0	0	1	0	1	3	0	3
90	212	2	36	169	17	2	15	0	0	0	1	1	0	2	0	1
91	140	2	22	116	12	1	11	0	0	0	0	0	0	0	0	0
92	76	1	12	62	7	3	4	0	0	0	0	0	0	0	0	0
93	52	1	4	46	6	1	5	0	0	0	0	0	0	0	0	0
94	42	0	14	28	3	0	3	0	0	0	0	0	0	1	0	1
95	23	1	1	21	7	2	5	0	0	0	0	0	0	0	0	0
96	15	0	2	13	0	0	0	0	0	0	0	0	0	0	0	0
97	8	0	4	4	2	0	2	0	0	0	0	0	0	0	0	0
98	7	0	0	6	4	0	4	0	0	0	0	0	0	0	0	0



AGE and INJURY SEVERITY by PERSON TYPE (continued)

Age	Driver			Passenger			Motorcyclist			Bicyclist			Pedestrian			
	Total	Killed	Injured	No Injury	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured
99	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0
109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	48,967	0	137	5,240	859	0	859	170	0	16	139	0	39	149	0	77
Totals	528,763*	693	58,582	420,658	19,724*	226	19,498	3,743*	110	2,706	2,084*	28	1,677	2,638*	137	2,195
	* Includes 48,830 drivers with unknown injury severity			* Uninjured passengers not included in total			* Includes 112 motorcyclists with unknown injury severity and 815 with no injury			* Includes 100 bicyclists with unknown injury severity and 279 with no injury			* Includes 131 pedestrians with unknown injury severity and 175 with no injury			



DRIVER AGE 16-24

DRIVER ACTION PRIOR TO CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Going straight ahead	65,951	54.6	265	81.0	15,829	57.6
Turning left	10,362	8.6	18	5.5	2,743	10.0
Turning right	3,475	2.9	2	0.6	538	2.0
Stopped on roadway	9,589	7.9	3	0.9	2,198	8.0
In prior crash	181	0.1	1	0.3	44	0.2
Changing lanes	3,228	2.7	7	2.1	433	1.6
Backing	2,352	1.9	3	0.9	119	0.4
Slowing/stopping on roadway	12,572	10.4	6	1.8	2,499	9.1
Slowing/stopping other	173	0.1	0	0.0	34	0.1
Starting up on roadway	2,763	2.3	1	0.3	658	2.4
Starting up other	64	0.1	0	0.0	16	0.1
Entering parking	108	0.1	0	0.0	12	0.0
Leaving parking	431	0.4	0	0.0	83	0.3
Entering roadway	2,374	2.0	3	0.9	516	1.9
Leaving roadway	286	0.2	3	0.9	91	0.3
Making U-turn	287	0.2	1	0.3	65	0.2
Overtaking or passing	1,080	0.9	4	1.2	249	0.9
Avoiding object	197	0.2	0	0.0	49	0.2
Avoiding animal	619	0.5	0	0.0	201	0.7
Avoiding pedestrian	35	0.0	2	0.6	17	0.1
Avoiding vehicle (front/back)	1,235	1.0	6	1.8	296	1.1
Avoiding vehicle (angle)	526	0.4	1	0.3	140	0.5
Driverless moving	24	0.0	0	0.0	3	0.0
Parked	343	0.3	0	0.0	36	0.1
Crossing at intersection	6	0.0	0	0.0	1	0.0
Crossing not at intersection	3	0.0	0	0.0	1	0.0
Getting on/off vehicle	4	0.0	1	0.3	2	0.0
In roadway with traffic	2	0.0	0	0.0	1	0.0
In roadway against traffic	6	0.0	0	0.0	2	0.0
Standing/lying in roadway	0	0.0	0	0.0	0	0.0
Pushing/working on vehicle	8	0.0	0	0.0	1	0.0
Other working in roadway	16	0.0	0	0.0	5	0.0
Playing in roadway	5	0.0	0	0.0	1	0.0
In roadway other reason	3	0.0	0	0.0	0	0.0
Not in roadway	6	0.0	0	0.0	1	0.0
Other	33	0.0	0	0.0	7	0.0
Unknown	2,413	2.0	0	0.0	570	2.1
Total Drivers	120,760	100.0	327	100.0	27,461	100.0

DRIVER AGE 16-24 (continued)

MOST HARMFUL EVENT IN A NONCOLLISION	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Loss of control	615	0.5	0	0.0	174	0.6
Cross center/median	98	0.1	0	0.0	34	0.1
Ran off road left	160	0.1	0	0.0	36	0.1
Ran off road right	301	0.2	0	0.0	57	0.2
Re-enter road	20	0.0	0	0.0	7	0.0
Overturn	2,744	2.3	30	9.2	1,370	5.0
Separation of units	101	0.1	0	0.0	14	0.1
Fire/explosion	144	0.1	1	0.3	16	0.1
Immersion	30	0.0	0	0.0	8	0.0
Jackknife	38	0.0	0	0.0	1	0.0
Downhill runaway	53	0.0	0	0.0	12	0.0
Cargo loss/shift	84	0.1	0	0.0	10	0.0
Individual fell off	93	0.1	2	0.6	77	0.3
Other noncollision	293	0.2	1	0.3	55	0.2
NONCOLLISION Subtotal	4,774	4.0	34	10.4	1,871	6.8

Drivers age 16-24 have the highest incidence of overturn in fatal and injury crashes when compared to the other two age groups.

MOST HARMFUL EVENT IN A COLLISION WITH A NONFIXED OBJECT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Pedestrian	410	0.3	31	9.5	332	1.2
Bicyclist (Pedalcycle)	310	0.3	6	1.8	263	1.0
Motor vehicle in transport	83,716	69.3	178	54.4	19,382	70.6
Parked motor vehicle	2,332	1.9	2	0.6	272	1.0
Railway train	61	0.1	1	0.3	17	0.1
Animal	9,120	7.6	2	0.6	226	0.8
Other nonfixed objects	852	0.7	0	0.0	92	0.3
COLLISION NONFIXED Subtotal	96,801	80.2	220	67.3	20,584	75.0

DRIVER AGE 16-24 (continued)

MOST HARMFUL EVENT IN A COLLISION WITH A FIXED OBJECT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Bridge/pier/abutment	125	0.1	1	0.3	39	0.1
Bridge parapet end	30	0.0	0	0.0	5	0.0
Bridge rail	130	0.1	0	0.0	24	0.1
Guardrail face	1,029	0.9	3	0.9	199	0.7
Guardrail end	195	0.2	1	0.3	53	0.2
Median barrier	1,120	0.9	3	0.9	344	1.3
Highway traffic sign post	736	0.6	0	0.0	44	0.2
Highway signal post	74	0.1	0	0.0	11	0.0
Luminaire/light support	197	0.2	0	0.0	40	0.1
Utility pole	999	0.8	6	1.8	366	1.3
Other pole	238	0.2	0	0.0	43	0.2
Culvert	235	0.2	0	0.0	79	0.3
Curb	675	0.6	1	0.3	84	0.3
Ditch	2,683	2.2	2	0.6	671	2.4
Embankment	519	0.4	0	0.0	172	0.6
Fence	381	0.3	2	0.6	59	0.2
Mailbox	574	0.5	0	0.0	39	0.1
Tree	3,722	3.1	51	15.6	1,453	5.3
Rail crossing signal	13	0.0	0	0.0	2	0.0
Building	226	0.2	1	0.3	77	0.3
Traffic island	15	0.0	0	0.0	2	0.0
Fire hydrant	166	0.1	0	0.0	30	0.1
Impact attenuator	14	0.0	0	0.0	9	0.0
Other fixed object	809	0.7	2	0.6	181	0.7
COLLISION FIXED Subtotal	14,905	12.3	73	22.3	4,026	14.7

Teens and young adults have the highest incidence of collision with ditches and trees in all crashes when compared to the other two age groups.

	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Unknown Event	4,280	3.5	0	0.0	980	3.6
TOTAL MOST HARMFUL EVENT	120,760	100.0	327	100.0	27,461	100.0

DRIVER AGE 16-24 (continued)

CRASH TYPE	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Single Vehicle	28,459	23.6	128	39.1	6,170	22.5
Head On	1,877	1.6	67	20.5	811	3.0
Head On - Left Turn	4,556	3.8	18	5.5	1,710	6.2
Angle	27,672	22.9	67	20.5	7,690	28.0
Rear End	38,321	31.7	18	5.5	8,276	30.1
Rear End - Left Turn	1,881	1.6	1	0.3	517	1.9
Rear End - Right Turn	1,304	1.1	0	0.0	180	0.7
Sideswipe - Same Direction	10,187	8.4	7	2.1	981	3.6
Sideswipe - Opposite Direct	2,606	2.2	3	0.9	412	1.5
Other/Unknown	3,897	3.2	18	5.5	714	2.6
Total Drivers	120,760	100.0	327	100.0	27,461	100.0

Teen and young adult drivers are involved in the largest proportion of single vehicle fatal crashes when compared to the other two age groups.

RELATIONSHIP TO ROADWAY (LOCATION OF FIRST IMPACT IN CRASH)	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
On Road	100,796	83.5	225	68.8	22,020	80.2
Median	741	0.6	2	0.6	208	0.8
Shoulder	4,372	3.6	20	6.1	1,088	4.0
Outside of Shoulder/Curb	9,499	7.9	66	20.2	2,949	10.7
Gore	296	0.2	1	0.3	88	0.3
Other/Unknown	5,056	4.2	13	4.0	1,108	4.0
Total Drivers	120,760	100.0	327	100.0	27,461	100.0

When compared to the other two age groups in all crashes, teen and young adult drivers have the highest incidence of crashes where the first impact is on the shoulder of the roadway or outside the shoulder/curb.

ROADWAY TYPE IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Interstate Routes	12,197	10.1	29	8.9	2,804	10.2
U.S. & Michigan Roads	34,549	28.6	103	31.5	7,896	28.8
County & City Roads	74,014	61.3	195	59.6	16,761	61.0
Total Drivers	120,760	100.0	327	100.0	27,461	100.0

DRIVER AGE 16-24 (continued)

TIME OF DAY IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Midnight - 02:59 AM	6,669	5.5	53	16.2	1,707	6.2
03:00 AM - 05:59 AM	3,498	2.9	30	9.2	882	3.2
06:00 AM - 08:59 AM	13,055	10.8	34	10.4	2,730	9.9
09:00 AM - 11:59 AM	12,162	10.1	26	8.0	2,741	10.0
Noon - 02:59 PM	21,326	17.7	32	9.8	5,068	18.5
03:00 PM - 05:59 PM	31,579	26.2	39	11.9	7,153	26.0
06:00 PM - 08:59 PM	19,002	15.7	46	14.1	4,240	15.4
09:00 PM - 11:59 PM	13,080	10.8	67	20.5	2,866	10.4
Unknown	389	0.3	0	0.0	74	0.3
Total Drivers	120,760	100.0	327	100.0	27,461	100.0

9:00 PM to 2:59 AM shows the highest involvement for teen and young adult drivers in all crashes compared to the other two age groups.

HAZARDOUS ACTION	All Crashes		Fatal Crashes		Injury Crashes		Hazardous Citation Issued	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury	Number	% of Issued
None	47,078	39.0	93	28.4	9,037	32.9	163	0.4
Speed too fast	10,651	8.8	62	19.0	2,917	10.6	4,099	11.0
Speed too slow	170	0.1	0	0.0	41	0.1	74	0.2
Failed to yield	13,752	11.4	17	5.2	3,733	13.6	8,585	23.0
Disregard traffic control	3,297	2.7	21	6.4	1,313	4.8	2,124	5.7
Drove wrong way	105	0.1	1	0.3	31	0.1	44	0.1
Drove left of center	764	0.6	24	7.3	256	0.9	339	0.9
Improper passing	715	0.6	0	0.0	99	0.4	317	0.8
Improper lane use	2,446	2.0	1	0.3	257	0.9	1,238	3.3
Improper turn	1,315	1.1	3	0.9	216	0.8	653	1.7
Improper/no signal	137	0.1	0	0.0	25	0.1	43	0.1
Improper backing	1,667	1.4	2	0.6	49	0.2	603	1.6
Unable to stop in assured clear distance	23,400	19.4	4	1.2	5,046	18.4	13,463	36.0
Reckless driving	1,089	0.9	21	6.4	473	1.7	543	1.5
Careless/negligent driving	4,868	4.0	30	9.2	1,697	6.2	2,926	7.8
Other	4,822	4.0	23	7.0	1,227	4.5	1,639	4.4
Unknown	4,484	3.7	25	7.6	1,044	3.8	514	1.4
Total Drivers	120,760	100.0	327	100.0	27,461	100.0	37,367	100.0

Compared to the other two age groups, teen and young adult drivers have the highest incidence of crash involvement when their speed is too fast. In all crashes they are “unable to stop in assured clear distance” more often than older drivers.

DRIVER AGE 16-24 (continued)

DAY OF WEEK IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Sunday	12,605	10.4	51	15.6	3,169	11.5
Monday	16,349	13.5	44	13.5	3,570	13.0
Tuesday	17,521	14.5	32	9.8	3,863	14.1
Wednesday	17,536	14.5	38	11.6	4,032	14.7
Thursday	18,652	15.4	58	17.7	4,114	15.0
Friday	21,256	17.6	41	12.5	4,748	17.3
Saturday	16,841	13.9	63	19.3	3,965	14.4
Total Drivers	120,760	100.0	327	100.0	27,461	100.0

The weekend shows higher involvement of teen and young adult drivers in all crashes when compared to the other two age groups.

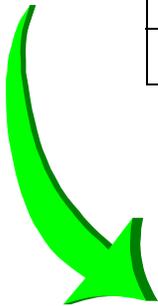
DRIVER GENDER IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Male	65,051	53.9	236	72.2	14,202	51.7
Female	55,646	46.1	91	27.8	13,248	48.2
Unknown	63	0.1	0	0.0	11	0.0
Total Drivers	120,760	100.0	327	100.0	27,461	100.0

OCCUPANTS IN MOTOR VEHICLE	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
1 occupant	83,686	69.3	188	57.5	17,576	64.0
2 occupants	25,123	20.8	82	25.1	6,504	23.7
3 occupants	7,102	5.9	33	10.1	1,994	7.3
4 occupants	2,654	2.2	15	4.6	822	3.0
5 occupants	767	0.6	6	1.8	253	0.9
6 + occupants	281	0.2	3	0.9	86	0.3
0 occupants	244	0.2	0	0.0	20	0.1
Unknown	903	0.7	0	0.0	206	0.8
Total Drivers	120,760	100.0	327	100.0	27,461	100.0

The 16-24 age group has the highest multiple-occupant crash percentage rates of the three age groups.

DRIVER AGE 16-24 (continued)

VEHICLE TYPE CRASH INVOLVEMENT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Passenger Car and Station Wagon	97,878	81.1	246	75.2	22,147	80.6
Van and Motorhome	3,827	3.2	7	2.1	888	3.2
Pickup	14,299	11.8	43	13.1	2,910	10.6
Small Truck (under 10,000 lbs.)	3,097	2.6	2	0.6	726	2.6
Motorcycle	547	0.5	17	5.2	436	1.6
Moped	59	0.0	1	0.3	50	0.2
Go Cart	5	0.0	1	0.3	3	0.0
Snowmobile	28	0.0	1	0.3	23	0.1
Off Road Vehicle	86	0.1	1	0.3	72	0.3
Other	118	0.1	0	0.0	36	0.1
Unknown	226	0.2	0	0.0	45	0.2
CDL Truck/Bus (breakdown below)	590	0.5	8	2.4	125	0.5
Total Number of Drivers	120,760	100.0	327	100.0	27,461	100.0



CDL Truck/Bus Sub-category Types	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Commercial Vehicle: Group A	269	45.6	3	37.5	50	40.0
Commercial Vehicle: Group B	114	19.3	4	50.0	33	26.4
Commercial Vehicle: Group C	34	5.8	0	0.0	7	5.6
Other Truck	67	11.4	1	12.5	13	10.4
Unknown Truck	106	18.0	0	0.0	22	17.6
Total Number of Drivers	590	100.0	8	100.0	125	100.0

Group "A" is any vehicle that is towing a vehicle or trailer that has a gross vehicle weight rating (GVWR) over 10,000 lbs.

Group "B" is any single vehicle (including buses) with a GVWR of 26,001 lbs. or more. This would include a combination of vehicles with a combined GVWR over 26,000 lbs. when towing a trailer that has a GVWR of 10,000 lbs. or less.

Group "C" is any single vehicle with a GVWR of less than 26,001 lbs. or a combination of vehicles having a combined GVWR under 26,001 lbs. when the vehicle is required to display placards for hazardous material or designed to carry 16 passengers (including driver). Group "C" is also any vehicle carrying 15 or less people (including driver) transporting children to or from school and home on a regular basis for compensation.

DRIVER AGE 25-64

DRIVER ACTION PRIOR TO CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Going straight ahead	174,294	54.7	771	79.7	35,550	52.8
Turning left	19,804	6.2	33	3.4	5,144	7.6
Turning right	8,293	2.6	5	0.5	1,340	2.0
Stopped on roadway	39,590	12.4	28	2.9	10,086	15.0
In prior crash	390	0.1	3	0.3	126	0.2
Changing lanes	6,713	2.1	14	1.4	917	1.4
Backing	7,378	2.3	4	0.4	355	0.5
Slowing/stopping on roadway	31,392	9.8	38	3.9	6,991	10.4
Slowing/stopping other	547	0.2	0	0.0	118	0.2
Starting up on roadway	6,723	2.1	12	1.2	1,515	2.3
Starting up other	175	0.1	0	0.0	37	0.1
Entering parking	344	0.1	0	0.0	39	0.1
Leaving parking	785	0.2	0	0.0	146	0.2
Entering roadway	3,967	1.2	9	0.9	830	1.2
Leaving roadway	570	0.2	3	0.3	193	0.3
Making U-turn	593	0.2	0	0.0	133	0.2
Overtaking or passing	2,295	0.7	12	1.2	464	0.7
Avoiding object	358	0.1	2	0.2	91	0.1
Avoiding animal	836	0.3	0	0.0	207	0.3
Avoiding pedestrian	89	0.0	3	0.3	37	0.1
Avoiding vehicle (front/back)	2,697	0.8	23	2.4	685	1.0
Avoiding vehicle (angle)	1,353	0.4	5	0.5	375	0.6
Driverless moving	43	0.0	0	0.0	8	0.0
Parked	1,649	0.5	1	0.1	177	0.3
Crossing at intersection	24	0.0	0	0.0	9	0.0
Crossing not at intersection	12	0.0	0	0.0	4	0.0
Getting on/off vehicle	5	0.0	0	0.0	1	0.0
In roadway with traffic	8	0.0	0	0.0	1	0.0
In roadway against traffic	9	0.0	0	0.0	1	0.0
Standing/lying in roadway	1	0.0	0	0.0	0	0.0
Pushing/working on vehicle	3	0.0	0	0.0	1	0.0
Other working in roadway	43	0.0	0	0.0	13	0.0
Playing in roadway	5	0.0	0	0.0	1	0.0
In roadway other reason	7	0.0	0	0.0	0	0.0
Not in roadway	24	0.0	0	0.0	8	0.0
Other	59	0.0	0	0.0	13	0.0
Unknown	7,665	2.4	1	0.1	1,694	2.5
Total Drivers	318,743	100.0	967	100.0	67,310	100.0

DRIVER AGE 25-64 (continued)

MOST HARMFUL EVENT IN A NONCOLLISION	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Loss of control	1,125	0.4	3	0.3	338	0.5
Cross center/median	231	0.1	0	0.0	43	0.1
Ran off road left	346	0.1	0	0.0	85	0.1
Ran off road right	604	0.2	0	0.0	147	0.2
Re-enter road	57	0.0	0	0.0	22	0.0
Overturn	4,263	1.3	68	7.0	2,064	3.1
Separation of units	283	0.1	0	0.0	44	0.1
Fire/explosion	358	0.1	4	0.4	47	0.1
Immersion	22	0.0	0	0.0	5	0.0
Jackknife	211	0.1	0	0.0	19	0.0
Downhill runaway	130	0.0	0	0.0	36	0.1
Cargo loss/shift	434	0.1	0	0.0	34	0.1
Individual fell off	294	0.1	17	1.8	247	0.4
Other noncollision	858	0.3	0	0.0	162	0.2
NONCOLLISION Subtotal	9,216	2.9	92	9.5	3,293	4.9

MOST HARMFUL EVENT IN A COLLISION WITH A NONFIXED OBJECT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Pedestrian	1,154	0.4	79	8.2	931	1.4
Pedalcycle (Bicyclist)	1,063	0.3	19	2.0	848	1.3
Motor vehicle in transport	214,348	67.2	600	62.0	51,562	76.6
Parked motor vehicle	5,415	1.7	8	0.8	558	0.8
Railway train	177	0.1	3	0.3	47	0.1
Animal	46,528	14.6	8	0.8	847	1.3
Other nonfixed objects	3,455	1.1	3	0.3	299	0.4
COLLISION NONFIXED Subtotal	272,140	85.4	720	74.5	55,092	81.8

DRIVER AGE 25-64 (continued)

MOST HARMFUL EVENT IN A COLLISION WITH A FIXED OBJECT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Bridge/pier/abutment	362	0.1	7	0.7	86	0.1
Bridge parapet end	78	0.0	0	0.0	8	0.0
Bridge rail	346	0.1	1	0.1	75	0.1
Guardrail face	1,979	0.6	4	0.4	369	0.5
Guardrail end	337	0.1	3	0.3	79	0.1
Median barrier	2,083	0.7	4	0.4	666	1.0
Highway traffic sign post	1,210	0.4	3	0.3	106	0.2
Highway signal post	143	0.0	2	0.2	15	0.0
Luminaire/light support	310	0.1	3	0.3	61	0.1
Utility pole	1,625	0.5	9	0.9	524	0.8
Other pole	458	0.1	1	0.1	90	0.1
Culvert	291	0.1	5	0.5	99	0.1
Curb	969	0.3	1	0.1	189	0.3
Ditch	3,831	1.2	12	1.2	921	1.4
Embankment	790	0.2	2	0.2	242	0.4
Fence	531	0.2	2	0.2	84	0.1
Mailbox	791	0.2	0	0.0	58	0.1
Tree	4,915	1.5	87	9.0	1,725	2.6
Rail crossing signal	59	0.0	0	0.0	9	0.0
Building	345	0.1	2	0.2	121	0.2
Traffic island	23	0.0	0	0.0	3	0.0
Fire hydrant	248	0.1	1	0.1	47	0.1
Impact attenuator	21	0.0	0	0.0	6	0.0
Other fixed object	1,592	0.5	5	0.5	382	0.6
COLLISION FIXED Subtotal	23,337	7.3	154	15.9	5,965	8.9

	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Unknown Event	14,050	4.4	1	0.1	2,960	4.4
TOTAL MOST HARMFUL EVENT	318,743	100.0	967	100.0	67,310	100.0

DRIVER AGE 25-64 (continued)

CRASH TYPE	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Single Vehicle	79,324	24.9	316	32.7	10,549	15.7
Head On	4,672	1.5	214	22.1	2,033	3.0
Head On - Left Turn	9,737	3.1	50	5.2	3,737	5.6
Angle	64,569	20.3	215	22.2	18,305	27.2
Rear End	101,715	31.9	74	7.7	24,737	36.8
Rear End - Left Turn	3,925	1.2	10	1.0	1,155	1.7
Rear End - Right Turn	3,789	1.2	2	0.2	592	0.9
Sideswipe - Same Direction	30,402	9.5	15	1.6	2,996	4.5
Sideswipe - Opposite Direct	7,462	2.3	19	2.0	1,131	1.7
Other/Unknown	13,148	4.1	52	5.4	2,075	3.1
Total Drivers	318,743	100.0	967	100.0	67,310	100.0

RELATIONSHIP TO ROADWAY (LOCATION OF FIRST IMPACT IN CRASH)	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
On Road	281,570	88.3	747	77.2	58,267	86.6
Median	1,501	0.5	12	1.2	411	0.6
Shoulder	7,830	2.5	56	5.8	1,872	2.8
Outside of Shoulder/Curb	13,439	4.2	135	14.0	3,911	5.8
Gore	435	0.1	1	0.1	128	0.2
Other/Unknown	13,968	4.4	16	1.7	2,721	4.0
Total Drivers	318,743	100.0	967	100.0	67,310	100.0

ROADWAY TYPE IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Interstate Routes	38,955	12.2	141	14.6	8,536	12.7
U.S. & Michigan Roads	98,363	30.9	331	34.2	21,068	31.3
County & City Roads	181,425	56.9	495	51.2	37,706	56.0
Total Drivers	318,743	100.0	967	100.0	67,310	100.0

DRIVER AGE 25-64 (continued)

TIME OF DAY IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Midnight - 02:59 AM	11,141	3.5	122	12.6	2,512	3.7
03:00 AM - 05:59 AM	11,578	3.6	77	8.0	1,830	2.7
06:00 AM - 08:59 AM	48,076	15.1	124	12.8	8,621	12.8
09:00 AM - 11:59 AM	39,732	12.5	111	11.5	8,711	12.9
Noon - 02:59 PM	56,035	17.6	114	11.8	13,438	20.0
03:00 PM - 05:59 PM	79,752	25.0	158	16.3	18,375	27.3
06:00 PM - 08:59 PM	47,000	14.7	153	15.8	9,037	13.4
09:00 PM - 11:59 PM	24,323	7.6	107	11.1	4,567	6.8
Unknown	1,106	0.3	1	0.1	219	0.3
Total Drivers	318,743	100.0	967	100.0	67,310	100.0

6:00 AM to 8:59 AM shows the highest involvement for drivers age 25-64 in all crashes compared to the other age groups.

HAZARDOUS ACTION	All Crashes		Fatal Crashes		Injury Crashes		Hazardous Citation Issued	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury	Number	% of Issued
None	183,939	57.7	447	46.2	35,203	52.3	395	0.7
Speed too fast	15,022	4.7	117	12.1	4,074	6.1	4,446	7.9
Speed too slow	353	0.1	2	0.2	82	0.1	91	0.2
Failed to yield	23,083	7.2	38	3.9	6,309	9.4	12,845	23.0
Disregard traffic control	6,128	1.9	39	4.0	2,329	3.5	3,472	6.2
Drove wrong way	232	0.1	9	0.9	72	0.1	92	0.2
Drove left of center	1,630	0.5	45	4.7	493	0.7	523	0.9
Improper passing	1,561	0.5	4	0.4	207	0.3	601	1.1
Improper lane use	5,765	1.8	2	0.2	645	1.0	2,456	4.4
Improper turn	3,058	1.0	4	0.4	459	0.7	1,283	2.3
Improper/no signal	347	0.1	0	0.0	54	0.1	83	0.1
Improper backing	5,432	1.7	0	0.0	138	0.2	1,614	2.9
Unable to stop in assured clear distance	39,547	12.4	28	2.9	8,991	13.4	20,107	36.0
Reckless driving	1,258	0.4	23	2.4	530	0.8	614	1.1
Careless/negligent driving	6,545	2.1	66	6.8	2,230	3.3	3,378	6.0
Other	11,288	3.5	57	5.9	2,624	3.9	3,127	5.6
Unknown	13,555	4.3	86	8.9	2,870	4.3	801	1.4
Total Drivers	318,743	100.0	967	100.0	67,310	100.0	55,928	100.0

DRIVER AGE 25-64 (continued)

DAY OF WEEK IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Sunday	28,141	8.8	153	15.8	6,246	9.3
Monday	46,141	14.5	123	12.7	9,647	14.3
Tuesday	49,362	15.5	132	13.7	10,185	15.1
Wednesday	48,899	15.3	132	13.7	9,957	14.8
Thursday	50,844	16.0	140	14.5	10,642	15.8
Friday	55,580	17.4	134	13.9	11,675	17.3
Saturday	39,776	12.5	153	15.8	8,958	13.3
Total Drivers	318,743	100.0	967	100.0	67,310	100.0

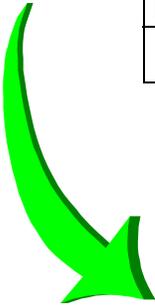
DRIVER GENDER IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Male	177,626	55.7	705	72.9	36,073	53.6
Female	140,885	44.2	262	27.1	31,203	46.4
Unknown	232	0.1	0	0.0	34	0.1
Total Drivers	318,743	100.0	967	100.0	67,310	100.0

OCCUPANTS IN MOTOR VEHICLE	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
1 occupant	240,949	75.6	688	71.1	47,581	70.7
2 occupants	49,263	15.5	192	19.9	12,333	18.3
3 occupants	14,697	4.6	49	5.1	3,977	5.9
4 occupants	6,284	2.0	19	2.0	1,699	2.5
5 occupants	2,185	0.7	9	0.9	619	0.9
6 + occupants	1,818	0.6	10	1.0	510	0.8
0 occupants	1,072	0.3	0	0.0	93	0.1
Unknown	2,475	0.8	0	0.0	498	0.7
Total Drivers	318,743	100.0	967	100.0	67,310	100.0

DRIVER AGE 25-64 (continued)

VEHICLE TYPE CRASH INVOLVEMENT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Passenger Car and Station Wagon	212,595	66.7	488	50.5	45,226	67.2
Van and Motorhome	26,313	8.3	68	7.0	5,638	8.4
Pickup	51,030	16.0	157	16.2	9,159	13.6
Small Truck (under 10,000 lbs.)	12,622	4.0	25	2.6	2,560	3.8
Motorcycle	2,644	0.8	99	10.2	1,968	2.9
Moped	157	0.0	1	0.1	121	0.2
Go Cart	7	0.0	0	0.0	4	0.0
Snowmobile	115	0.0	6	0.6	87	0.1
Off Road Vehicle	105	0.0	7	0.7	90	0.1
Other	861	0.3	5	0.5	132	0.2
Unknown	698	0.2	0	0.0	156	0.2
CDL Truck/Bus (breakdown below)	11,596	3.6	111	11.5	2,169	3.2
Total Number of Drivers	318,743	100.0	967	100.0	67,310	100.0

Compared to the other two age groups, a higher percentage of drivers age 25-64 were driving pickups and small trucks at the time of the crash.



CDL Truck/Bus Sub-category Types	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Commercial Vehicle: Group A	6,191	53.4	69	62.2	1,115	51.4
Commercial Vehicle: Group B	2,452	21.1	28	25.2	488	22.5
Commercial Vehicle: Group C	402	3.5	2	1.8	85	3.9
Other Truck	430	3.7	10	9.0	90	4.1
Unknown Truck	2,121	18.3	2	1.8	391	18.0
Total Number of Drivers	11,596	100.0	111	100.0	2,169	100.0

Group "A" is any vehicle that is towing a vehicle or trailer that has a gross vehicle weight rating (GVWR) over 10,000 lbs.

Group "B" is any single vehicle (including buses) with a GVWR of 26,001 lbs. or more. This would include a combination of vehicles with a combined GVWR over 26,000 lbs. when towing a trailer that has a GVWR of 10,000 lbs. or less.

Group "C" is any single vehicle with a GVWR of less than 26,001 lbs. or a combination of vehicles having a combined GVWR under 26,001 lbs. when the vehicle is required to display placards for hazardous material or designed to carry 16 passengers (including driver). Group "C" is also any vehicle carrying 15 or less people (including driver) transporting children to or from school and home on a regular basis for compensation.

DRIVER AGE 65 & OVER

DRIVER ACTION PRIOR TO CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Going straight ahead	19,613	50.4	128	68.1	4,378	50.2
Turning left	4,276	11.0	32	17.0	1,203	13.8
Turning right	1,434	3.7	3	1.6	235	2.7
Stopped on roadway	3,834	9.9	4	2.1	1,030	11.8
In prior crash	37	0.1	0	0.0	6	0.1
Changing lanes	1,173	3.0	2	1.1	105	1.2
Backing	1,266	3.3	0	0.0	46	0.5
Slowing/stopping on roadway	2,906	7.5	2	1.1	716	8.2
Slowing/stopping other	65	0.2	0	0.0	8	0.1
Starting up on roadway	989	2.5	4	2.1	289	3.3
Starting up other	31	0.1	0	0.0	9	0.1
Entering parking	73	0.2	0	0.0	8	0.1
Leaving parking	191	0.5	0	0.0	33	0.4
Entering roadway	1,013	2.6	9	4.8	219	2.5
Leaving roadway	57	0.1	0	0.0	14	0.2
Making U-turn	139	0.4	1	0.5	37	0.4
Overtaking or passing	263	0.7	2	1.1	40	0.5
Avoiding object	44	0.1	0	0.0	10	0.1
Avoiding animal	50	0.1	0	0.0	8	0.1
Avoiding pedestrian	6	0.0	0	0.0	3	0.0
Avoiding vehicle (front/back)	194	0.5	0	0.0	45	0.5
Avoiding vehicle (angle)	114	0.3	1	0.5	32	0.4
Driverless moving	8	0.0	0	0.0	4	0.0
Parked	161	0.4	0	0.0	16	0.2
Crossing at intersection	3	0.0	0	0.0	2	0.0
Crossing not at intersection	2	0.0	0	0.0	2	0.0
Getting on/off vehicle	1	0.0	0	0.0	1	0.0
In roadway with traffic	0	0.0	0	0.0	0	0.0
In roadway against traffic	0	0.0	0	0.0	0	0.0
Standing/lying in roadway	0	0.0	0	0.0	0	0.0
Pushing/working on vehicle	0	0.0	0	0.0	0	0.0
Other working in roadway	4	0.0	0	0.0	1	0.0
Playing in roadway	0	0.0	0	0.0	0	0.0
In roadway other reason	0	0.0	0	0.0	0	0.0
Not in roadway	1	0.0	0	0.0	1	0.0
Other	11	0.0	0	0.0	2	0.0
Unknown	940	2.4	0	0.0	222	2.5
Total Drivers	38,899	100.0	188	100.0	8,725	100.0

Compared to the other two age groups, elderly drivers are about three times more likely to be involved in a fatal crash when making a left turn.

DRIVER AGE 65 & OVER (continued)

MOST HARMFUL EVENT IN A NONCOLLISION	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Loss of control	94	0.2	0	0.0	21	0.2
Cross center/median	38	0.1	0	0.0	7	0.1
Ran off road left	40	0.1	0	0.0	11	0.1
Ran off road right	63	0.2	0	0.0	13	0.1
Re-enter road	11	0.0	0	0.0	4	0.0
Overturn	274	0.7	13	6.9	142	1.6
Separation of units	39	0.1	0	0.0	8	0.1
Fire/explosion	31	0.1	0	0.0	2	0.0
Immersion	2	0.0	0	0.0	0	0.0
Jackknife	11	0.0	0	0.0	0	0.0
Downhill runaway	14	0.0	0	0.0	1	0.0
Cargo loss/shift	24	0.1	0	0.0	1	0.0
Individual fell off	8	0.0	0	0.0	4	0.0
Other noncollision	85	0.2	0	0.0	22	0.3
NONCOLLISION Subtotal	734	1.9	13	6.9	236	2.7

MOST HARMFUL EVENT IN A COLLISION WITH A NONFIXED OBJECT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Pedestrian	194	0.5	11	5.9	165	1.9
Pedalcycle (Bicyclist)	195	0.5	2	1.1	159	1.8
Motor vehicle in transport	28,244	72.6	129	68.6	7,000	80.2
Parked motor vehicle	943	2.4	1	0.5	77	0.9
Railway train	17	0.0	2	1.1	3	0.0
Animal	4,354	11.2	2	1.1	71	0.8
Other nonfixed objects	314	0.8	0	0.0	19	0.2
COLLISION NONFIXED Subtotal	34,261	88.1	147	78.2	7,494	85.9

Motor vehicle in transport was by far the most problematic event in collisions with a nonfixed object for all crash types and age groups; however, it was most problematic for drivers age 65 and over.

DRIVER AGE 65 & OVER (continued)

MOST HARMFUL EVENT IN A COLLISION WITH A FIXED OBJECT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Bridge/pier/abutment	32	0.1	0	0.0	10	0.1
Bridge parapet end	12	0.0	0	0.0	3	0.0
Bridge rail	23	0.1	0	0.0	6	0.1
Guardrail face	130	0.3	2	1.1	23	0.3
Guardrail end	21	0.1	0	0.0	1	0.0
Median barrier	84	0.2	1	0.5	25	0.3
Highway traffic sign post	156	0.4	0	0.0	11	0.1
Highway signal post	14	0.0	1	0.5	2	0.0
Luminaire/light support	31	0.1	1	0.5	8	0.1
Utility pole	177	0.5	1	0.5	89	1.0
Other pole	61	0.2	0	0.0	11	0.1
Culvert	34	0.1	3	1.6	20	0.2
Curb	82	0.2	1	0.5	8	0.1
Ditch	333	0.9	3	1.6	85	1.0
Embankment	72	0.2	0	0.0	32	0.4
Fence	67	0.2	0	0.0	9	0.1
Mailbox	104	0.3	0	0.0	12	0.1
Tree	474	1.2	13	6.9	193	2.2
Rail crossing signal	12	0.0	0	0.0	1	0.0
Building	59	0.2	0	0.0	19	0.2
Traffic island	3	0.0	0	0.0	0	0.0
Fire hydrant	28	0.1	0	0.0	7	0.1
Impact attenuator	5	0.0	0	0.0	2	0.0
Other fixed object	176	0.5	2	1.1	49	0.6
COLLISION FIXED Subtotal	2,190	5.6	28	14.9	626	7.2

	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Unknown Event	1,714	4.4	0	0.0	369	4.2
TOTAL MOST HARMFUL EVENT	38,899	100.0	188	100.0	8,725	100.0

DRIVER AGE 65 & OVER (continued)

CRASH TYPE	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Single Vehicle	7,339	18.9	52	27.7	1,064	12.2
Head On	559	1.4	22	11.7	262	3.0
Head On - Left Turn	1,757	4.5	30	16.0	704	8.1
Angle	11,467	29.5	61	32.4	3,135	35.9
Rear End	9,860	25.3	8	4.3	2,628	30.1
Rear End - Left Turn	510	1.3	2	1.1	157	1.8
Rear End - Right Turn	394	1.0	0	0.0	73	0.8
Sideswipe - Same Direction	4,355	11.2	4	2.1	313	3.6
Sideswipe - Opposite Direct	970	2.5	4	2.1	118	1.4
Other/Unknown	1,688	4.3	5	2.7	271	3.1
Total Drivers	38,899	100.0	188	100.0	8,725	100.0

Elderly drivers have the highest incidence of angle type crashes when compared to the other two age groups (16-24 and 25-64) in all crashes, fatal crashes, and injury crashes.

RELATIONSHIP TO ROADWAY (LOCATION OF FIRST IMPACT IN CRASH)	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
On Road	34,866	89.6	149	79.3	7,676	88.0
Median	119	0.3	2	1.1	32	0.4
Shoulder	739	1.9	8	4.3	162	1.9
Outside of Shoulder/Curb	1,295	3.3	24	12.8	422	4.8
Gore	33	0.1	1	0.5	16	0.2
Other/Unknown	1,847	4.7	4	2.1	417	4.8
Total Drivers	38,899	100.0	188	100.0	8,725	100.0

ROADWAY TYPE IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Interstate Routes	2,764	7.1	8	4.3	605	6.9
U.S. & Michigan Roads	12,619	32.4	70	37.2	2,917	33.4
County & City Roads	23,516	60.5	110	58.5	5,203	59.6
Total Drivers	38,899	100.0	188	100.0	8,725	100.0

DRIVER AGE 65 & OVER (continued)

TIME OF DAY IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Midnight - 02:59 AM	373	1.0	2	1.1	67	0.8
03:00 AM - 05:59 AM	435	1.1	6	3.2	86	1.0
06:00 AM - 08:59 AM	3,150	8.1	17	9.0	635	7.3
09:00 AM - 11:59 AM	7,767	20.0	46	24.5	1,785	20.5
Noon - 02:59 PM	10,278	26.4	50	26.6	2,560	29.3
03:00 PM - 05:59 PM	9,948	25.6	42	22.3	2,372	27.2
06:00 PM - 08:59 PM	4,881	12.5	15	8.0	911	10.4
09:00 PM - 11:59 PM	1,926	5.0	10	5.3	288	3.3
Unknown	141	0.4	0	0.0	21	0.2
Total Drivers	38,899	100.0	188	100.0	8,725	100.0

9:00 AM to 2:59 PM shows the highest involvement for elderly drivers in all crashes when compared to the other two age groups.

HAZARDOUS ACTION	All Crashes		Fatal Crashes		Injury Crashes		Hazardous Citation Issued	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury	Number	% of Issued
None	18,966	48.8	60	31.9	3,763	43.1	26	0.3
Speed too fast	914	2.3	12	6.4	254	2.9	185	2.3
Speed too slow	38	0.1	1	0.5	12	0.1	11	0.1
Failed to yield	6,357	16.3	46	24.5	1,733	19.9	3,217	40.7
Disregard traffic control	1,235	3.2	16	8.5	495	5.7	721	9.1
Drove wrong way	56	0.1	1	0.5	19	0.2	25	0.3
Drove left of center	253	0.7	7	3.7	82	0.9	76	1.0
Improper passing	198	0.5	0	0.0	21	0.2	71	0.9
Improper lane use	1,154	3.0	2	1.1	117	1.3	448	5.7
Improper turn	682	1.8	3	1.6	123	1.4	276	3.5
Improper/no signal	58	0.1	0	0.0	9	0.1	15	0.2
Improper backing	982	2.5	0	0.0	19	0.2	218	2.8
Unable to stop in assured clear distance	4,050	10.4	1	0.5	1,093	12.5	1,885	23.9
Reckless driving	28	0.1	1	0.5	13	0.1	14	0.2
Careless/negligent driving	724	1.9	7	3.7	238	2.7	313	4.0
Other	1,439	3.7	12	6.4	364	4.2	299	3.8
Unknown	1,765	4.5	19	10.1	370	4.2	96	1.2
Total Drivers	38,899	100.0	188	100.0	8,725	100.0	7,896	100.0

Compared to the other two age groups, elderly drivers have the highest incidence of failed to yield, disregard of traffic control, improper lane use, improper turn, and improper backing as a hazardous action in all crashes. In fatal crashes, elderly drivers have a significantly higher incidence of failed to yield as a hazardous action.

DRIVER AGE 65 & OVER (continued)

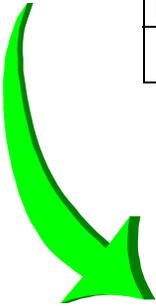
DAY OF WEEK IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Sunday	3,483	9.0	17	9.0	810	9.3
Monday	5,756	14.8	32	17.0	1,277	14.6
Tuesday	6,063	15.6	32	17.0	1,352	15.5
Wednesday	6,050	15.6	24	12.8	1,382	15.8
Thursday	6,249	16.1	35	18.6	1,420	16.3
Friday	6,626	17.0	21	11.2	1,489	17.1
Saturday	4,672	12.0	27	14.4	995	11.4
Total Drivers	38,899	100.0	188	100.0	8,725	100.0

DRIVER GENDER IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Male	22,293	57.3	127	67.6	4,803	55.0
Female	16,585	42.6	61	32.4	3,917	44.8
Unknown	21	0.1	0	0.0	5	0.2
Total Drivers	38,899	100.0	188	100.0	8,725	100.0

OCCUPANTS IN MOTOR VEHICLE	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
1 occupant	28,844	74.2	135	71.8	6,186	70.9
2 occupants	8,263	21.2	46	24.5	2,087	23.9
3 occupants	869	2.2	5	2.7	252	2.9
4 occupants	325	0.8	2	1.1	94	1.1
5 occupants	82	0.2	0	0.0	24	0.3
6 + occupants	97	0.2	0	0.0	21	0.2
0 occupants	127	0.3	0	0.0	12	0.1
Unknown	292	0.8	0	0.0	49	0.6
Total Drivers	38,899	100.0	188	100.0	8,725	100.0

DRIVER AGE 65 & OVER (continued)

VEHICLE TYPE CRASH INVOLVEMENT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Passenger Car and Station Wagon	29,600	76.1	148	78.7	6,739	77.2
Van and Motorhome	3,148	8.1	12	6.4	725	8.3
Pickup	4,580	11.8	14	7.4	896	10.3
Small Truck (under 10,000 lbs.)	927	2.4	2	1.1	177	2.0
Motorcycle	85	0.2	4	2.1	64	0.7
Moped	12	0.0	1	0.5	5	0.1
Go Cart	0	0.0	0	0.0	0	0.0
Snowmobile	3	0.0	1	0.5	1	0.0
Off Road Vehicle	7	0.0	2	1.1	5	0.1
Other	63	0.2	1	0.5	17	0.2
Unknown	86	0.2	0	0.0	20	0.2
CDL Truck/Bus (breakdown below)	388	1.0	3	1.6	76	0.9
Total Number of Drivers	38,899	100.0	188	100.0	8,725	100.0



CDL Truck/Bus Sub-category Types	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Commercial Vehicle: Group A	185	47.7	3	100.0	33	43.4
Commercial Vehicle: Group B	102	26.3	0	0.0	18	23.7
Commercial Vehicle: Group C	25	6.4	0	0.0	3	3.9
Other Truck	11	2.8	0	0.0	4	5.3
Unknown Truck	65	16.8	0	0.0	18	23.7
Total Number of Drivers	388	100.0	3	100.0	76	100.0

Group "A" is any vehicle that is towing a vehicle or trailer that has a gross vehicle weight rating (GVWR) over 10,000 lbs.

Group "B" is any single vehicle (including buses) with a GVWR of 26,001 lbs. or more. This would include a combination of vehicles with a combined GVWR over 26,000 lbs. when towing a trailer that has a GVWR of 10,000 lbs. or less.

Group "C" is any single vehicle with a GVWR of less than 26,001 lbs. or a combination of vehicles having a combined GVWR under 26,001 lbs. when the vehicle is required to display placards for hazardous material or designed to carry 16 passengers (including driver). Group "C" is also any vehicle carrying 15 or less people (including driver) transporting children to or from school and home on a regular basis for compensation.

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Alcohol/Drug

ROADWAY INJURY EXPERIENCE FOR PERSONS WHO HAD BEEN DRINKING AND/OR USING DRUGS

Alcohol and/or drug use affects the judgment and behavior of persons in addition to motor vehicle drivers. Consider the experience of impaired bicyclists, pedestrians, motorcyclists, snowmobilers, and ORV/ATV riders when looking at crash statistics.

BICYCLIST	Total	In Crash				Bicyclist			
		Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
Killed	28	6	0	2	8	2	0	1	3
Injured	1,677	88	1	2	91	72	1	1	74
In Crashes	2,084	106	3	4	113	82	3	2	87



PEDESTRIAN	Total	In Crash				Pedestrian			
		Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
Killed	137	38	8	11	57	33	7	7	47
Injured	2,195	193	7	10	210	123	4	9	136
In Crashes	2,638	249	16	23	288	169	12	16	197



MOTORCYCLIST	Total	In Crash				Motorcyclist			
		Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
Killed	110	29	5	7	41	27	5	7	39
Injured	2,706	247	5	9	261	210	5	7	222
In Crashes	3,743	321	10	18	349	268	10	15	293



SNOWMOBILER	Total	In Crash				Snowmobiler			
		Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
Killed	8	5	0	1	6	5	0	1	6
Injured	115	17	0	0	17	17	0	0	17
In Crashes	181	25	0	1	26	24	0	1	25



ORV/ATV RIDER	Total	In Crash				ORV/ATV Rider			
		Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
Killed	13	7	0	0	7	7	0	0	7
Injured	240	55	0	3	58	55	0	3	58
In Crashes	322	76	0	3	79	74	0	3	77



DRIVER	Total	In Crash				Driver			
		Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
Killed	693	200	38	50	288	179	34	43	256
Injured	58,582	4,695	460	327	5,482	3,569	312	251	4,132
In Crashes	528,763	17,524	1,503	1,047	20,074	11,835	880	654	13,369



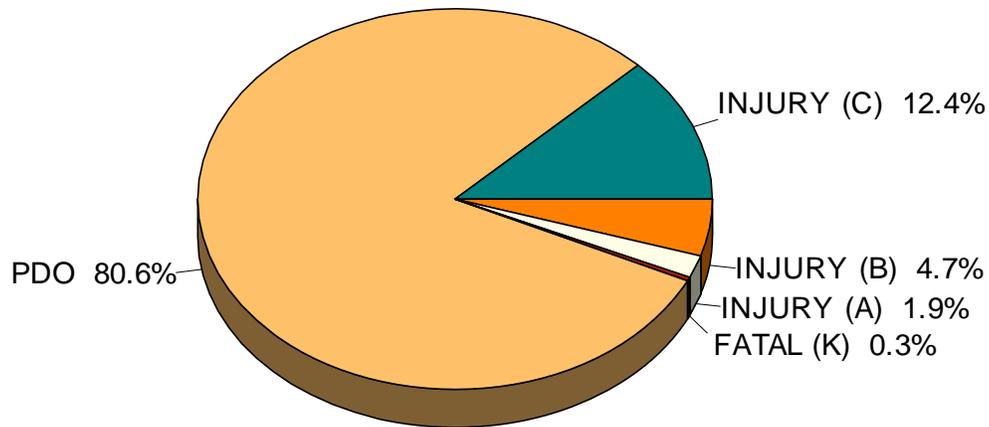
NOTE: These crashes involve a motor vehicle in transport on a public trafficway (in Michigan) and result in injury, death, or at least \$1,000 in property damage.

DRIVER DRINKING AND/OR USING DRUGS AND INJURY SEVERITY IN CRASH

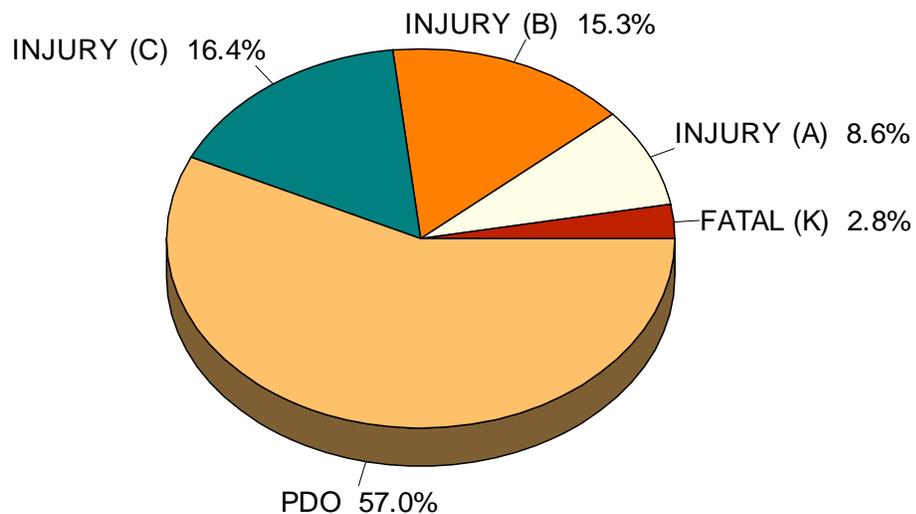
MOST SEVERE OUTCOME IN CRASH

AGE OF DRIVER IN CRASH	All Crashes				Fatal				Injury			
	Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
13 years & under	1	0	2	3	0	0	0	0	0	0	1	1
14 years	0	0	1	1	0	0	0	0	0	0	1	1
15 years	16	2	2	20	3	0	0	3	4	0	0	4
16 years	79	11	14	104	0	0	0	0	40	7	7	54
17 years	198	18	14	230	6	2	0	8	85	9	10	104
18 years	339	26	32	397	3	0	1	4	141	12	16	169
19 years	378	34	19	431	5	1	3	9	151	19	7	177
20 years	426	27	22	475	11	2	2	15	169	7	6	182
21 - 24 years	2,255	92	91	2,438	54	3	8	65	849	41	40	930
25 - 34 years	2,962	204	147	3,313	57	12	17	86	1,219	83	60	1,362
35 - 44 years	2,382	219	150	2,751	41	13	11	65	943	92	61	1,096
45 - 54 years	1,777	180	106	2,063	44	8	13	65	695	82	48	825
55 - 64 years	661	44	31	736	26	2	2	30	252	22	10	284
65 - 69 years	113	4	8	125	6	0	0	6	48	3	5	56
70 - 74 years	85	4	6	95	4	1	1	6	32	3	2	37
75 - 79 years	45	2	4	51	1	0	0	1	19	0	0	19
80 - 84 years	22	2	2	26	3	0	0	3	7	0	0	7
85 - 89 years	8	1	1	10	0	0	0	0	1	0	0	1
90 years & over	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	88	10	2	100	0	0	1	1	21	0	1	22
Total	11,835	880	654	13,369	264	44	59	367	4,676	380	275	5,331

ALL CRASHES BY INJURY SEVERITY



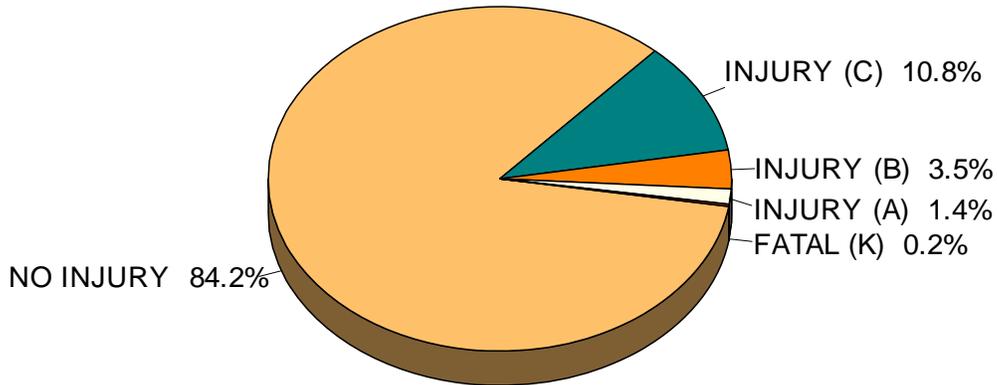
HBD CRASHES BY INJURY SEVERITY



The problem of the drinking driver, pedestrian, and/or cyclist is seen when one compares the two charts on this page. All injury levels are greater, and a fatality in the crash is **nine and one third times** more likely when one of the crash-involved operators is reported as had been drinking.

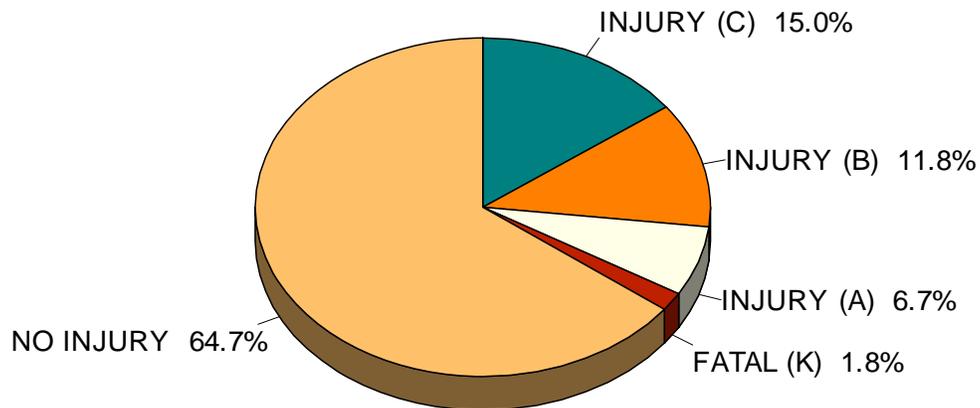
DEATH & INJURY FOR CRASH INVOLVED OCCUPANTS

Occupants in Crashes



The majority of occupants involved in crashes are not injured (84.2%). Two thirds of those who are injured receive only minor (C) injuries.

Occupants in HBD Crashes

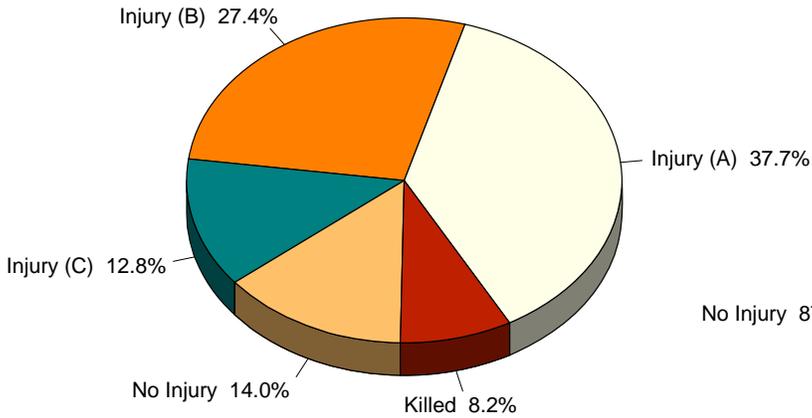


Crashes involving drinking tend to be more serious than nondrinking crashes. The percentage of occupant fatalities is nine times higher than in all crashes and the most serious injury level (A) is almost five times higher.

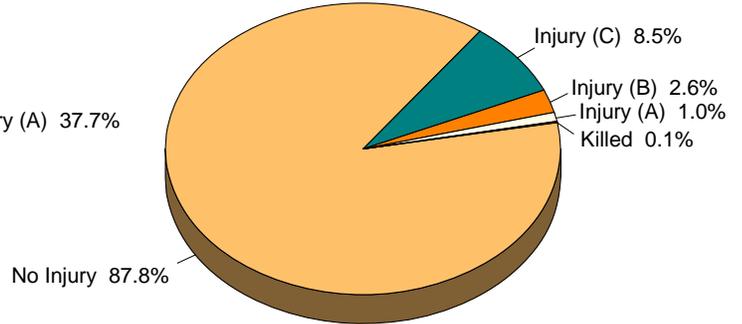
ALL DRIVERS and HBD DRIVERS INJURY SEVERITY - EJECTED vs. NOT EJECTED

As can be seen in the two charts below, death and injury are much more likely when *drivers are ejected* from their vehicles.

Ejected

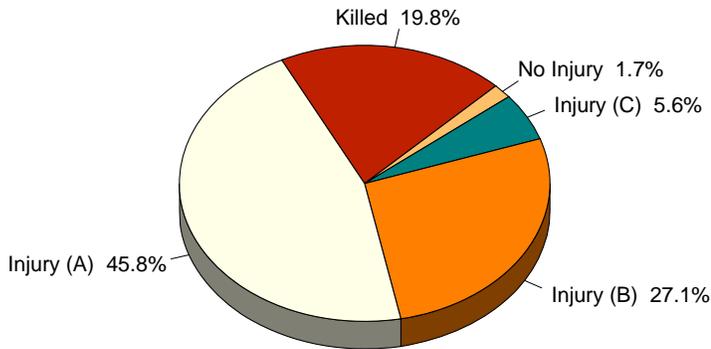


Not Ejected

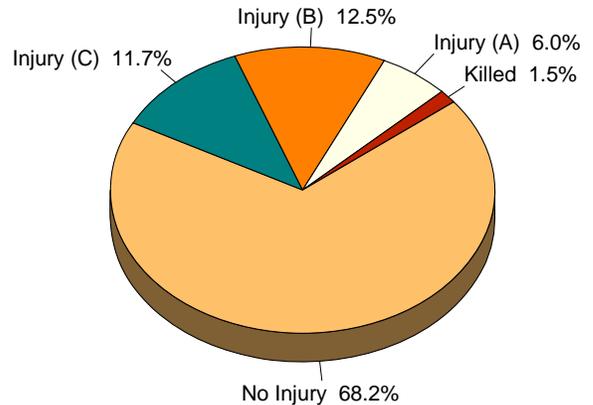


When compared to the charts above, the charts below demonstrate that the injury severity is much worse for drivers who had been drinking in both ejected and non-ejected events.

HBD Ejected



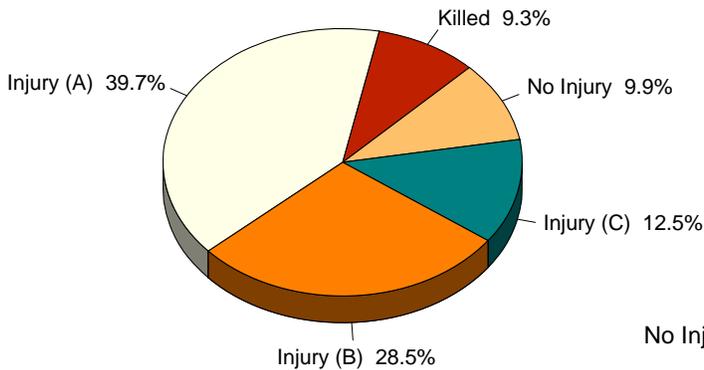
HBD Not Ejected



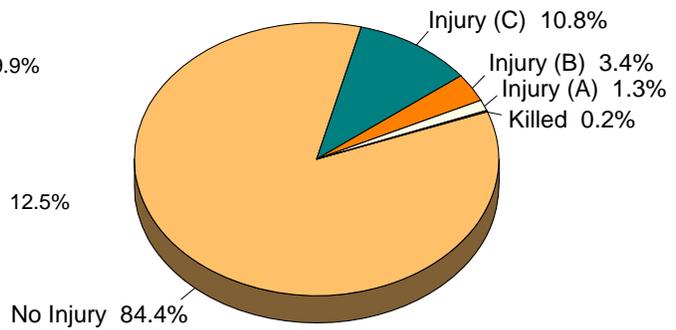
ALL OCCUPANTS and OCCUPANTS of HBD CRASHES INJURY SEVERITY - EJECTED vs. NOT EJECTED

As can be seen in the two charts below, death and injury are much more likely when *occupants are ejected* from their vehicles.

Ejected

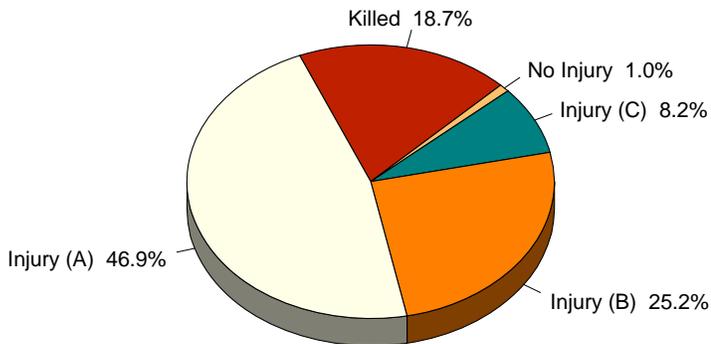


Not Ejected

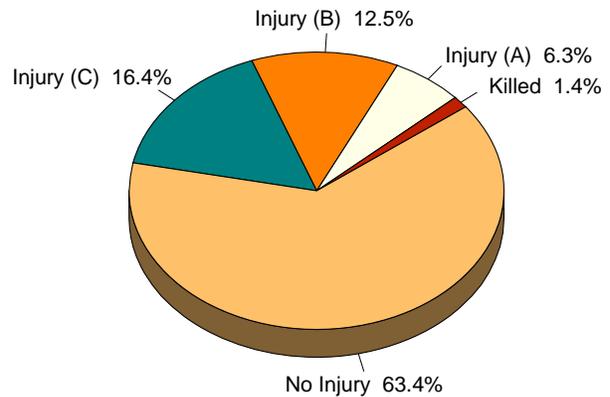


When compared to the charts above, the charts below demonstrate that the injury severity is much worse for occupants in a crash where drinking is reported in both ejected and non-ejected events.

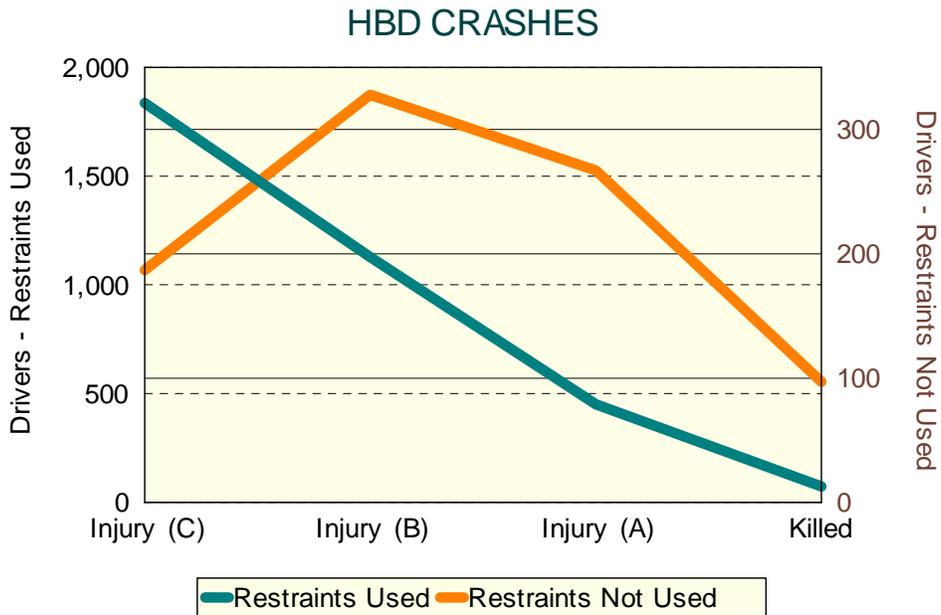
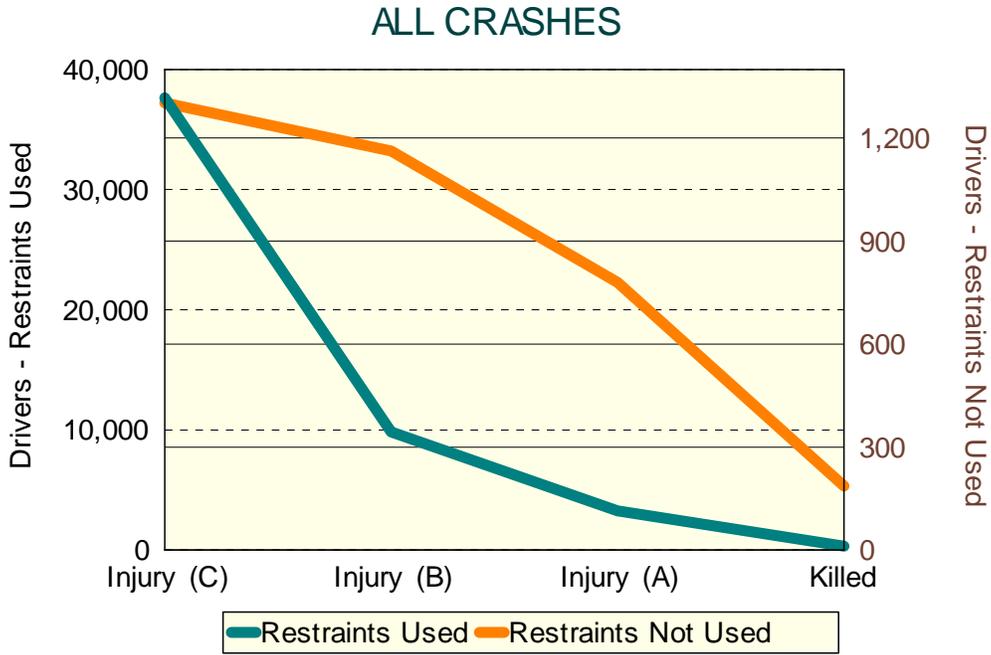
HBD Ejected



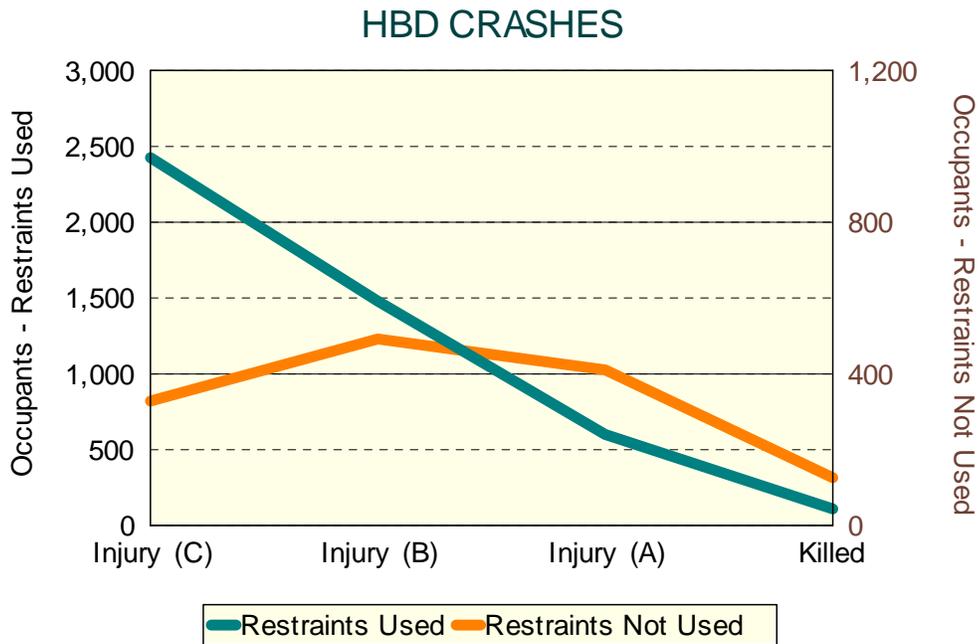
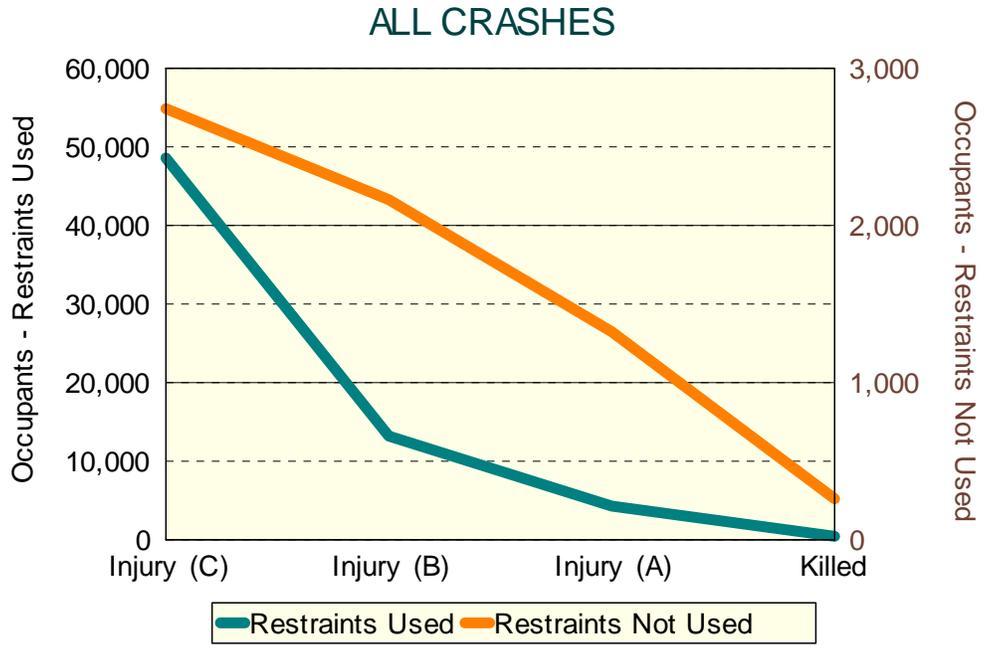
HBD Not Ejected



INJURY SEVERITY & RESTRAINT USE FOR CRASH INVOLVED KABC DRIVERS



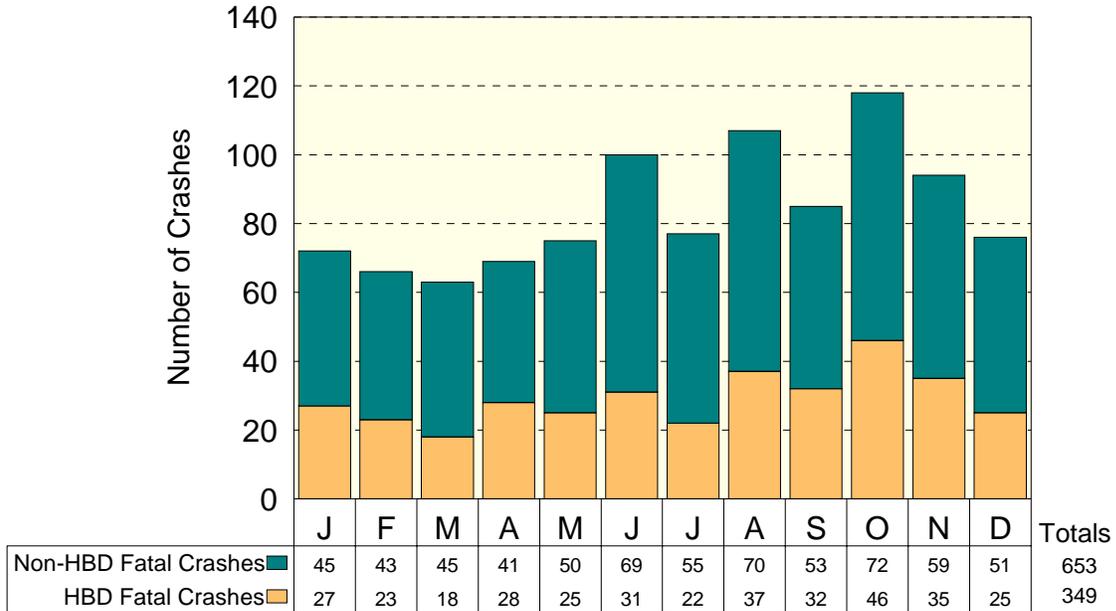
INJURY SEVERITY & RESTRAINT USE FOR CRASH INVOLVED KABC OCCUPANTS



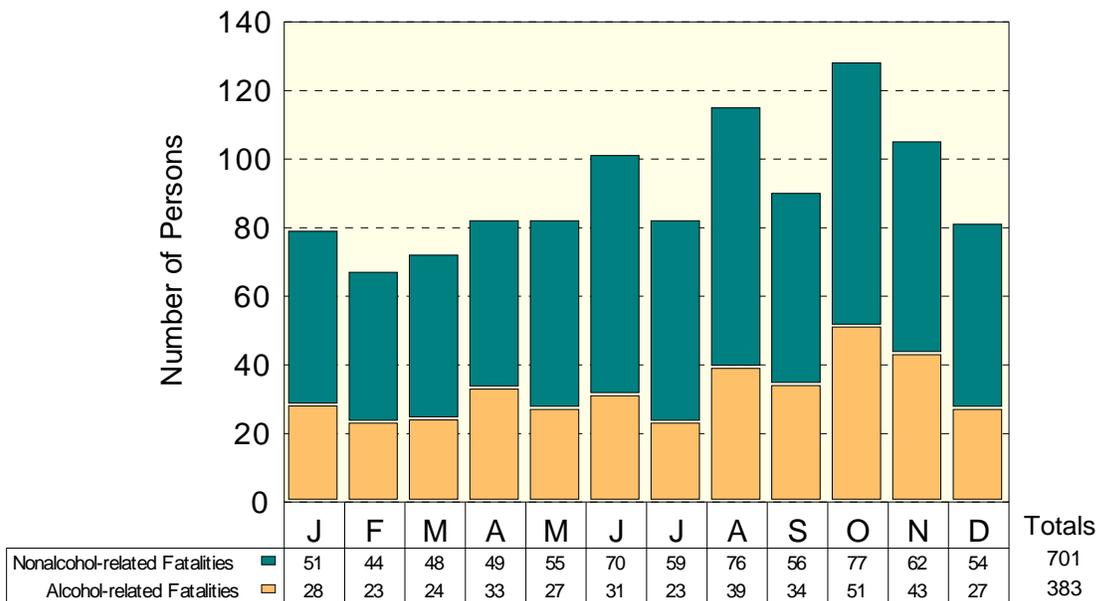
ALCOHOL INVOLVEMENT IN FATAL CRASHES

Fatal crashes (total of non-HBD and HBD fatal crashes) were lowest during February and March. The number of fatal crashes reached highest levels in August and October. The number of HBD fatal crashes follows the overall trend, with the highest number of HBD fatal crashes in October.

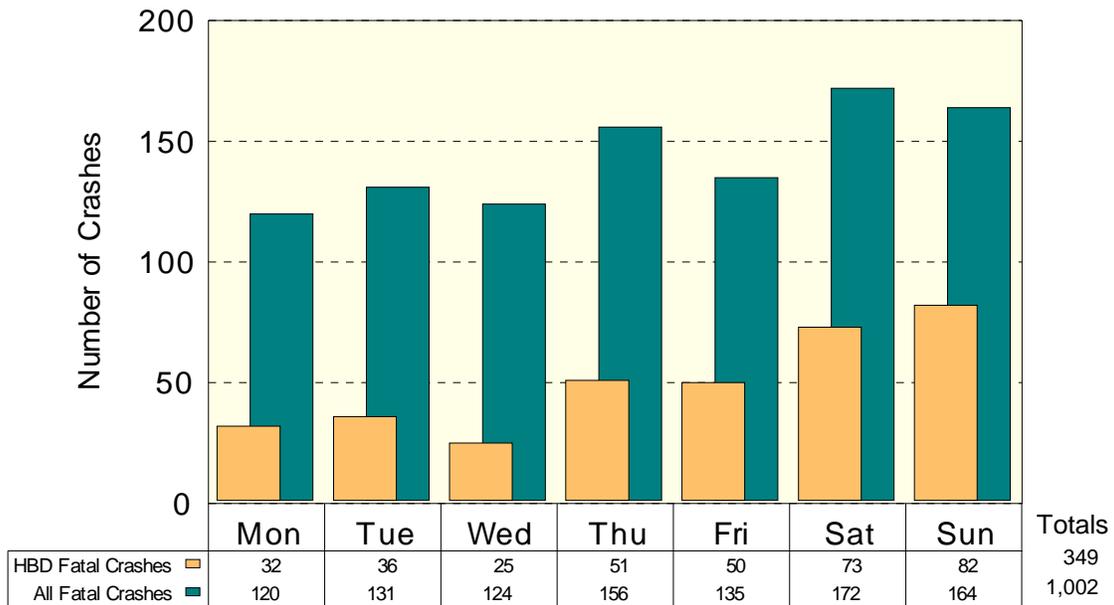
HBD Fatal Crashes by Month



Alcohol-related Fatalities by Month

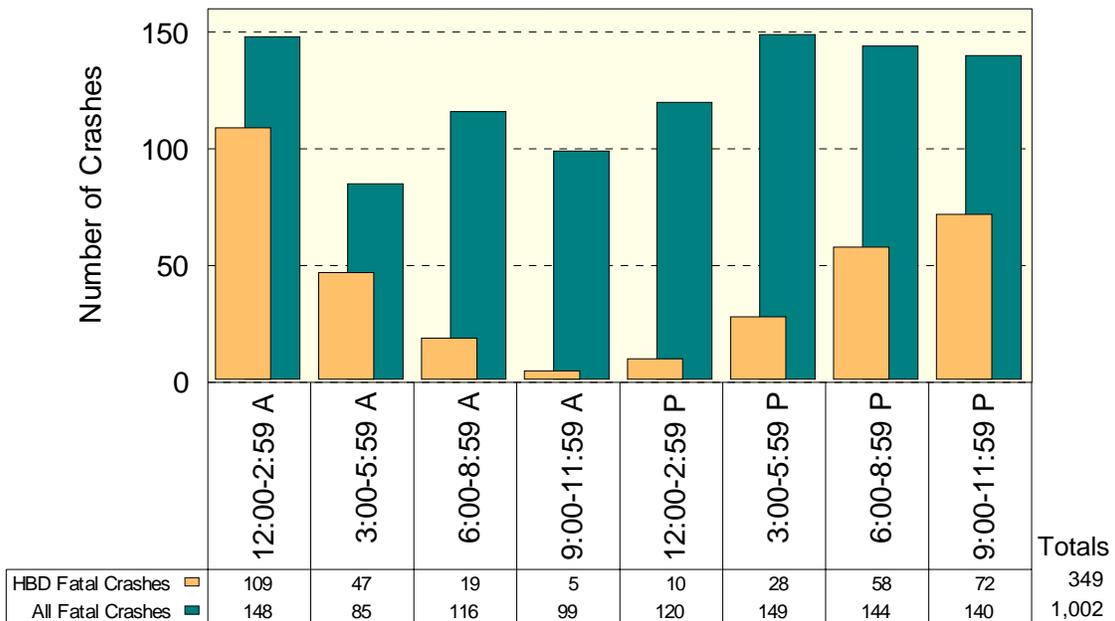


HBD Fatal Crashes by Day of Week



Saturday and Sunday had the most fatal crashes and the highest proportions of drinking-related fatal crashes in 2006. 50.0 percent of the fatal crashes on Sunday involved drinking, while only 20.2 percent of fatal crashes on Wednesday involved drinking.

HBD Fatal Crashes by Time of Day



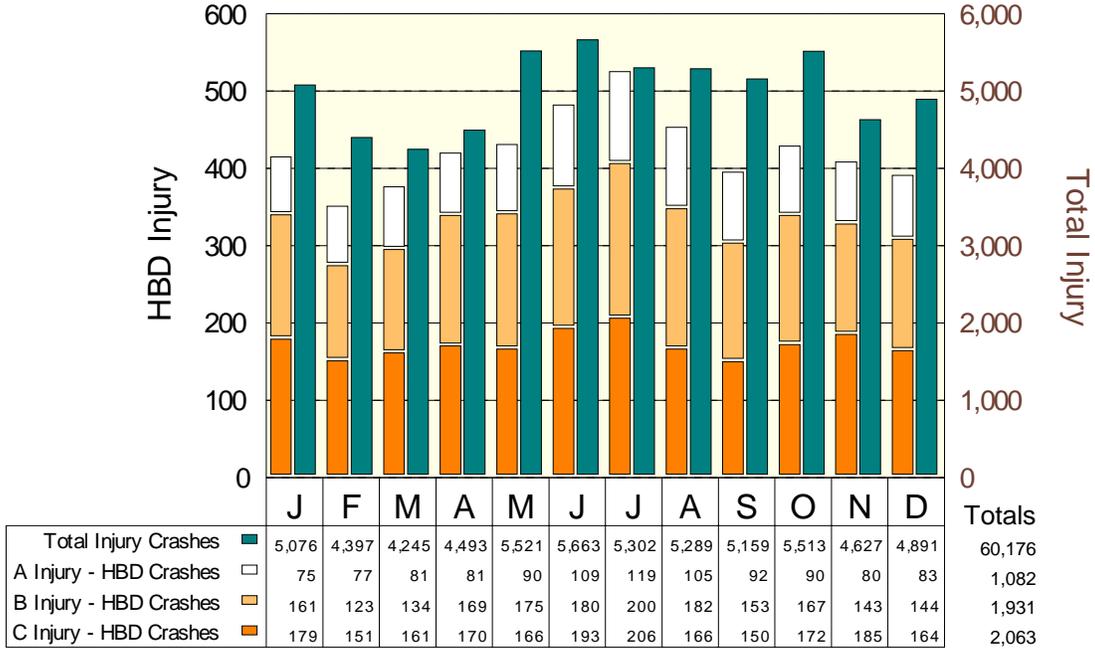
Not surprisingly, the 9:00 PM to 11:59 PM, midnight to 2:59 AM, and 3:00 AM to 5:59 AM time periods had the highest rate of drinking involvement (51.4%, 73.6% and 55.3%), while the late morning hours had the lowest (5.1%).

There was 1 fatal HBD crash where the time of day was unknown.

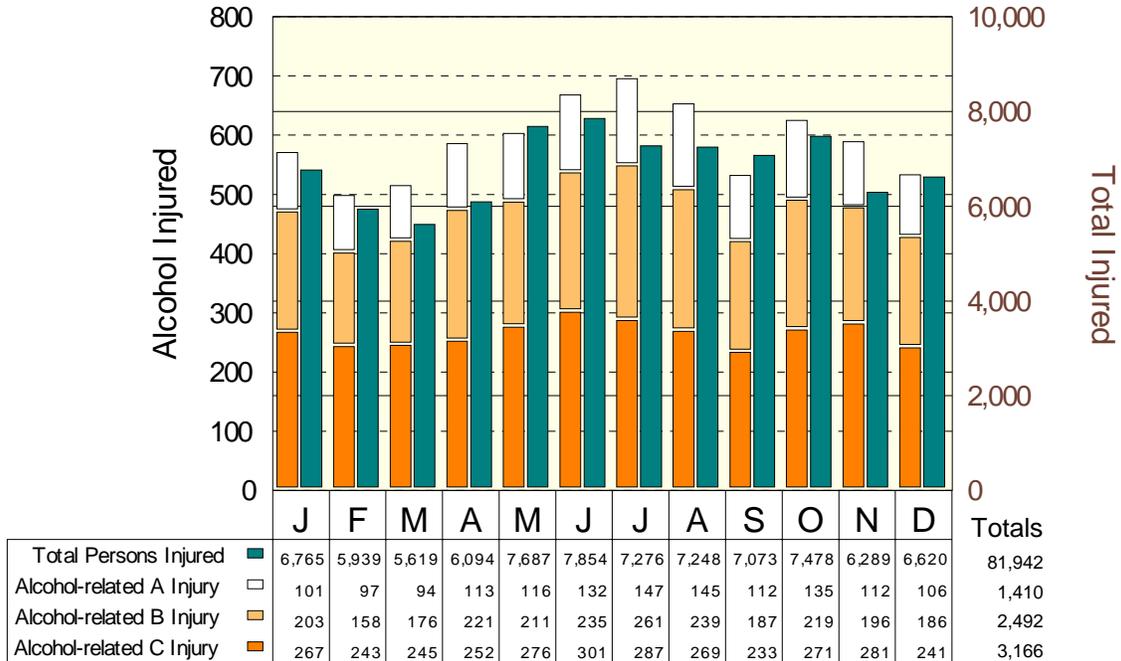
ALCOHOL INVOLVEMENT IN INJURY CRASHES

Alcohol involvement in injury crashes is an important indicator of the alcohol impaired driving problem. In 2006, the highest number of HBD injury crashes occurred in July with 525. The highest proportion of HBD injury crashes also occurred in July with 9.9 percent of the injury crashes in that month involving alcohol.

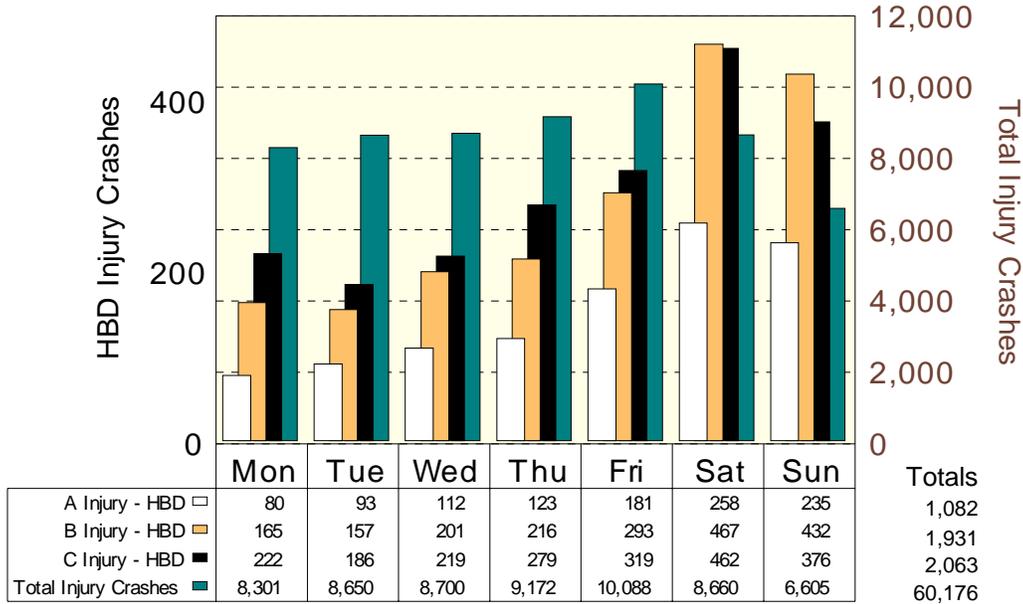
HBD Injury Crashes by Month



Alcohol-related Injuries by Month

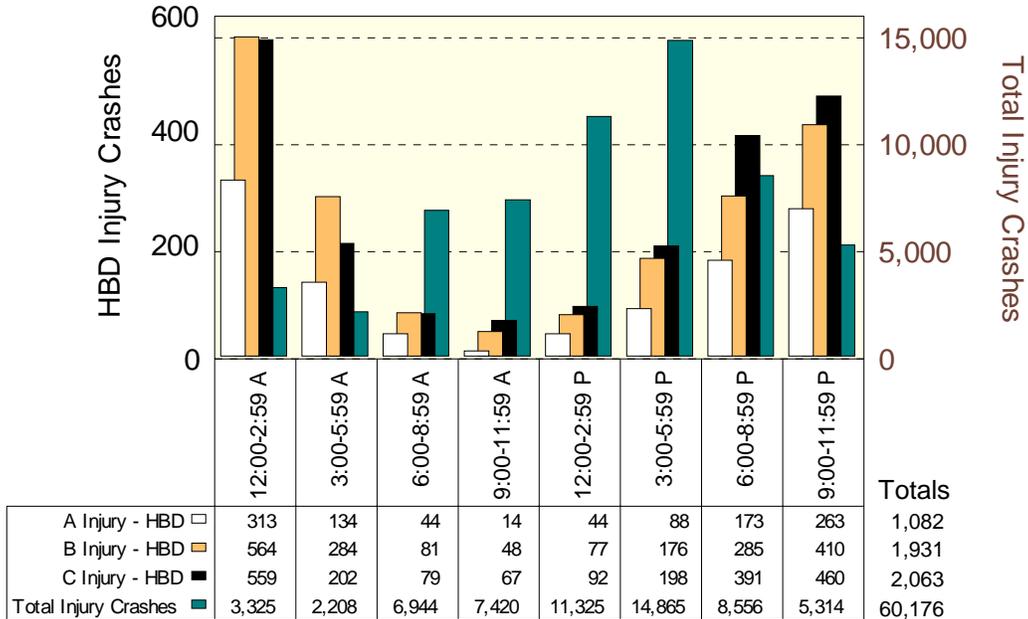


HBD Injury Crashes by Day of Week



HBD injury crashes follow the same basic trends as total crashes through the work week, but the weekend sees a dramatic increase in the proportion of HBD injury crashes to total injury crashes.

HBD Injury Crashes by Time of Day



Total injury crash frequencies peak in the hours between 3:00 PM and 5:59 PM, while HBD injury crash frequencies peak between midnight and 2:59 AM (a particularly hazardous travel period). These frequencies exclude 219 injury crashes and 30 HBD injury crashes where time of day is unknown.

REPORTED AGE OF DRINKING DRIVERS INVOLVED IN CRASHES

COUNTY	All Ages	0-15 Years	16-20 Years	21-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75 Yrs & Over	DOB Unk
Alcona	19	0	6	2	2	3	5	1	0	0	0
Alger	16	1	2	2	3	2	4	1	1	0	0
Allegan	168	1	19	43	42	32	19	7	3	1	1
Alpena	50	2	6	11	9	12	5	4	1	0	0
Antrim	33	0	3	3	9	7	7	2	1	1	0
Arenac	37	0	6	5	6	9	6	3	1	1	0
Baraga	14	0	2	2	5	1	2	1	0	1	0
Barry	106	0	11	22	24	24	11	7	4	2	1
Bay	211	0	28	38	54	46	32	10	3	0	0
Benzie	30	0	4	2	8	11	4	1	0	0	0
Berrien	196	2	21	37	52	44	30	8	0	0	2
Branch	68	0	2	18	21	14	7	5	0	1	0
Calhoun	196	2	24	32	58	33	30	11	1	2	3
Cass	106	0	10	22	30	18	13	7	5	0	1
Charlevoix	33	0	3	8	9	6	4	1	2	0	0
Cheboygan	46	0	9	11	9	11	6	0	0	0	0
Chippewa	76	0	10	13	19	14	13	4	2	0	1
Clare	40	0	3	8	8	8	9	1	1	2	0
Clinton	85	0	11	13	17	19	16	5	3	0	1
Crawford	35	0	6	5	6	9	3	6	0	0	0
Delta	52	0	10	7	10	13	7	2	2	1	0
Dickinson	41	1	7	5	7	11	9	1	0	0	0
Eaton	117	0	16	24	34	23	17	1	1	0	1
Emmet	48	0	8	9	13	8	7	2	0	1	0
Genesee	596	0	56	93	159	129	101	40	7	2	9
Gladwin	47	0	2	4	17	13	4	6	1	0	0
Gogebic	20	0	2	5	1	4	4	3	1	0	0
Grand Traverse	130	0	16	19	26	32	23	9	3	1	1
Gratiot	44	1	3	9	18	5	4	3	1	0	0
Hillsdale	57	0	5	10	21	13	4	2	1	1	0
Houghton	73	0	10	17	17	12	6	7	3	1	0
Huron	39	0	7	13	5	7	1	2	4	0	0
Ingham	325	0	45	70	85	51	50	17	5	0	2
Ionia	96	0	16	17	25	15	15	5	1	0	2
Iosco	44	0	3	7	13	6	8	5	1	1	0
Iron	17	0	5	5	2	3	0	0	1	1	0
Isabella	113	0	18	39	24	14	12	5	0	0	1
Jackson	231	1	27	39	62	46	35	15	0	2	4
Kalamazoo	378	0	54	96	90	47	55	21	4	2	9
Kalkaska	19	0	1	3	4	7	4	0	0	0	0
Kent	929	3	122	205	267	162	98	41	21	6	4
Keweenaw	7	0	2	1	2	0	1	1	0	0	0
Lake	19	0	3	2	3	4	3	2	2	0	0
Lapeer	129	1	20	29	29	27	15	5	2	1	0
Leelanau	29	0	8	8	8	3	1	1	0	0	0

REPORTED AGE OF DRINKING DRIVERS INVOLVED IN CRASHES (continued)

COUNTY	All Ages	0-15 Years	16-20 Years	21-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75 Yrs & Over	DOB Unk
Lenawee	110	0	11	18	22	35	13	8	2	1	0
Livingston	219	0	33	35	48	44	39	15	1	4	0
Luce	12	0	0	3	3	2	3	0	1	0	0
Mackinac	24	0	5	6	5	3	3	2	0	0	0
Macomb	911	0	108	160	197	194	163	63	21	2	3
Manistee	40	0	4	5	10	7	9	4	0	1	0
Marquette	77	0	15	11	20	12	12	4	1	1	1
Mason	46	0	2	5	16	7	13	1	1	1	0
Mecosta	68	1	9	16	15	15	7	3	2	0	0
Menominee	45	0	9	10	11	3	11	1	0	0	0
Midland	66	0	14	6	19	13	12	1	0	1	0
Missaukee	23	0	4	5	3	6	2	1	2	0	0
Monroe	231	1	27	41	51	56	37	15	1	1	1
Montcalm	98	0	14	23	18	17	18	3	4	0	1
Montmorency	18	0	1	7	7	1	1	1	0	0	0
Muskegon	231	1	31	40	55	43	35	12	8	2	4
Newaygo	89	0	14	15	18	25	13	2	2	0	0
Oakland	1,293	0	149	235	323	257	211	85	17	9	7
Oceana	48	0	9	14	12	5	3	3	1	1	0
Ogemaw	27	0	3	5	5	6	5	2	1	0	0
Ontonagon	30	0	2	4	7	7	9	0	1	0	0
Osceola	37	0	6	8	5	13	5	0	0	0	0
Oscoda	24	0	0	1	9	6	4	4	0	0	0
Otsego	25	0	2	2	5	7	7	1	0	1	0
Ottawa	296	0	49	75	71	56	33	10	1	1	0
Presque Isle	19	0	3	1	4	5	3	2	1	0	0
Roscommon	48	0	6	11	12	8	7	3	1	0	0
Saginaw	260	2	34	40	67	56	40	11	8	0	2
St. Clair	219	0	24	49	46	55	32	6	4	0	3
St. Joseph	88	0	11	19	21	24	7	3	1	1	1
Sanilac	54	0	7	7	15	10	10	3	2	0	0
Schoolcraft	19	0	1	4	1	4	5	3	1	0	0
Shiawassee	82	0	9	10	29	14	14	5	0	1	0
Tuscola	94	0	12	20	24	24	10	3	1	0	0
Van Buren	127	0	14	20	40	27	18	5	1	1	1
Washtenaw	381	0	47	96	101	65	48	17	3	1	3
Wayne	1,774	2	177	267	439	410	298	107	33	21	20
Wexford	71	0	3	19	22	12	13	2	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0
Total	12,489	22	1,521	2,346	3,109	2,532	1,883	692	212	82	90



MALE DRIVERS BY AGE & INJURY SEVERITY IN CRASH

MOST SEVERE OUTCOME IN CRASH

AGE OF DRIVER IN CRASH	Male Drivers		Fatal		Injury			PDO
	Number	% of Total	Number	% of Fatal	A	B	C	
13 years and under	157	0.1	2	0.2	21	28	21	85
14 years	111	0.0	1	0.1	13	20	14	63
15 years	485	0.2	7	0.6	18	52	63	345
16 years	6,292	2.3	11	1.0	122	388	899	4,872
17 years	8,064	3.0	25	2.3	153	474	1,118	6,294
18 years	9,154	3.4	26	2.4	184	581	1,304	7,059
19 years	8,262	3.0	25	2.3	186	502	1,131	6,418
20 years	7,530	2.8	30	2.8	165	433	1,032	5,870
21 - 24 years	25,749	9.5	119	11.0	583	1,531	3,416	20,100
25 - 34 years	49,984	18.4	198	18.3	1,133	2,533	6,669	39,451
35 - 44 years	50,909	18.7	172	15.9	1,119	2,377	6,749	40,492
45 - 54 years	47,178	17.3	196	18.1	982	2,195	6,311	37,494
55 - 64 years	29,555	10.9	139	12.9	620	1,323	4,062	23,411
65 - 69 years	7,666	2.8	31	2.9	144	372	1,066	6,053
70 - 74 years	5,485	2.0	27	2.5	107	276	779	4,296
75 - 79 years	4,466	1.6	25	2.3	96	218	632	3,495
80 - 84 years	3,076	1.1	26	2.4	84	189	437	2,340
85 - 89 years	1,258	0.5	12	1.1	38	80	185	943
90 years and over	342	0.1	6	0.6	13	32	55	236
Unknown	6,605	2.4	2	0.2	66	190	823	5,524
Total	272,328	100.0	1,080	100.0	5,847	13,794	36,766	214,841

NOTE: Gender tables exclude 40,239 drivers of unknown gender.

The crash involvement for male drivers is down 12.0 percent from 2005.

The fatal crash involvement for male drivers is down 5.3 percent from 2005.



MALE DRINKING DRIVERS BY AGE & INJURY SEVERITY IN CRASH

MOST SEVERE OUTCOME IN CRASH

AGE OF DRINKING DRIVER IN CRASH	Male Drivers		Fatal		Injury			PDO
	Number	% of Total	Number	% of Fatal	A	B	C	
13 years and under	1	0.0	0	0.0	0	1	0	0
14 years	1	0.0	0	0.0	1	0	0	0
15 years	16	0.2	3	1.1	2	0	2	9
16 years	61	0.6	0	0.0	6	12	14	29
17 years	159	1.7	6	2.2	19	27	17	90
18 years	283	3.0	4	1.5	26	56	42	155
19 years	308	3.3	6	2.2	29	59	35	179
20 years	352	3.7	9	3.3	31	58	56	198
21 - 24 years	1,808	19.1	49	18.2	159	281	263	1,056
25 - 34 years	2,367	25.0	61	22.7	218	398	362	1,328
35 - 44 years	1,826	19.3	37	13.8	164	297	279	1,049
45 - 54 years	1,426	15.1	53	19.7	121	199	256	797
55 - 64 years	569	6.0	27	10.0	45	63	109	325
65 - 69 years	96	1.0	6	2.2	3	25	14	48
70 - 74 years	73	0.8	4	1.5	4	9	15	41
75 - 79 years	39	0.4	1	0.4	3	4	7	24
80 - 84 years	18	0.2	3	1.1	2	3	1	9
85 - 89 years	6	0.1	0	0.0	0	1	0	5
90 years and over	0	0.0	0	0.0	0	0	0	0
Unknown	45	0.5	0	0.0	1	2	11	31
Total	9,454	100.0	269	100.0	834	1,495	1,483	5,373

NOTE: Gender/alcohol tables exclude 44 unknown gender drinking drivers.



FEMALE DRIVERS BY AGE & INJURY SEVERITY IN CRASH

AGE OF DRIVER IN CRASH	MOST SEVERE OUTCOME IN CRASH							PDO
	Female Drivers		Fatal		Injury			
	Number	% of Total	Number	% of Fatal	A	B	C	
13 years and under	63	0.0	1	0.2	9	8	10	35
14 years	72	0.0	0	0.0	3	7	7	55
15 years	364	0.2	0	0.0	14	28	64	258
16 years	5,749	2.7	5	1.2	106	342	948	4,348
17 years	7,046	3.3	10	2.4	129	414	1,239	5,254
18 years	7,441	3.4	13	3.1	111	419	1,211	5,687
19 years	6,924	3.2	14	3.4	129	395	1,224	5,162
20 years	6,473	3.0	13	3.1	106	342	1,129	4,883
21 - 24 years	22,013	10.2	36	8.7	355	1,090	3,559	16,973
25 - 34 years	41,667	19.3	72	17.3	692	1,865	6,866	32,172
35 - 44 years	41,781	19.3	85	20.4	677	1,716	6,820	32,483
45 - 54 years	36,167	16.7	68	16.3	573	1,489	5,790	28,247
55 - 64 years	21,270	9.8	37	8.9	356	822	3,537	16,518
65 - 69 years	5,353	2.5	7	1.7	87	246	866	4,147
70 - 74 years	3,912	1.8	16	3.8	75	191	621	3,009
75 - 79 years	3,518	1.6	17	4.1	74	173	633	2,621
80 - 84 years	2,455	1.1	13	3.1	68	146	371	1,857
85 - 89 years	1,112	0.5	5	1.2	23	84	197	803
90 years and over	235	0.1	3	0.7	7	27	28	170
Unknown	2,581	1.2	1	0.2	18	60	268	2,234
Total	216,196	100.0	416	100.0	3,612	9,864	35,388	166,916

NOTE: Gender tables exclude 40,239 drivers of unknown gender.

The crash involvement for female drivers is down 8.9 percent from 2005.

The fatal crash involvement for female drivers is down 8.0 percent from 2005.



FEMALE DRINKING DRIVERS BY AGE & INJURY SEVERITY IN CRASH

AGE OF DRINKING DRIVER IN CRASH	MOST SEVERE OUTCOME IN CRASH							
	Female Drivers		Fatal		Injury			PDO
	Number	% of Total	Number	% of Fatal	A	B	C	
13 years and under	1	0.0	0	0.0	0	0	0	1
14 years	0	0.0	0	0.0	0	0	0	0
15 years	2	0.1	0	0.0	0	0	0	2
16 years	32	1.1	0	0.0	4	4	7	17
17 years	53	1.8	0	0.0	7	11	14	21
18 years	88	2.9	0	0.0	6	13	14	55
19 years	89	3.0	2	3.8	3	13	19	52
20 years	96	3.2	4	7.5	6	12	12	62
21 - 24 years	538	18.0	13	24.5	32	83	71	339
25 - 34 years	741	24.8	13	24.5	60	112	129	427
35 - 44 years	704	23.5	15	28.3	49	75	139	426
45 - 54 years	456	15.2	4	7.5	26	55	86	285
55 - 64 years	123	4.1	1	1.9	9	10	26	77
65 - 69 years	25	0.8	0	0.0	1	5	5	14
70 - 74 years	18	0.6	1	1.9	3	1	2	11
75 - 79 years	10	0.3	0	0.0	2	3	0	5
80 - 84 years	6	0.2	0	0.0	0	0	1	5
85 - 89 years	3	0.1	0	0.0	0	0	0	3
90 years and over	0	0.0	0	0.0	0	0	0	0
Unknown	6	0.2	0	0.0	0	0	1	5
Total	2,991	100.0	53	100.0	208	397	526	1,807

NOTE: Gender/alcohol tables exclude 44 unknown gender drinking drivers.

FATAL CRASHES AND FATALITIES WITH DRINKING INVOLVEMENT BY COUNTY

COUNTY	CRASHES			PERSONS		
	All Fatal Crashes	HBD Fatal Crashes	Percent HBD	Total Fatalities	HBD Fatalities	Percent HBD
Alcona	3	1	33.3	4	1	25.0
Alger	0	0	0.0	0	0	0.0
Allegan	15	1	6.7	15	1	6.7
Alpena	4	1	25.0	4	1	25.0
Antrim	6	1	16.7	6	1	16.7
Arenac	7	2	28.6	9	2	22.2
Baraga	1	0	0.0	1	0	0.0
Barry	12	5	41.7	13	5	38.5
Bay	7	2	28.6	7	2	28.6
Benzie	2	1	50.0	2	1	50.0
Berrien	21	8	38.1	21	8	38.1
Branch	12	4	33.3	12	4	33.3
Calhoun	16	6	37.5	20	9	45.0
Cass	11	4	36.4	11	4	36.4
Charlevoix	3	1	33.3	3	1	33.3
Cheboygan	3	1	33.3	3	1	33.3
Chippewa	5	4	80.0	5	4	80.0
Clare	4	2	50.0	6	3	50.0
Clinton	4	1	25.0	6	1	16.7
Crawford	5	4	80.0	7	5	71.4
Delta	3	1	33.3	3	1	33.3
Dickinson	4	2	50.0	4	2	50.0
Eaton	11	4	36.4	11	4	36.4
Emmet	2	1	50.0	2	1	50.0
Genesee	56	26	46.4	60	27	45.0
Gladwin	2	0	0.0	2	0	0.0
Gogebic	0	0	0.0	0	0	0.0
Grand Traverse	13	8	61.5	16	11	68.8
Gratiot	9	4	44.4	9	4	44.4
Hillsdale	10	0	0.0	11	0	0.0
Houghton	5	3	60.0	5	3	60.0
Huron	4	1	25.0	4	1	25.0
Ingham	16	3	18.8	17	3	17.6
Ionia	4	2	50.0	4	2	50.0
Iosco	5	2	40.0	5	2	40.0
Iron	3	1	33.3	3	1	33.3
Isabella	7	2	28.6	7	2	28.6
Jackson	21	10	47.6	22	11	50.0
Kalamazoo	23	11	47.8	25	11	44.0
Kalkaska	2	0	0.0	2	0	0.0
Kent	51	24	47.1	57	29	50.9
Keweenaw	0	0	0.0	0	0	0.0
Lake	1	1	100.0	1	1	100.0
Lapeer	7	1	14.3	7	1	14.3

**FATAL CRASHES AND FATALITIES
WITH DRINKING INVOLVEMENT
BY COUNTY (continued)**

COUNTY	CRASHES			PERSONS		
	All Fatal Crashes	HBD Fatal Crashes	Percent HBD	Total Fatalities	HBD Fatalities	Percent HBD
Leelanau	4	1	25.0	4	1	25.0
Lenawee	14	4	28.6	15	5	33.3
Livingston	19	6	31.6	23	7	30.4
Luce	4	1	25.0	4	1	25.0
Mackinac	0	0	0.0	0	0	0.0
Macomb	57	15	26.3	61	15	24.6
Manistee	2	1	50.0	2	1	50.0
Marquette	6	1	16.7	6	1	16.7
Mason	1	0	0.0	1	0	0.0
Mecosta	6	3	50.0	7	3	42.9
Menominee	4	1	25.0	4	1	25.0
Midland	3	1	33.3	4	2	50.0
Missaukee	3	2	66.7	3	2	66.7
Monroe	17	7	41.2	18	7	38.9
Montcalm	8	1	12.5	8	1	12.5
Montmorency	2	1	50.0	2	1	50.0
Muskegon	20	7	35.0	22	8	36.4
Newaygo	9	4	44.4	10	4	40.0
Oakland	58	20	34.5	63	23	36.5
Oceana	3	0	0.0	3	0	0.0
Ogemaw	5	2	40.0	5	2	40.0
Ontonagon	5	5	100.0	5	5	100.0
Osceola	1	0	0.0	1	0	0.0
Oscoda	3	2	66.7	3	2	66.7
Otsego	6	3	50.0	8	4	50.0
Ottawa	26	8	30.8	28	8	28.6
Presque Isle	1	0	0.0	1	0	0.0
Roscommon	3	2	66.7	3	2	66.7
Saginaw	31	9	29.0	33	11	33.3
St. Clair	17	5	29.4	18	5	27.8
St. Joseph	13	5	38.5	17	6	35.3
Sanilac	7	4	57.1	7	4	57.1
Schoolcraft	3	0	0.0	4	0	0.0
Shiawassee	13	4	30.8	13	4	30.8
Tuscola	14	4	28.6	14	4	28.6
Van Buren	11	2	18.2	11	2	18.2
Washtenaw	33	9	27.3	35	9	25.7
Wayne	161	50	31.1	173	57	32.9
Wexford	9	3	33.3	13	4	30.8
Total	1,002	349	34.8	1,084	383	35.3

MOST SEVERE OUTCOME IN HBD CRASHES BY COUNTY

Note: While the Michigan *Traffic Crash Report* (UD-10) requests officers to report Bodily Alcohol Content (BAC) of all persons tested for alcohol after a traffic crash, only the BAC testing of deceased motor vehicle drivers and deceased railroad train engineers is required by law. Consequently, alcohol involvement in nonfatal crashes is frequently unreported, and is therefore generally believed to be higher than indicated in this table.

MOST SEVERE OUTCOME IN HBD CRASH

COUNTY	All HBD Crashes	Fatal	Injury			PDO
			A	B	C	
Alcona	19	1	3	3	4	8
Alger	15	0	1	3	0	11
Allegan	167	1	14	29	27	96
Alpena	51	1	3	6	8	33
Antrim	33	1	4	12	3	13
Arenac	36	2	4	8	3	19
Baraga	14	0	5	0	2	7
Barry	105	5	15	20	14	51
Bay	212	2	16	33	31	130
Benzie	30	1	9	7	3	10
Berrien	199	8	16	32	32	111
Branch	69	4	11	12	9	33
Calhoun	198	6	19	26	30	117
Cass	107	4	10	15	19	59
Charlevoix	33	1	2	10	2	18
Cheboygan	46	1	7	13	5	20
Chippewa	75	4	15	14	12	30
Clare	43	2	9	5	4	23
Clinton	84	1	8	17	13	45
Crawford	35	4	2	7	4	18
Delta	53	1	5	10	4	33
Dickinson	40	2	1	9	5	23
Eaton	118	4	10	24	19	61
Emmet	48	1	0	8	8	31
Genesee	604	26	43	104	118	313
Gladwin	47	0	5	11	0	31
Gogebic	20	0	2	4	1	13
Grand Traverse	131	8	2	10	26	85
Gratiot	43	4	3	5	4	27
Hillsdale	57	0	9	14	7	27
Houghton	73	3	7	8	16	39
Huron	38	1	4	11	3	19
Ingham	331	3	31	44	57	196
Ionia	96	2	15	18	14	47
Iosco	45	2	4	5	4	30
Iron	16	1	2	3	0	10
Isabella	115	2	6	20	15	72
Jackson	235	10	20	38	41	126
Kalamazoo	385	11	31	60	68	215
Kalkaska	19	0	3	0	6	10
Kent	944	24	77	118	142	583
Keweenaw	7	0	3	1	0	3

MOST SEVERE OUTCOME IN HBD CRASHES BY COUNTY (continued)

MOST SEVERE OUTCOME IN HBD CRASH

COUNTY	All HBD Crashes	Fatal	Injury			PDO
			A	B	C	
Lake	19	1	5	3	2	8
Lapeer	131	1	9	26	21	74
Leelanau	29	1	4	3	2	19
Lenawee	111	4	9	18	13	67
Livingston	217	6	32	33	28	118
Luce	12	1	0	2	1	8
Mackinac	24	0	5	6	1	12
Macomb	919	15	49	116	171	568
Manistee	40	1	2	8	4	25
Marquette	77	1	12	12	9	43
Mason	45	0	0	11	6	28
Mecosta	69	3	9	14	7	36
Menominee	45	1	2	11	4	27
Midland	68	1	5	14	17	31
Missaukee	24	2	2	7	3	10
Monroe	233	7	16	37	40	133
Montcalm	96	1	11	17	11	56
Montmorency	17	1	3	2	1	10
Muskegon	234	7	31	38	37	121
Newaygo	89	4	10	16	19	40
Oakland	1,305	20	88	193	237	767
Oceana	48	0	4	8	6	30
Ogemaw	27	2	6	6	3	10
Ontonagon	30	5	7	1	2	15
Osceola	36	0	6	6	5	19
Oscoda	24	2	3	5	1	13
Otsego	25	3	1	5	4	12
Ottawa	302	8	27	53	44	170
Presque Isle	19	0	4	3	1	11
Roscommon	48	2	4	6	7	29
Saginaw	262	9	26	41	49	137
St. Clair	222	5	26	34	31	126
St. Joseph	88	5	8	13	18	44
Sanilac	54	4	8	4	6	32
Schoolcraft	20	0	2	3	1	14
Shiawassee	83	4	7	17	8	47
Tuscola	96	4	10	19	18	45
Van Buren	128	2	17	22	14	73
Washtenaw	390	9	33	56	77	215
Wayne	1,793	50	117	227	348	1,051
Wexford	69	3	6	18	3	39
Unknown	0	0	0	0	0	0
Total	12,604	349	1,082	1,931	2,063	7,179

COUNTY RANKING BY HBD FATAL CRASH RATE per 1,000 Michigan Residents

COUNTY	2006 Population Estimate	All Crashes	Fatal Crashes	HBD Crashes	HBD Fatal Crashes	HBD Fatal Crash Rate per 1,000 people	Rank
Ontonagon	7,202	412	5	30	5	0.6943	1
Crawford	14,928	656	5	35	4	0.2680	2
Oscoda	9,140	342	3	24	2	0.2188	3
Luce	6,684	213	4	12	1	0.1496	4
Missaukee	15,197	647	3	24	2	0.1316	5
Otsego	24,711	995	6	25	3	0.1214	6
Arenac	17,024	884	7	36	2	0.1175	7
Chippewa	38,674	1,240	5	75	4	0.1034	8
Montmorency	10,478	379	2	17	1	0.0954	9
Gratiot	42,107	1,735	9	43	4	0.0950	10
Grand Traverse	84,952	3,215	13	131	8	0.0942	11
Wexford	31,994	1,333	9	69	3	0.0938	12
Ogemaw	21,665	951	5	27	2	0.0923	13
Sanilac	44,448	1,716	7	54	4	0.0900	14
Branch	45,875	1,780	12	69	4	0.0872	15
Alcona	11,759	590	3	19	1	0.0850	16
Houghton	35,334	1,147	5	73	3	0.0849	17
Lake	11,793	510	1	19	1	0.0848	18
Barry	59,899	2,131	12	105	5	0.0835	19
Iron	12,377	680	3	16	1	0.0808	20
Newaygo	49,840	1,716	9	89	4	0.0803	21
St. Joseph	62,777	1,873	13	88	5	0.0796	22
Cass	51,329	1,782	11	107	4	0.0779	23
Roscommon	26,064	890	3	48	2	0.0767	24
Iosco	26,831	908	5	45	2	0.0745	25
Dickinson	27,447	1,058	4	40	2	0.0729	26
Mecosta	42,252	2,177	6	69	3	0.0710	27
Tuscola	57,878	1,913	14	96	4	0.0691	28
Clare	31,307	1,330	4	43	2	0.0639	29
Jackson	163,851	6,044	21	235	10	0.0610	30
Genesee	441,966	11,971	56	604	26	0.0588	31
Benzie	17,652	571	2	30	1	0.0567	32
Shiawassee	72,912	2,434	13	83	4	0.0549	33
Berrien	161,705	4,567	21	199	8	0.0495	34
Kalamazoo	240,720	8,446	23	385	11	0.0457	35
Leelanau	22,112	628	4	29	1	0.0452	36
Monroe	155,035	3,891	17	233	7	0.0452	36
Saginaw	206,300	5,996	31	262	9	0.0436	38
Calhoun	137,991	5,246	16	198	6	0.0435	39
Antrim	24,463	935	6	33	1	0.0409	40
Menominee	24,696	1,218	4	45	1	0.0405	41
Kent	599,524	19,537	51	944	24	0.0400	42
Manistee	25,067	886	2	40	1	0.0399	43
Muskegon	175,231	5,011	20	234	7	0.0399	43
Lenawee	102,191	2,725	14	111	4	0.0391	45

COUNTY RANKING BY HBD FATAL CRASH RATE per 1,000 Michigan Residents (continued)

COUNTY	2006 Population Estimate	All Crashes	Fatal Crashes	HBD Crashes	HBD Fatal Crashes	HBD Fatal Crash Rate per 1,000 people	Rank
Charlevoix	26,422	1,080	3	33	1	0.0378	46
Eaton	107,237	3,777	11	118	4	0.0373	47
Cheboygan	27,282	1,102	3	46	1	0.0367	48
Alpena	30,067	950	4	51	1	0.0333	49
Livingston	184,511	5,097	19	217	6	0.0325	50
Ottawa	257,671	6,978	26	302	8	0.0310	51
Ionia	64,821	2,404	4	96	2	0.0309	52
Isabella	65,818	2,836	7	115	2	0.0304	53
Emmet	33,607	1,394	2	48	1	0.0298	54
Huron	34,143	1,719	4	38	1	0.0293	55
St. Clair	171,725	4,278	17	222	5	0.0291	56
Delta	38,156	1,724	3	53	1	0.0262	57
Washtenaw	344,047	10,344	33	390	9	0.0262	57
Wayne	1,971,853	54,480	161	1,793	50	0.0254	59
Van Buren	79,018	2,519	11	128	2	0.0253	60
Bay	108,390	3,134	7	212	2	0.0185	61
Macomb	832,861	22,660	57	919	15	0.0180	62
Oakland	1,214,255	37,415	58	1,305	20	0.0165	63
Montcalm	63,977	2,851	8	96	1	0.0156	64
Marquette	64,675	2,122	6	77	1	0.0155	65
Clinton	69,909	2,506	4	84	1	0.0143	66
Midland	83,792	2,476	3	68	1	0.0119	67
Ingham	276,898	9,584	16	331	3	0.0108	68
Lapeer	93,761	3,189	7	131	1	0.0107	69
Allegan	113,501	3,293	15	167	1	0.0088	70
Alger	9,665	340	0	15	0	0.0000	71
Baraga	8,742	398	1	14	0	0.0000	71
Gladwin	27,008	905	2	47	0	0.0000	71
Gogebic	16,524	353	0	20	0	0.0000	71
Hillsdale	47,206	1,912	10	57	0	0.0000	71
Kalkaska	17,330	678	2	19	0	0.0000	71
Keweenaw	2,183	107	0	7	0	0.0000	71
Mackinac	11,050	636	0	24	0	0.0000	71
Mason	29,045	1,439	1	45	0	0.0000	71
Oceana	28,639	1,110	3	48	0	0.0000	71
Osceola	23,584	1,223	1	36	0	0.0000	71
Presque Isle	14,144	585	1	19	0	0.0000	71
Schoolcraft	8,744	415	3	20	0	0.0000	71
Total	10,095,643	315,322	1,002	12,604	349	0.03457	

REPORTED STATEWIDE ALCOHOL INVOLVED TRAFFIC CRASHES BY COUNTY IN MICHIGAN

COUNTY	All	Fatal	Injury	Property Damage	Inter- state	US Route	State Route	Local Street	Persons Killed	Persons Injured
Alcona	19	1	10	8	0	1	1	17	1	15
Alger	15	0	4	11	0	1	3	11	0	5
Allegan	167	1	70	96	6	14	25	122	1	85
Alpena	51	1	17	33	0	8	9	34	1	19
Antrim	33	1	19	13	0	3	9	21	1	21
Arenac	36	2	15	19	4	7	2	23	2	18
Baraga	14	0	7	7	0	3	1	10	0	13
Barry	105	5	49	51	0	0	30	75	5	71
Bay	212	2	80	130	14	5	40	153	2	101
Benzie	30	1	19	10	0	5	6	19	1	31
Berrien	199	8	80	111	19	16	27	137	8	102
Branch	69	4	32	33	3	3	6	57	4	40
Calhoun	198	6	75	117	24	0	36	138	9	106
Cass	107	4	44	59	0	17	30	60	4	58
Charlevoix	33	1	14	18	0	6	3	24	1	21
Cheboygan	46	1	25	20	1	2	9	34	1	32
Chippewa	75	4	41	30	15	0	15	45	4	57
Clare	43	2	18	23	0	7	4	32	3	30
Clinton	84	1	38	45	10	7	6	61	1	50
Crawford	35	4	13	18	6	0	8	21	5	14
Delta	53	1	19	33	0	8	7	38	1	23
Dickinson	40	2	15	23	0	6	7	27	2	17
Eaton	118	4	53	61	14	0	32	72	4	72
Emmet	48	1	16	31	0	7	3	38	1	22
Genesee	604	26	265	313	64	13	82	445	27	403
Gladwin	47	0	16	31	0	0	7	40	0	18
Gogebic	20	0	7	13	0	5	2	13	0	8
Grand Traverse	131	8	38	85	0	26	13	92	11	58
Gratiot	43	4	12	27	0	7	5	31	4	23
Hillsdale	57	0	30	27	0	7	6	44	0	39
Houghton	73	3	31	39	0	19	11	43	3	44
Huron	38	1	18	19	0	0	14	24	1	25
Ingham	331	3	132	196	44	12	63	212	3	180
Ionia	96	2	47	47	8	0	12	76	2	54
Iosco	45	2	13	30	0	6	3	36	2	18
Iron	16	1	5	10	0	0	2	14	1	5
Isabella	115	2	41	72	0	14	9	92	2	77
Jackson	235	10	99	126	26	11	18	180	11	132
Kalamazoo	385	11	159	215	42	24	43	276	11	219
Kalkaska	19	0	9	10	0	1	1	17	0	11
Kent	944	24	337	583	78	70	125	671	29	445
Keweenaw	7	0	4	3	0	3	1	3	0	4
Lake	19	1	10	8	0	0	3	16	1	14
Lapeer	131	1	56	74	6	0	18	107	1	75
Leelanau	29	1	9	19	0	0	9	20	1	10
Lenawee	111	4	40	67	0	18	14	79	5	50

REPORTED STATEWIDE ALCOHOL INVOLVED TRAFFIC CRASHES BY COUNTY IN MICHIGAN (continued)

COUNTY	All	Fatal	Injury	Property Damage	Inter- state	US Route	State Route	Local Street	Persons Killed	Persons Injured
Livingston	217	6	93	118	18	11	23	165	7	119
Luce	12	1	3	8	0	0	5	7	1	3
Mackinac	24	0	12	12	4	2	2	16	0	12
Macomb	919	15	336	568	95	0	195	629	15	470
Manistee	40	1	14	25	0	6	3	31	1	22
Marquette	77	1	33	43	0	10	10	57	1	51
Mason	45	0	17	28	0	9	2	34	0	20
Mecosta	69	3	30	36	0	8	13	48	3	35
Menominee	45	1	17	27	0	11	2	32	1	25
Midland	68	1	36	31	0	5	10	53	2	49
Missaukee	24	2	12	10	0	0	5	19	2	18
Monroe	233	7	93	133	24	28	17	164	7	132
Montcalm	96	1	39	56	0	5	19	72	1	54
Montmorency	17	1	6	10	0	0	5	12	1	10
Muskegon	234	7	106	121	4	37	26	167	8	142
Newaygo	89	4	45	40	0	0	16	73	4	62
Oakland	1,305	20	518	767	217	46	178	864	23	725
Oceana	48	0	18	30	0	2	3	43	0	26
Ogemaw	27	2	15	10	1	0	3	23	2	24
Ontonagon	30	5	10	15	0	7	6	17	5	14
Osceola	36	0	17	19	0	8	0	28	0	23
Oscoda	24	2	9	13	0	0	6	18	2	11
Otsego	25	3	10	12	4	0	1	20	4	14
Ottawa	302	8	124	170	30	25	28	219	8	181
Presque Isle	19	0	8	11	0	0	3	16	0	8
Roscommon	48	2	17	29	3	2	13	30	2	22
Saginaw	262	9	116	137	9	0	82	171	11	163
St. Clair	222	5	91	126	32	0	36	154	5	127
St. Joseph	88	5	39	44	0	14	16	58	6	60
Sanilac	54	4	18	32	0	0	13	41	4	27
Schoolcraft	20	0	6	14	0	4	4	12	0	10
Shiawassee	83	4	32	47	9	0	14	60	4	49
Tuscola	96	4	47	45	0	0	10	86	4	64
Van Buren	128	2	53	73	12	0	14	102	2	70
Washtenaw	390	9	166	215	58	51	17	264	9	236
Wayne	1,793	50	692	1,051	296	92	267	1,138	57	1,017
Wexford	69	3	27	39	0	9	19	41	4	38
Unknown	0	0	0	0	0	0	0	0	0	0
Total	12,604	349	5,076	7,179	1,200	754	1,866	8,784	383	7,068

2006

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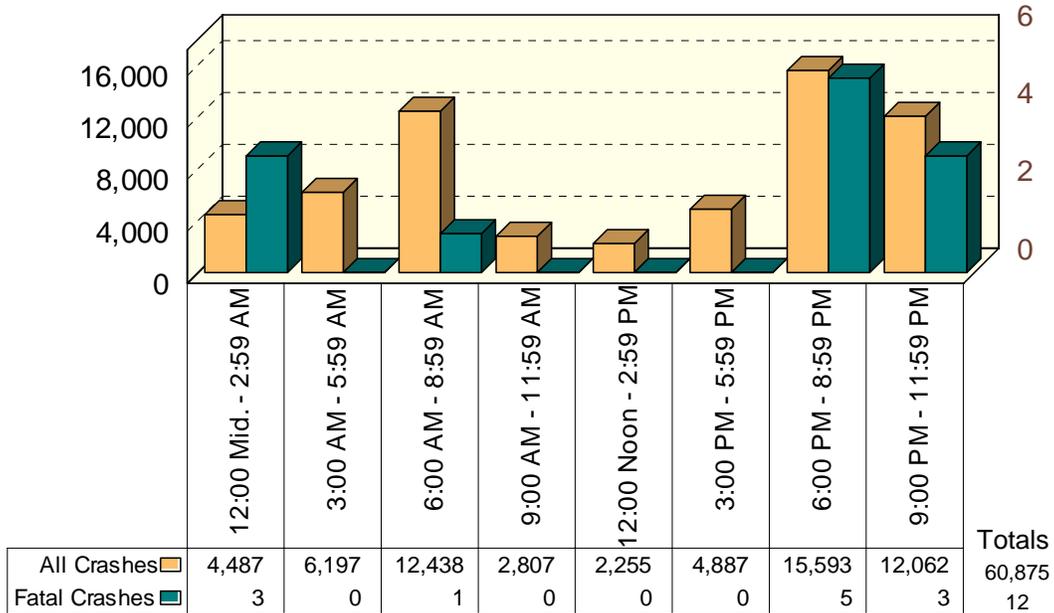
2006

Deer

LIGHT CONDITION AND TIME OF DAY IN MOTOR VEHICLE-DEER CRASHES

LIGHT CONDITION	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Daylight	12,794	21.0	1	8.3	49	164	241	12,339
Dawn	5,463	9.0	0	0.0	5	32	80	5,346
Dusk	3,136	5.2	0	0.0	5	26	42	3,063
Dark – Lighted	1,960	3.2	0	0.0	0	20	19	1,921
Dark – Unlighted	36,816	60.5	11	91.7	52	219	514	36,020
Other/Unknown	706	1.2	0	0.0	0	2	7	697
Total	60,875	100.0	12	100.0	111	463	903	59,386

Time and Severity of All Motor Vehicle-Deer Crashes

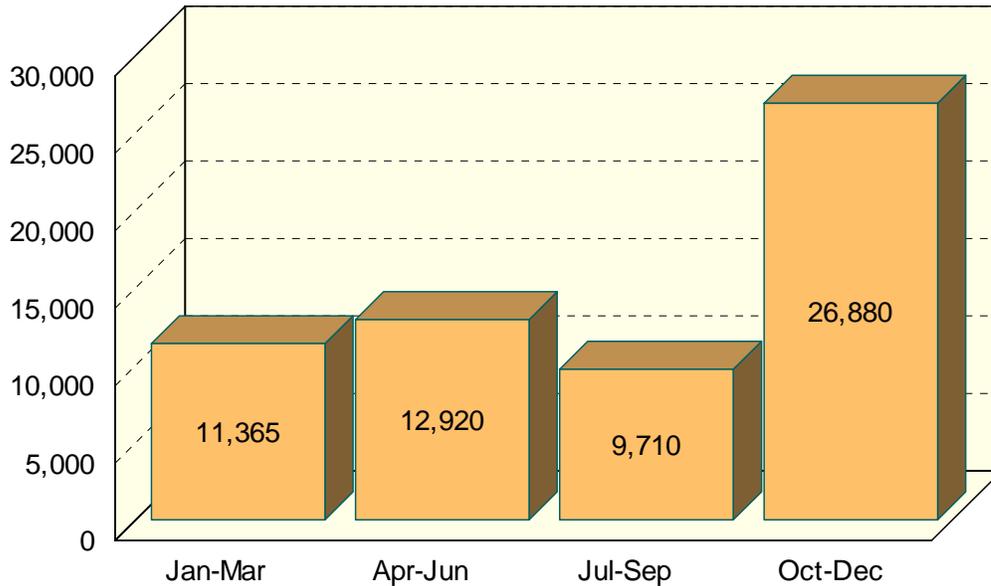


NOTE: Time and Severity chart excludes 149 crashes where time of day is unknown.

MONTHLY AND SEASONAL RATES FOR MOTOR VEHICLE-DEER CRASHES

MONTH	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
January	4,524	7.4	0	0.0	2	18	51	4,453
February	3,275	5.4	0	0.0	1	12	30	3,232
March	3,566	5.9	0	0.0	1	17	43	3,505
April	3,433	5.6	0	0.0	3	27	42	3,361
May	4,431	7.3	0	0.0	13	49	90	4,279
June	5,056	8.3	1	8.3	25	67	104	4,859
July	2,945	4.8	2	16.7	17	57	62	2,807
August	2,619	4.3	4	33.3	12	44	39	2,520
September	4,146	6.8	2	16.7	5	35	61	4,043
October	8,809	14.5	0	0.0	13	56	147	8,593
November	11,750	19.3	3	25.0	14	63	156	11,514
December	6,321	10.4	0	0.0	5	18	78	6,220
Total	60,875	100.0	12	100.0	111	463	903	59,386

All Motor Vehicle-Deer Crashes



26,880 (44.2%) of all reported motor vehicle-deer collisions occurred during the fourth quarter of the year.

REPORTED STATEWIDE MOTOR VEHICLE-DEER CRASHES BY COUNTY IN MICHIGAN

COUNTY	All	Fatal	Injury	Property Damage	Inter-state	US Route	State Route	Local Street	Persons Killed	Persons Injured
Alcona	403	0	12	391	0	71	91	241	0	12
Alger	145	0	4	141	0	26	68	51	0	5
Allegan	1,153	0	36	1,117	81	106	195	771	0	41
Alpena	378	0	4	374	0	55	90	233	0	4
Antrim	419	0	9	410	0	85	85	249	0	9
Arenac	456	1	5	450	29	115	35	277	1	5
Baraga	236	0	5	231	0	82	44	110	0	6
Barry	1,182	1	30	1,151	0	0	435	747	1	34
Bay	434	0	11	423	52	29	107	246	0	13
Benzie	259	0	6	253	0	57	47	155	0	8
Berrien	941	0	38	903	133	182	120	506	0	43
Branch	894	2	20	872	82	87	52	673	2	22
Calhoun	1,817	0	33	1,784	254	0	382	1,181	0	36
Cass	757	0	24	733	0	68	236	453	0	26
Charlevoix	508	0	8	500	0	117	102	289	0	10
Cheboygan	417	0	14	403	76	30	115	196	0	17
Chippewa	428	0	10	418	52	0	184	192	0	11
Clare	632	0	10	622	0	159	138	335	0	11
Clinton	1,265	0	32	1,233	142	139	145	839	0	35
Crawford	259	0	10	249	38	7	92	122	0	10
Delta	875	1	17	857	0	279	175	421	1	19
Dickinson	548	0	2	546	0	168	166	214	0	2
Eaton	1,420	0	30	1,390	210	0	361	849	0	38
Emmet	481	0	7	474	1	138	43	299	0	7
Genesee	1,244	0	24	1,220	141	27	149	927	0	24
Gladwin	508	0	11	497	0	0	213	295	0	14
Gogebic	123	0	6	117	0	73	15	35	0	8
Grand Traverse	524	0	17	507	0	52	123	349	0	21
Gratiot	955	0	15	940	0	170	140	645	0	17
Hillsdale	1,025	0	18	1,007	0	116	190	719	0	21
Houghton	313	0	10	303	0	86	117	110	0	12
Huron	1,195	0	14	1,181	0	0	472	723	0	16
Ingham	1,530	0	39	1,491	175	128	189	1,038	0	44
Ionia	1,212	0	25	1,187	133	0	290	789	0	26
Iosco	450	0	16	434	0	58	152	240	0	17
Iron	420	0	11	409	0	187	86	147	0	14
Isabella	1,092	0	20	1,072	0	144	110	838	0	22
Jackson	2,017	2	43	1,972	113	139	329	1,436	2	50
Kalamazoo	1,354	0	49	1,305	71	101	151	1,031	0	59
Kalkaska	271	0	4	267	0	36	70	165	0	4
Kent	2,208	0	81	2,127	181	111	425	1,491	0	96
Keweenaw	47	0	1	46	0	24	6	17	0	1
Lake	307	0	7	300	0	58	59	190	0	8
Lapeer	1,373	0	34	1,339	92	0	208	1,073	0	40
Leelanau	250	0	6	244	0	0	118	132	0	6
Lenawee	750	0	19	731	0	147	157	446	0	20

REPORTED STATEWIDE MOTOR VEHICLE-DEER CRASHES BY COUNTY IN MICHIGAN (continued)

COUNTY	All	Fatal	Injury	Property Damage	Inter-state	US Route	State Route	Local Street	Persons Killed	Persons Injured
Livingston	1,216	0	34	1,182	134	66	130	886	0	35
Luce	117	0	1	116	0	0	70	47	0	1
Mackinac	352	0	6	346	45	80	122	105	0	6
Macomb	656	1	25	630	22	0	127	507	1	28
Manistee	423	0	7	416	0	67	96	260	0	9
Marquette	452	0	8	444	0	121	136	195	0	9
Mason	728	0	18	710	0	206	24	498	0	19
Mecosta	1,143	0	28	1,115	0	111	303	729	0	32
Menominee	749	0	24	725	0	282	101	366	0	32
Midland	818	0	17	801	0	73	89	656	0	19
Missaukee	404	0	5	399	0	0	132	272	0	5
Monroe	327	0	9	318	38	62	40	187	0	10
Montcalm	1,576	1	24	1,551	0	55	437	1,084	1	26
Montmorency	215	0	2	213	0	0	115	100	0	2
Muskegon	733	0	26	707	19	92	71	551	0	29
Newaygo	792	1	23	768	0	0	248	544	1	26
Oakland	1,866	0	55	1,811	182	24	253	1,407	0	61
Oceana	574	0	21	553	0	123	77	374	0	24
Ogemaw	538	0	17	521	63	0	144	331	0	19
Ontonagon	256	1	6	249	0	74	134	48	1	9
Osceola	642	0	12	630	0	167	106	369	0	13
Oscoda	165	0	3	162	0	0	72	93	0	4
Otsego	210	0	8	202	37	0	47	126	0	10
Ottawa	1,183	0	39	1,144	177	53	78	875	0	42
Presque Isle	408	0	3	405	0	87	112	209	0	3
Roscommon	381	0	10	371	61	38	63	219	0	12
Saginaw	911	0	22	889	40	0	219	652	0	26
St. Clair	762	0	15	747	97	0	77	588	0	16
St. Joseph	697	1	13	683	0	87	163	447	1	15
Sanilac	1,107	0	16	1,091	0	0	428	679	0	19
Schoolcraft	248	0	9	239	0	85	90	73	0	9
Shiawassee	1,099	0	22	1,077	92	0	251	756	0	26
Tuscola	955	0	21	934	0	0	327	628	0	22
Van Buren	771	0	23	748	77	0	177	517	0	26
Washtenaw	1,187	0	40	1,147	80	89	122	896	0	50
Wayne	344	0	12	332	53	15	27	249	0	12
Wexford	395	0	6	389	0	60	178	157	0	6
Total	60,875	12	1,477	59,386	3,273	5,774	12,663	39,165	12	1,676

2006

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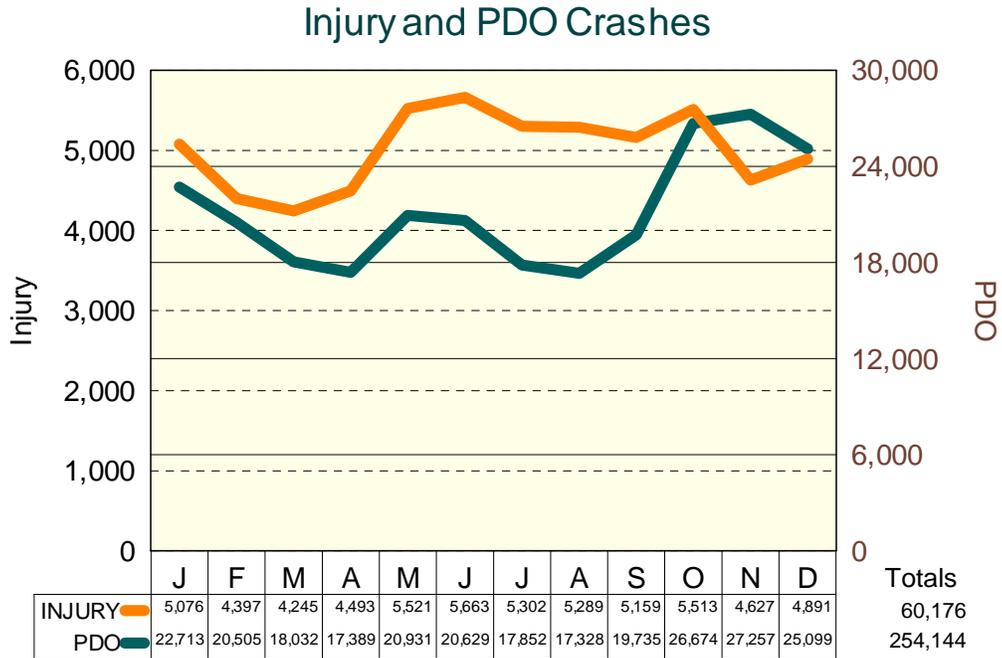
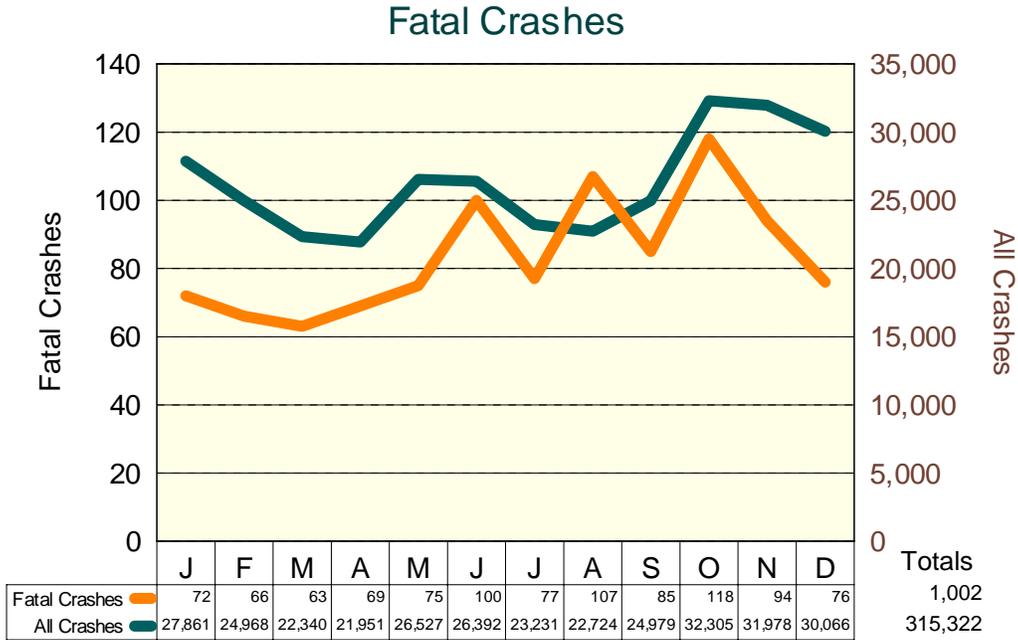
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Crash

ALL CRASHES INJURY SEVERITY BY MONTH

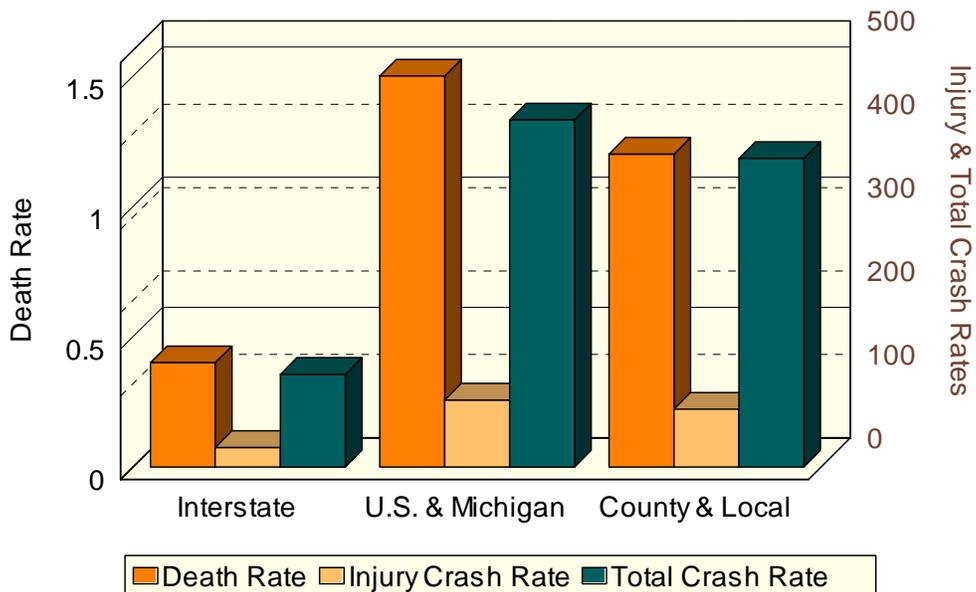


CRASH EXPERIENCE BY ROADWAY TYPE

The table below provides a detailed breakdown of estimated vehicle mileage, crashes, death rates (deaths per 100 million vehicle miles), and crash rates (crashes per 100 million vehicle miles) for the major roadway types in Michigan. All rates are lowest on interstate routes. 2006 estimated mileage figures were provided by the Michigan Department of Transportation [11].

STATEWIDE	Estimated Mileage (Billions)	All Crashes	Injury Crashes	Deaths	Total Crash Rate	Injury Crash Rate	Death Rate
Interstate Routes	30.6	33,962	7,084	126	111.0	23.2	0.4
U.S. & Michigan Roads	21.4	89,047	17,137	331	416.1	80.1	1.5
County & City Roads	52.0	192,313	35,955	627	369.8	69.1	1.2
Total	104.0	315,322	60,176	1,084	303.2	57.9	1.04

Rates per 100 Million Vehicle Miles



CRASH TYPE

CRASH TYPE	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Single Vehicle	117,622	37.3	522	52.1	2,736	6,523	9,143	98,698
Head On	4,528	1.4	146	14.6	355	532	755	2,740
Head On - Left Turn	8,062	2.6	47	4.7	309	821	1,878	5,007
Angle	55,734	17.7	168	16.8	1,383	3,459	9,655	41,069
Rear End	74,562	23.6	47	4.7	661	2,061	13,537	58,256
Rear End - Left Turn	3,151	1.0	5	0.5	47	164	646	2,289
Rear End - Right Turn	2,829	0.9	1	0.1	13	42	372	2,401
Sideswipe - Same Direction	27,294	8.7	12	1.2	168	498	1,597	25,019
Sideswipe - Opposite Direct	7,082	2.2	12	1.2	104	238	506	6,222
Other/Unknown	14,458	4.6	42	4.2	272	596	1,105	12,443
Total	315,322	100.0	1,002	100.0	6,048	14,934	39,194	254,144

Single Vehicle, Head On, and Angle crash types produce the highest number of fatal crashes (83.4%). Single Vehicle crashes include rollovers, which are particularly deadly crash types. Rear End-Turning and Sideswipe crashes produce the lowest number of fatal crashes (3.0%).



RELATIONSHIP TO ROADWAY

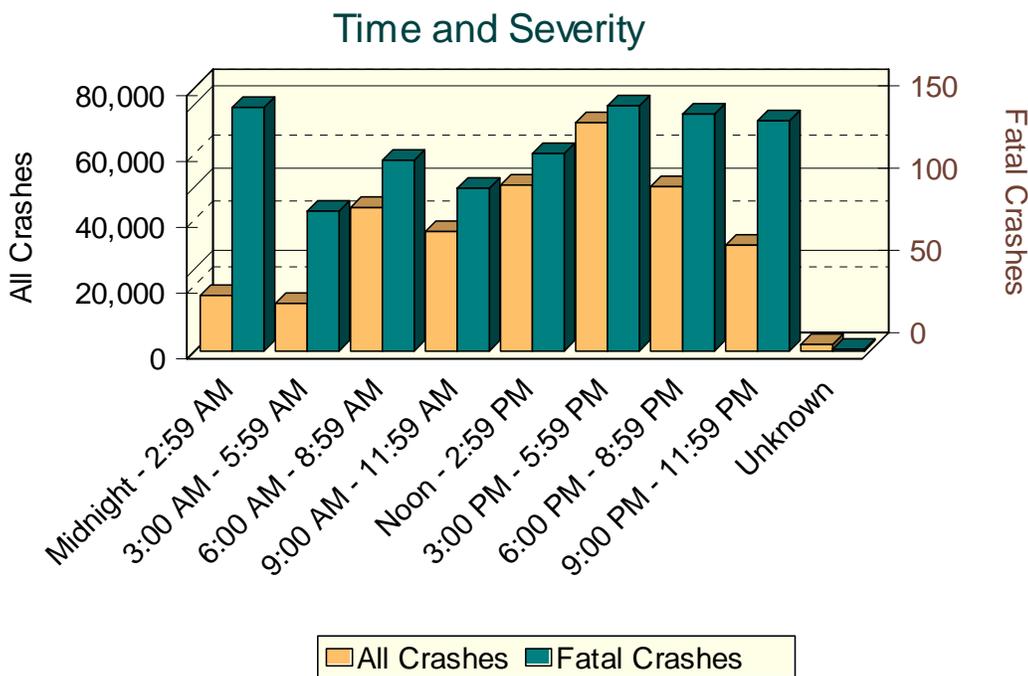
LOCATION OF FIRST IMPACT	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
On Road	258,690	82.0	655	65.4	4,096	10,262	31,834	211,843
Median	2,215	0.7	15	1.5	76	181	351	1,592
Shoulder	12,877	4.1	73	7.3	401	993	1,560	9,850
Outside of Shoulder/Curb	25,316	8.0	226	22.6	1,155	2,623	3,519	17,793
Gore	762	0.2	3	0.3	30	84	116	529
Other/Unknown	15,462	4.9	30	3.0	290	791	1,814	12,537
Total	315,322	100.0	1,002	100.0	6,048	14,934	39,194	254,144

Crashes that happen outside of the normal driving lanes are overrepresented in the fatal count. Only 8.0 percent of crashes occur outside the shoulder of the road, but these crashes account for 22.6 percent of the fatal crashes.



TIME AND SEVERITY

TIME OF DAY	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Midnight - 2:59 AM	16,927	5.4	148	14.8	539	1,168	1,618	13,454
3:00 AM - 5:59 AM	14,464	4.6	85	8.5	347	729	1,132	12,171
6:00 AM - 8:59 AM	43,631	13.8	116	11.6	618	1,519	4,807	36,571
9:00 AM - 11:59 AM	36,345	11.5	99	9.9	624	1,697	5,099	28,826
Noon - 2:59 PM	50,461	16.0	120	12.0	1,002	2,624	7,699	39,016
3:00 PM - 5:59 PM	69,381	22.0	149	14.9	1,230	3,411	10,224	54,367
6:00 PM - 8:59 PM	49,936	15.8	144	14.4	920	2,191	5,445	41,236
9:00 PM - 11:59 PM	32,157	10.2	140	14.0	736	1,549	3,029	26,703
Unknown	2,020	0.6	1	0.1	32	46	141	1,800
Total	315,322	100.0	1,002	100.0	6,048	14,934	39,194	254,144



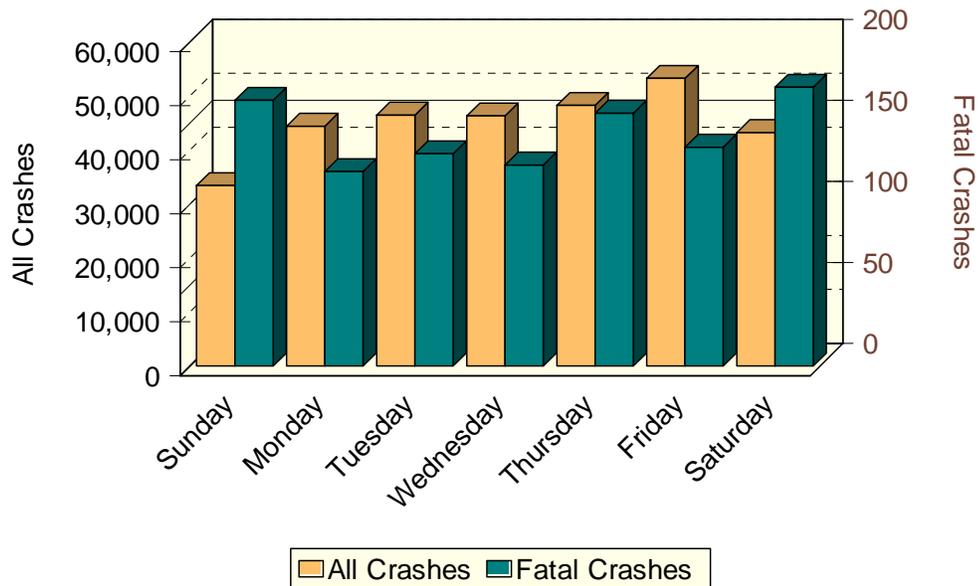
Crash frequencies peak in the late afternoon, then drop off steadily until 6:00 AM (the morning rush hour). Fatal crash frequencies rise with the frequency of other crashes, but continue at a high rate well into the early morning hours. There are proportionally more fatal crashes during the midnight to 2:59 AM time period.

SUN	MON	TUE	WED	THUR	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DAY OF WEEK

DAY OF WEEK	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Sunday	33,405	10.6	164	16.4	862	1,915	3,828	26,636
Monday	44,393	14.1	120	12.0	763	2,030	5,508	35,972
Tuesday	46,476	14.7	131	13.1	785	2,070	5,795	37,695
Wednesday	46,321	14.7	124	12.4	804	2,037	5,859	37,497
Thursday	48,254	15.3	156	15.6	851	2,125	6,196	38,926
Friday	53,261	16.9	135	13.5	936	2,415	6,737	43,038
Saturday	43,212	13.7	172	17.2	1,047	2,342	5,271	34,380
Total	315,322	100.0	1,002	100.0	6,048	14,934	39,194	254,144

Day of Week



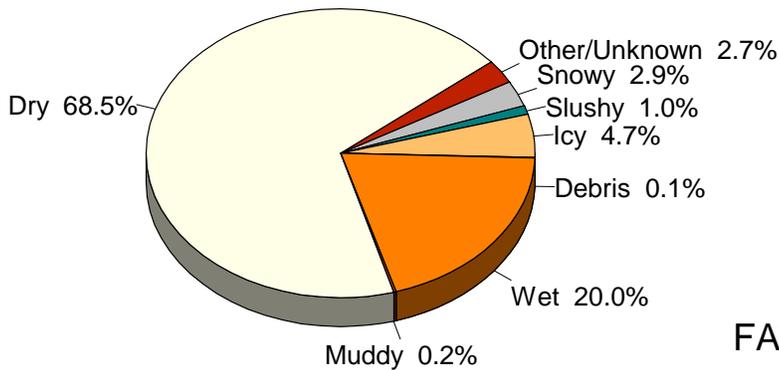
Crash frequencies were higher Monday through Friday than on the weekend. Saturday (17.2%) and Sunday (16.4%) had the highest number of fatal crashes.



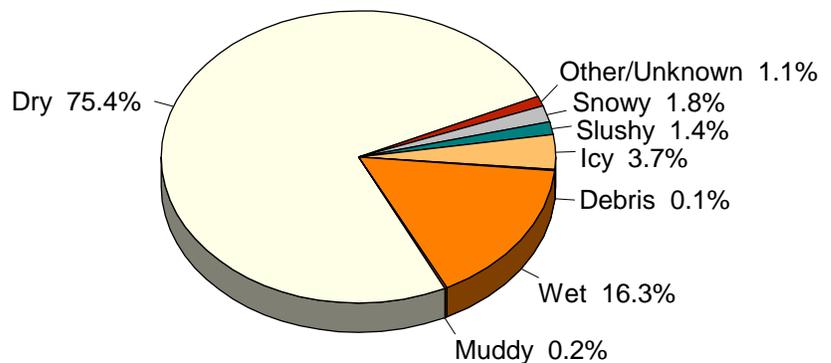
ROAD CONDITION

ROAD SURFACE CONDITION	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Dry	215,909	68.5	756	75.4	4,469	10,692	26,574	173,418
Wet	63,083	20.0	163	16.3	1,000	2,755	8,779	50,386
Icy	14,781	4.7	37	3.7	255	710	1,864	11,915
Snowy	9,176	2.9	18	1.8	147	313	859	7,839
Muddy	602	0.2	2	0.2	26	34	61	479
Slushy	3,084	1.0	14	1.4	71	149	376	2,474
Debris	186	0.1	1	0.1	6	16	32	131
Other/Unknown	8,501	2.7	11	1.1	74	265	649	7,502
Total	315,322	100.0	1,002	100.0	6,048	14,934	39,194	254,144

ALL CRASHES



FATAL CRASHES



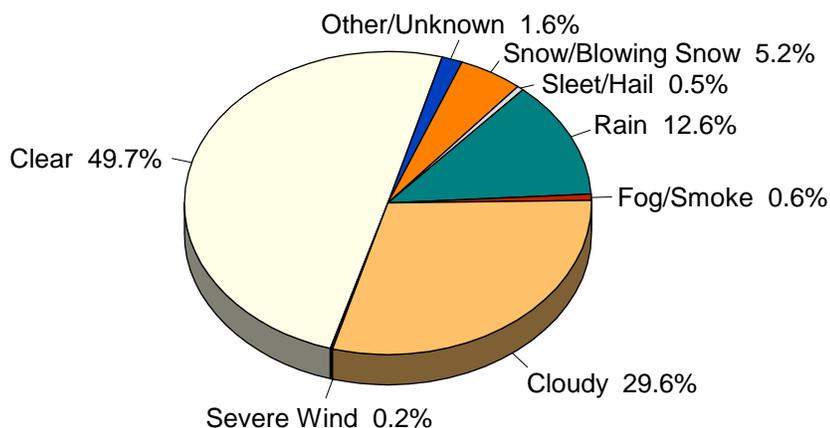
Most crashes (68.5%) and most fatal crashes (75.4%) occur on dry roads.

WEATHER CONDITION

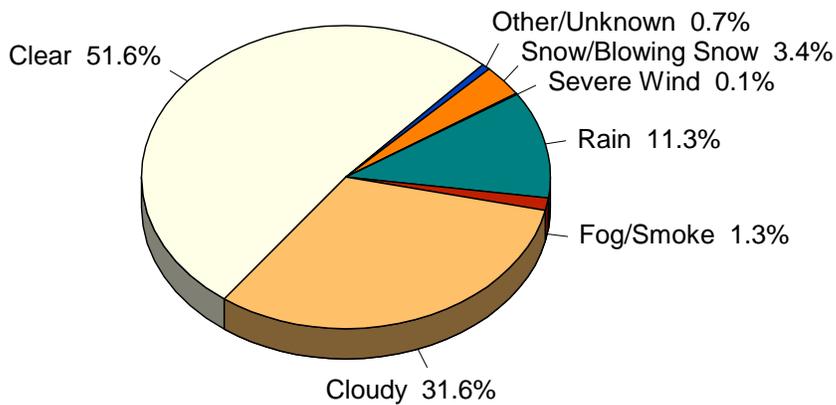


WEATHER CONDITION	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Clear	156,765	49.7	517	51.6	3,361	7,896	18,907	126,084
Cloudy	93,209	29.6	317	31.6	1,668	4,324	11,828	75,072
Fog/Smoke	2,024	0.6	13	1.3	55	118	144	1,694
Rain	39,613	12.6	113	11.3	622	1,762	5,860	31,256
Snow/Blowing Snow	16,423	5.2	34	3.4	256	636	1,903	13,594
Severe Wind	519	0.2	1	0.1	12	22	43	441
Sleet/Hail	1,647	0.5	0	0.0	41	84	216	1,306
Other/Unknown	5,122	1.6	7	0.7	33	92	293	4,697
Total	315,322	100.0	1,002	100.0	6,048	14,934	39,194	254,144

ALL CRASHES



FATAL CRASHES

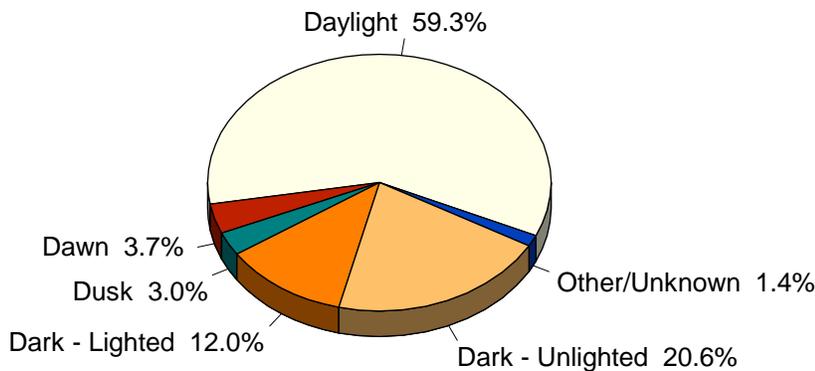




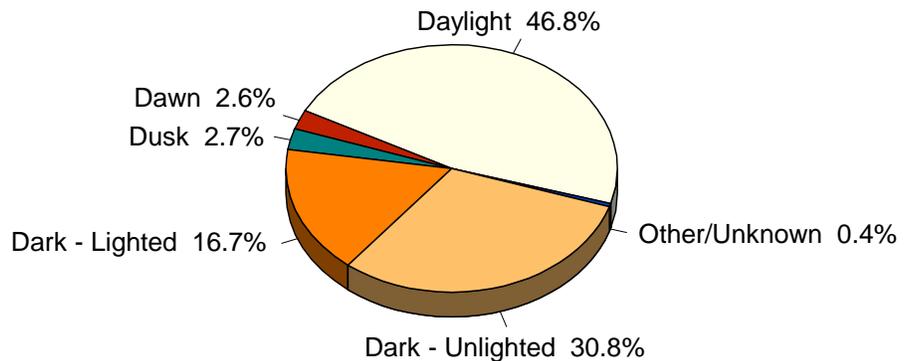
LIGHT CONDITION

LIGHT CONDITION	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Daylight	186,868	59.3	469	46.8	3,631	9,478	27,398	145,892
Dawn	11,793	3.7	26	2.6	139	347	1,011	10,270
Dusk	9,558	3.0	27	2.7	139	389	1,058	7,945
Dark – Lighted	37,732	12.0	167	16.7	914	2,185	5,283	29,183
Dark – Unlighted	64,831	20.6	309	30.8	1,187	2,444	4,121	56,770
Other/Unknown	4,540	1.4	4	0.4	38	91	323	4,084
Totals	315,322	100.0	1,002	100.0	6,048	14,934	39,194	254,144

ALL CRASHES



FATAL CRASHES



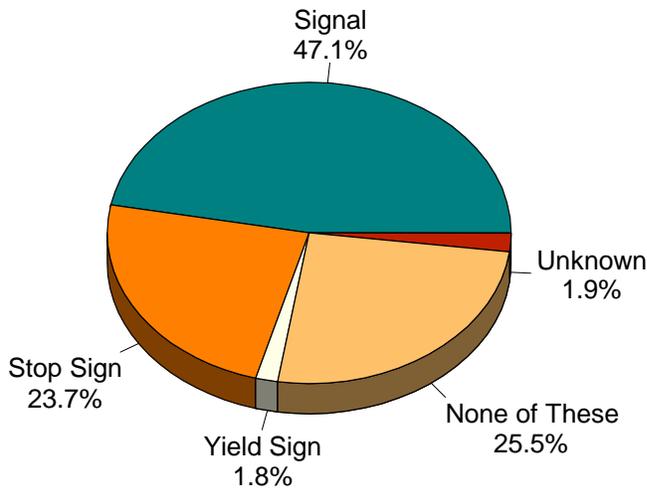
The majority (59.3%) of all crashes happen during daylight hours. Darkened conditions create the greatest hazard, as they are overrepresented in fatal crashes. Almost twice as many fatal crashes occur in areas without street lights, as in dark, but lighted areas.

INTERSECTION CRASHES BY TRAFFIC CONTROL TYPE

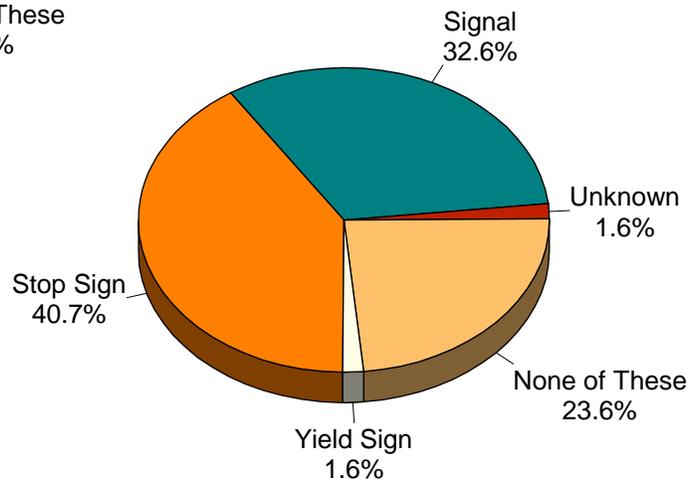


TRAFFIC CONTROL TYPE	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Signal	44,183	47.1	84	32.6	792	2,375	8,599	32,333
Stop Sign	22,256	23.7	105	40.7	652	1,602	3,914	15,983
Yield Sign	1,653	1.8	4	1.6	39	90	319	1,201
None of These	23,894	25.5	61	23.6	479	1,272	3,586	18,496
Unknown	1,804	1.9	4	1.6	28	88	284	1,400
Total	93,790	100.0	258	100.0	1,990	5,427	16,702	69,413

ALL CRASHES



FATAL CRASHES



Intersections with stop signs are overrepresented in fatal crashes. Driver perception, awareness, and adherence to traffic control signing are all key factors in crashes at intersections.



CONSTRUCTION ZONE CRASHES

Revised June 25, 2008

CONSTRUCTION ZONE TYPE	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Subtotal	Number	% of Subtotal	A	B	C	
Construction/Maintenance	Indicates roadway construction, maintenance or repair. The building, maintenance or repair of the road itself and roadway-related features (e.g., overhead signs, signals).							
Activity - On Road								
Lane Closed	2,415	48.0	5	33.3	29	87	324	1,970
Lane Open	620	12.3	5	33.3	15	31	77	492
Unknown Lane Closure	84	1.7	0	0.0	2	3	8	71
Activity - Off Road								
Lane Closed	288	5.7	0	0.0	12	11	52	213
Lane Open	262	5.2	0	0.0	4	13	43	202
Unknown Lane Closure	25	0.5	0	0.0	1	1	3	20
Activity - None								
Lane Closed	736	14.6	0	0.0	9	42	117	568
Lane Open	367	7.3	5	33.3	9	27	39	287
Unknown Lane Closure	25	0.5	0	0.0	0	0	5	20
Activity - Unknown								
Lane Closed	77	1.5	0	0.0	1	1	11	64
Lane Open	22	0.4	0	0.0	0	1	1	20
Unknown Lane Closure	109	2.2	0	0.0	0	2	17	90
Subtotal	5,030	100.0	15	100.0	82	219	697	4,017
Utility	Indicates work on facilities other than the roadway such as telephone, electrical, cable television, water, or sewer.							
Activity - On Road								
Lane Closed	78	38.4	0	0.0	0	3	18	57
Lane Open	25	12.3	1	50.0	0	0	1	23
Unknown Lane Closure	2	1.0	0	0.0	0	0	1	1
Activity - Off Road								
Lane Closed	28	13.8	0	0.0	0	1	3	24
Lane Open	39	19.2	0	0.0	0	4	5	30
Unknown Lane Closure	1	0.5	0	0.0	0	0	0	1
Activity - None								
Lane Closed	15	7.4	0	0.0	0	1	2	12
Lane Open	8	3.9	1	50.0	0	1	3	3
Unknown Lane Closure	0	0.0	0	0.0	0	0	0	0
Activity - Unknown								
Lane Closed	2	1.0	0	0.0	0	0	0	2
Lane Open	0	0.0	0	0.0	0	0	0	0
Unknown Lane Closure	5	2.5	0	0.0	0	0	1	4
Subtotal	203	100.0	2	100.0	0	10	34	157
Unknown Type / Unknown Lane Closure / Activity None								
Subtotal	39,067		1		744	1,933	4,472	31,917
Total	44,300		18		826	2,162	5,203	36,091

2006

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2006

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2006

2006

2006

**Vehicle/
Driver**



VEHICLE TYPE CRASH INVOLVEMENT

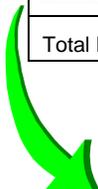


MOST SEVERE OUTCOME IN CRASH

MOST SEVERE OUTCOME IN VEHICLE

Vehicle Type	Motor Vehicles		Fatal Crash		Injury	PDO	Fatality in Veh		Injury	No Injury
	Number of Vehicles	% of Total	Number	% of Total			Number	% of Total		
Passenger Car and Station Wagon	368,105	69.6	923	59.5	77,187	289,995	563	66.1	49,191	318,351
Van and Motorhome	35,954	6.8	93	6.0	7,608	28,253	41	4.8	4,330	31,583
Pickup	75,226	14.2	220	14.2	13,580	61,426	83	9.7	6,974	68,169
Small Truck (under 10,000 lbs.)	17,884	3.4	33	2.1	3,607	14,244	14	1.6	2,108	15,762
Motorcycle	3,386	0.6	120	7.7	2,500	766	110	12.9	2,464	812
Moped	285	0.1	3	0.2	218	64	3	0.4	212	70
Go Cart	25	0.0	1	0.1	16	8	1	0.1	16	8
Snowmobile	166	0.0	8	0.5	121	37	8	0.9	109	49
Off-Road Vehicle	267	0.1	13	0.8	222	32	13	1.5	208	46
Other	1,267	0.2	8	0.5	220	1,039	5	0.6	94	1,168
Unknown	12,632	2.4	2	0.1	1,045	11,585	0	0.0	127	12,505
CDL Truck/Bus (breakdown below)	13,566	2.6	127	8.2	2,494	10,945	11	1.3	687	12,868
Total Number of Vehicles	528,763	100.0	1,551	100.0	108,818	418,394	852	100.0	66,520	461,391

Special Note: School bus is not recorded on the UD-10 and cannot be broken out of CDL Truck/Bus.



CDL Truck/Bus Sub-category Type	Motor Vehicles		Fatal Crash		Injury	PDO	Fatality in Veh		Injury	No Injury
	Number of Vehicles	% of Total	Number	% of Total			Number	% of Total		
Commercial Vehicle: Group A	6,788	50.0	77	60.6	1,224	5,487	9	81.8	268	6,511
Commercial Vehicle: Group B	2,730	20.1	33	26.0	553	2,144	1	9.1	186	2,543
Commercial Vehicle: Group C	474	3.5	2	1.6	98	374	0	0.0	38	436
Other Truck	525	3.9	13	10.2	110	402	1	9.1	44	480
Unknown Truck	3,049	22.5	2	1.6	509	2,538	0	0.0	151	2,898
Total Number of Vehicles	13,566	100.0	127	100.0	2,494	10,945	11	100.0	687	12,868

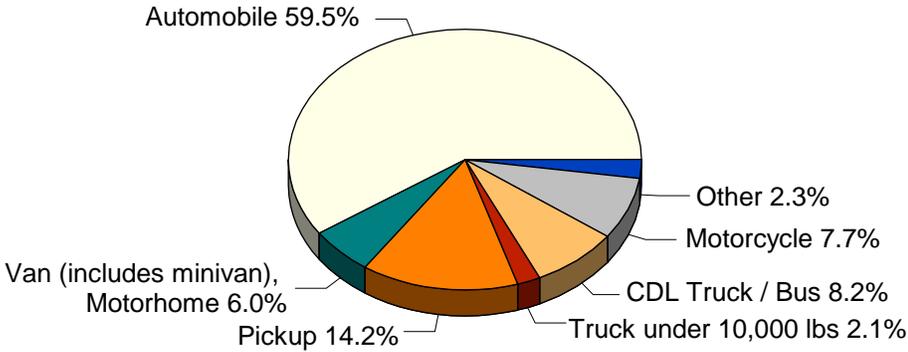
Group "A" is any vehicle that is towing a vehicle or trailer that has a gross vehicle weight rating (GVWR) over 10,000 lbs.

Group "B" is any single vehicle (including buses) with a GVWR of 26,001 lbs. or more. This would include a combination of vehicles with a combined GVWR over 26,000 lbs. when towing a trailer that has a GVWR of 10,000 lbs. or less.

Group "C" is any single vehicle with a GVWR of less than 26,001 lbs. or a combination of vehicles having a combined GVWR under 26,001 lbs. when the vehicle is required to display placards for hazardous material or designed to carry 16 passengers (including driver). Group "C" is also any vehicle carrying 15 or less people (including driver) transporting children to or from school and home on a regular basis for compensation.

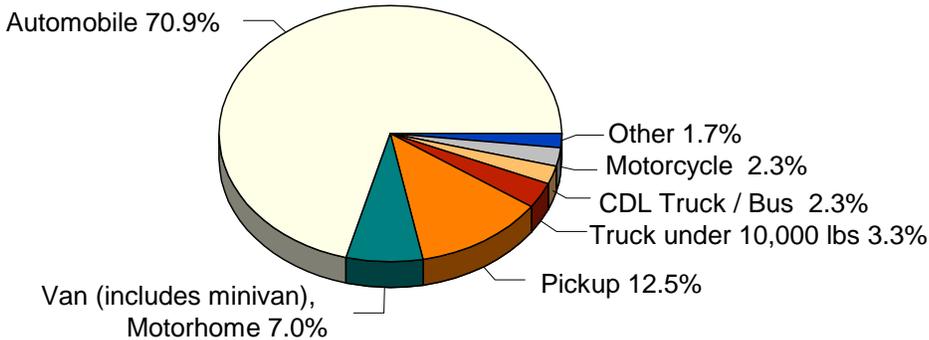
VEHICLE TYPES IN CRASHES BY CRASH SEVERITY

FATAL



The top chart shows that almost 3 out of 4 vehicles involved in fatal crashes are automobiles or pickups. Van/motorhome, the vehicle type that includes the popular minivan, has a fatal crash involvement of 6.0 percent.

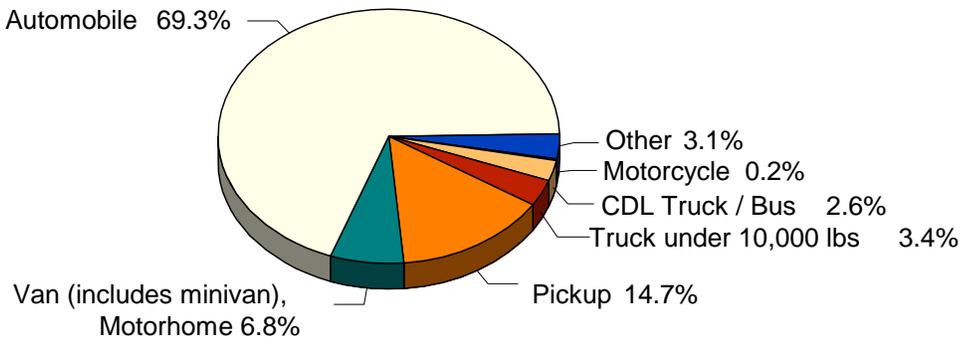
INJURY



Special Note: "Other" consists of moped, go-cart, snowmobile, off-road vehicle, other, and unknown.

As with fatal crashes, injury and PDO crashes are represented primarily by cars and pickups.

PROPERTY DAMAGE ONLY



ACTION PRIOR TO CRASH

MOST SEVERE OUTCOME IN CRASH

DRIVER ACTION	Vehicles		Fatal	Injury			PDO
	Number of Vehicles	% of Total		A	B	C	
Going straight ahead	274,388	51.9	1,193	6,316	14,561	37,018	215,300
Turning left	36,022	6.8	83	818	2,393	6,108	26,620
Turning right	14,119	2.7	11	157	566	1,514	11,871
Stopped on roadway	54,011	10.2	37	577	1,881	11,051	40,465
In prior crash	704	0.1	7	19	46	138	494
Changing lanes	12,457	2.4	23	131	348	1,113	10,842
Backing	12,661	2.4	8	50	138	387	12,078
Slowing/stopping on roadway	48,089	9.1	46	366	1,375	8,654	37,648
Slowing/stopping other	821	0.2	0	9	29	123	660
Starting up on roadway	10,738	2.0	17	176	503	1,830	8,212
Starting up other	299	0.1	0	10	10	44	235
Entering parking	589	0.1	0	1	19	41	528
Leaving parking	1,579	0.3	0	21	67	185	1,306
Entering roadway	7,847	1.5	22	168	381	1,078	6,198
Leaving roadway	1,030	0.2	7	58	111	140	714
Making U-turn	1,147	0.2	3	31	71	161	881
Overtaking or passing	4,063	0.8	18	123	226	458	3,238
Avoiding object	833	0.2	2	15	54	102	660
Avoiding animal	1,510	0.3	0	52	148	218	1,092
Avoiding pedestrian	136	0.0	5	23	17	19	72
Avoiding vehicle (front/back)	4,183	0.8	29	135	283	614	3,122
Avoiding vehicle (angle)	2,028	0.4	7	65	155	331	1,470
Driverless moving	263	0.0	0	7	12	12	232
Parked	20,751	3.9	31	218	536	908	19,058
Crossing at intersection	40	0.0	0	3	7	5	25
Crossing not at intersection	50	0.0	0	1	4	7	38
Getting on/off vehicle	19	0.0	1	2	0	3	13
In roadway with traffic	47	0.0	0	0	3	2	42
In roadway against traffic	38	0.0	0	0	2	4	32
Standing or lying in roadway	5	0.0	0	0	0	0	5
Pushing/working on vehicle	15	0.0	0	0	2	0	13
Other working in roadway	69	0.0	0	0	3	17	49
Playing in roadway	12	0.0	0	0	0	2	10
In roadway other reason	19	0.0	0	0	0	0	19
Not in roadway	33	0.0	0	2	1	8	22
Other	136	0.0	0	2	7	13	114
Unknown	18,012	3.4	1	292	633	2,070	15,016
Total	528,763	100.0	1,551	9,848	24,592	74,378	418,394

ACTION PRIOR TO CRASH (continued)

MOTORCYCLIST – INJURY SEVERITY

MOTORCYCLIST ACTION	Motorcycles		Motorcyclists*		Fatal	Injury			No Injury
	Number of Motorcycles	% of Total	Number of Motorcyclists	% of Total		A	B	C	
Going straight ahead	2,225	65.7	2,464	65.8	94	527	786	556	452
Turning left	140	4.1	156	4.2	1	21	49	34	47
Turning right	124	3.7	132	3.5	0	17	39	34	40
Stopped on roadway	147	4.3	162	4.3	1	11	19	48	81
In prior crash	3	0.1	3	0.1	0	0	1	1	0
Changing lanes	52	1.5	56	1.5	1	12	17	6	15
Backing	6	0.2	6	0.2	0	2	2	2	0
Slowing/stopping on roadway	195	5.8	215	5.7	6	24	65	53	66
Slowing/stopping other	7	0.2	8	0.2	0	1	3	2	2
Starting up on roadway	42	1.2	46	1.2	0	5	19	8	13
Starting up other	3	0.1	3	0.1	0	1	1	0	1
Entering parking	0	0.0	0	0.0	0	0	0	0	0
Leaving parking	3	0.1	3	0.1	0	0	1	0	2
Entering roadway	24	0.7	29	0.8	0	7	6	7	7
Leaving roadway	10	0.3	10	0.3	2	1	4	2	1
Making U-turn	8	0.2	8	0.2	0	1	3	0	4
Overtaking or passing	68	2.0	75	2.0	0	23	17	17	16
Avoiding object	11	0.3	13	0.3	0	1	6	4	2
Avoiding animal	35	1.0	45	1.2	0	7	24	9	5
Avoiding pedestrian	2	0.1	2	0.1	0	0	1	1	0
Avoiding vehicle (front/back)	94	2.8	103	2.8	4	15	29	34	21
Avoiding vehicle (angle)	61	1.8	68	1.8	1	10	20	24	13
Driverless moving	1	0.0	1	0.0	0	0	1	0	0
Parked	42	1.2	42	1.1	0	0	0	1	4
Crossing at intersection	0	0.0	0	0.0	0	0	0	0	0
Crossing not at intersection	0	0.0	0	0.0	0	0	0	0	0
Getting on/off vehicle	0	0.0	0	0.0	0	0	0	0	0
In roadway with traffic	0	0.0	0	0.0	0	0	0	0	0
In roadway against traffic	0	0.0	0	0.0	0	0	0	0	0
Standing or lying in roadway	0	0.0	0	0.0	0	0	0	0	0
Pushing/working on vehicle	0	0.0	0	0.0	0	0	0	0	0
Other working in roadway	0	0.0	0	0.0	0	0	0	0	0
Playing in roadway	0	0.0	0	0.0	0	0	0	0	0
In roadway other reason	0	0.0	0	0.0	0	0	0	0	0
Not in roadway	0	0.0	0	0.0	0	0	0	0	0
Other	2	0.1	2	0.1	0	0	2	0	0
Unknown	81	2.4	91	2.4	0	17	23	22	23
Total	3,386	100.0	3,743	100.0	110	703	1,138	865	815

* This table includes 112 motorcyclists (drivers and passengers) with unknown injury severity, and persons miscoded as motorcyclists.

ACTION PRIOR TO CRASH (continued)

BICYCLIST - INJURY SEVERITY

BICYCLIST ACTION	Bicycles		Bicyclists*		Fatal	Injury			No Injury
	Number of Bicycles	% of Total	Number of Bicyclists	% of Total		A	B	C	
Going straight ahead	1,058	51.3	1,066	51.2	13	95	351	418	147
Turning left	53	2.6	53	2.5	2	8	15	16	10
Turning right	21	1.0	22	1.1	0	1	5	6	9
Stopped on roadway	9	0.4	9	0.4	0	1	2	5	1
In prior crash	0	0.0	0	0.0	0	0	0	0	0
Changing lanes	21	1.0	21	1.0	0	3	9	8	1
Backing	0	0.0	0	0.0	0	0	0	0	0
Slowing/stopping on roadway	8	0.4	8	0.4	0	1	5	2	0
Slowing/stopping other	2	0.1	2	0.1	0	0	0	2	0
Starting up on roadway	9	0.4	9	0.4	0	1	3	5	0
Starting up other	1	0.0	1	0.0	0	0	1	0	0
Entering parking	2	0.1	2	0.1	0	0	2	0	0
Leaving parking	7	0.3	8	0.4	0	2	2	1	2
Entering roadway	123	6.0	126	6.0	2	20	44	40	13
Leaving roadway	0	0.0	0	0.0	0	0	0	0	0
Making U-turn	4	0.2	4	0.2	0	0	2	2	0
Overtaking or passing	5	0.2	5	0.2	1	1	1	1	1
Avoiding object	2	0.1	2	0.1	0	0	0	2	0
Avoiding animal	0	0.0	0	0.0	0	0	0	0	0
Avoiding pedestrian	1	0.0	1	0.0	0	0	0	1	0
Avoiding vehicle (front/back)	8	0.4	8	0.4	0	2	2	4	0
Avoiding vehicle (angle)	4	0.2	4	0.2	0	1	1	2	0
Driverless moving	0	0.0	0	0.0	0	0	0	0	0
Parked	5	0.2	5	0.2	0	0	2	0	1
Crossing at intersection	348	16.9	351	16.8	0	28	132	137	46
Crossing not at intersection	118	5.7	121	5.8	6	18	39	31	17
Getting on/off vehicle	0	0.0	0	0.0	0	0	0	0	0
In roadway with traffic	38	1.8	38	1.8	2	5	11	15	4
In roadway against traffic	32	1.6	32	1.5	0	4	13	12	3
Standing or lying in roadway	1	0.0	1	0.0	0	0	0	1	0
Pushing/working on vehicle	0	0.0	0	0.0	0	0	0	0	0
Other working in roadway	1	0.0	1	0.0	0	0	0	1	0
Playing in roadway	10	0.5	10	0.5	0	2	3	1	2
In roadway other reason	13	0.6	14	0.7	0	2	5	4	1
Not in roadway	29	1.4	29	1.4	0	5	9	9	4
Other	26	1.3	26	1.2	0	6	5	9	4
Unknown	102	4.9	105	5.0	2	11	35	26	13
Total	2,061	100.0	2,084	100.0	28	217	699	761	279

* Includes 100 bicyclists with unknown injury severity

ACTION PRIOR TO CRASH (continued)

PEDESTRIAN - INJURY SEVERITY

PEDESTRIAN ACTION	Pedestrians*		Fatal	Injury			No Injury
	Number of Pedestrians	% of Total		A	B	C	
Going straight ahead	108	4.1	4	11	26	42	18
Turning left	9	0.3	0	2	2	2	3
Turning right	4	0.2	0	0	0	1	1
Stopped on roadway	10	0.4	0	1	4	3	0
In prior crash	0	0.0	0	0	0	0	0
Changing lanes	3	0.1	0	0	2	1	0
Backing	0	0.0	0	0	0	0	0
Slowing/stopping on roadway	0	0.0	0	0	0	0	0
Slowing/stopping other	0	0.0	0	0	0	0	0
Starting up on roadway	4	0.2	0	0	0	3	1
Starting up other	1	0.0	0	0	1	0	0
Entering parking	0	0.0	0	0	0	0	0
Leaving parking	0	0.0	0	0	0	0	0
Entering roadway	25	0.9	1	5	6	9	1
Leaving roadway	5	0.2	0	0	4	1	0
Making U-turn	0	0.0	0	0	0	0	0
Overtaking or passing	1	0.0	0	0	1	0	0
Avoiding object	1	0.0	0	1	0	0	0
Avoiding animal	0	0.0	0	0	0	0	0
Avoiding pedestrian	1	0.0	0	0	1	0	0
Avoiding vehicle (front/back)	4	0.2	0	2	0	1	1
Avoiding vehicle (angle)	5	0.2	0	0	0	4	1
Driverless moving	2	0.1	0	2	0	0	0
Parked	4	0.2	0	2	0	2	0
Crossing at intersection	723	27.4	17	113	201	311	40
Crossing not at intersection	666	25.2	42	160	201	203	31
Getting on/off vehicle	37	1.4	4	9	12	11	1
In roadway with traffic	171	6.5	16	28	53	49	22
In roadway against traffic	47	1.8	6	11	12	14	2
Standing or lying in roadway	105	4.0	17	25	27	30	3
Pushing/working on vehicle	26	1.0	1	7	9	6	2
Other working in roadway	41	1.6	3	4	11	16	7
Playing in roadway	44	1.7	1	13	12	13	2
In roadway other reason	142	5.4	7	29	42	51	8
Not in roadway	120	4.5	4	21	33	53	4
Other	97	3.7	2	20	28	36	7
Unknown	232	8.8	12	31	76	72	20
Total	2,638	100.0	137	497	764	934	175

* Includes 131 pedestrians with unknown injury severity

MOST HARMFUL EVENT

MOST SEVERE OUTCOME IN CRASH

NONCOLLISION	Motor Vehicles		Fatal	Injury			PDO
	Number of Vehicles	% of Total		A	B	C	
Loss of control	2,053	0.4	3	69	175	315	1,491
Cross center/median	428	0.1	0	9	30	54	335
Ran off road left	598	0.1	0	16	49	72	461
Ran off road right	1,006	0.2	0	29	73	116	788
Re-enter road	107	0.0	0	5	7	27	68
Overturn	7,448	1.4	116	567	1,352	1,717	3,696
Separation of units	487	0.1	0	5	12	51	419
Fire/explosion	568	0.1	5	16	17	34	496
Immersion	56	0.0	0	2	2	9	43
Jackknife	277	0.1	0	1	4	16	256
Downhill runaway	229	0.0	0	4	8	38	179
Cargo loss/shift	654	0.1	0	4	9	38	603
Individual fell off	430	0.1	19	110	154	80	67
Other noncollision	1,413	0.3	1	20	90	146	1,156
NONCOLLISION Subtotal	15,754	3.0	144	857	1,982	2,713	10,058

MOST SEVERE OUTCOME IN CRASH

HAD A COLLISION WITH NONFIXED OBJECT	Motor Vehicles		Fatal	Injury			PDO
	Number of Vehicles	% of Total		A	B	C	
Pedestrian	2,228	0.4	138	430	636	754	270
Bicycle / Pedalcycle	1,820	0.3	28	203	606	660	323
Motor vehicle in transport	359,486	68.0	946	6,119	15,907	59,498	277,016
Parked motor vehicle	14,390	2.7	14	110	307	615	13,344
Railway train	303	0.1	6	4	24	43	226
Animal	60,082	11.4	12	85	350	713	58,922
Other nonfixed objects	4,799	0.9	4	46	136	243	4,370
COLLISION NONFIXED Subtotal	443,108	83.8	1,148	6,997	17,966	62,526	354,471

MOST HARMFUL EVENT (continued)

MOST SEVERE OUTCOME IN CRASH

HAD A COLLISION WITH FIXED OBJECT	Motor Vehicles		Fatal	Injury			PDO
	Number of Vehicles	% of Total		A	B	C	
Bridge/pier/abutment	532	0.1	8	19	36	80	389
Bridge parapet end	276	0.1	0	3	7	11	255
Bridge rail	511	0.1	1	11	27	68	404
Guardrail face	3,179	0.6	9	56	171	366	2,577
Guardrail end	561	0.1	4	18	51	64	424
Median barrier	3,331	0.6	8	64	260	717	2,282
Highway traffic sign post	2,218	0.4	3	17	46	99	2,053
Signal post	252	0.0	3	2	8	18	221
Luminaire/light support	594	0.1	4	7	38	70	475
Utility pole	3,103	0.6	17	139	365	492	2,090
Other pole	826	0.2	1	19	50	79	677
Culvert	577	0.1	9	31	71	98	368
Curb	1,785	0.3	3	34	88	165	1,495
Ditch	6,977	1.3	17	207	589	900	5,264
Embankment	1,429	0.3	2	57	164	232	974
Fence	1,155	0.2	4	26	29	103	993
Mailbox	1,734	0.3	0	13	36	63	1,622
Tree	9,505	1.8	152	668	1,257	1,513	5,915
Rail crossing signal	91	0.0	0	1	2	9	79
Building	770	0.1	3	38	80	109	540
Traffic island	41	0.0	0	1	2	2	36
Fire hydrant	494	0.1	1	8	24	53	408
Impact attenuator	42	0.0	0	0	7	10	25
Other fixed object	2,764	0.5	9	111	231	285	2,128
COLLISION FIXED Subtotal	42,747	8.1	258	1,550	3,639	5,606	31,694

MOST SEVERE OUTCOME IN CRASH

	Motor Vehicles		Fatal	Injury			PDO
	Number of Vehicles	% of Total		A	B	C	
Unknown Event	27,154	5.1	1	444	1,005	3,533	22,171
TOTAL MOST HARMFUL EVENT	528,763	100.0	1,551	9,848	24,592	74,378	418,394

VEHICLE DEFECTS IN CRASH INVOLVEMENT

MOST SEVERE OUTCOME IN CRASH

VEHICLE DEFECTS	Motor Vehicles		Fatal	Injury			PDO
	Number of Vehicles	% of Total		A	B	C	
Brakes	1,409	0.3	4	29	102	205	1,069
Lights/reflectors	203	0.0	2	5	10	23	163
Steering	168	0.0	0	2	12	26	128
Tires/wheels	548	0.1	2	13	38	74	421
Windows	26	0.0	0	1	1	2	22
Other	474	0.1	0	8	35	59	372
None or Unknown	525,935	99.5	1,543	9,790	24,394	73,989	416,219
TOTAL	528,763	100.0	1,551	9,848	24,592	74,378	418,394

DRIVER HAZARDOUS ACTION

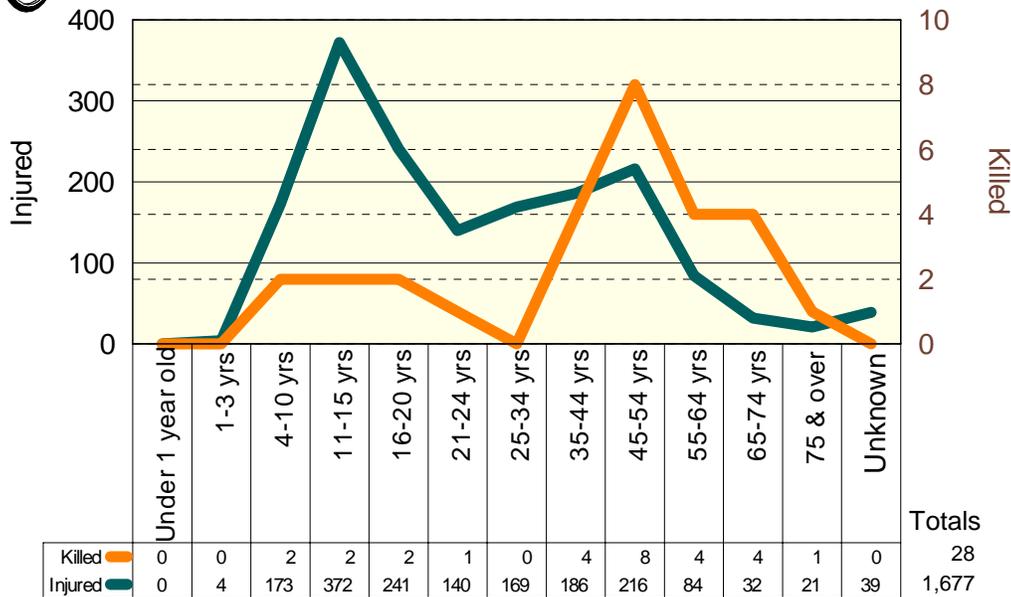
MOST SEVERE OUTCOME IN CRASH

HAZARDOUS ACTION	All Drivers		Fatal	Injury			PDO
	Number of Drivers	% of Total		A	B	C	
None	264,793	50.1	619	4,031	10,405	34,831	214,907
Speed too fast	27,407	5.2	198	934	2,320	4,148	19,807
Speed too slow	583	0.1	3	8	29	101	442
Failed to yield	45,011	8.5	102	1,057	3,001	8,079	32,772
Disregard traffic control	11,707	2.2	78	473	1,090	2,835	7,231
Drove wrong way	447	0.1	11	13	42	80	301
Drove left of center	2,940	0.6	76	178	255	425	2,006
Improper passing	2,838	0.5	4	40	85	230	2,479
Improper lane use	10,694	2.0	5	89	243	769	9,588
Improper turn	5,447	1.0	10	66	197	572	4,602
Improper/no signal	563	0.1	0	11	21	59	472
Improper backing	8,909	1.7	2	13	43	170	8,681
Unable to stop in assured clear distance	70,034	13.2	33	573	2,042	13,057	54,329
Reckless driving	3,034	0.6	46	289	407	428	1,864
Careless/negligent driving	13,390	2.5	106	741	1,545	2,055	8,943
Other	19,195	3.6	100	601	1,336	2,460	14,698
Unknown	41,771	7.9	158	731	1,531	4,079	35,272
TOTAL	528,763	100.0	1,551	9,848	24,592	74,378	418,394



MICHIGAN BICYCLE CRASHES

2006 Bicycle Crash Information



In 2006 there were 2,061 bicycles involved in motor vehicles crashes, with 28 bicyclists killed and 1,677 injured.

Children under 16 years of age accounted for 4 (14.3%) of the bicycle deaths in 2006. Persons aged 35 through 74 represented 20 (71.4%) of the deaths.

BICYCLE HELMET USE AND INJURY SEVERITY

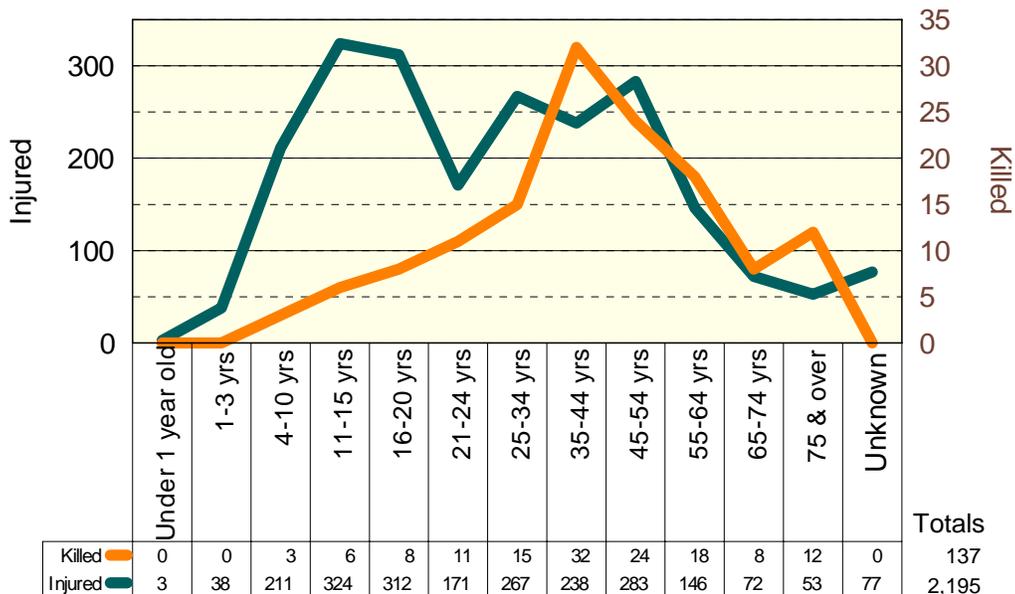
HELMET USE	Fatality	Injury			No Injury
		A	B	C	
Worn	0	19	54	48	13
Not Worn	16	80	264	260	82
Unknown	12	118	381	453	184
Total	28	217	699	761	279

The National Center for Statistics and Analysis of the National Highway Traffic Safety Administration cites a study by the Centers for Disease Control [10]: "Bicycle helmets are 85 to 88 percent effective in mitigating head and brain injuries in all types of bicycle accidents, making the use of helmets the **single most effective countermeasure** available to reduce head injuries and fatalities resulting from bicycle crashes."



MICHIGAN PEDESTRIAN CRASHES

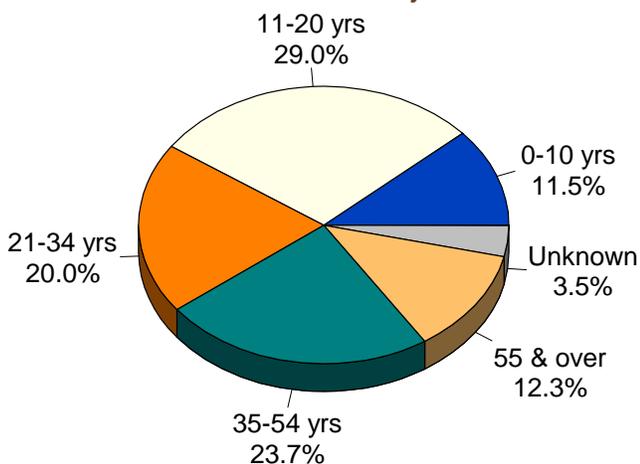
2006 Pedestrian Crash Information



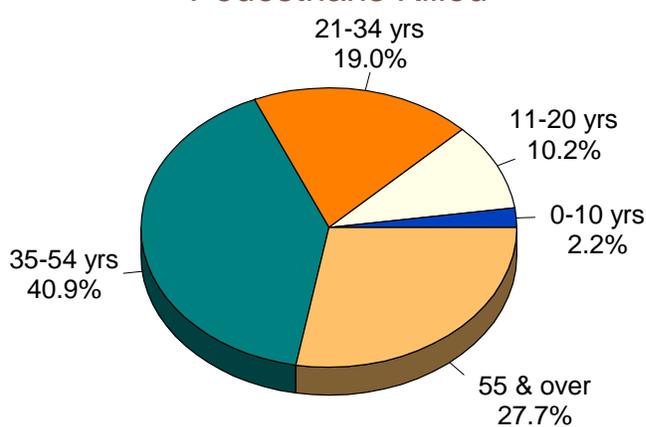
In 2006 there were 2,638 pedestrians involved in motor vehicles crashes, with 137 pedestrians killed and 2,195 injured.

Children under 16 years of age accounted for 9 (6.6%) of the pedestrian deaths in 2006. Adults over the age of 54 accounted for 38 (27.7%) of the pedestrian deaths.

Pedestrians Injured



Pedestrians Killed





MICHIGAN SNOWMOBILE CRASHES ON PUBLIC ROADWAYS

Most Harmful Event

NONCOLLISION	SNOWMOBILES		MOST SEVERE OUTCOME IN CRASH				PDO
	Number of Snowmobiles	% of Total	Fatal	Injury			
				A	B	C	
Loss of control	2	1.2	0	0	0	1	1
Cross center/median	0	0.0	0	0	0	0	0
Ran off road left	0	0.0	0	0	0	0	0
Ran off road right	1	0.6	0	0	0	1	0
Re-enter road	0	0.0	0	0	0	0	0
Overturn	18	10.8	1	5	7	5	0
Separation of units	1	0.6	0	1	0	0	0
Fire/explosion	0	0.0	0	0	0	0	0
Immersion	0	0.0	0	0	0	0	0
Jackknife	0	0.0	0	0	0	0	0
Downhill runaway	0	0.0	0	0	0	0	0
Cargo loss/shift	0	0.0	0	0	0	0	0
Individual fell off	16	9.6	0	8	5	3	0
Other noncollision	1	0.6	0	0	0	0	1
NONCOLLISION Subtotal	39	23.5	1	14	12	10	2

HAD A COLLISION WITH NONFIXED OBJECT	SNOWMOBILES		MOST SEVERE OUTCOME IN CRASH				PDO
	Number of Snowmobiles	% of Total	Fatal	Injury			
				A	B	C	
Pedestrian	2	1.2	0	1	1	0	0
Bicycle / pedalcycle	0	0.0	0	0	0	0	0
Motor vehicle in transport	57	34.3	0	19	6	10	22
Parked motor vehicle	3	1.8	1	0	2	0	0
Railway train	0	0.0	0	0	0	0	0
Animal	5	3.0	0	2	1	1	1
Other nonfixed objects	3	1.8	0	1	1	0	1
COLLISION NONFIXED Subtotal	70	42.2	1	23	11	11	24



MICHIGAN SNOWMOBILE CRASHES ON PUBLIC ROADWAYS (continued)

Most Harmful Event

HAD A COLLISION WITH FIXED OBJECT	SNOWMOBILES		MOST SEVERE OUTCOME IN CRASH				
	Number of Snowmobiles	% of Total	Fatal	Injury			PDO
				A	B	C	
Bridge/pier/abutment	0	0.0	0	0	0	0	0
Bridge parapet end	0	0.0	0	0	0	0	0
Bridge rail	0	0.0	0	0	0	0	0
Guardrail face	0	0.0	0	0	0	0	0
Guardrail end	1	0.6	0	1	0	0	0
Median barrier	0	0.0	0	0	0	0	0
Highway traffic sign post	0	0.0	0	0	0	0	0
Signal post	0	0.0	0	0	0	0	0
Luminaire/light support	0	0.0	0	0	0	0	0
Utility pole	1	0.6	0	0	1	0	0
Other pole	0	0.0	0	0	0	0	0
Culvert	1	0.6	0	0	1	0	0
Curb	1	0.6	0	0	0	1	0
Ditch	5	3.0	0	2	2	0	1
Embankment	4	2.4	0	2	1	1	0
Fence	3	1.8	1	0	0	1	1
Mailbox	3	1.8	0	2	0	0	1
Tree	27	16.3	5	8	5	4	5
Rail crossing signal	0	0.0	0	0	0	0	0
Building	0	0.0	0	0	0	0	0
Traffic island	0	0.0	0	0	0	0	0
Fire hydrant	0	0.0	0	0	0	0	0
Impact attenuator	0	0.0	0	0	0	0	0
Other fixed object	2	1.2	0	1	0	1	0
COLLISION FIXED Subtotal	48	28.9	6	16	10	8	8
Unknown Event	9	5.4	0	2	0	4	3
TOTAL MOST HARMFUL EVENT	166	100.0	8	55	33	33	37

NOTE: These crashes involve a motor vehicle in transport on a public trafficway and result in injury, death, or at least \$1,000 in property damage.

A total of 166 snowmobiles were reported in crashes on Michigan public roadways during 2006. Eight of these snowmobiles were involved in 8 fatal crashes with 7 of their operators and 1 passenger killed. Alcohol was involved in 6 of the fatal crashes, and 1 of these fatal crashes also involved drugs.

MICHIGAN ORV/ATV CRASHES ON PUBLIC ROADWAYS



Most Harmful Event	ORV/ATV		MOST SEVERE OUTCOME IN CRASH				
	Number of ORV/ATVs	% of Total	Fatal	Injury			PDO
				A	B	C	
NONCOLLISION							
Loss of control	2	0.7	0	2	0	0	0
Ran off road left	1	0.4	0	0	1	0	0
Ran off road right	1	0.4	0	1	0	0	0
Re-enter road	1	0.4	0	0	0	0	1
Overturn	43	16.1	3	17	13	9	1
Individual fell off	30	11.2	2	14	9	3	2
Other noncollision	3	1.1	0	0	2	0	1
NONCOLLISION Subtotal	81	30.3	5	34	25	12	5
HAD A COLLISION WITH NONFIXED OBJECT							
Pedestrian	4	1.5	0	0	3	1	0
Bicycle / pedalcycle	1	0.4	0	1	0	0	0
Motor vehicle in transport	87	32.6	5	18	29	13	22
Parked motor vehicle	6	2.2	0	2	1	3	0
Animal	6	2.2	1	3	1	0	1
Other nonfixed objects	1	0.4	0	0	1	0	0
COLLISION NONFIXED Subtotal	105	39.3	6	24	35	17	23
HAD A COLLISION WITH FIXED OBJECT							
Traffic sign post	5	1.9	0	2	3	0	0
Luminaire/light support	1	0.4	1	0	0	0	0
Utility pole	2	0.7	0	1	0	0	1
Culvert	2	0.7	1	1	0	0	0
Curb	1	0.4	0	0	1	0	0
Ditch	9	3.4	0	8	1	0	0
Embankment	5	1.9	0	4	1	0	0
Fence	2	0.7	0	1	1	0	0
Mailbox	2	0.7	0	0	1	0	1
Tree	33	12.4	0	17	11	5	0
Building	1	0.4	0	0	1	0	0
Other fixed object	10	3.7	0	2	5	2	1
COLLISION FIXED Subtotal	73	27.3	2	36	25	7	3
Unknown Event	8	3.0	0	4	1	2	1
TOTAL MOST HARMFUL EVENT	267	100.0	13	98	86	38	32

NOTE: These crashes involve a motor vehicle in transport on a public trafficway and result in injury, death, or at least \$1,000 in property damage.

A total of 267 off-road/all-terrain vehicles were reported in crashes on Michigan public roadways during 2006. Thirteen of these ORV/ATVs were involved in 13 fatal crashes with 11 ORV/ATV operators and 2 ORV/ATV passengers killed. Alcohol was involved in 7 of the fatal crashes. One of these alcohol-involved fatal crashes listed collision with a deer as the most harmful event.



MICHIGAN SNOWMOBILE CRASHES ON PUBLIC ROADWAYS

SNOWMOBILES MOST SEVERE OUTCOME IN CRASH

Driver Hazardous Action	SNOWMOBILES		Fatal	MOST SEVERE OUTCOME IN CRASH			PDO
	Number of Snowmobiles	% of Total		A	B	C	
None	33	19.9	0	11	6	10	6
Speed too fast	61	36.7	6	24	14	12	5
Speed too slow	0	0.0	0	0	0	0	0
Failed to yield	19	11.4	0	4	1	6	8
Disregard traffic control	1	0.6	0	0	0	0	1
Drove wrong way	1	0.6	0	0	1	0	0
Drove left of center	1	0.6	0	1	0	0	0
Improper passing	0	0.0	0	0	0	0	0
Improper lane use	0	0.0	0	0	0	0	0
Improper turn	3	1.8	0	1	1	0	1
Improper/no signal	1	0.6	0	0	0	0	1
Improper backing	0	0.0	0	0	0	0	0
Unable to stop in assured clear distance	7	4.2	0	1	1	1	4
Reckless driving	3	1.8	0	1	2	0	0
Careless/negligent driving	12	7.2	1	3	3	1	4
Other	19	11.4	1	7	4	2	5
Unknown	5	3.0	0	2	0	1	2
TOTAL	166	100.0	8	55	33	33	37



MICHIGAN ORV/ATV CRASHES ON PUBLIC ROADWAYS

ORV/ATV MOST SEVERE OUTCOME IN CRASH

Driver Hazardous Action	ORV/ATV		Fatal	MOST SEVERE OUTCOME IN CRASH			PDO
	Number of ORV/ATVs	% of Total		A	B	C	
None	37	13.9	1	9	17	7	3
Speed too fast	56	21.0	5	18	19	11	3
Speed too slow	0	0.0	0	0	0	0	0
Failed to yield	28	10.5	2	4	8	5	9
Disregard traffic control	3	1.1	0	1	1	1	0
Drove wrong way	0	0.0	0	0	0	0	0
Drove left of center	1	0.4	1	0	0	0	0
Improper passing	1	0.4	0	0	0	0	1
Improper lane use	1	0.4	0	0	1	0	0
Improper turn	2	0.7	0	0	0	0	2
Improper/no signal	0	0.0	0	0	0	0	0
Improper backing	0	0.0	0	0	0	0	0
Unable to stop in assured clear distance	8	3.0	0	2	5	1	0
Reckless driving	16	6.0	2	8	3	1	2
Careless/negligent driving	53	19.9	0	29	12	5	7
Other	46	17.2	2	22	13	5	4
Unknown	15	5.6	0	5	7	2	1
TOTAL	267	100.0	13	98	86	38	32

NOTE: These crashes involve a motor vehicle in transport on a public trafficway and result in injury, death, or at least \$1,000 in property damage.



MICHIGAN FARM EQUIPMENT CRASHES

A total of 151 crashes involving farm equipment were reported on Michigan roadways during 2006. Of these crashes, 4 were fatal with 1 operator of the equipment killed.



MICHIGAN VEHICLE - TRAIN CRASHES

A total of 57 crashes involving trains were reported in Michigan during 2006. The National Highway Traffic Safety Administration's 2006 Fatality Analysis Reporting System [13] reported 6 fatal train crashes in Michigan, and 6 persons killed as a result of those collisions.

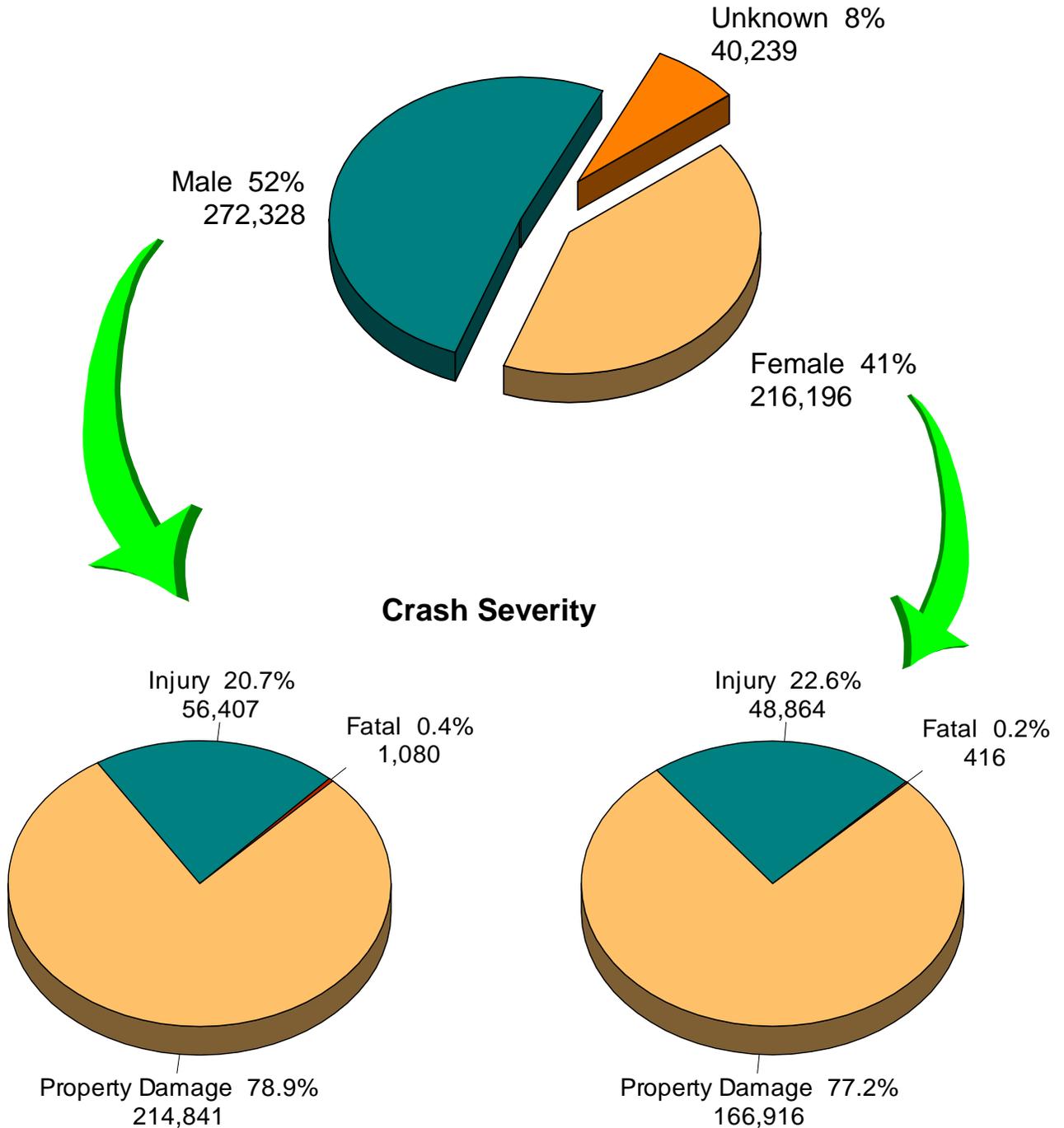


MICHIGAN MOTORCYCLE CRASHES

MOTORCYCLE DATA	2005	2006	% Change
Motorcycle Registrations	254,480	236,856	-6.9
Motorcycles in Crashes	3,589	3,386	-5.7
Motorcyclist Deaths	122	110	-9.8
Motorcyclists Injured	2,895	2,706	-6.5
Death Rate based on 10,000 motorcycle registrations	4.79	4.64	-3.1
Estimated Mileage based on 3,000 miles per motorcycle	763,440,000	710,568,000	-6.9
Death Rate based on deaths per 100 million vehicle miles traveled	15.98	15.48	-3.1

Motorcycles were involved in 1.1 percent of all traffic crashes in Michigan in 2006. Injuries were proportionately more severe to motorcyclists than to persons in motor vehicles. The 2006 death rate for motorcyclists was 15.48 per 100 million vehicle miles traveled compared to the overall 1.04 mileage death rate per 100 million vehicle miles traveled.

DRIVER GENDER INFORMATION - ALL CRASHES



A higher proportion of crashes involved male drivers than female drivers. When examining the severity of crashes involving drivers of each gender, fatal crashes are more prevalent among male drivers than female drivers (0.4% vs. 0.2%).

This 2006 chart was processed with data for all drivers (vehicle level).

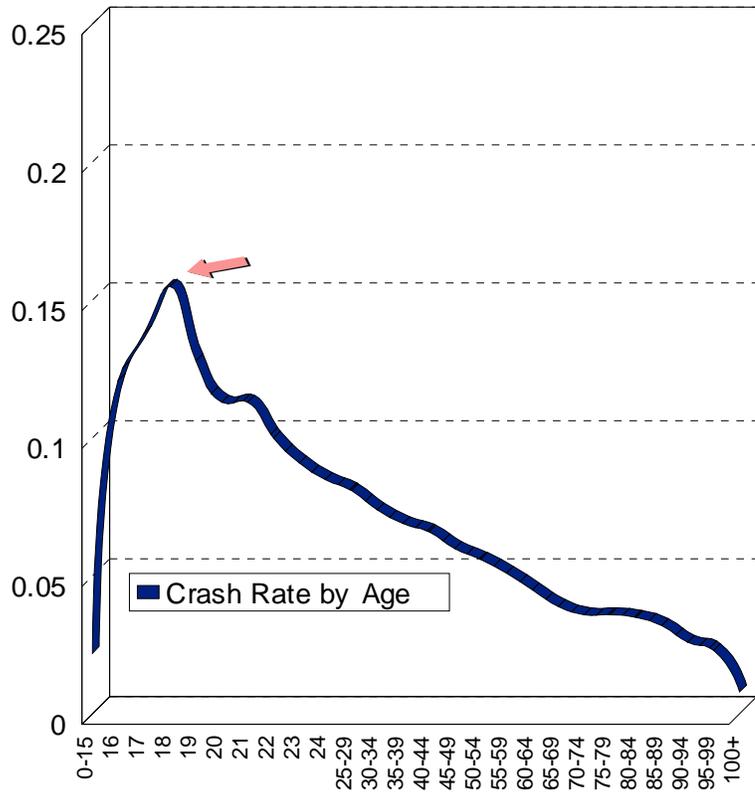
PERSON AGE - DEMOGRAPHICS AND CRASH INVOLVEMENTS

Age	Licensed Drivers	Michigan Population	Drivers in All Crashes	Drivers in Fatal Crashes	Occupants Killed	Occupants Injured	Bicyclist All Crashes	Bicyclist Fatal Crashes	Pedestrian All Crashes	Pedestrian Fatal Crashes
0-15	64,329	2,173,710	1,394	12	41	5,118	647	6	654	14
16	99,433	157,979	12,041	16	16	2,260	79	2	67	1
17	109,536	146,667	15,113	35	24	2,711	51	0	82	2
18	107,433	144,314	16,599	39	21	2,928	59	0	54	1
19	118,663	142,905	15,194	39	19	2,688	50	0	80	3
20	124,397	142,202	14,010	43	25	2,305	45	0	75	1
21	117,405	143,293	13,234	52	40	2,123	51	0	67	3
22	120,829	135,746	12,091	39	22	1,873	43	1	42	0
23	125,392	136,978	11,470	31	21	1,877	39	0	46	3
24	129,395	137,385	11,008	33	27	1,748	27	0	47	6
25-29	598,490	648,347	48,496	137	88	7,125	106	0	177	7
30-34	586,869	624,512	43,226	133	64	6,011	86	0	135	8
35-39	665,466	703,352	46,248	120	61	6,450	89	3	142	14
40-44	702,676	758,900	46,518	137	64	6,317	139	1	154	20
45-49	744,427	801,470	44,747	138	66	6,129	138	3	181	16
50-54	692,373	729,417	38,654	126	72	5,429	126	7	150	11
55-59	610,218	642,566	30,844	111	62	4,457	68	4	107	7
60-64	447,088	465,036	20,010	65	34	3,017	32	0	76	11
65-69	332,805	351,726	13,028	38	25	1,917	22	3	48	6
70-74	262,712	287,781	9,406	43	30	1,572	18	1	36	2
75-79	224,744	253,510	7,987	42	30	1,327	12	0	28	6
80-84	157,457	193,089	5,531	39	34	1,040	8	0	29	6
85-100+	96,718	174,758	2,947	26	33	661	4	1	11	0
Unknown	---	---	48,967	57	0	996	122	0	134	0
Total	7,238,855	10,095,643	528,763	1,551	919	78,079	2,061	32	2,622	148



CRASH RATE PER LICENSED DRIVER BY AGE OF DRIVER IN ALL CRASHES

Age	Rate	Licensed Drivers	Drivers in all crashes*
0-15	0.022	64,329	1,394
16	0.121	99,433	12,041
17	0.138	109,536	15,113
18	0.155	107,433	16,599
19	0.128	118,663	15,194
20	0.113	124,397	14,010
21	0.113	117,405	13,234
22	0.100	120,829	12,091
23	0.091	125,392	11,470
24	0.085	129,395	11,008
25-29	0.081	598,490	48,496
30-34	0.074	586,869	43,226
35-39	0.069	665,466	46,248
40-44	0.066	702,676	46,518
45-49	0.060	744,427	44,747
50-54	0.056	692,373	38,654
55-59	0.051	610,218	30,844
60-64	0.045	447,088	20,010
65-69	0.039	332,805	13,028
70-74	0.036	262,712	9,406
75-79	0.036	224,744	7,987
80-84	0.035	157,457	5,531
85-89	0.032	74,447	2,370
90-94	0.026	19,760	522
95-99	0.023	2,392	54
100+	0.008	119	1
Total		7,238,855	479,796



* Excludes 48,967 drivers with unknown age

Licensed drivers age 18 have the highest crash rate (total crashes in age group divided by total number of licensed drivers in age group). The low crash rates of the older groups (per licensed driver) may reflect reduced driving and exposure to the risk of a crash relative to younger drivers.

REPORTED AGE OF DRIVERS INVOLVED IN ALL CRASHES

COUNTY	All Ages	0-15 Years	16-20 Years	21-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75 yrs & Over	DOB Unk
Alcona	646	13	79	26	67	116	142	108	56	38	1
Alger	419	4	45	29	65	80	83	63	25	19	6
Allegan	4,538	17	754	436	807	848	741	457	211	125	142
Alpena	1,335	16	226	87	196	215	252	141	81	74	47
Antrim	1,146	4	157	94	175	199	225	134	70	45	43
Arenac	1,058	3	129	72	161	204	211	144	78	44	12
Baraga	468	1	52	42	62	85	90	67	31	28	10
Barry	2,646	4	411	231	435	511	474	306	127	76	71
Bay	5,236	11	810	475	880	836	831	513	272	234	374
Benzie	728	1	106	53	132	132	114	81	45	35	29
Berrien	7,153	25	945	641	1,132	1,251	1,110	881	417	293	458
Branch	2,341	3	314	207	424	417	422	249	124	82	99
Calhoun	7,771	34	940	651	1,398	1,347	1,258	843	404	298	598
Cass	2,309	3	330	213	419	436	378	251	96	71	112
Charlevoix	1,399	3	194	111	216	276	244	176	79	52	48
Cheboygan	1,364	7	185	104	205	244	241	177	87	72	42
Chippewa	1,667	9	242	170	287	278	280	169	97	69	66
Clare	1,637	8	202	142	263	308	304	194	106	62	48
Clinton	3,203	6	482	317	539	650	562	319	130	85	113
Crawford	840	3	103	60	121	149	173	119	58	32	22
Delta	2,349	6	295	164	363	378	444	296	158	89	156
Dickinson	1,413	8	188	93	201	237	263	161	106	90	66
Eaton	5,551	11	826	518	1,036	1,008	930	575	234	154	259
Emmet	2,031	17	284	147	346	324	382	264	110	92	65
Genesee	20,755	52	2,925	1,836	3,661	3,552	3,218	1,978	921	629	1,983
Gladwin	1,048	6	138	81	177	205	178	122	81	43	17
Gogebic	493	2	64	40	58	80	92	64	34	36	23
Grand Traverse	5,467	11	856	459	857	995	936	603	300	182	268
Gratiot	2,192	5	301	202	421	410	364	245	94	83	67
Hillsdale	2,412	8	298	222	418	451	416	277	122	92	108
Houghton	1,750	8	321	241	257	219	227	175	86	75	141
Huron	2,027	11	273	162	332	352	388	235	146	73	55
Ingham	16,702	25	2,514	2,101	3,037	2,790	2,563	1,537	579	388	1,168
Ionia	3,069	14	431	278	584	601	509	318	128	73	133
Iosco	1,160	3	159	69	153	206	228	151	95	53	43
Iron	805	5	89	45	103	114	173	114	59	54	49
Isabella	4,222	11	799	737	707	601	543	339	151	103	231
Jackson	9,055	28	1,370	774	1,545	1,630	1,494	880	399	312	623
Kalamazoo	14,616	25	2,447	1,896	2,531	2,245	2,185	1,291	544	447	1,005
Kalkaska	860	4	107	65	145	172	160	106	57	27	17
Kent	34,992	86	5,064	3,951	6,866	5,807	5,076	2,833	1,147	844	3,318
Keweenaw	126	1	10	10	15	7	30	31	6	5	11
Lake	586	4	50	44	105	97	128	81	47	23	7
Lapeer	4,375	13	738	337	721	895	790	432	195	110	144
Leelanau	798	3	119	48	100	128	152	107	67	31	43

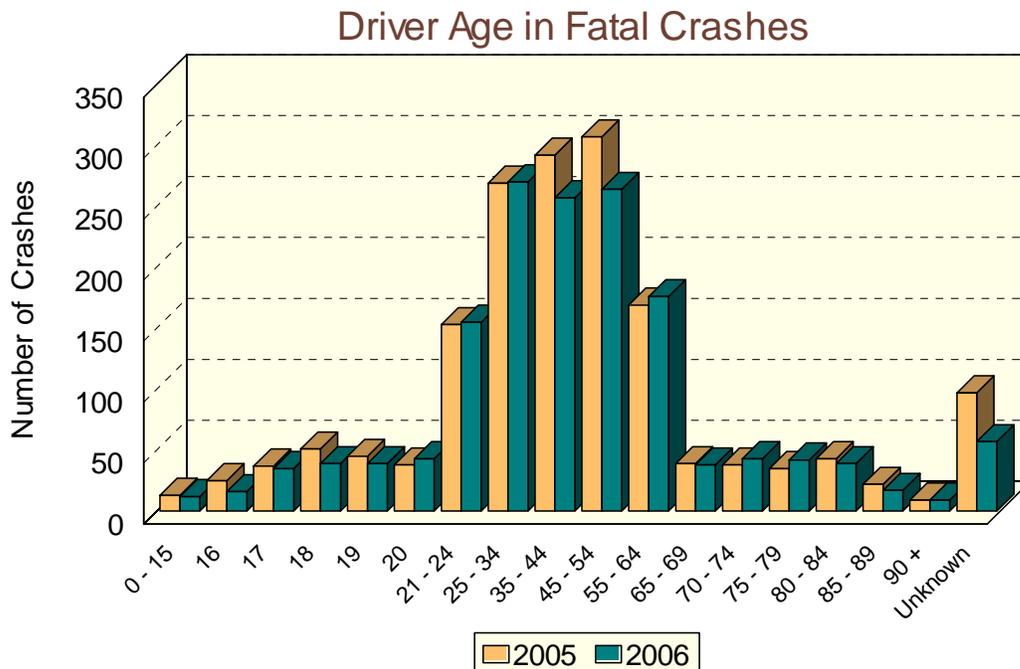
REPORTED AGE OF DRIVERS INVOLVED IN ALL CRASHES (continued)

COUNTY	All Ages	0-15 Years	16-20 Years	21-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75 yrs & Over	DOB Unk
Lenawee	4,187	6	675	349	646	698	676	478	223	161	275
Livingston	8,008	22	1,506	684	1,318	1,578	1,369	765	294	177	295
Luce	254	1	24	15	46	44	58	35	16	7	8
Mackinac	762	2	65	56	131	149	136	103	58	32	30
Macomb	43,860	88	6,464	3,638	7,566	7,740	6,737	3,917	1,859	1,507	4,344
Manistee	1,181	5	126	77	147	205	217	177	76	57	94
Marquette	3,417	13	561	388	481	481	521	352	155	128	337
Mason	1,886	1	247	122	311	316	343	239	118	87	102
Mecosta	2,783	5	422	325	482	492	465	274	138	81	99
Menominee	1,497	6	174	113	234	274	291	183	101	62	59
Midland	3,732	9	710	338	586	661	636	340	188	128	136
Missaukee	746	1	98	68	120	151	147	81	40	21	19
Monroe	6,466	17	1,040	616	995	1,207	964	633	263	196	535
Montcalm	3,517	7	470	326	641	694	640	372	174	89	104
Montmorency	444	4	59	38	70	77	84	56	29	17	10
Muskegon	8,385	17	1,276	781	1,445	1,474	1,322	754	394	340	582
Newaygo	2,175	8	330	202	388	419	387	203	122	72	44
Oakland	71,714	108	9,639	6,015	13,077	14,014	12,179	7,105	2,806	2,102	4,669
Oceana	1,292	2	185	141	214	249	210	153	65	41	32
Ogemaw	1,146	11	128	93	198	216	222	140	64	59	15
Ontonagon	474	0	37	39	70	88	84	76	49	13	18
Osceola	1,430	5	190	123	255	288	235	166	89	37	42
Oscoda	411	2	57	28	58	60	80	68	43	12	3
Otsego	1,450	3	219	109	240	263	264	180	73	39	60
Ottawa	11,631	68	2,162	1,271	2,022	2,026	1,705	1,058	458	348	513
Presque Isle	648	0	61	35	102	118	138	93	56	28	17
Roscommon	1,121	2	157	79	156	189	204	158	83	56	37
Saginaw	10,124	112	1,527	940	1,678	1,678	1,662	1,089	498	417	523
St. Clair	7,001	19	1,084	605	1,193	1,276	1,109	674	321	237	483
St. Joseph	2,624	11	354	260	490	447	430	264	138	92	138
Sanilac	2,045	6	260	171	370	380	389	233	108	78	50
Schoolcraft	485	4	37	32	69	96	118	63	31	18	17
Shiawassee	3,287	13	469	275	599	605	587	359	157	99	124
Tuscola	2,427	9	375	229	408	448	429	245	132	79	73
Van Buren	3,519	9	510	322	619	706	560	376	149	111	157
Washtenaw	18,281	37	2,515	2,182	3,423	3,245	2,980	1,734	610	371	1,184
Wayne	105,688	214	11,110	7,862	17,831	17,309	14,500	8,827	3,703	3,055	21,277
Wexford	1,907	5	262	175	320	319	319	224	93	69	121
Total	528,763	1,394	72,957	47,803	91,722	92,766	83,401	50,854	22,434	16,465	48,967

DRIVER AGE

AGE OF DRIVERS IN FATAL CRASHES	2005	2006	% Change	% 2006 Fatal Crash Involvement	Percent Active Driving Population*
15 years and under	13	12	-7.7	0.8	0.9
16 years	25	16	-36.0	1.0	1.4
17 years	37	35	-5.4	2.3	1.5
18 years	51	39	-23.5	2.5	1.5
19 years	45	39	-13.3	2.5	1.6
20 years	38	43	13.2	2.8	1.7
21 - 24 years	153	155	1.3	10.0	6.8
25 - 34 years	269	270	0.4	17.4	16.4
35 - 44 years	292	257	-12.0	16.6	18.9
45 - 54 years	307	264	-14.0	17.0	19.8
55 - 64 years	169	176	4.1	11.3	14.6
65 - 69 years	39	38	-2.6	2.5	4.6
70 - 74 years	38	43	13.2	2.8	3.6
75 - 79 years	35	42	20.0	2.7	3.1
80 - 84 years	43	39	-9.3	2.5	2.2
85 - 89 years	22	17	-22.7	1.1	1.0
90 years and over	9	9	0.0	0.6	0.3
Unknown	97	57	-41.2	3.7	---
Total	1,682	1,551	-7.8	100.0	100.0

* Figures courtesy of the Michigan Department of State [12]



DRIVER CONDITION

MOST SEVERE OUTCOME IN CRASH

POSSIBLE CONDITIONS OF DRIVER*	Conditions Coded by Police	Fatal	Injury			PDO
		Number	A	B	C	
Appeared Normal	426,460	734	6,875	19,342	63,558	335,951
Had Been Drinking	13,076	191	1,030	1,886	2,113	7,856
Illegal Drug Use	1,501	15	65	131	246	1,044
Sick	1,093	4	101	136	310	542
Fatigue	915	2	40	123	184	566
Asleep	1,165	2	92	150	250	671
Medication	818	2	45	73	198	500
Driver Distracted	3,603	9	129	295	791	2,379
Using Cellular Phone	951	4	29	77	178	663
Unknown	29,067	469	876	1,073	2,661	23,988

* Drivers may have more than 1 condition including "Appeared Normal"

These are driver conditions that, in the opinion of the investigating officer were involved in the crash. While some conditions may be evident, others (such as distraction) will only be known if the driver admits to the condition, thus leading to possible under-reporting.

DRIVER INJURY SEVERITY BY RESTRAINT, ALCOHOL, AND DRUG USE

	Drivers		Fatality		Injury			No Injury	Unknown
	Number	% of Total	Number	% of Total	A	B	C		
All Drivers									
Restraint Used	452,988	85.7	415	59.9	3,835	10,699	38,301	396,892	2,846
Restraint Not Used	6,267	1.2	197	28.4	740	1,054	886	3,264	126
Unknown	69,508	13.1	81	11.7	501	926	1,640	20,502	45,858
Total	528,763	100.0	693	100.0	5,076	12,679	40,827	420,658	48,830

Drinking Only Drivers									
Restraint Used	8,542	72.2	75	41.9	391	949	1,007	6,078	42
Restraint Not Used	1,117	9.4	81	45.3	235	297	119	370	15
Unknown	2,176	18.4	23	12.8	121	253	197	1,506	76
Total	11,835	100.0	179	100.0	747	1,499	1,323	7,954	133

Drugged Only Drivers									
Restraint Used	614	69.8	20	58.8	46	59	104	383	2
Restraint Not Used	96	10.9	8	23.5	14	22	16	36	0
Unknown	170	19.3	6	17.6	4	19	28	103	10
Total	880	100.0	34	100.0	64	100	148	522	12

Drinking and Drugged Drivers									
Restraint Used	410	62.7	17	39.5	26	40	67	258	2
Restraint Not Used	106	16.2	16	37.2	29	22	21	18	0
Unknown	138	21.1	10	23.3	12	14	20	82	0
Total	654	100.0	43	100.0	67	76	108	358	2

NOTE: Restraint Used includes shoulder belt only, lap belt only, both lap and shoulder belts used, restraint failed, and helmet worn.

REGISTRATION TRANSACTIONS
(Includes Original, Renewal, Correction, and Replacements)
 Registration data courtesy of the Michigan Department of State [13]

COUNTY	VEHICLE										OTHER		
	Passenger	Commercial	Trailer*	Motorcycle	Total Plates	Total Revenue	Watercraft	Snowmobile	Moped				
Alcona	9,179	2,083	523	464	12,249	1,042,836.26	2,537	994	105				
Alger	6,049	1,635	358	313	8,355	698,626.71	1,785	1,441	26				
Allegan	74,791	16,408	3,047	3,225	97,471	9,014,504.23	12,177	3,587	578				
Alpena	21,867	5,344	1,154	893	29,258	2,742,779.20	4,482	2,482	94				
Antrim	18,228	3,878	915	793	23,814	2,163,660.56	5,438	2,159	97				
Arenac	11,701	3,007	607	570	15,885	1,464,456.15	3,843	1,487	127				
Baraga	4,616	1,289	243	167	6,315	587,861.98	1,053	714	14				
Barry	40,827	8,757	1,690	2,127	53,401	4,489,207.58	9,787	2,035	246				
Bay	76,915	13,368	2,518	2,919	95,720	8,860,482.81	9,755	5,736	311				
Benzie	13,352	2,733	620	587	17,292	1,495,491.84	4,071	1,549	109				
Berrien	116,597	19,176	2,964	4,542	143,279	12,385,042.80	12,722	2,909	525				
Branch	29,264	6,399	1,266	1,399	38,328	3,415,895.76	6,329	1,109	189				
Calhoun	95,205	14,700	2,598	3,869	116,372	9,987,387.20	9,976	1,726	678				
Cass	33,199	7,416	1,318	1,545	43,478	3,764,656.20	8,807	1,932	128				
Charlevoix	20,334	4,360	960	946	26,600	2,507,995.73	5,198	2,648	150				
Cheboygan	19,255	4,360	974	892	25,481	2,277,370.14	5,608	3,117	102				
Chippewa	21,997	5,265	1,111	776	29,149	2,687,540.14	4,791	4,261	135				
Clare	22,176	4,619	1,064	1,043	28,902	2,524,420.38	4,468	1,899	168				
Clinton	48,393	10,567	1,900	1,796	62,656	6,088,583.87	7,385	2,968	200				
Crawford	9,816	1,960	504	430	12,710	1,120,719.31	2,790	1,663	41				
Delta	27,422	7,289	1,271	1,073	37,055	3,398,367.62	4,447	2,754	188				
Dickinson	19,107	5,892	960	913	26,872	2,494,144.98	3,599	1,609	201				
Eaton	73,952	12,564	2,143	2,989	91,648	9,324,584.20	8,947	2,699	255				
Emmet	25,827	5,114	1,131	1,088	33,160	3,122,794.23	5,713	2,802	138				
Genesee	300,572	40,945	7,304	10,091	358,912	32,896,134.51	30,432	12,181	751				
Gladwin	18,994	4,284	969	843	25,090	2,135,794.60	5,037	1,643	106				
Gogebic	10,215	2,466	428	376	13,485	1,121,208.64	2,301	1,724	128				
Grand Traverse	65,787	11,827	2,637	2,539	82,790	8,193,804.17	13,715	5,013	192				



REGISTRATION TRANSACTIONS (continued)

COUNTY	VEHICLE										OTHER		
	Passenger	Commercial	Trailer*	Motorcycle	Total Plates	Total Revenue	Watercraft	Snowmobile	Moped				
Gratiot	27,264	6,508	1,195	1,068	36,035	3,467,225.71	3,501	1,565	209				
Hillsdale	31,566	7,253	1,323	1,457	41,599	3,591,034.22	5,294	985	215				
Houghton	21,834	4,601	814	863	28,112	2,433,079.56	4,006	2,427	125				
Huron	26,444	7,653	1,157	1,046	36,300	3,567,989.49	3,024	2,620	368				
Ingham	190,236	24,296	3,500	5,256	223,288	19,761,149.89	15,464	3,841	631				
Ionia	40,358	8,353	1,584	1,620	51,915	4,340,842.93	5,336	1,700	184				
Iosco	20,410	4,267	918	961	26,556	2,340,072.24	5,085	1,567	205				
Iron	8,653	2,539	471	331	11,994	1,007,370.22	2,448	1,055	52				
Isabella	35,373	8,428	1,569	1,308	46,678	4,705,966.96	4,900	2,082	124				
Jackson	111,831	20,078	3,568	4,921	140,398	12,462,321.23	15,887	3,642	602				
Kalamazoo	162,830	22,322	3,458	5,425	194,035	17,933,093.04	18,313	3,310	951				
Kalkaska	12,536	3,562	849	662	17,609	2,105,575.79	2,760	1,920	45				
Kent	417,026	64,203	12,750	12,012	505,991	54,175,940.52	45,446	9,398	1463				
Keweenaw	1,486	323	53	67	1,929	154,328.63	406	225	7				
Lake	7,253	1,657	368	295	9,573	751,976.94	2,254	904	36				
Lapeer	62,901	13,864	2,311	3,533	82,609	7,678,513.08	7,730	4,343	189				
Leelanau	16,296	3,352	744	529	20,921	1,934,060.47	5,916	1,657	111				
Lenawee	70,912	14,350	2,268	3,664	91,194	8,026,525.04	9,184	3,214	487				
Livingston	126,769	21,742	3,987	5,953	158,451	15,940,423.99	20,154	6,520	315				
Luce	4,081	1,177	287	129	5,674	546,620.66	1,396	1,390	29				
Mackinac	7,981	2,092	414	289	10,776	995,195.10	2,996	2,291	66				
Macomb	609,851	78,578	10,000	18,173	716,602	71,850,763.09	48,568	17,180	1,513				
Manistee	18,136	3,911	814	817	23,678	2,110,969.66	3,806	1,612	121				
Marquette	44,585	9,024	1,669	1,924	57,202	5,011,882.95	7,263	4,557	154				
Mason	20,867	4,411	940	1,107	27,325	2,377,360.55	4,378	1,489	179				
Mecosta	24,826	5,265	1,119	878	32,088	2,811,185.39	5,181	1,586	98				
Menominee	16,155	4,164	851	696	21,866	1,935,110.54	2,623	1,272	372				
Midland	62,767	10,243	2,288	2,483	77,781	6,808,922.19	9,308	3,020	278				
Missaukee	9,666	3,168	585	455	13,874	1,364,980.92	2,201	1,276	43				



REGISTRATION TRANSACTIONS (continued)

COUNTY	VEHICLE										OTHER		
	Passenger	Commercial	Trailer*	Motorcycle	Total Plates	Total Revenue	Watercraft	Snowmobile	Moped				
Monroe	110,809	21,057	3,225	5,186	140,277	13,054,400.67	11,407	4,665	458				
Montcalm	41,894	9,273	1,884	1,676	54,727	4,880,386.43	7,131	2,236	224				
Montmorency	7,743	1,865	418	363	10,389	938,948.87	2,257	1,399	17				
Muskegon	118,473	17,669	3,577	4,947	144,666	12,181,499.28	14,861	4,754	566				
Newaygo	33,602	7,335	1,607	1,523	44,067	3,664,831.78	7,196	2,485	137				
Oakland	959,412	101,538	13,496	25,669	1,100,115	115,760,843.46	82,542	22,179	1,895				
Oceana	19,100	4,702	738	823	25,363	2,193,670.93	3,122	1,826	178				
Ogemaw	15,966	4,067	802	1,045	21,880	2,011,155.74	3,330	1,639	53				
Ontonagon	5,172	1,608	283	184	7,247	634,362.48	1,197	1,129	79				
Osceola	16,146	4,035	828	623	21,632	2,001,208.54	2,653	1,511	71				
Oscoda	6,557	1,606	373	361	8,897	832,391.68	2,043	936	43				
Otsego	17,390	4,384	965	896	23,635	2,491,916.41	3,186	3,036	46				
Ottawa	174,257	28,381	5,640	6,057	214,335	21,020,505.26	25,483	6,188	949				
Presque Isle	10,310	2,927	544	380	14,161	1,274,947.67	2,956	1,664	91				
Roscommon	19,819	3,766	1,062	879	25,526	2,249,175.06	6,123	3,388	200				
Saginaw	140,320	22,846	3,958	4,340	171,464	16,479,787.26	15,511	7,064	493				
St. Clair	119,700	22,297	3,884	4,968	150,849	14,048,514.61	15,880	6,867	445				
St. Joseph	43,560	8,970	1,704	2,352	56,586	4,805,506.45	8,407	1,000	267				
Sanilac	29,830	8,098	1,255	1,530	40,713	3,765,908.32	2,242	2,444	111				
Schoolcraft	5,965	1,693	371	282	8,311	783,783.97	1,724	1,146	56				
Shiawassee	52,062	10,922	1,863	2,266	67,113	5,992,089.58	6,148	3,389	216				
Tuscola	40,909	9,809	1,712	2,108	54,538	4,741,093.36	4,664	3,250	430				
Van Buren	53,695	10,337	1,954	2,649	68,635	5,796,157.78	8,500	2,387	428				
Washtenaw	222,353	25,837	3,248	6,449	257,887	24,119,782.56	15,329	3,974	734				
Wayne	1,199,557	134,602	14,655	30,366	1,379,180	134,169,876.61	63,759	14,877	2,657				
Wexford	22,792	4,575	1,063	971	29,401	2,706,923.37	4,546	2,449	97				
Non-Resident	63,944	28,709	3,423	833	96,909	57,446,366.85	38,278	5,924	255				
Unknown County	0	0	0	0	0	0	3,089	0	0				
Total	6,997,867	1,091,997	179,563	236,856	8,506,283	\$864,242,867.78	825,585	279,295	26,350				

* Trailers now have permanent plates for each trailer owner instead of 1- and 5-year plates.



2006

2006

2006

2006

2006

2006

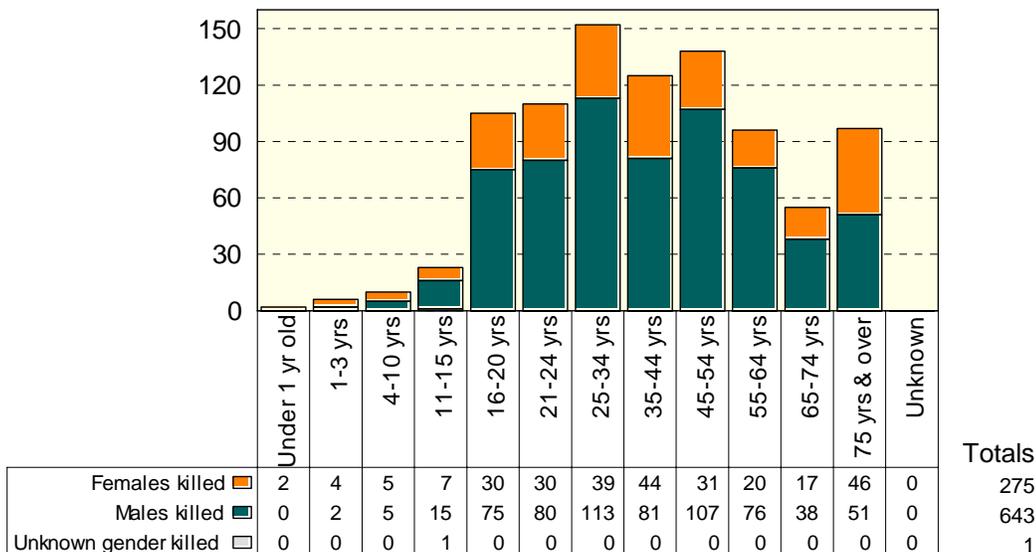
2006

2006

**Occupant/
Person**

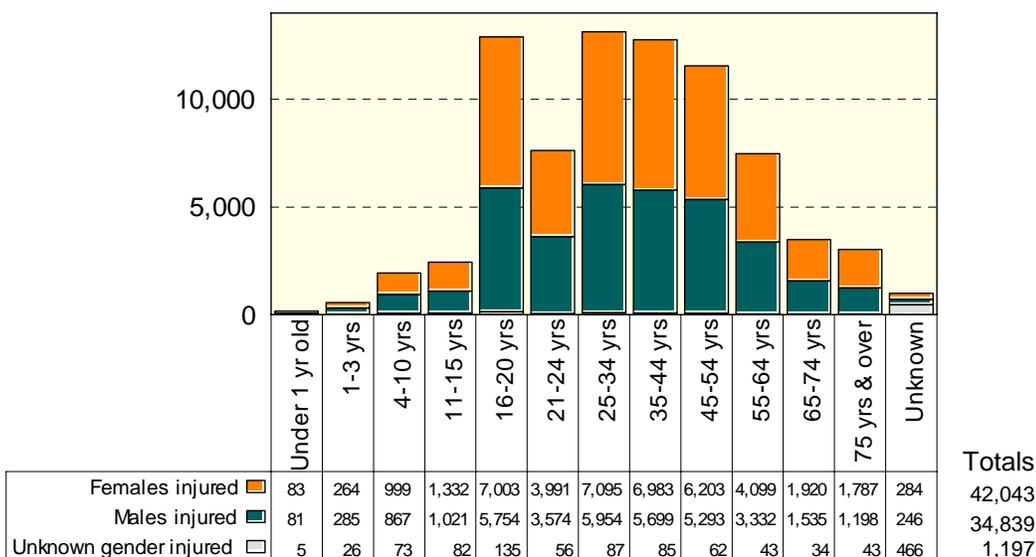
AGE AND GENDER OF OCCUPANTS KILLED & INJURED IN MOTOR VEHICLE CRASHES

Occupants Killed



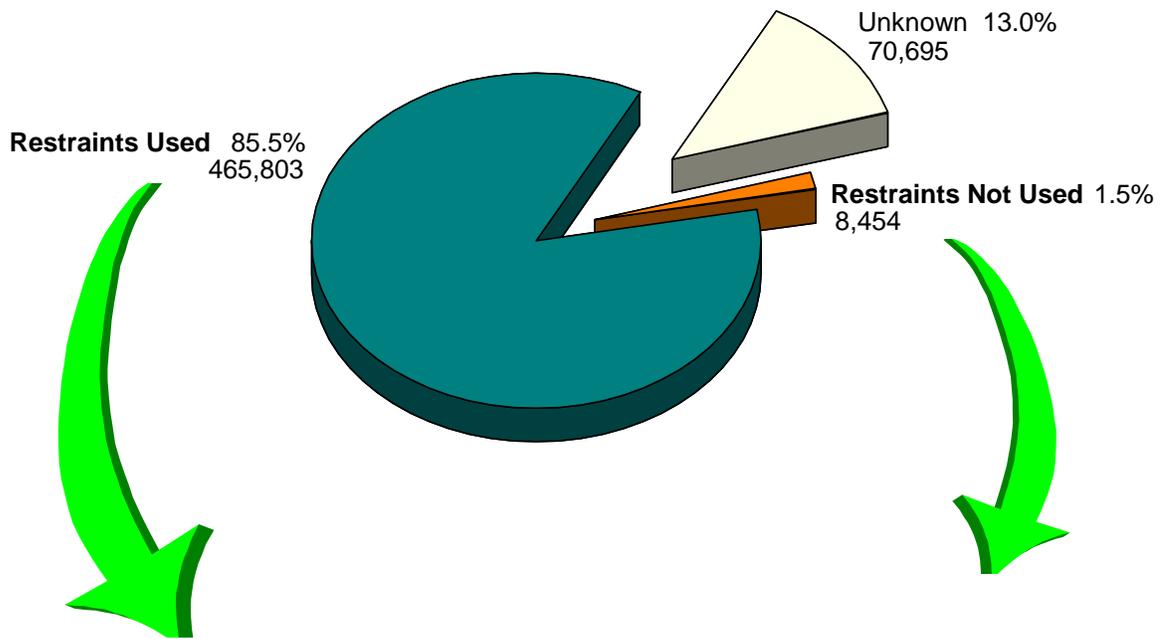
There were 643 male occupants, 275 female occupants, and 1 occupant of unknown gender killed in motor vehicle crashes in 2006. The majority (70.0%) of occupants killed in traffic crashes in 2006 were male.

Occupants Injured

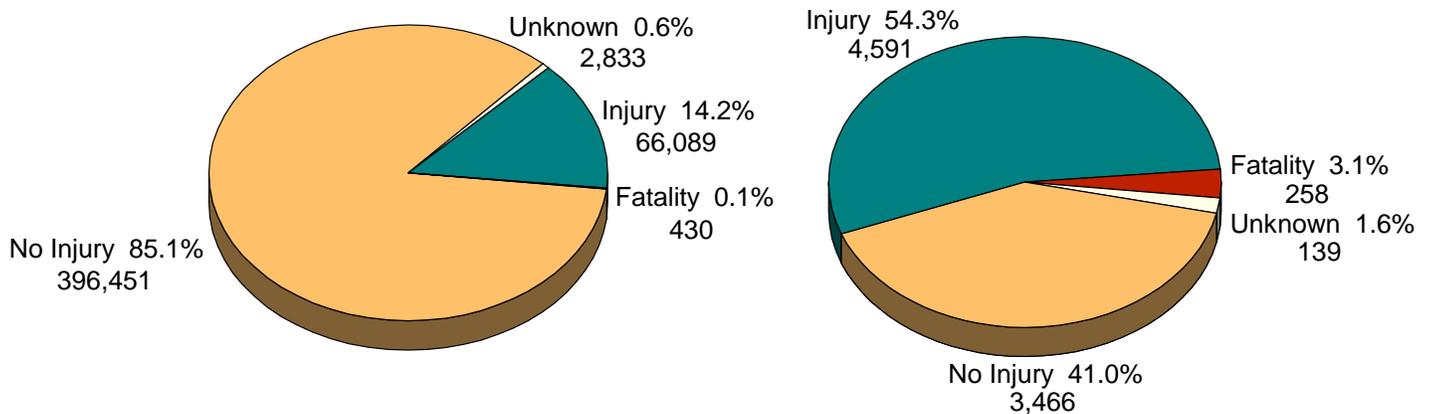


There were 34,839 male occupants, 42,043 female occupants, and 1,197 occupants of unknown gender injured in motor vehicle crashes in 2006. The majority (53.8%) of occupants injured in traffic crashes in 2006 were female.

REPORTED OCCUPANT RESTRAINT USAGE FOR ALL DRIVERS AND INJURED PASSENGERS

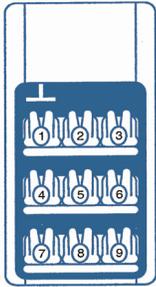


Injury Severity



Of the 544,952 drivers and injured passengers involved in crashes, 465,803 (85.5%) were REPORTED to be using occupant restraints.

Occupants in crashes were thirty times more likely to be killed if they were not wearing their restraints.



MOTOR VEHICLE OCCUPANTS & INJURY SEVERITY BY SEATING POSITION AND KNOWN BELT USAGE

Seating Position	Belts Used*		Fatal	Injury			No Injury
	Number	% of Total		A	B	C	
Left Front	444,405	96.2	316	3,262	9,788	37,517	393,522
Center Front	384	0.1	2	18	62	210	92
Right Front	10,822	2.3	94	747	2,243	7,539	199
Left Rear	1,263	0.3	6	89	292	876	0
Center Rear	327	0.1	0	17	77	233	0
Right Rear	1,385	0.3	3	87	306	989	0
Left Rear Third Seat	184	0.0	2	13	39	130	0
Center Rear Third Seat	78	0.0	0	3	15	60	0
Right Rear Third Seat	236	0.1	1	14	65	156	0
Unknown	2,741	0.6	1	20	80	290	2,350
Total	461,825†	100.0	425	4,270	12,967	48,000	396,163

* A lap belt, shoulder belt or a combination of lap and shoulder belts used. Children who were coded as using or not using a child restraint device appear in separate tables on pages 172-173.

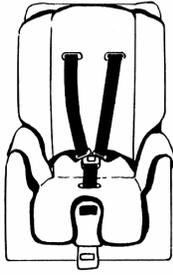
†This total does not include 2,823 occupants with unknown injury severity.

Seating Position	Belts Not Used*		Fatal	Injury			No Injury
	Number	% of Total		A	B	C	
Left Front	5,713	71.6	184	686	958	861	3,024
Center Front	76	1.0	2	12	25	23	14
Right Front	735	9.2	32	176	239	252	36
Left Rear	348	4.4	15	71	104	158	0
Center Rear	154	1.9	4	34	54	62	0
Right Rear	339	4.2	14	69	114	142	0
Left Rear Third Seat	61	0.8	1	8	18	34	0
Center Rear Third Seat	26	0.3	0	6	6	14	0
Right Rear Third Seat	62	0.8	1	8	19	34	0
Unknown	463	5.8	4	44	99	162	154
Total	7,977†	100.0	257	1,114	1,636	1,742	3,228

* No belts available or no belts used. Children who were coded as using or not using a child restraint device appear in separate tables on page 172-173.

†This total does not include 123 occupants with unknown injury severity.

*Michigan law requires that all persons must wear a safety belt
when riding in the front seat of a motor vehicle.*



REPORTED RESTRAINT USE - CHILDREN

Michigan law requires:

*Any child **under four years of age** riding in either the front or back seat of a vehicle must be in an approved Child Safety Seat (CSS)/Child Restraint Device (CRD).*

Excludes Drivers:

Restraint Usage	Children Age 0		Fatal	Injury		
	Number	% Total		A	B	C
Belts Used	26	15.6	0	1	4	21
No Belts Used	3	1.8	0	0	2	1
Child Restraint Used	123	73.7	1	7	10	105
Child Restraint Not Used	4	2.4	1	0	0	3
Restraint Failed	0	0.0	0	0	0	0
Unknown	11	6.6	0	0	5	6
Total	167	100.0	2	8	21	136

Children Age 1

Belts Used	23	12.8	0	5	5	13
No Belts Used	1	0.6	0	0	0	1
Child Restraint Used	137	76.5	2	4	43	88
Child Restraint Not Used	11	6.1	0	3	2	6
Restraint Failed	2	1.1	0	0	0	2
Unknown	5	2.8	0	1	1	3
Total	179	100.0	2	13	51	113

Children Age 2

Belts Used	23	13.9	0	1	3	19
No Belts Used	5	3.0	1	1	2	1
Child Restraint Used	113	68.1	0	3	37	73
Child Restraint Not Used	12	7.2	0	2	3	7
Restraint Failed	1	0.6	0	0	0	1
Unknown	12	7.2	0	0	3	9
Total	166	100.0	1	7	48	110

Children Age 3

Belts Used	52	22.2	0	3	15	34
No Belts Used	11	4.7	3	1	4	3
Child Restraint Used	159	67.9	0	5	48	106
Child Restraint Not Used	9	3.8	0	3	3	3
Restraint Failed	0	0.0	0	0	0	0
Unknown	3	1.3	0	0	2	1
Total	234	100.0	3	12	72	147

Information about uninjured passengers does not have to be reported by the officer on the crash report, thus these tables relate the experience of only those children with injuries in crashes.

REPORTED RESTRAINT USE - CHILDREN (continued)

All children ages 4 through 15 must wear a properly adjusted and fastened safety belt when riding in either the front or back seat of a vehicle.

Excludes Drivers:

Restraint Usage	Children Age 4-15		Fatal	Injury		
	Number	% Total		A	B	C
Belts Used	3,176	77.1	13	184	776	2,203
No Belts Used	382	9.3	9	65	126	182
Child Restraint Used	242	5.9	2	10	57	173
Child Restraint Not Used	24	0.6	0	7	8	9
Restraint Failed	4	0.1	0	2	1	1
Unknown	291	7.1	2	31	80	178
Total	4,119	100.0	26	299	1,048	2,746

Note: Safety equipment usage is often self-reported and may not reflect actual usage.

It is recommended that all children age 12 and under ride in a rear seat with appropriate restraint.

A vehicle can be stopped if an officer observes the driver or front seat passenger not wearing a safety belt, or, a child not properly restrained.

The driver of the vehicle can be stopped and will receive a citation for any child (under age 16) not restrained.

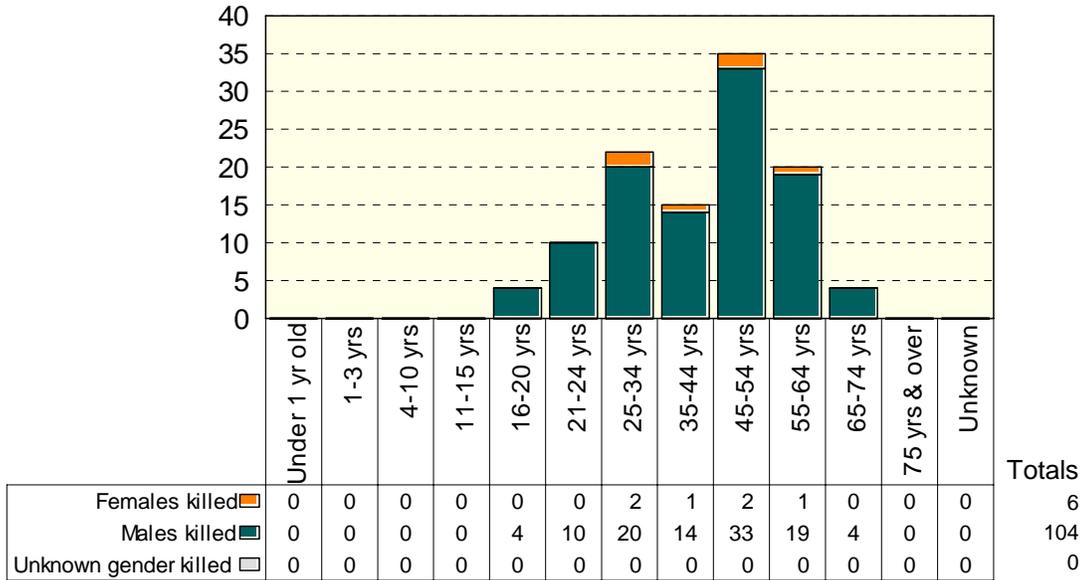
MOTOR VEHICLE OCCUPANT INJURY SEVERITY BY KNOWN AIRBAG DEPLOYMENT

Motor Vehicle Occupant Airbag Deployment	OCCUPANT – INJURY SEVERITY						
	Occupants*		Fatal	Injury			No Injury
	Number	% Total		A	B	C	
Deployed	43,253	7.9	339	2,393	5,961	12,111	21,633
Not deployed	386,162	70.4	224	1,907	6,012	30,091	338,985
Not equipped	51,572	9.4	323	2,042	3,957	7,086	36,753
Unknown	67,499	12.3	33	562	1,493	4,464	23,287
Total	548,486	100.0	919	6,904	17,423	53,752	420,658

* Includes 48,830 occupants (drivers and passengers) with unknown injury severity.

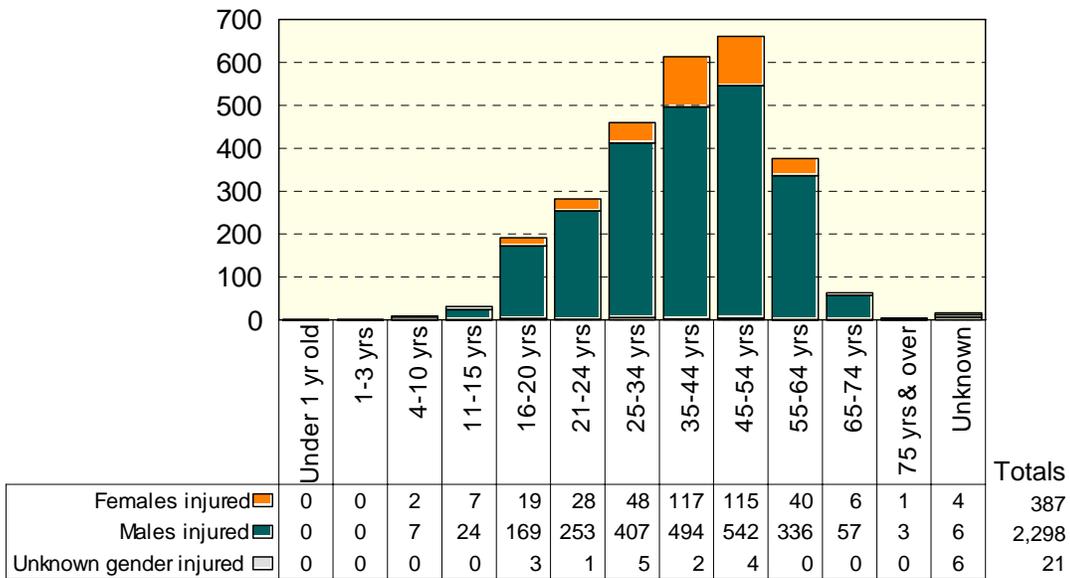
AGE AND GENDER OF MOTORCYCLISTS KILLED & INJURED IN MOTOR VEHICLE CRASHES

Motorcyclists Killed



94.5 percent of the motorcyclists killed in traffic crashes in 2006 were male. In comparison, 70.4 percent of all persons killed in crashes were male.

Motorcyclists Injured



84.9 percent of the motorcyclists injured in traffic crashes in 2006 were male. In comparison, 45.5 percent of all persons injured in crashes were male.

MOTORCYCLE HELMET USE AND INJURY SEVERITY

Helmet Worn Age of Motorcyclist	Fatality	Injury			No Injury
		A	B	C	
3 years and under	0	0	0	0	0
4 - 10 years	0	2	3	1	0
11 - 15 years	0	5	8	5	0
16 - 20 years	3	22	63	46	26
21 - 24 years	8	40	122	62	42
25 - 34 years	19	90	145	108	99
35 - 44 years	12	123	185	144	110
45 - 54 years	32	145	189	179	175
55 - 64 years	17	86	119	103	59
65 - 74 years	4	8	28	10	10
75 years and over	0	1	2	1	2
Unknown	0	0	2	1	7
Subtotal	95	522	866	660	530



Drivers killed 90
Passengers killed 5

Helmet Not Worn Age of Motorcyclist	Fatality	Injury			No Injury
		A	B	C	
3 years and under	0	0	0	0	0
4 - 10 years	0	0	1	0	0
11 - 15 years	0	2	1	2	0
16 - 20 years	0	3	1	3	2
21 - 24 years	1	2	6	2	0
25 - 34 years	0	4	9	2	4
35 - 44 years	1	7	13	2	1
45 - 54 years	0	3	7	0	1
55 - 64 years	0	0	1	0	1
65 - 74 years	0	0	3	0	0
75 years and over	0	0	0	0	0
Unknown	0	0	0	1	0
Subtotal	2	21	42	12	9



Drivers killed 2
Passengers killed 0

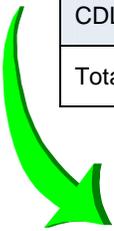
Helmet Use Unknown Age of Motorcyclist	Fatality	Injury			No Injury
		A	B	C	
3 years and under	0	0	0	0	1
4 - 10 years	0	1	0	1	0
11 - 15 years	0	1	4	3	1
16 - 20 years	1	10	23	20	14
21 - 24 years	1	13	23	12	17
25 - 34 years	3	26	42	34	48
35 - 44 years	2	40	53	46	53
45 - 54 years	3	44	43	51	60
55 - 64 years	3	18	29	20	22
65 - 74 years	0	6	6	2	8
75 years and over	0	0	0	0	0
Unknown	0	1	7	4	52
Subtotal	13	160	230	193	276
Total	110	703	1,138	865	815

Michigan Vehicle Code Public Act 300 of 1949, Section 257.658 requires that all motorcycle riders wear a helmet. As a result, according to studies by UMTRI [14], approximately 99 percent of the motorcyclists in Michigan wear helmets when riding. The fact that most fatalities (where helmet use is known) are wearing their helmets does not indicate that helmets are not an effective safety device.

OCCUPANT INJURY OUTCOME BY VEHICLE TYPE



VEHICLE TYPE	Killed	A Injured	B Injured	C Injured	Total KABC	% of All Crash Involved KABC Occupants
Passenger Car and Station Wagon	621	4,499	12,161	41,108	58,389	73.9
Van (Minivan) and Motorhome	46	424	1,030	3,945	5,445	6.9
Pickup	85	760	2,004	5,199	8,048	10.2
Small Truck (under 10,000 lbs.)	16	203	577	1,718	2,514	3.2
Motorcycle	110	703	1,138	865	2,816	3.6
Moped	3	44	109	71	227	0.3
Go Cart	1	3	8	9	21	0.0
Snowmobile	8	50	31	34	123	0.2
Off Road Vehicle	13	104	90	46	253	0.3
Other	5	20	30	54	109	0.1
Unknown	0	10	45	95	150	0.2
CDL Truck/Bus (breakdown below)	11	84	200	608	903	1.1
Total Number of Occupants	919	6,904	17,423	53,752	78,998	100.0



CDL Truck/Bus Sub-category Type	Killed	A Injured	B Injured	C Injured	Total KABC	% of All Crash Involved KABC Occupants
Commercial Vehicle: Group A	9	38	84	160	291	32.2
Commercial Vehicle: Group B	1	29	52	228	310	34.3
Commercial Vehicle: Group C	0	5	15	43	63	7.0
Other Truck	1	3	13	31	48	5.3
Unknown Truck	0	9	36	146	191	21.2
Total Number of Occupants	11	84	200	608	903	100.0

Group "A" is any vehicle that is towing a vehicle or trailer that has a gross vehicle weight rating (GVWR) over 10,000 lbs.

Group "B" is any single vehicle (including buses) with a GVWR of 26,001 lbs. or more. This would include a combination of vehicles with a combined GVWR over 26,000 lbs. when towing a trailer that has a GVWR of 10,000 lbs. or less.

Group "C" is any single vehicle with a GVWR of less than 26,001 lbs. or a combination of vehicles having a combined GVWR under 26,001 lbs. when the vehicle is required to display placards for hazardous material or designed to carry 16 passengers (including driver). Group "C" is also any vehicle carrying 15 or less people (including driver) transporting children to or from school and home on a regular basis for compensation.

NOTES:

- 1) School bus is not recorded on the UD-10 and cannot be broken out of CDL Truck/Bus.
- 2) These crashes involve a motor vehicle in transport on a public trafficway (in Michigan) and result in injury, death, or at least \$1,000 in property damage.

2006

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- [2] Table 31DP Number of Deaths by Underlying Cause of Death Michigan Residents, 2005. Michigan Department of Community Health, Division for Vital Records and Health Statistics, PO Box 30691, Lansing, MI 48909-8191.
- [3] Injury Facts 2005-2006. National Safety Council. 1121 Spring Lake Drive, Itasca, IL 60143.
- [4] Traffic Safety Facts 2005. National Highway Traffic Safety Administration, National Center for Statistics and Analysis, U.S. Department of Transportation, Washington, DC 20590.
- [5] Annual Highway Statistics for 2006. Federal Highway Administration.
- [6] The Ohio Department of Public Safety, Office of the Governor's Highway Safety Representative, 240 Parsons Avenue, Columbus, OH 43215.
- [7] Indiana Department of Transportation, Roadway Management Division, 100 N. Senate Avenue, Room N808, Indianapolis, IN 46204-2218.
- [8] Illinois Department of Transportation, Division of Traffic Safety, 3215 Executive Park Drive, P.O. Box 19245, Springfield, IL 62794-9245.
- [9] Wisconsin Bureau of Transportation Safety, P.O. Box 7913, Madison, WI 53707-7913.
- [10] Minnesota Department of Public Safety, Office of Traffic Safety, 444 Cedar Street, Suite 100-B, Town Square, St. Paul, MN 55101-2156.
- [11] Michigan Department of Transportation, Bureau of Transportation Planning, Lansing, MI 48909.
- [12] Traffic Safety Facts 2003 - Children. National Center for Statistics & Analysis, Research & Development, 400 Seventh Street, S.W., Washington, D.C. 20590. (Source: Robert Thompson, *A Case Control Study of the Effectiveness of Bicycle Safety Helmets.* Centers for Disease Control.)
- [13] 2006 Fatality Analysis Reporting System Version Annual Report File. U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, Washington, D.C. 20590.
- [14] Michigan Department of State, Office of Policy and Planning, Research Section, Lansing, MI 48918.
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- [16] Streff, Fredrick M., Eby, David W., Molnar, Lisa J., Joksch, Hans C., Wallace, Richard R. Direct Observation of Safety Belt Use and Motorcycle Helmet Use in Michigan: Fall 1993. UMTRI-93-44, University of Michigan Transportation Research Institute, Ann Arbor, MI 48109-2150, November 1993.

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State:

Census Statistics & Demographic Data for Michigan www.michigan.gov/census

Michigan Deer Crash Coalition www.semco.org/TranPlan/Safety/MDCC

Michigan Department of Community Health www.michigan.gov/mdch

Michigan Department of Management and Budget (MDMB) www.michigan.gov/dmb

Michigan Department of Natural Resources www.michigan.gov/dnr

Michigan Department of State www.michigan.gov/sos

Michigan Department of Transportation www.michigan.gov/mdot

Michigan State Police www.michigan.gov/msp

Michigan State Police UD-10 Manual www.michigan.gov/documents/UD-10_Manual_2004_91577_7.pdf

Office of Highway Safety Planning www.michigan.gov/ohsp

SEMCOG's Data Resource Center www.semco.org

SEMCOG's Transportation Data Tool www.semco.org/TranPlan/TransportationDataTool.htm

Create a Community Crash Profile <http://webdev2.semco.org/cgi-bin/data/geo-crash-profile.html>

Generate a High Crash Intersection list <http://webdev2.semco.org/cgi-bin/data/geo-high-crash.html>

University of Michigan Transportation Research Institute www.umtri.umich.edu

National:

National Safety Council Accident Facts www.nsc.org

NHTSA Traffic Safety Fact Sheets www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/AvailInf.html

Other States:

Illinois Traffic Crash Data wrc.dot.il.gov/fatalcrash/crashdata.aspx

Indiana Traffic Safety Data www.in.gov/cji/SAC/traffic_data.html

Minnesota Traffic Crash Facts www.dps.state.mn.us/OTS/crashdata/crash_facts.asp

Ohio Traffic Crash Reports/Facts www.publicsafety.ohio.gov/crashes/crash_facts.asp

Wisconsin Traffic Crash Facts www.dot.wisconsin.gov/safety/motorist/crashfacts/

2006

2006

2006

2006

2006

2006

2006

2006

Index

A

ACCIDENTAL DEATH

Causes of, for children	3
Causes of, for teenagers and young adults	3

ACTION PRIOR TO CRASH

Bicyclist Action	145
Driver Action	143
Driver Age 16-24	65
Driver Age 25-64	73
Driver Age 65 & Over	81
Heavy Truck/Bus	51
Motorcyclist Action	144
Pedestrian Action	146

AGE

Average Age of Drivers in Crashes	30
Demographics and Crash Involvements	158
Driver 16-19	
in Crashes	38
Driver 16-24	
Action Prior to Crash	65
Crash Type	68
Day of Week	70
Gender	70
Hazardous Action	69
Most Harmful Event	66-67
Number of Occupants	70
Relationship to Roadway	68
Roadway Type	68
Time of Day in Crash	69
Vehicle Type	71
Driver 25-64	
Action Prior to Crash	73
Crash Type	76
Day of Week	78
Gender	78
Hazardous Action	77
Most Harmful Event	74-75
Number of Occupants	78
Relationship to Roadway	76
Roadway Type	76
Time of Day in Crash	77
Vehicle Type	79
Driver 65 & Over	
Action Prior to Crash	81
Crash Type	84
Day of Week	86
Gender	86
Hazardous Action	85
in Crashes	38
Killed and Injured	38
Most Harmful Event	82-83
Number of Occupants	86
Relationship to Roadway	84

Roadway Type	84
Time of Day in Crash	85
Vehicle Type	87
of Bicyclist & Injury Severity	61-64
of Bicyclists in All Crashes	158
of Bicyclists in Fatal Crashes	158
of Bicyclists Killed	33
of Bicyclists Killed & Injured	150
of Drinking Drivers, Reported	103-4
of Drinking Female Drivers	108
of Drinking Male Drivers	106
of Driver & Injury Severity	61-64
of Drivers in All Crashes	158-61
of Drivers in Fatal Crashes	158, 162
of Drivers, Involved in Fatal Crashes	32
of Drivers, Involved in Single Vehicle Fatal Crashes	32
of Drivers, Reported	160-61
of Female Drivers	107
of Licensed Drivers in Michigan	158-59
of Male Drivers	105
of Michigan Population	158
of Motorcyclist & Injury Severity	61-64
of Motorcyclists - Helmet Use	175
of Motorcyclists Killed & Injured	174
of Occupants Injured	158
of Occupants Killed	158
of Occupants Killed & Injured, by Gender	169
of Passenger & Injury Severity	61-64
of Pedestrian & Injury Severity	61-64
of Pedestrians in All Crashes	158
of Pedestrians in Fatal Crashes	158
of Pedestrians Killed	33
of Pedestrians Killed & Injured	151
of Persons Killed, Total	31

AIRBAG

Occupant Injury Severity by Known Deployment	173
--	-----

ALCOHOL

Age of Driver in Crash	92
Age of Drivers by County	103-4
Average Age of Drivers in Crashes	30
County Ranking by Fatal Crash Rate	114-15, 116
Crashes by County	117-18
Crashes by Injury Severity	93
Death & Injury per Crash Involved Occupant	94
Drinking Bicyclist	91
Drinking Driver	91, 92, 163
Drinking Motorcyclist	91
Drinking ORV/ATV Rider	91
Drinking Pedestrian	91
Drinking Snowmobiler	91
Driver Ejection	95
Driver Had Been Drinking	163

Drivers in All Crashes.....	20–21
Drivers in Fatal Crashes.....	20–21
Elderly Drivers in All Crashes.....	20–21
Elderly Drivers in Fatal Crashes.....	20–21
Fatal Crashes.....	99–100, 109–10
Fatal Crashes - 10 Year Trend.....	13
Fatal Crashes by Day of Week.....	100
Fatal Crashes by Month.....	99
Fatal Crashes by Time of Day.....	100
Fatal Crashes for Selected Holiday Periods.....	34
Fatalities.....	109–10
Fatalities - 10 Year Trend.....	13
Fatalities by Month.....	99
Fatalities for Selected Holiday Periods.....	34
Female Drivers & Injury Severity in Crash.....	108
Gender of Drivers in All Crashes.....	16–17
in Red-Light-Running Crashes.....	48
Injuries - 10 Year Trend.....	13
Injury Crashes.....	101–2
Injury Severity & Restraint Use - Driver.....	97
Injury Severity & Restraint Use - Occupant.....	98
Involved Fatal Crashes.....	37
Involved Personal Injury Crashes.....	37
Involved Persons in Crashes.....	37
Involved Property Damage Crashes.....	37
Male Drivers & Injury Severity in Crash.....	106
Map of County Ranking.....	116
Map of HBD Traffic Fatalities.....	111
Most Severe Outcome in Crash.....	112–13
Occupant Ejection.....	96
Restraint Use.....	163
Teen/Young Adult Drivers in All Crashes.....	20–21
Teen/Young Adult Drivers in Fatal Crashes.....	20–21

B

BICYCLE	
in All Crashes.....	24–25
in Fatal Crashes.....	24–25
BICYCLIST	
Action Prior to Crash.....	145
Age & Injury Severity.....	61–64
Age in All Crashes.....	158
Age in Fatal Crashes.....	158
Age of Persons Killed.....	33
Alcohol and/or Drug Involvement.....	91
Fatalities.....	38, 91, 150
Helmet Use & Injury Severity.....	150
in Crashes.....	91
in Red-Light-Running Crashes.....	48
Injuries.....	91, 150

BUS	
Crashes.....	141
Crashes by Crash Severity.....	142
Driver Age 16-24.....	71
Driver Age 25-64.....	79
Driver Age 65 & Over.....	87
Heavy Truck/Bus.....	57
Occupant Injury Outcome.....	176

C

CELLULAR PHONE	
Driver Using.....	163
CHILD RESTRAINT DEVICE (CRD)	
Reported Restraint Use - Children.....	172–73
CHILDREN	
5 Year Trend	
Bicyclists Killed.....	33
for Fatalities.....	31
Pedestrians Killed.....	33
Accidental Death.....	3
Demographics and Crash Involvements.....	158
Gender of Motorcyclist Killed & Injured.....	174
Gender of Occupants Killed & Injured.....	169
in Bicycle Crashes.....	150
in Pedestrian Crashes.....	151
Injury Severity by Person Type.....	64
Motorcycle Helmet Use.....	175
Percent of Bicycle Deaths.....	4
Reported Restraint Use.....	172–73
CONSTRUCTION ZONE	
All Crashes.....	138
Fatal Crashes.....	138
Injury Crashes.....	138
COST	
Comprehensive, 2006.....	39
of Crashes in Michigan.....	4, 39
COUNTY DATA	
Fatal Crashes.....	109–10
Fatalities.....	109–10
HBD Fatal Crashes.....	109–10
HBD Fatalities.....	109–10
Map of County Ranking.....	116
Map of Deer Crashes.....	121
Map of HBD Traffic Fatalities.....	111
Map of Where Traffic Fatalities Occurred.....	40
Most Severe Outcome HBD Crashes.....	112–13
Registration Transactions.....	164–66
Reported Age of Drinking Drivers.....	103–4
Reported Age of Drivers.....	160–61
Reported Statewide Alcohol Involved Crashes.....	117–18
Reported Statewide Crashes.....	5–6
Reported Statewide Deer Crashes.....	124–25

COUNTY RANKING	
by HBD Fatal Crash Rate.....	114–15
by HBD Fatal Crash Rate, Map of.....	116
CRASH RATES	
County Ranking by HBD Fatal	114–15
Fatal	39
Map of County Ranking by HBD Fatal	116
per Licensed Driver by Age of Driver in	
All Crashes	159
Personal Injury	130
Personal Injury - 10 Year Trend	15
Property Damage - 10 Year Trend.....	15
Total	130
Total - 10 Year Trend.....	15
CRASH TYPE	
All Motor Vehicle Crashes.....	131
Driver Age 16-24	68
Driver Age 25-64	76
Driver Age 65 & Over	84
Heavy Truck/Bus.....	54
in Red-Light-Running Crash.....	47
CRASHES	
10 Year Trend	11
All Drivers in	18–19
Average Age of Drivers	30
Bicycles in	24–25
by County	5–6
by Injury Severity.....	93, 129
Construction Zone.....	138
Cost of	39
Crash Type.....	131
Day of Week	133
Drinking Drivers in.....	20–21
Driver Gender.....	157
Driver Hazardous Action	149
Elderly Drinking Drivers in	20–21
Elderly Drivers in	18–19
Farm Equipment.....	156
Gender of Drinking Drivers in.....	16–17
Gender of Drivers in	16–17
Heavy Truck/Bus.....	49
Light Condition	136
Location of First Impact.....	131
Michigan Motorcycle Crashes	156
Most Harmful Event.....	147–48
Motor Vehicles in.....	22–23
Motorcycles in	22–23
Number of	37, 42
ORV/ATV Driver Hazardous Action	155
ORV/ATV Most Harmful Event.....	154
ORV/ATV's in	24–25
Pedestrians in	22–23
Persons in	37
Persons in Alcohol-Involved.....	37
Red-Light-Running	45
Relationship to Roadway.....	131

Reported Age of Drivers Involved	160–61
Road Condition	134
Roadway Type	130
Single Vehicle Involved.....	3
Snowmobile Driver Hazardous Action	155
Snowmobile, Most Harmful Event.....	152–53
Snowmobiles in.....	24–25
Teen/Young Adult Drinking Drivers in.....	20–21
Teen/Young Adult Drivers in	18–19
Time and Severity	132
Traffic Control Type, Intersections	137
Vehicle Defects.....	149
Weather Condition	135
Yearly Totals of	42

D

DAY OF WEEK	
Fatal Crashes.....	100
HBD Fatal Crashes	100
HBD Injury Crashes	102
in All Crashes.....	133
in Crashes	
Driver 16-24.....	70
Driver 25-64.....	78
Driver 65 & Over.....	86
Heavy Truck/Bus	56
in Fatal Crashes.....	133
in Injury Crashes	133
Injury Crashes.....	102
DEATH RATE	
10 Year Trend.....	14
by Roadway Type.....	130
Michigan 2006.....	3, 28, 39, 42
Michigan, U.S. and Surrounding States.....	28
Motorcycle.....	156
Yearly Totals of	42
DEER CRASHES	
10 Year Trend.....	26
by County, Map of	121
Light Condition & Time of Day	122
Monthly & Seasonal Rates.....	123
Reported Statewide	124–25
DRIVER	
Action Prior to Crash.....	143
Age & Injury Severity.....	61–64
Age 16-19	
in Crashes	38
Killed and Injured.....	38
Age 16-24	
Action Prior to Crash	65
Crash Type.....	68
Day of Week.....	70
Gender	70
Hazardous Action	69

Most Harmful Event	66–67	in Fatal Crashes, Teen/Young Adult Drinking	20–21
Number of Occupants	70	Injuries	91, 92, 163
Relationship to Roadway	68	Injury Severity & Restraint Use	97
Roadway Type	68	Involved in Crashes, Number of	39
Time of Day in Crash	69	Involved in Fatal Crashes, Age of	32
Vehicle Type	71	Involved in Single Vehicle Fatal Crashes,	
Age 25-64		Age of	32
Action Prior to Crash	73	Licensed, Number of	39
Crash Type	76	Licensed, Total - 10 Year Trend	14
Day of Week	78	Male Drinking Drivers & Injury Severity in Crash	106
Gender	78	Male Drivers & Injury Severity in Crash	105
Hazardous Action	77	Population in Fatal Crashes, Percent	162
Most Harmful Event	74–75	Reported Age of	160–61
Number of Occupants	78	Reported Age of Drinking	103–4
Relationship to Roadway	76	Reported Restraint Usage	170
Roadway Type	76	Restraint Use	38, 163
Time of Day in Crash	77		
Vehicle Type	79	DRIVER CONDITION	
Age 65 & Over		Appeared Normal	163
Action Prior to Crash	81	Asleep	163
Crash Type	84	Driver Distraction	163
Day of Week	86	Fatigue	163
Gender	86	Had Been Drinking	163
Hazardous Action	85	Illegal Drug Use	163
in Crashes	38	in Red-Light-Running Crash	48
Killed and Injured	38	Medication	163
Most Harmful Event	82–83	Sick	163
Number of Occupants	86	Using Cellular Phone	163
Relationship to Roadway	84	DRUG	
Roadway Type	84	Age of Driver in Crash	92
Time of Day in Crash	85	Bicyclist	91
Vehicle Type	87	Driver	91, 92, 163
Age in All Crashes	158–61	Driver Illegal Drug Use	163
Age in Fatal Crashes	158, 162	Motorcyclist	91
Age of Driver, Drinking and/or Drugged	92	ORV/ATV Rider	91
Alcohol and/or Drug Involvement	91, 92, 163	Pedestrian	91
Drinking in All Crashes	20–21	Restraint Use	163
Drinking in Fatal Crashes	20–21	Snowmobiler	91
Driver Hazardous Action	149		
Ejection	95		
Fatalities	38, 91, 92, 163		
Female Drinking Drivers & Injury Severity			
in Crash	108		
Female Drivers & Injury Severity in Crash	107		
HBD - Ejection	95		
in All Crashes	18–19	EJECTION	
in All Crashes, Elderly	18–19	All Drivers & HBD Drivers Injury Severity	95
in All Crashes, Elderly Drinking	20–21	All Occupants & Occupants of HBD Crashes	
in All Crashes, Teen/Young Adult	18–19	Injury Severity	96
in All Crashes, Teen/Young Adult Drinking	20–21	EMERGENCY VEHICLE	
in Crashes	91, 92	Red-Light-Running Crashes	48
in Fatal Crashes	18–19		
in Fatal Crashes, Elderly	18–19		
in Fatal Crashes, Elderly Drinking	20–21		
in Fatal Crashes, Teen/Young Adult	18–19		

E

EJECTION	
All Drivers & HBD Drivers Injury Severity	95
All Occupants & Occupants of HBD Crashes	
Injury Severity	96
EMERGENCY VEHICLE	
Red-Light-Running Crashes	48

F

FARM EQUIPMENT	
Crashes	
10 Year Trend.....	26
Total.....	156
Rider	
Fatalities	38
FATAL CRASHES	
10 Year Trend	12
Age of Drivers Involved in	32
All Drivers in	18-19
at Intersections	3
Average Age of Drivers	30
Bicycles in	24-25
by County	109-10
by Day of Week.....	100
by Month.....	99
by Time of Day	100
Drinking Drivers in.....	20-21
Driver Age	162
Elderly Drinking Drivers in.....	20-21
Elderly Drivers in	18-19
Excessive Speed in.....	3
for Selected Holiday Periods.....	34
Gender of Drivers in.....	16-17
Motor Vehicles in.....	22-23
Motorcycles in	22-23
Number of	37
ORV/ATV's in	24-25
Pedestrians in	22-23
Single Vehicle Involved	3
Snowmobiles in	24-25
Teen/Young Adult Drinking Drivers in	20-21
Teen/Young Adult Drivers in	18-19
FATALITIES	
& Injury per Crash-Involved Occupant	27
10 Year Trend	12
Action of Pedestrians	33
Age of Bicyclists	33
Age of Pedestrians.....	33
by County	109-10
by County, Map	40
by Month.....	41, 99
by Roadway Type.....	130
for Selected Holiday Periods.....	34
Map of HBD Traffic Fatalities	111
Number of	31, 42
Number of, by Month.....	35
Yearly Totals of	41-42

G

GENDER	
Driver Age 16-24.....	70
Driver Age 25-64.....	78
Driver Age 65 & Over.....	86
Driver Information All Crashes.....	157
Female Drinking Drivers & Injury Severity	
in Crash.....	108
Female Drivers & Injury Severity in Crash	107
Male Drinking Drivers & Injury Severity	
in Crash.....	106
Male Drivers & Injury Severity in Crash	105
of Drinking Drivers in All Crashes	16-17
of Drivers in All Crashes	16-17
of Drivers in Fatal Crashes	16-17
of Drivers in Heavy Truck/Bus Crashes.....	56
of Motorcyclists Killed & Injured.....	174
of Occupants Killed & Injured, by Age	169
of Persons Injured.....	37
of Persons Killed	38

H

HAZARDOUS ACTION	
All Motor Vehicles	149
Driver Age 16-24.....	69
Driver Age 25-64.....	77
Driver Age 65 & Over.....	85
Heavy Truck/Bus.....	54
ORV/ATV	155
Snowmobile	155
HAZARDOUS CITATION ISSUED	
Driver Age 16-24.....	69
Driver Age 25-64.....	77
Driver Age 65 & Over.....	85
Heavy Truck/Bus Involved Crashes.....	54, 58
Red-Light-Running Crashes	48
HBD.....	(See Alcohol)
HEAVY TRUCK/BUS	
Action Prior to Crash.....	51
Crash Type	54
Day of Week	56
Driver Gender	56
Hazardous Action.....	54
Hazardous Citation Issued.....	54, 58
Most Harmful Event	52-53
Number of Occupants in	56
Red-Light-Running Crashes	48
Relationship to Roadway	55
Roadway Type	55
Time of Day in Crash	55
Vehicle Type	57

HELMET	
Use and Injury Severity, Bicycle	150
Use and Injury Severity, Motorcycle	175
HIGHWAY CLASS..... (See Roadway Type)	
HOLIDAY	
Alcohol Involved Fatal Crashes and Fatalities	34
Fatal Crashes and Fatalities	34

I

INJURIES	
1 Year Trend	37, 38
10 Year Trend	12
Alcohol and/or Drug Involvement	91
Alcohol Involvement	101
HBD, 10 Year Trend.....	13
Number of	42
per Crash-Involved Occupant, Death &	27
Yearly Totals of	42
INJURY SEVERITY	
Alcohol Involved Crashes.....	101-2
and Restraint Use	
Crash Involved KABC Drivers	97
Crash Involved KABC Occupants.....	98
Bicycle Helmet Use	150
Bicyclist Action Prior to Crash	145
by Construction Zone Type	138
by Crash Type	131
by Day of Week.....	133
by Driver Hazardous Action.....	149
by Known Airbag Deployment	173
by Light Condition.....	136
by Month	
in Fatal and All Crashes	129
in Injury and PDO Crashes	129
by Relationship to Roadway	131
by Road Condition.....	134
by Seating Position and Known Belt Usage ...	171
by Time of Day	132
by Weather Condition.....	135
Driver Action Prior to Crash	143
Female Drinking Drivers.....	108
Female Drivers.....	107
for Occupant by Vehicle Type	176
Intersection Crashes by Traffic Control Type	137
Male Drinking Drivers	106
Male Drivers	105
Most Harmful Event.....	147-48
Motorcyclist Action Prior to Crash	144
Motorcyclist Age and Helmet Use	175
ORV/ATV Driver Hazardous Action	155
ORV/ATV Most Harmful Event.....	154
Pedestrian Action Prior to Crash.....	146

Reported Restraint Use - Children.....	172-73
Snowmobile Driver Hazardous Action	155
Snowmobile Most Harmful Event.....	152-53
Vehicle Defects in Crash.....	149
INTERSECTION	
Crashes by Traffic Control Type	137
Involved in Fatal Crashes	3
Pedestrian Crossing other than at	4
Red-Light-Running.....	45

L

LICENSED DRIVERS	
10 Year Trend.....	14
in Michigan, Age of	158
LIGHT CONDITION	
in All Crashes	136
in Deer Crashes	122
in Fatal Crashes.....	136
in Injury Crashes	136

M

MAP	
County Ranking by HBD Fatal Crash Rate	116
Michigan Motor Vehicle-Deer Involved Crashes	121
Traffic Fatalities with Drinking Involvement	
by County	111
Where Traffic Fatalities Occurred.....	40
MICHIGAN	
1 Year Summary Trends.....	37-38, 39
Crash Watch	7
Quick Facts	3-4
MILEAGE DEATH RATE	
10 Year Average	3
10 Year Trend	14
by Roadway Type.....	130
Michigan 2006.....	39, 42
Michigan, U.S. & Surrounding States	28
Motorcycle.....	156
Yearly Totals of	42
MINI VAN	
Crashes.....	141
Crashes by Injury Severity	142
Driver Age 16-24.....	71
Driver Age 25-64.....	79
Driver Age 65 & Over.....	87
Heavy Truck/Bus.....	57
in Deer Crashes	121
Occupant Injury Outcome	176

MONTH OF YEAR	
Alcohol Involvement in Fatal Crashes.....	99
Alcohol Involvement in Injury Crashes	101
All Crashes Injury Severity	129
in Fatal Crashes	99
in Injury Crashes	101
Motor Vehicle Deaths & Mileage.....	35
Motor Vehicle-Deer Crashes.....	123
Yearly Motor Vehicle Traffic Deaths by Month	41
MOPED	
Crashes.....	141
Crashes by Injury Severity.....	142
Driver Age 16-24	71
Driver Age 25-64	79
Driver Age 65 & Over	87
Heavy Truck/Bus.....	57
in Deer Crashes	121
Occupant Injury Outcome	176
MOST HARMFUL EVENT	
All Motor Vehicles.....	147-48
Driver Age 16-24	66-67
Driver Age 25-64	74-75
Driver Age 65 & Over	82-83
Heavy Truck/Bus.....	52-53
ORV/ATV	154
Snowmobile.....	152-53
MOTOR VEHICLE	
Driver Age 16-24	71
Driver Age 25-64	79
Driver Age 65 & Over	87
Heavy Truck/Bus.....	57
in All Crashes	22-23
in Deer Crashes	121
in Fatal Crashes	22-23
in Michigan, Registered.....	39
Involved in Crashes, Number of.....	39
Type, Occupant Injury Outcome by.....	176
Types in Crashes	141
Types in Crashes by Crash Severity	142
MOTORCYCLE	
Crashes.....	141, 156
Driver Age 16-24	71
Driver Age 25-64	79
Driver Age 65 & Over	87
Heavy Truck/Bus.....	57
in All Crashes	22-23
in Deer Crashes	121
in Fatal Crashes	22-23
in Red-Light-Running Crashes.....	48
Occupant Injury Outcome	176
Registrations	156
Trend Data	156
MOTORCYCLIST	
Action Prior to Crash	144
Age & Injury Severity.....	61-64

Age & Gender by Killed & Injured	174
Alcohol and/or Drug Involvement.....	91
Fatalities.....	38, 91
Fatalities and Injuries	156
Helmet Use & Injury Severity	175
in Crashes.....	91
Injuries	91

N

NATIONAL	
Mileage Death Rate	28
Vehicle Miles Traveled.....	29

O

OCCUPANT	
Age & Gender by Killed & Injured	169
Age of Occupants Injured	158
Age of Occupants Killed.....	158
Death & Injury per Crash Involved	94
Death & Injury per Crash-Involved	27
Ejection	96
HBD - Ejection	96
in Motor Vehicle	
Driver Age 16-24	70
Driver Age 25-64	78
Driver Age 65 & Over	86
Injury Outcome by Vehicle Type	176
Injury Severity & Restraint Use	98
Injury Severity by Known Airbag Deployment	173
Involved in Crashes	39
of Heavy Truck/Bus.....	56
Reported Belt Use by Seating Position.....	171
Reported Restraint Usage	170
ORV/ATV	
Crashes.....	141
Driver Age 16-24.....	71
Driver Age 25-64.....	79
Driver Age 65 & Over.....	87
Driver Hazardous Action	155
Heavy Truck/Bus.....	57
in All Crashes.....	24-25
in Deer Crashes.....	121
in Fatal Crashes.....	24-25
Most Harmful Event	154
Occupant Injury Outcome	176
ORV/ATV RIDER	
Alcohol and/or Drug Involvement.....	91
Fatalities.....	38, 91
in Crashes.....	91
Injuries	91

P

PASSENGER	
Age & Injury Severity	61–64
Fatalities	38
Reported Restraint Usage for Injured	170
Reported Restraint Use - Children	172–73
Restraint Use	38
PEDESTRIAN	
Action of Persons Killed	33
Action Prior to Crash	146
Age & Injury Severity	61–64
Age in All Crashes	158
Age in Fatal Crashes	158
Age of Persons Killed	33
Alcohol and/or Drug Involvement	91
Crossing other than at Intersections	4
Fatalities	38, 91, 151
in All Crashes	22–23
in Crashes	91
in Fatal Crashes	22–23
in Red-Light-Running Crashes	48
Injuries	91, 151
PERSONAL INJURY CRASHES	
Number of	37, 38
PERSONS	
Age & Injury Severity	61–64
Gender	
Injured	37
Killed	38
in Alcohol-Involved Crashes	37
in Crashes	37
PICKUP	
Crashes	141
Crashes by Injury Severity	142
Driver Age 16-24	71
Driver Age 25-64	79
Driver Age 65 & Over	87
Heavy Truck/Bus	57
in Deer Crashes	121
Occupant Injury Outcome	176
POPULATION	
in Michigan	3, 39
in Michigan by County	114–15
in Michigan, Age of	158
Percent of Active Drivers by Age	162
PROPERTY DAMAGE CRASHES	
Number of	37

R

RED-LIGHT-RUNNING	
Crash Type	47
Driver Condition	48
Intersection Crash Type	45
Special Circumstances	48
Speed Limit	47
REGISTRATIONS	
10 Year Trend	11
Motorcycle	156
Number of	42
Transactions by County	164–66
Yearly Totals of	42
RELATIONSHIP TO ROADWAY	
Driver Age 16-24	68
Driver Age 25-64	76
Driver Age 65 & Over	84
Heavy Truck/Bus	55
Location of First Impact	131
RESTRAINT USE	
10 Year Trend	14
Driver	
Killed & Injured	38
Driver Alcohol and/or Drug Involvement	163
Driver Injury Severity	97
for Drivers & Injured Passengers	170
Highest Usage	4
Injured Passenger	
Killed & Injured	38
Lowest Usage	4
Occupant Injury Severity	98
Reported Belt Use by Seating Position	171
Reported Restraint Use - Children	172–73
ROAD CONDITION	
All Crashes	134
Fatal Crashes	134
Injury Crashes	134
ROADWAY TYPE	
All Crashes	130
Fatalities	130
Heavy Truck/Bus Crashes	55
in Crashes by Driver 16-24	68
in Crashes by Driver 25-64	76
in Crashes by Driver 65 & Over	84
Personal Injury Crashes	130
Reported Statewide Alcohol Involved Crashes	
.....	117–18
Reported Statewide County Deer Crashes	
.....	124–25
Reported Statewide Crashes	5–6
Vehicle Miles Traveled	130

S

SCHOOL BUS

Involved/Associated in Red-Light-Running Crashes	48
<i>School Buses are not identified on the UD-10 and cannot be broken out of CDL Truck/Bus</i>	

SINGLE VEHICLE CRASHES

Age of Drivers Involved in Fatal	32
Number of	3
Number of Fatal	3
Percentage of	3

SNOWMOBILE

Crashes	141
Crashes by Crash Severity.....	142
Driver Age 16-24	71
Driver Age 25-64	79
Driver Age 65 & Over	87
Driver Hazardous Action	155
Heavy Truck/Bus.....	57
in All Crashes	24-25
in Deer Crashes	121
in Fatal Crashes	24-25
in Red-Light-Running Crashes	48
Most Harmful Event.....	152-53
Occupant Injury Outcome	176

SNOWMOBILER

Alcohol and/or Drug Involvement	91
Fatalities	38, 91
in Crashes	91
Injuries.....	91

SPEED

Driver Hazardous Action	149
Hazardous Action	
Driver 16-24	69
Driver 25-64	77
Driver 65 & Over	85
Heavy Truck/Bus	54
in Fatal Crashes, Excessive.....	3
Limit in Red-Light-Running Crash	47
ORV/ATV Driver Hazardous Action	155
Snowmobile Driver Hazardous Action.....	155

T

TIME OF DAY

Fatal Crashes	100
HBD Fatal Crashes	100
HBD Injury Crashes	102
Heavy Truck/Bus Crashes	55
in All Crashes	132
in Crashes	
by Driver 16-24	69
by Driver 25-64	77

by Driver 65 & Over	85
in Deer Crashes	122
in Fatal Crashes	132
in Injury Crashes	132
Injury Crashes	102

TRAFFIC CONTROL

All Crashes at Intersections	137
Red-Light-Running Crashes	45

TRAIN

Crashes	
10 Year Trend	26
Fatal Crashes	156
Red-Light-Running	48
Engineer	
Fatalities	38

TREND, 1 YEAR

Alcohol-Involved Crashes	37
Alcohol-Involved Fatal Crashes	37
Bicyclists Killed.....	38
Crashes.....	37
Death Rate	39
Driver Age 16-19.....	38
Driver Age 65 & Over.....	38
Drivers Involved in Crashes	39
Drivers Killed.....	38
Farm Equipment Riders Killed	38
Fatal Crash Rate.....	39
Fatalities by County, Map.....	40
Gender of Persons Killed	38
Injured Occupants Involved in Crashes	39
Licensed Drivers	39
Michigan Population.....	39
Motorcyclists Killed.....	38
ORV/ATV Riders Killed	38
Passengers Killed	38
Pedestrians Killed	38
Persons in Alcohol-Involved Crashes	37
Persons in Crashes.....	37
Persons Injured by Gender	37
Persons Injured by Severity	37
Persons Killed	38
Registered Vehicles in Michigan.....	39
Restraint Use by Driver	38
Restraint Use by Injured Passenger	38
Snowmobilers Killed.....	38
Train Engineers Killed.....	38
Vehicle Miles Traveled.....	39
Vehicles Involved in Crashes	39

TREND, 10 YEAR

Alcohol-Related Fatal Crashes	13
Alcohol-Related Fatalities	13
Alcohol-Related Injuries	13
All Drivers in Crashes	18-19
All Drivers in Fatal Crashes	18-19
Bicycles in All Crashes.....	24-25
Bicycles in Fatal Crashes.....	24-25

Crashes	11
Death & Injury per Crash-Involved Occupant	27
Deer Crashes	26
Drinking Drivers in All Crashes	20-21
Drinking Drivers in Fatal Crashes	20-21
Elderly Drinking Drivers in All Crashes.....	20-21
Elderly Drinking Drivers in Fatal Crashes ..	20-21
Elderly Drivers in Crashes.....	18-19
Elderly Drivers in Fatal Crashes.....	18-19
Farm Equipment Crashes	26
Fatal Crashes.....	12
Fatalities	12
Gender of Drinking Drivers in All Crashes .	16-17
Gender of Drivers in All Crashes.....	16-17
Gender of Drivers in Fatal Crashes.....	16-17
Injuries.....	12
Michigan, U.S. & Surrounding States Mileage	
Death Rate	28
Mileage Death Rate.....	14, 28
Motor Vehicles in All Crashes	22-23
Motor Vehicles in Fatal Crashes	22-23
Motorcycles in All Crashes.....	22-23
Motorcycles in Fatal Crashes.....	22-23
National Mileage Death Rate	28
ORV/ATV's in All Crashes.....	24-25
ORV/ATV's in Fatal Crashes.....	24-25
Pedestrians in All Crashes	22-23
Pedestrians in Fatal Crashes	22-23
Personal Injury Crash Rate	15
Property Damage Crash Rate	15
Registrations	11
Restraint Usage	14
Snowmobiles in All Crashes.....	24-25
Snowmobiles in Fatal Crashes.....	24-25
Teen/Young Adult Drinking Drivers in All	
Crashes	20-21
Teen/Young Adult Drinking Drivers in Fatal	
Crashes	20-21
Teen/Young Adult Drivers in Crashes.....	18-19
Teen/Young Adult Drivers in Fatal Crashes	
.....	18-19
Total Crash Rate	15
Total Licensed Drivers	14
Train Crashes.....	26
Vehicle Miles Traveled	11, 29
TREND, 5 YEAR	
Action of Pedestrians Killed	33
Age of Bicyclists Killed	33
Age of Drivers Involved in Fatal Crashes.....	32
Age of Drivers Involved in Single Vehicle Fatal	
Crashes	32
Age of Pedestrians Killed.....	33
Age of Persons Killed, Total.....	31
Alcohol Involved Fatal Crashes for Selected	
Holiday Periods.....	34

Alcohol Involved Fatalities for Selected	
Holiday Periods	34
Fatal Crashes for Selected Holiday Periods	34
Fatalities.....	31
Fatalities by Month.....	35
Fatalities for Selected Holiday Periods	34
Percent Vehicle Miles Driven by Month	35
TRUCK	(See also Heavy Truck/Bus)
Crashes.....	141
Crashes by Crash Severity	142
Driver Age 16-24.....	71
Driver Age 25-64.....	79
Driver Age 65 & Over.....	87
in Deer Crashes	121
Occupant Injury Outcome	176

V

VEHICLE DEFECTS	
in Crash Involvement	149
VEHICLE MILES TRAVELED	
10 Year Trend.....	11
by Roadway Type.....	130
Estimated MV Mileage Traveled.....	39
Michigan, U.S. & Surrounding States	29
Number of	42
Percent Miles Driven by Month	35
Yearly Totals of	42
VEHICLE TYPE	
Crash Involvement	
Driver Age 16-24	71
Driver Age 25-64	79
Driver Age 65 & Over	87
in Heavy Truck/Bus Crashes	57
in Motor Vehicle Crashes.....	141-42
Occupant Injury Outcome	176

W

WEATHER CONDITION	
All Crashes.....	135
Fatal Crashes.....	135
Injury Crashes.....	135

