

2005

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.

2005 Michigan Traffic Crash Facts

A summary of traffic crashes on Michigan roadways in calendar year 2005

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WWW.MICHIGAN.GOV/OHSP



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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 2005 mileage death rate of 1.09 is the lowest that the state has ever recorded. This continues a trend that marks a decrease each year since 1999.

Following a national trend, Michigan experienced an increase 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 2006. 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 2005 crash data collected and processed is in the third 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 2005 information in PDF format.

EXECUTIVE SUMMARY

The 2005 traffic fatality count was 1,129, down 2.6 percent from the 2004 figure of 1,159. Compared with 2004, injuries were down 9.2 percent and total crashes were down 5.9 percent. These figures translated into a death rate of 1.09 per 100 million miles of travel.

Exposure factors in 2005 showed an increase in the travel mileage, and decreases in the number of drivers on Michigan roads and in motor vehicle registrations. The number of licensed drivers was down 0.1 percent to 7.2 million, and vehicle miles traveled was up 1.3 percent to 103.2 billion. Motor vehicle registrations were down 1.3 percent to 8.5 million. The last time Michigan experienced a drop in motor vehicle registrations was in 2004.

Consumption of alcohol continues to be a major factor in Michigan crashes, particularly the more serious crashes. In 2005, 3.9 percent of all crashes, including property damage only, were reported to involve drinking. While 19.3 percent of all crashes resulted in injury or death, 41.7 percent of alcohol-related crashes involved injury or death. 30.8 percent of fatal crashes involved drinking.

Data on crashes in this book was obtained from 2005 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 22, 2006. We acknowledge, with appreciation, all involved agencies for their assistance.



UD-10 (BACK)

BACK

Unit Number	State	Driver License Number	Date of Birth	License Type	Sex	Total Occup	Hazard Action
NCS		MMDDYYYY		<input type="radio"/> O <input type="radio"/> CY <input type="radio"/> C <input type="radio"/> F <input type="radio"/> M <input type="radio"/> R	<input type="radio"/> M <input type="radio"/> F		
Unit Type <input type="radio"/> MV <input type="radio"/> B <input type="radio"/> P <input type="radio"/> E (train)		Name		Injury		Hospital	
Street Address		City		Position		Restraint	
State		Zip		Phone Number		Ambulance	
Driver Condition ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩		Interlock <input type="radio"/> Yes <input type="radio"/> No		Ejected Trapped <input type="radio"/> Yes <input type="radio"/> No		Airbag Deployed <input type="radio"/> Yes <input type="radio"/> No	
Alcohol <input type="radio"/> Yes <input type="radio"/> No		Test Type <input type="radio"/> Field <input type="radio"/> PBT <input type="radio"/> Breath <input type="radio"/> Blood <input type="radio"/> Urine		Citation Issued		Hazardous <input type="radio"/> Other <input type="radio"/>	
Drugs <input type="radio"/> Yes <input type="radio"/> No		Test Type <input type="radio"/> Blood <input type="radio"/> Urine		Vehicle Registration		Insurance	
VIN		Vehicle Description		Make		Model	
Location of Greatest Damage ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫		Vehicle Type		Vehicle Direction		Special Vehicles ① ② ③ ④ ⑤ ⑥	
First Impact		Extent of Damage <input type="radio"/> Yes <input type="radio"/> No		PA <input type="radio"/> CY <input type="radio"/> OR <input type="radio"/>		Private Trailer Type ① ② ③ ④ ⑤ ⑥ ⑦	
Driveable <input type="radio"/> Yes <input type="radio"/> No		VA <input type="radio"/> MO <input type="radio"/> Other <input type="radio"/>		North <input type="radio"/> South <input type="radio"/> East <input type="radio"/> West <input type="radio"/>		Vehicle Defect ① ② ③ ④ ⑤ ⑥	
PU <input type="radio"/> GC <input type="radio"/> Truck/Bus <input type="radio"/> ST <input type="radio"/> SM (Complete Truck/Bus Section)		Vehicle Use ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪		Color		Year	
First Name		Date of Birth		Sex		Position	
Middle		MMDDYYYY		<input type="radio"/> M <input type="radio"/> F		Restraint	
Last		Street Address		Hospital		Ambulance	
Injury <input type="radio"/> K <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> O		City		Ejected <input type="radio"/> Trapped <input type="radio"/>		Yes <input type="radio"/> Yes <input type="radio"/>	
Airbag Deployed <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Equipped		State		Zip		Phone Number	
First Name		Date of Birth		Sex		Position	
Middle		MMDDYYYY		<input type="radio"/> M <input type="radio"/> F		Restraint	
Last		Street Address		Hospital		Ambulance	
Injury <input type="radio"/> K <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> O		City		Ejected <input type="radio"/> Trapped <input type="radio"/>		Yes <input type="radio"/> Yes <input type="radio"/>	
Airbag Deployed <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Equipped		State		Zip		Phone Number	
<input type="radio"/> Owner <input type="radio"/> Witness <input type="radio"/> Uninjured Passenger		Name		Address		Phone Number	
<input type="radio"/> Owner <input type="radio"/> Witness <input type="radio"/> Uninjured Passenger		Name		Address		Phone Number	
Age		Pos.		Rest.			
Unit Reported on Front		Unit Reported Above		Crash Diagram and Remarks			
Action Prior		Action Prior					
Sequence of Events		Sequence of Events					
First Second Third Fourth		First Second Third Fourth					
Most Harmful (M)		Most Harmful (M)					
Unit Number		Carrier Name					
Address		City					
State		Carrier Source					
Zip		<input type="radio"/> Papers <input type="radio"/> Vehicle <input type="radio"/> Log Book <input type="radio"/> Driver					
GVWR		ICCMC					
Driver's CDL Type		CDL Restrictions					
<input type="radio"/> A <input type="radio"/> C <input type="radio"/> H <input type="radio"/> P <input type="radio"/> T		<input type="radio"/> 28 <input type="radio"/> 29 <input type="radio"/> 30					
<input type="radio"/> B <input type="radio"/> None <input type="radio"/> N <input type="radio"/> S <input type="radio"/> X		CDL Exempt <input type="radio"/> Farm <input type="radio"/> Other					
<input type="radio"/> Interstate <input type="radio"/> Intra (MI Only)		Vehicle Type <input type="radio"/> AS <input type="radio"/> AL <input type="radio"/> BS <input type="radio"/> CX					
<input type="radio"/> CDL Exempt <input type="radio"/> Farm <input type="radio"/> Other		<input type="radio"/> AA <input type="radio"/> AT <input type="radio"/> BB <input type="radio"/> BX					
<input type="radio"/> Other		<input type="radio"/> AH <input type="radio"/> AX <input type="radio"/> BH <input type="radio"/> CH					
<input type="radio"/> AN <input type="radio"/> AY <input type="radio"/> BN <input type="radio"/> CP		<input type="radio"/> AP <input type="radio"/> AZ <input type="radio"/> BP <input type="radio"/> CS					
<input type="radio"/> Medical Card <input type="radio"/> Y <input type="radio"/> N		<input type="radio"/> Hazardous Material <input type="radio"/> Placard <input type="radio"/> Cargo Spill					
<input type="radio"/> Class #							
UD-10 SERIAL NUMBER		Investigated at Scene		Reported Date/Time		Photos By	
SERIAL #		<input type="radio"/> Y <input type="radio"/> N		Investigator Name(s) & Badge # (Print Only)			

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
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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 seats.
- **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 that 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.

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Quick Facts

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2005 QUICK FACTS

- ★ Some exposure factor comparisons between 2005 and 2004 show motor vehicle registrations decreased **1.3** percent, the number of licensed drivers on Michigan roads decreased **0.1** percent, and vehicle mileage increased **1.3** percent.
- ★ The 2005 death rate remained constant at **1.09** deaths per 100 million miles of travel, below the ten-year average of **1.3** (1996-2005).
- ★ There were **1,129** persons killed and **90,510** persons injured in **350,838** reported motor vehicle traffic crashes in Michigan during 2005. Compared with the 2004 experience, deaths decreased **2.6** percent, persons injured decreased **9.2** percent, and total reported crashes decreased **5.9** percent.
- ★ There were **350,838** reported crashes, of which **1,030** were fatal, **66,729** were personal injury, and **283,079** were property damage only crashes.
- ★ Of all fatal crashes, **25.9** percent occurred at intersections.
- ★ Of all fatal crashes, **35.0** percent involved at least one drinking and/or drugged operator, bicyclist, or pedestrian, **25.2** percent involved drinking but no drugs, **4.3** percent involved drugs but no drinking, and **5.5** percent involved both drinking and drugs.
- ★ Excessive speed was indicated as the hazardous action by **12.5** percent of the drivers involved in fatal crashes.
- ★ In 2005 there were **126,064** single vehicle crashes, a decrease of **1.8** percent from last year's count of **128,360**.
- ★ Of the **350,838** total crashes, **126,064 (35.9%)** involved one vehicle.
- ★ Of the **1,030** fatal crashes, **483 (46.9%)** involved one vehicle.
- ★ Of the **317** alcohol-related fatal crashes, **207 (65.3%)** involved one vehicle. This is an 4.2 percent decrease from last year's figure of **216** single vehicle, alcohol-related fatal crashes.
- ★ Of the **1,682** drivers involved in fatal crashes, **12.4** percent were under 21 years of age and **21.5** percent of all drivers involved in fatal crashes were under 25 years of age.
- ★ Of the **10,120,860** persons living in Michigan [1] one out of every **8,964** was killed in a traffic crash; one out of every **112** persons was injured.
- ★ For each person killed, **80.2** 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 **138** persons, a decrease of **2** deaths from the 2004 figure.

- ★ For each pedestrian killed, there were **16.3** pedestrians injured.
- ★ Of the pedestrians killed, **35.5** percent were killed while crossing streets other than at intersections.
- ★ Of all pedestrians killed, **18.8** percent were under the age of 21 and **26.8** percent were 55 and older.
- ★ Children under the age of 16 accounted for **28.0** percent of the bicycle deaths.
- ★ Of the **610,816** drivers and injured passengers involved in crashes, **520,909** or **85.3** 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 2005.
- ★ Motor vehicle occupants age 75 to 110 had the highest reported restraint usage (**95.6%**) among age groups. Children age 11 to 15 had the lowest reported restraint usage (**79.3%**).
- ★ The economic loss in Michigan traffic crashes amounted to **\$9,079,563,900**. If costs were spread across the state's population this would translate into a loss of \$899 per state resident.

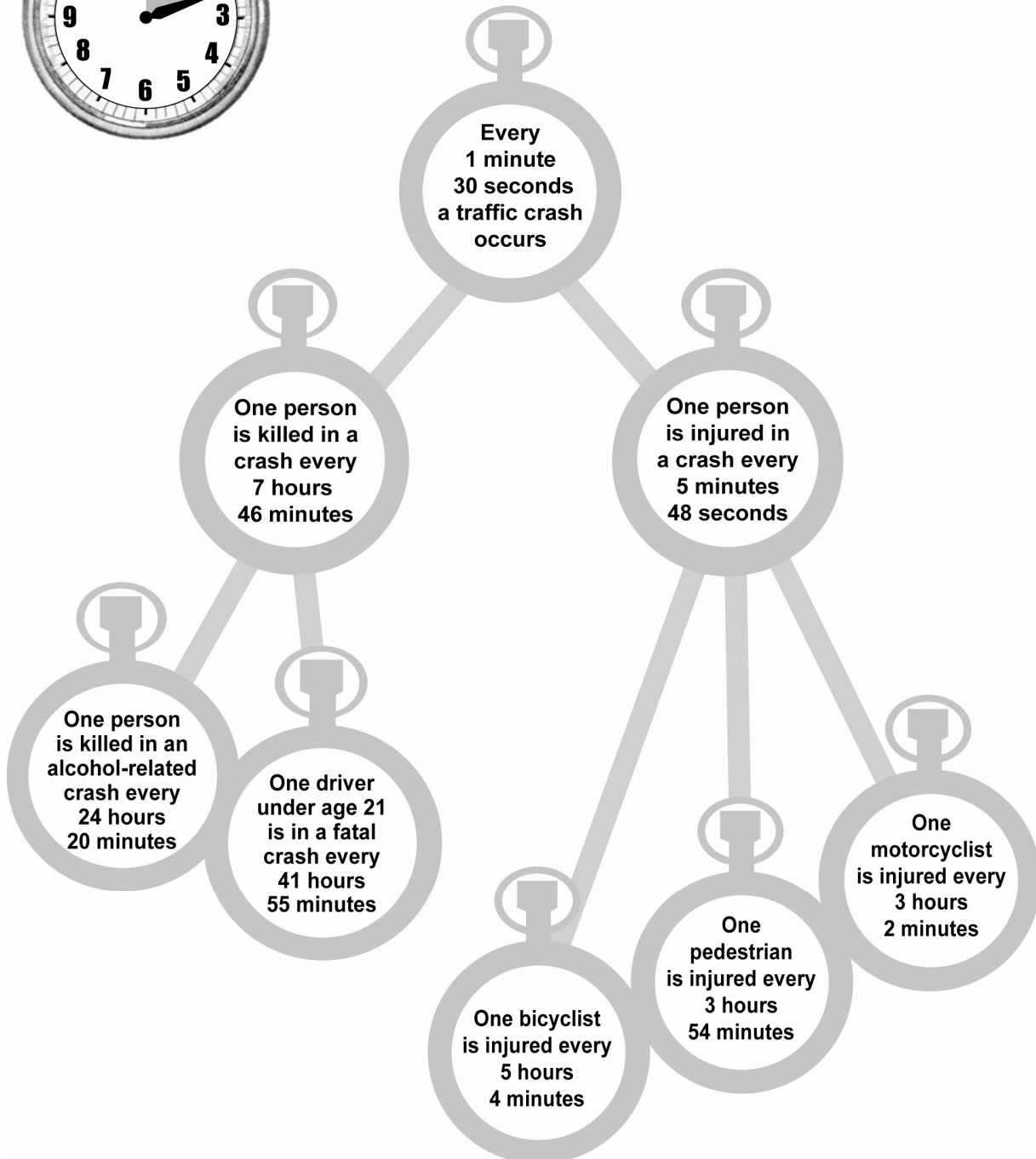
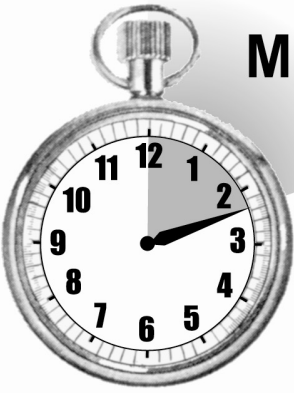
REPORTED STATEWIDE TRAFFIC CRASHES BY COUNTY IN MICHIGAN

COUNTY	All Crashes	Fatal	Injury	Property Damage	Inter-state	US Route	State Route	Local Street	Persons Killed	Persons Injured
Alcona	628	2	75	551	0	86	141	401	2	92
Alger	355	3	59	293	0	40	194	121	4	81
Allegan	3,417	20	637	2,760	257	370	704	2,086	21	910
Alpena	938	6	131	801	0	186	172	580	6	173
Antrim	1,055	5	156	894	0	207	223	625	6	209
Arenac	910	2	153	755	165	224	96	425	2	215
Baraga	390	1	59	330	0	170	61	159	1	83
Barry	2,278	8	331	1,939	0	0	889	1,389	8	452
Bay	3,317	15	707	2,595	285	155	1,033	1,844	19	954
Benzie	623	3	92	528	0	150	102	371	3	123
Berrien	5,108	21	1,025	4,062	802	509	1,048	2,749	26	1,443
Branch	2,238	9	308	1,921	203	463	106	1,466	10	429
Calhoun	6,130	16	924	5,190	1,339	0	1,391	3,400	16	1,199
Cass	2,034	10	339	1,685	0	210	567	1,257	10	470
Charlevoix	1,164	3	158	1,003	0	367	189	608	3	219
Cheboygan	1,109	8	227	874	199	78	244	588	8	302
Chippewa	1,197	1	210	986	285	0	310	602	1	284
Clare	1,372	7	190	1,175	0	392	231	749	8	268
Clinton	2,828	12	432	2,384	443	349	342	1,694	17	616
Crawford	649	6	103	540	162	19	211	257	6	135
Delta	1,994	2	240	1,752	0	601	311	1,082	2	331
Dickinson	1,147	3	147	997	0	397	314	436	3	183
Eaton	4,181	11	640	3,530	682	0	1,370	2,129	11	877
Emmet	1,619	7	245	1,367	1	604	123	891	7	332
Genesee	13,925	42	3,360	10,523	2,217	589	1,710	9,409	49	4,799
Gladwin	847	1	103	743	0	0	336	511	1	144
Gogebic	372	0	70	302	0	201	27	144	0	87
Grand Traverse	3,496	6	593	2,897	0	907	351	2,238	7	820
Gratiot	1,704	5	227	1,472	0	456	266	982	5	306
Hillsdale	2,041	9	294	1,738	0	232	471	1,338	10	419
Houghton	1,127	6	202	919	0	392	290	445	6	282
Huron	1,761	6	219	1,536	0	0	761	1,000	7	311
Ingham	10,663	27	1,889	8,747	1,803	481	2,130	6,249	27	2,467
Ionia	2,776	9	374	2,393	321	0	759	1,696	9	510
Iosco	959	4	169	786	0	229	221	509	4	234
Iron	739	1	70	668	0	297	117	325	1	98
Isabella	3,083	5	490	2,588	0	641	355	2,087	5	689
Jackson	6,556	14	1,125	5,417	1,026	361	991	4,178	16	1,521
Kalamazoo	9,182	26	1,619	7,537	1,142	600	1,427	6,013	26	2,114
Kalkaska	680	3	132	545	0	141	145	394	3	182
Kent	21,447	49	4,309	17,089	2,164	1,758	4,149	13,376	52	5,830
Keweenaw	80	0	16	64	0	28	9	43	0	17
Lake	456	2	79	375	0	83	62	311	3	107
Lapeer	3,405	20	553	2,832	264	0	944	2,197	28	736
Leelanau	576	5	71	500	0	0	246	330	5	102
Lenawee	3,203	15	629	2,559	0	632	815	1,756	16	881

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	5,628	16	992	4,620	1,130	486	663	3,349	18	1,333
Luce	245	1	40	204	0	0	161	84	1	54
Mackinac	743	5	102	636	167	166	172	238	5	138
Macomb	25,261	41	5,374	19,846	2,645	0	6,730	15,886	44	7,299
Manistee	964	4	119	841	0	261	159	544	7	164
Marquette	2,051	6	383	1,662	0	706	276	1,069	7	521
Mason	1,515	8	206	1,301	0	523	88	904	8	298
Mecosta	2,246	5	299	1,942	0	318	769	1,159	5	386
Menominee	1,358	3	194	1,161	0	496	135	727	3	273
Midland	2,531	12	410	2,109	0	344	416	1,771	16	565
Missaukee	658	2	80	576	0	0	222	436	2	109
Monroe	4,709	20	1,008	3,681	723	861	657	2,468	20	1,452
Montcalm	3,085	14	440	2,631	0	121	1,078	1,886	17	647
Montmorency	386	2	68	316	0	0	151	235	2	99
Muskegon	5,562	16	1,215	4,331	84	1036	705	3,737	16	1,646
Newaygo	1,866	9	293	1,564	0	0	653	1,213	11	413
Oakland	41,958	77	8,509	33,372	6,495	2,267	6,898	26,298	88	11,266
Oceana	1,110	6	177	927	0	255	131	724	6	256
Ogemaw	1,028	5	159	864	145	0	309	574	5	219
Ontonagon	409	0	41	368	0	115	186	108	0	53
Osceola	1,193	4	152	1,037	0	365	174	654	4	209
Oscoda	345	3	49	293	0	0	152	193	3	74
Otsego	938	4	179	755	224	0	224	490	5	243
Ottawa	7,973	29	1,558	6,386	713	1,113	797	5,350	30	2,093
Presque Isle	594	1	57	536	0	117	144	333	1	71
Roscommon	999	5	185	809	146	135	274	444	5	254
Saginaw	6,731	28	1,470	5,233	688	0	2,077	3,966	28	2,025
St. Clair	4,774	18	1,044	3,712	895	0	951	2,928	20	1,463
St. Joseph	2,197	9	357	1,831	0	446	513	1,238	12	472
Sanilac	1,846	7	248	1,591	0	0	754	1,092	7	357
Schoolcraft	493	4	65	424	0	158	173	162	4	97
Shiawassee	2,574	9	427	2,138	249	0	781	1,544	9	595
Tuscola	2,076	12	324	1,740	0	0	718	1,358	13	458
Van Buren	2,687	15	483	2,189	533	0	485	1,669	19	685
Washtenaw	11,795	32	2,368	9,395	1,677	1,704	1,047	7,367	35	3,143
Wayne	63,159	156	13,246	49,757	7,828	3,392	10,124	41,815	166	17,724
Wexford	1,392	6	227	1,159	0	410	409	573	7	320
Unknown	0	0	0	0	0	0	0	0	0	0
Totals	350,838	1,030	66,729	283,079	38,102	29,400	67,310	216,026	1,129	90,510

Michigan's Crash Watch 2005

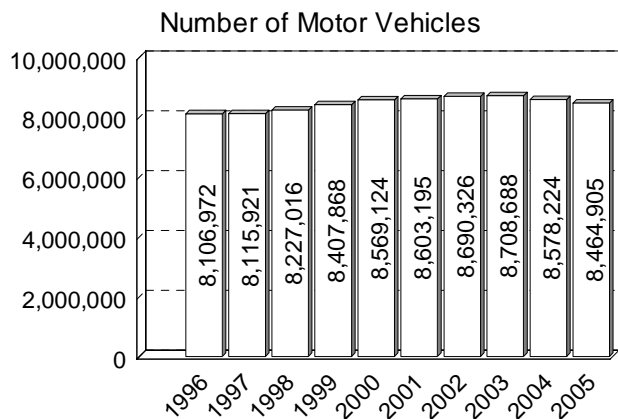


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**Historical
Information**
10-, 5-, and 1-year

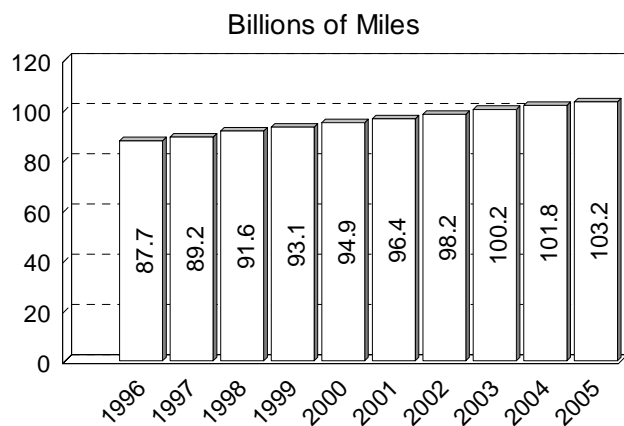
10 YEAR

VEHICLE REGISTRATIONS



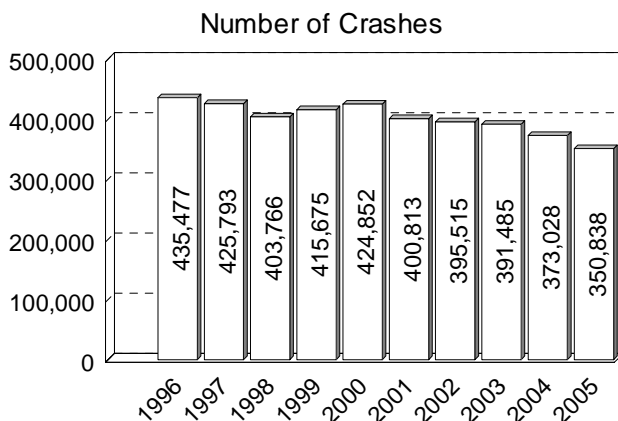
Vehicle registrations dropped for the second time in the ten-year period in 2005.

VEHICLE MILES TRAVELED



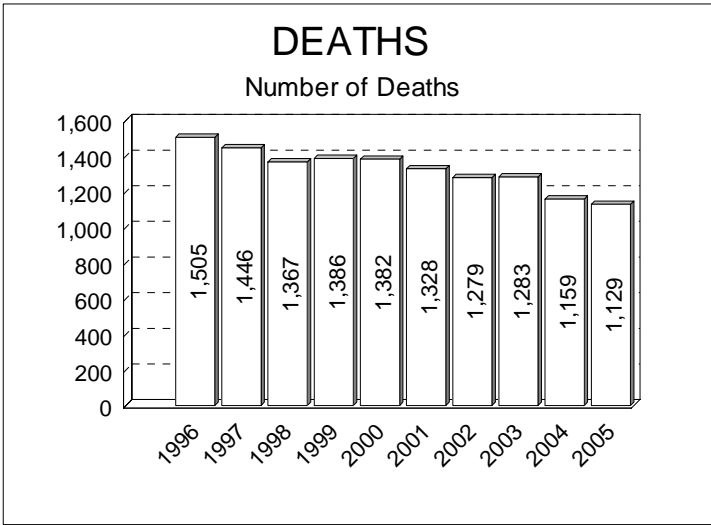
Vehicle miles traveled have increased 17.7 percent since 1996, reaching 103.2 billion miles in 2005.

CRASHES

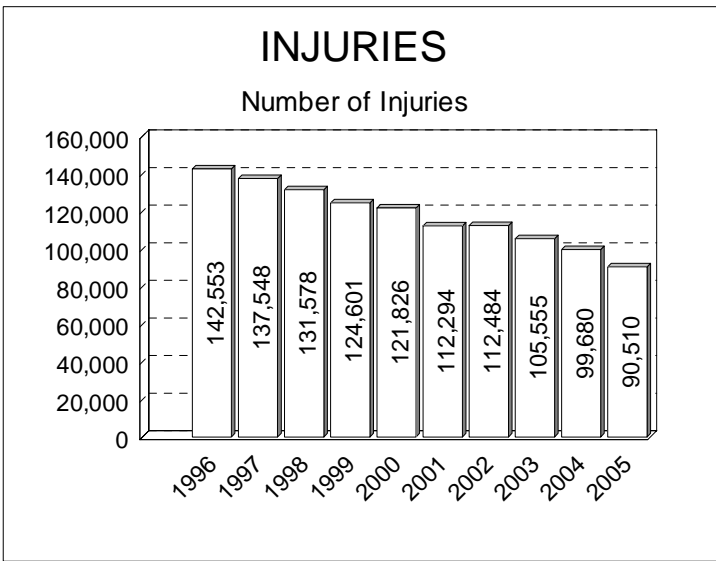


There were 350,838 total crashes statewide in 2005, a 19.4 percent decrease from 1996.

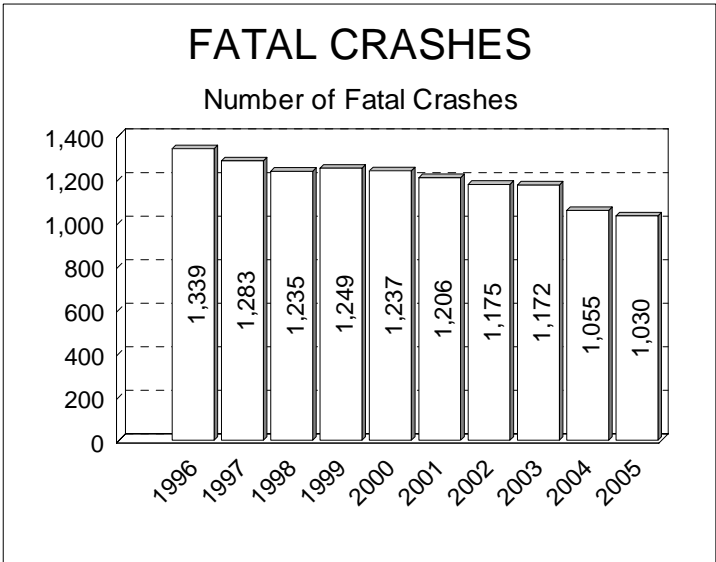
10 YEAR TRENDS (continued)



In 2005, 1,129 people died in motor vehicle crashes, a decrease of 25 percent from 1996.



90,510 people received nonfatal injuries in motor vehicle crashes in 2005, down 36.5 percent from 142,553 in 1996.

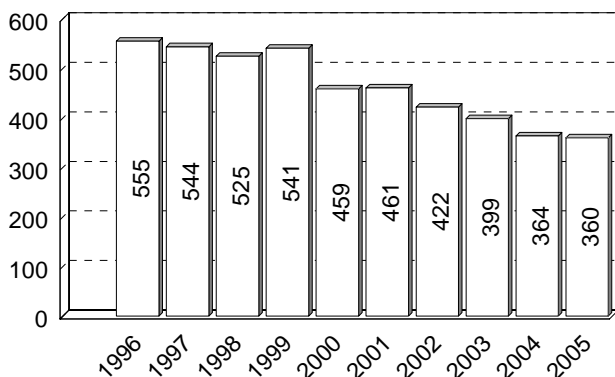


In 2005, there were 1,030 fatal crashes, down 23.1 percent from 1,339 in 1996.

10 YEAR

HBD FATALITIES

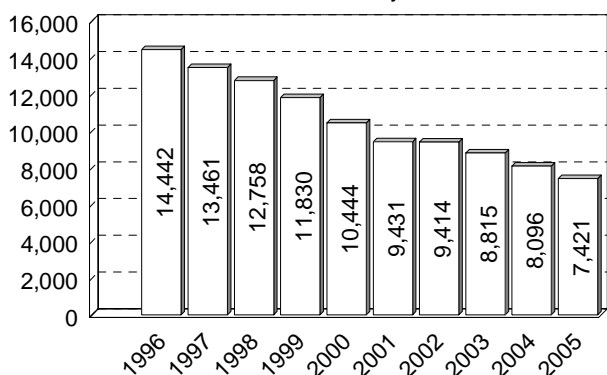
Number of HBD Fatalities



Deaths in alcohol-related crashes decreased 35.1 percent over the last ten years.

HBD INJURIES

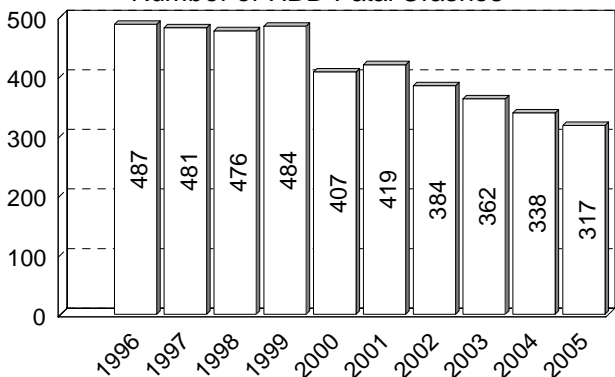
Number of HBD Injuries



Mirroring the trend in deaths, HBD injuries have decreased over the last ten years. In 2005, there were 7,421 injuries in crashes where the operator had been drinking (HBD), down 48.6 percent from 1996.

HBD FATAL CRASHES

Number of HBD Fatal Crashes

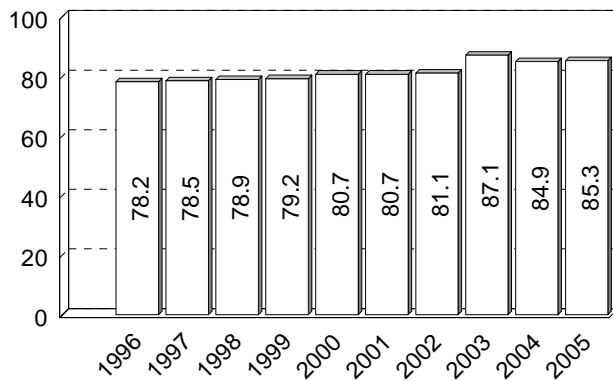


Alcohol involvement in fatal crashes has also decreased over the ten-year period. In 2005, there were 317 HBD fatal crashes where the operator had been drinking (HBD), down 34.9 percent from 1996.

Note: The 2005 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 had been reported prior to 2000.

RESTRAINT USAGE

Annual Average Percentage of Occupants

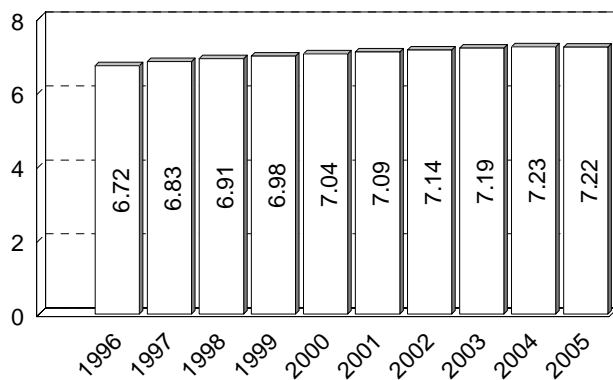


10 YEAR TRENDS (continued)

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 9.1 percent over the last ten years.

DRIVERS IN MICHIGAN

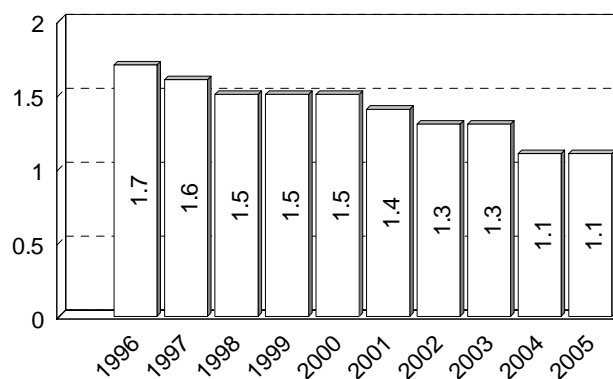
Licensed Drivers in Millions



There were 7,217,208 licensed drivers on Michigan roadways in 2005, an increase of 7.4 percent from 1996.

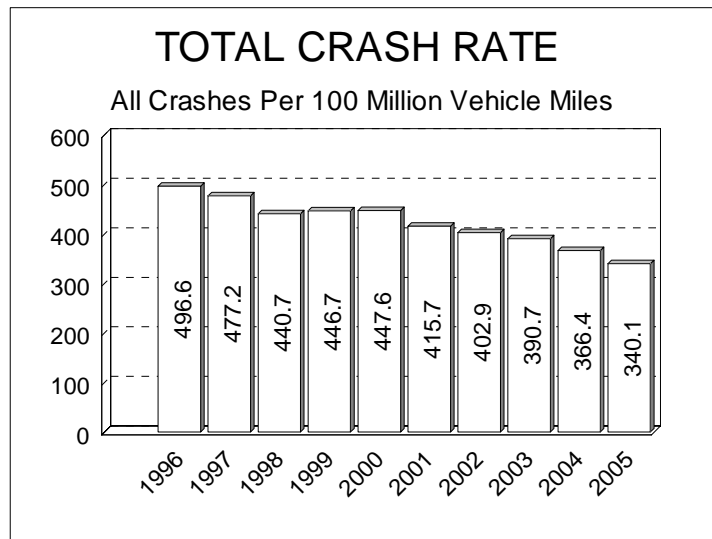
MILEAGE DEATH RATE

Deaths Per 100 Million Vehicle Miles

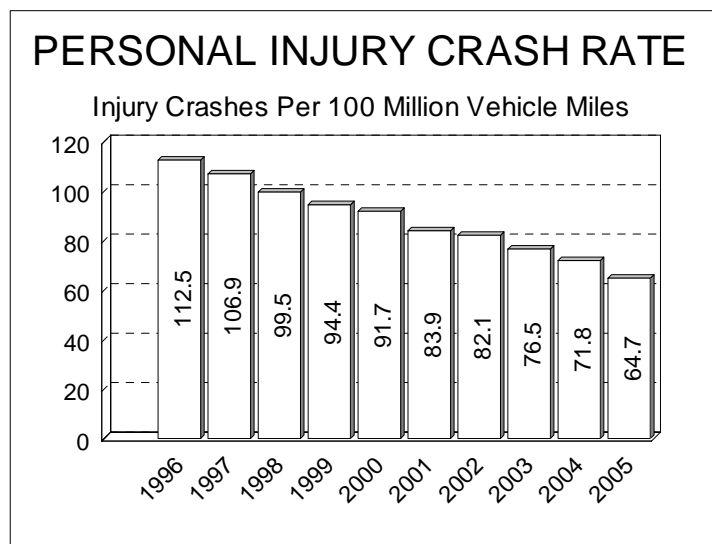


The 1.1 death rate in 2005 is a 35.3 percent decrease from the ten-year high of 1.7 in 1996.

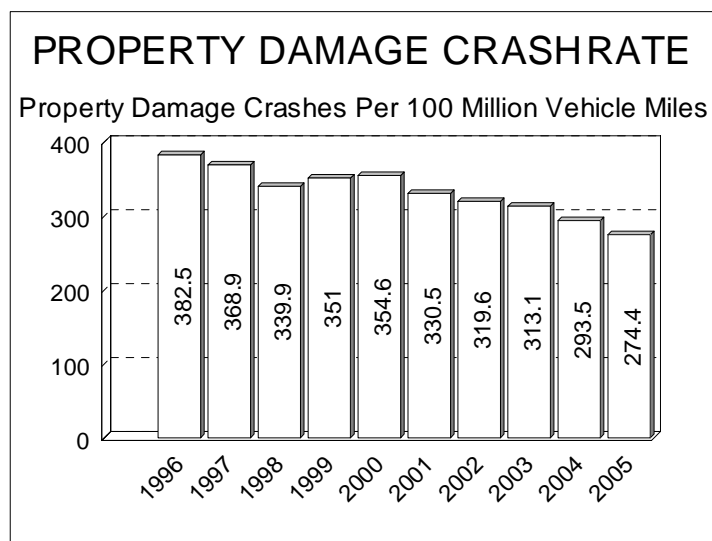
10 YEAR



The ten-year total crash rate peaked in 1996 at 496.6, then decreased by 31.5 percent to 340.1 in 2005.



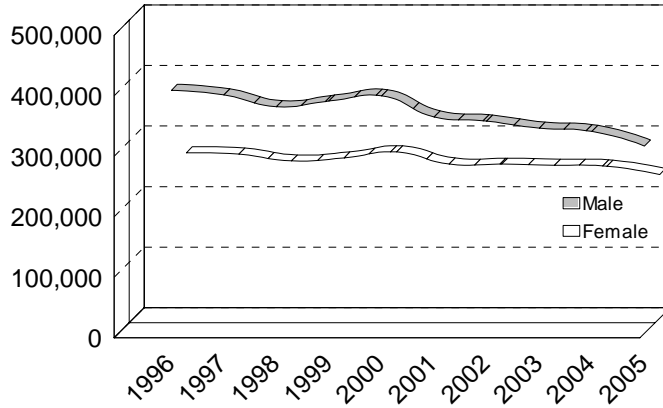
The personal injury crash rate has been steadily decreasing since 1996. The 64.7 personal injury crash rate in 2005 is a 42.5 percent decrease from 1996.



The 274.4 property damage crash rate in 2005 is a 28.3 percent decrease from 1996.

MALE vs. FEMALE DRIVERS

Number in All Crashes

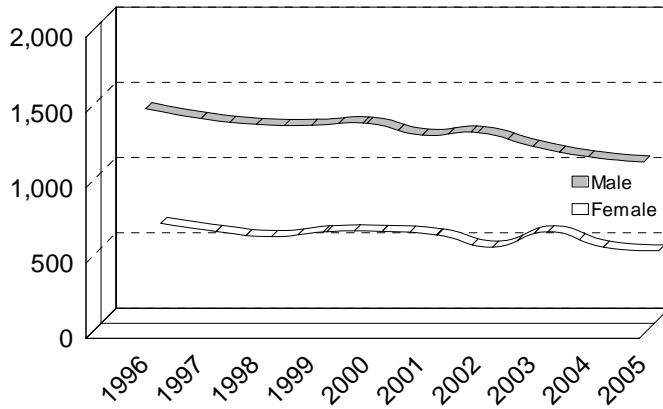


10 YEAR TRENDS (continued)



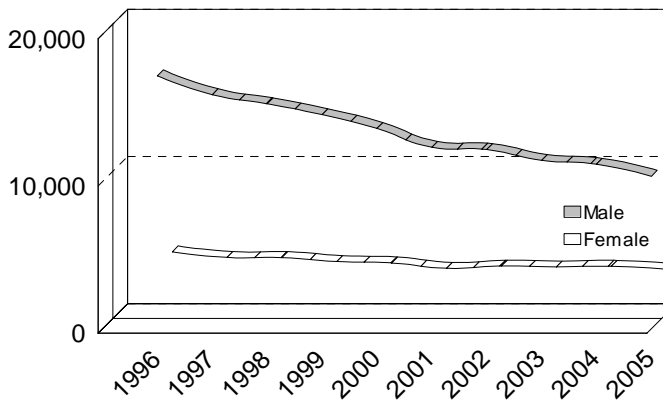
MALE vs. FEMALE DRIVERS

Number in Fatal Crashes



MALE vs. FEMALE DRINKING DRIVERS

Number in All Crashes



DRIVERS IN ALL CRASHES		
	Male	Female
1996	401,350	273,361
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

Male drivers accounted for 52.2 percent of all drivers in crashes in 2005. The 309,487 male driver count is down 22.9 percent from 1996.

Note: 7.7 percent of all drivers (45,841) were coded as unknown gender in 2005.

DRIVERS IN FATAL CRASHES		
	Male	Female
1996	1,497	634
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

Male drivers made up 67.8 percent of all drivers in fatal crashes in 2005. The 1,141 male driver count is down 23.8 percent from 1996.

Note: 5.3 percent of drivers (89) in fatal crashes were coded as unknown gender in 2005.

DRINKING DRIVERS IN ALL CRASHES		
	Male	Female
1996	17,186	4,225
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

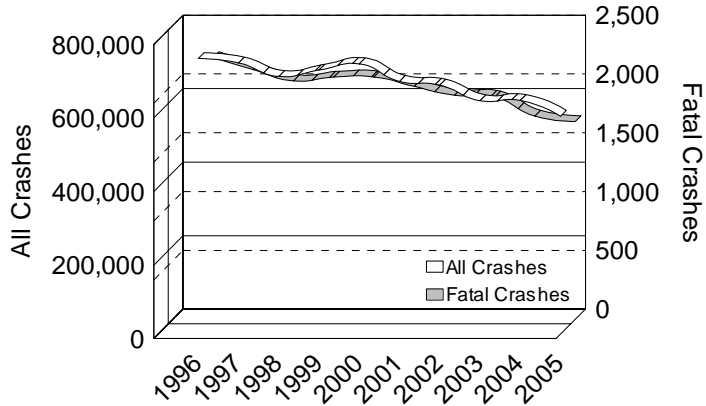
Note: The 2005 information provided for alcohol contains data for alcohol-related crashes only. This figure DOES NOT include the combined number for alcohol- and drug-related crashes as had been reported prior to 2000.

Male drivers have always accounted for the majority of drinking drivers in all crashes. The 10,359 male driver count is down 39.7 percent from 1996.

Note: 0.4 percent of all drinking drivers (48) were coded as unknown gender in 2005.

ALL DRIVERS

Number in All and Fatal Crashes

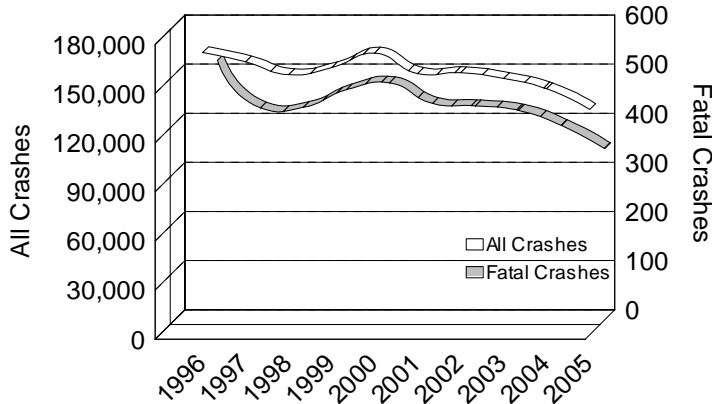


10 YEAR TRENDS (continued)



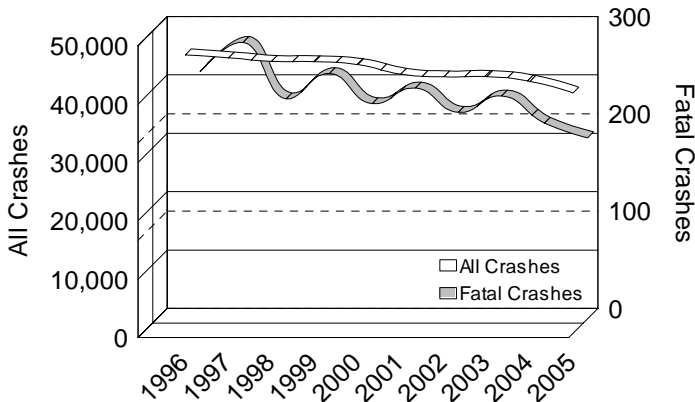
TEEN/YOUNG ADULT DRIVERS

Age 16-24: Number in All and Fatal Crashes



ELDERLY DRIVERS

Age 65-110: Number in All and Fatal Crashes



10 YEAR

ALL DRIVERS		
	All Crashes	Fatal Crashes
1996	750,103	2,226
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

Driver involvement in all crashes decreased 21.0 percent over the ten-year period.

Driver involvement in fatal crashes decreased 24.4 percent over the ten-year period.

TEEN/YOUNG ADULT DRIVERS		
	All Crashes	Fatal Crashes
1996	172,442	529
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

Teen/young adult drivers (age 16-24) represent 14.6 percent of the licensed drivers in 2005.

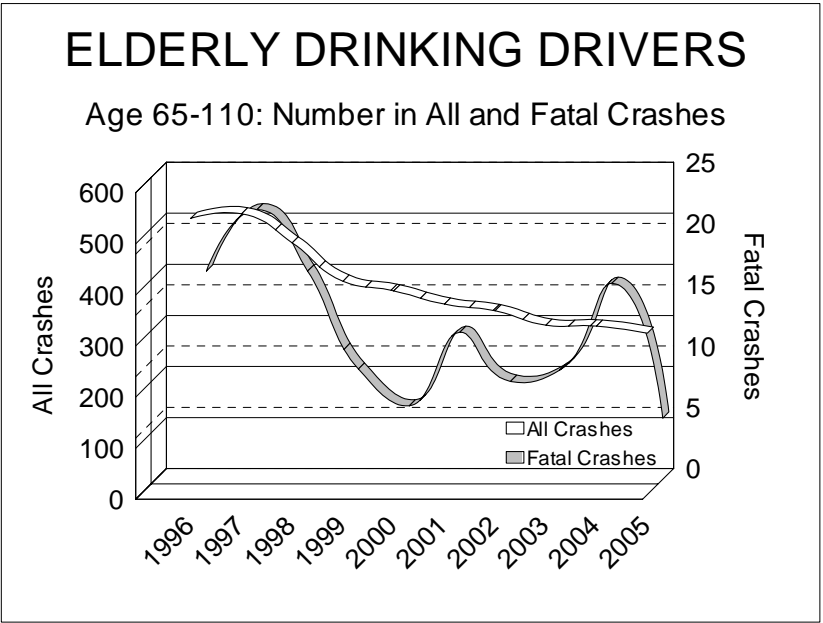
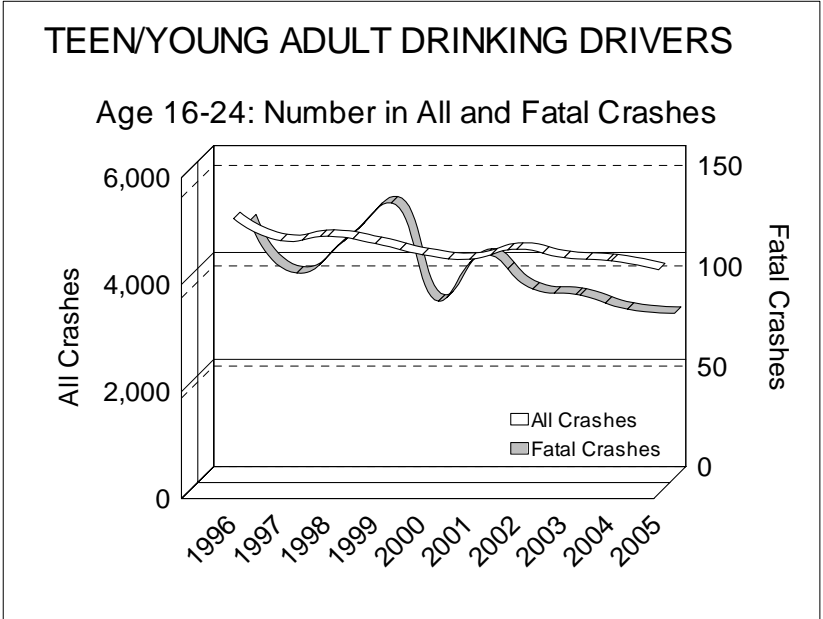
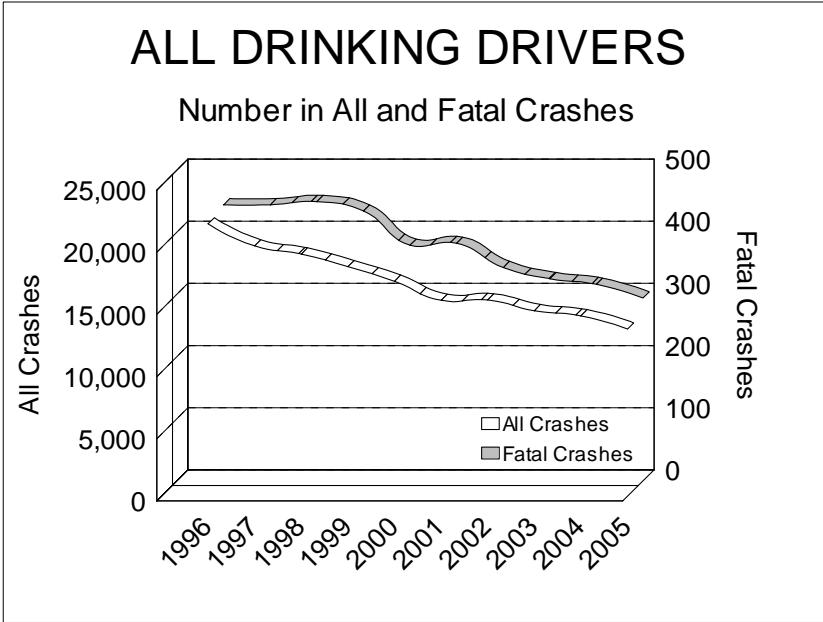
The number of teen/young adult drivers in all crashes has decreased by 20.2 percent since 1996. Their involvement in fatal crashes decreased 34.0 percent during the same time period.

ELDERLY DRIVERS		
	All Crashes	Fatal Crashes
1996	47,695	254
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

Elderly drivers (age 65-110) represent 14.6 percent of the licensed drivers in 2005.

The number of drivers age 65 and older in all crashes has decreased 13.7 percent since 1996. Their involvement in fatal crashes decreased 26.8 percent during the same time period.

10 YEAR TRENDS (continued)



10 YEAR

DRINKING DRIVERS		
	All Crashes	Fatal Crashes
1996	21,919	444
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

Drinking driver involvement in all crashes decreased by 38.6 percent from 1996. Drinking driver involvement in fatal crashes decreased by 33.8 percent from 1996.

TEEN/YOUNG ADULT DRINKING DRIVERS		
	All Crashes	Fatal Crashes
1996	5,142	128
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

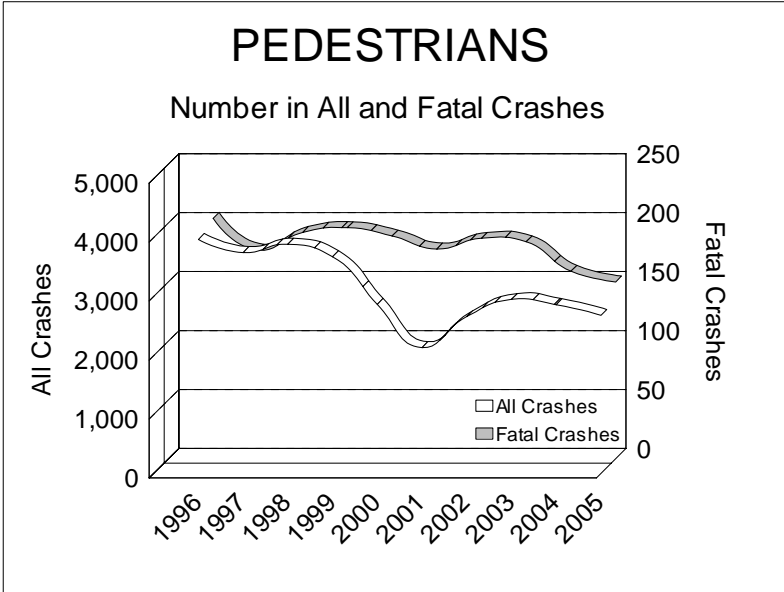
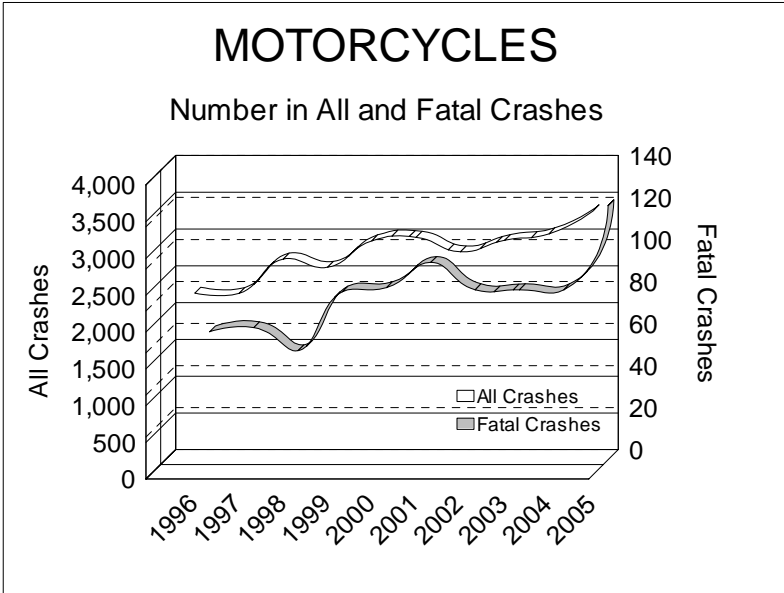
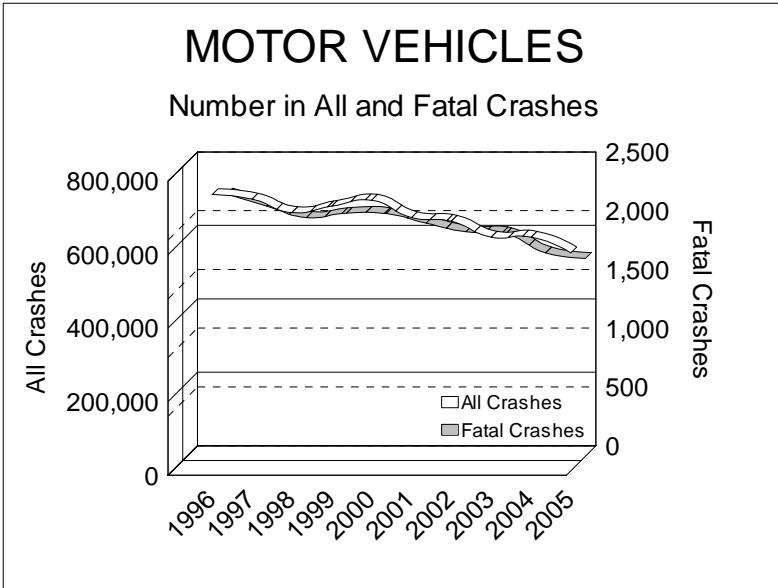
Following the trend for all drinking drivers, the number of teen/young adult drinking drivers (age 16-24) in all crashes decreased by 18.5 percent, and their involvement in fatal crashes decreased by 35.9 percent from 1996.

ELDERLY DRINKING DRIVERS		
	All Crashes	Fatal Crashes
1996	541	17
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

The number of elderly drinking drivers (age 65-110) in all crashes continues to decrease, reaching a ten-year low of 316 in 2005.

Note: The 2005 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 had been reported prior to 2000.

10 YEAR TRENDS (continued)



10 YEAR

MOTOR VEHICLES		
	All Crashes	Fatal Crashes
1996	751,804	2,229
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

There were 1,682 motor vehicles involved in fatal crashes in 2005, down 24.5 percent from 1996.

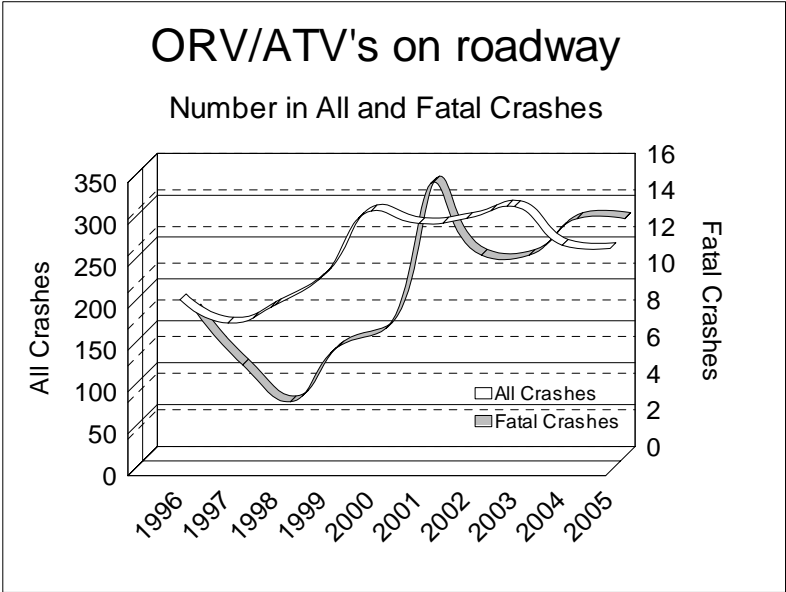
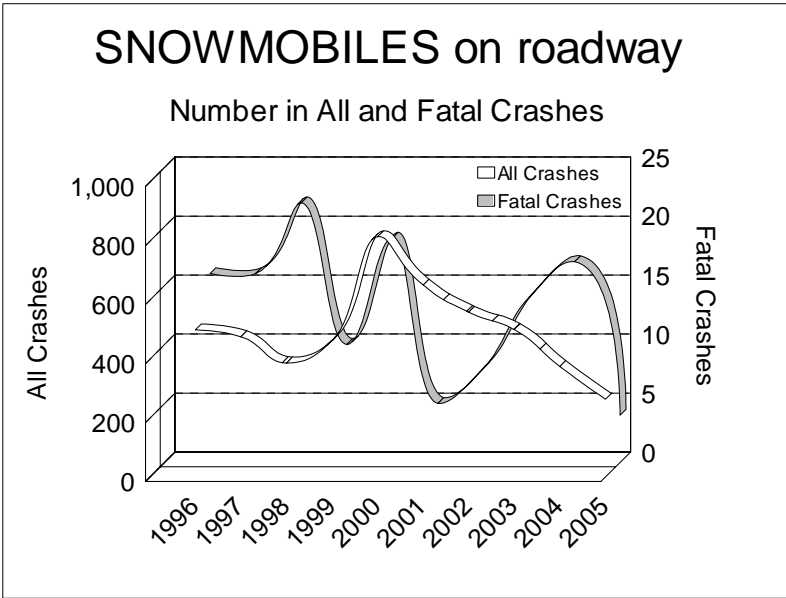
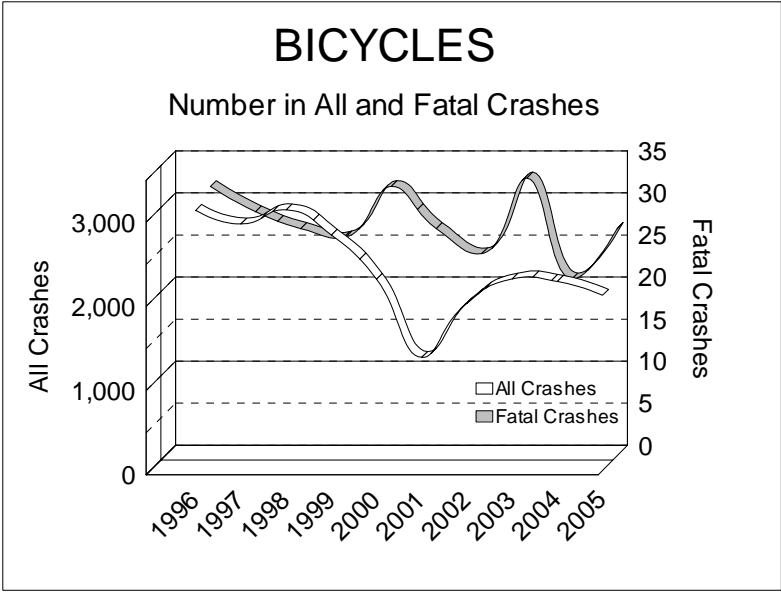
MOTORCYCLES		
	All Crashes	Fatal Crashes
1996	2,468	61
1997	2,465	63
1998	2,931	52
1999	2,820	80
2000	3,180	82
2001	3,228	94
2002	3,030	81
2003	3,187	81
2004	3,276	81
2005	3,589	121

The number of motorcycles involved in fatal crashes has increased 98.4 percent in the ten-year period.

PEDESTRIANS		
	All Crashes	Fatal Crashes
1996	3,971	204
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

There were 150 pedestrians involved in fatal crashes in 2005, down 26.5 percent from 1996.

10 YEAR TRENDS (continued)



10 YEAR

BICYCLES		
	All Crashes	Fatal Crashes
1996	3,091	32
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

There were 27 bicycles involved in fatal crashes in 2005, down 15.6 percent from 1996.

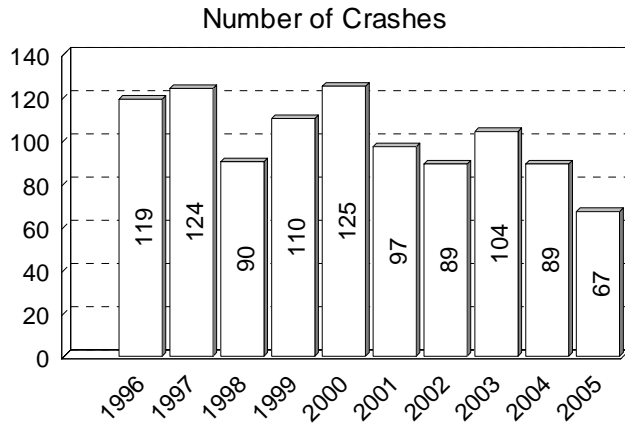
SNOWMOBILES on Michigan roadways		
	All Crashes	Fatal Crashes
1996	499	16
1997	476	16
1998	387	22
1999	463	10
2000	815	19
2001	651	5
2002	559	8
2003	500	14
2004	375	17
2005	264	4

The 264 snowmobile crash count is down 47.1 percent from 1996. 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
1996	205	8
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

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.

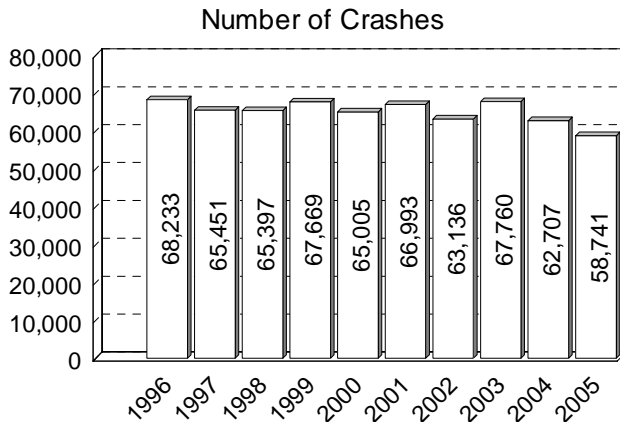
VEHICLE-TRAIN CRASHES



10 YEAR TRENDS (continued)

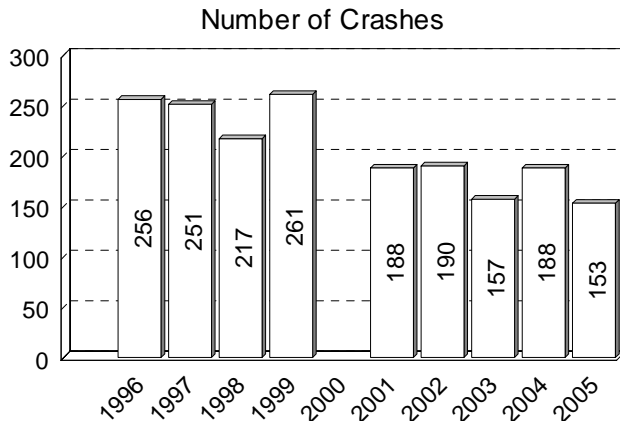
67 vehicle-train crashes occurred in 2005, a decrease of 43.7 percent in the ten-year period.

VEHICLE-DEER CRASHES



The number of vehicle-deer crashes has decreased 13.9 percent in the ten-year period.

FARM EQUIPMENT CRASHES

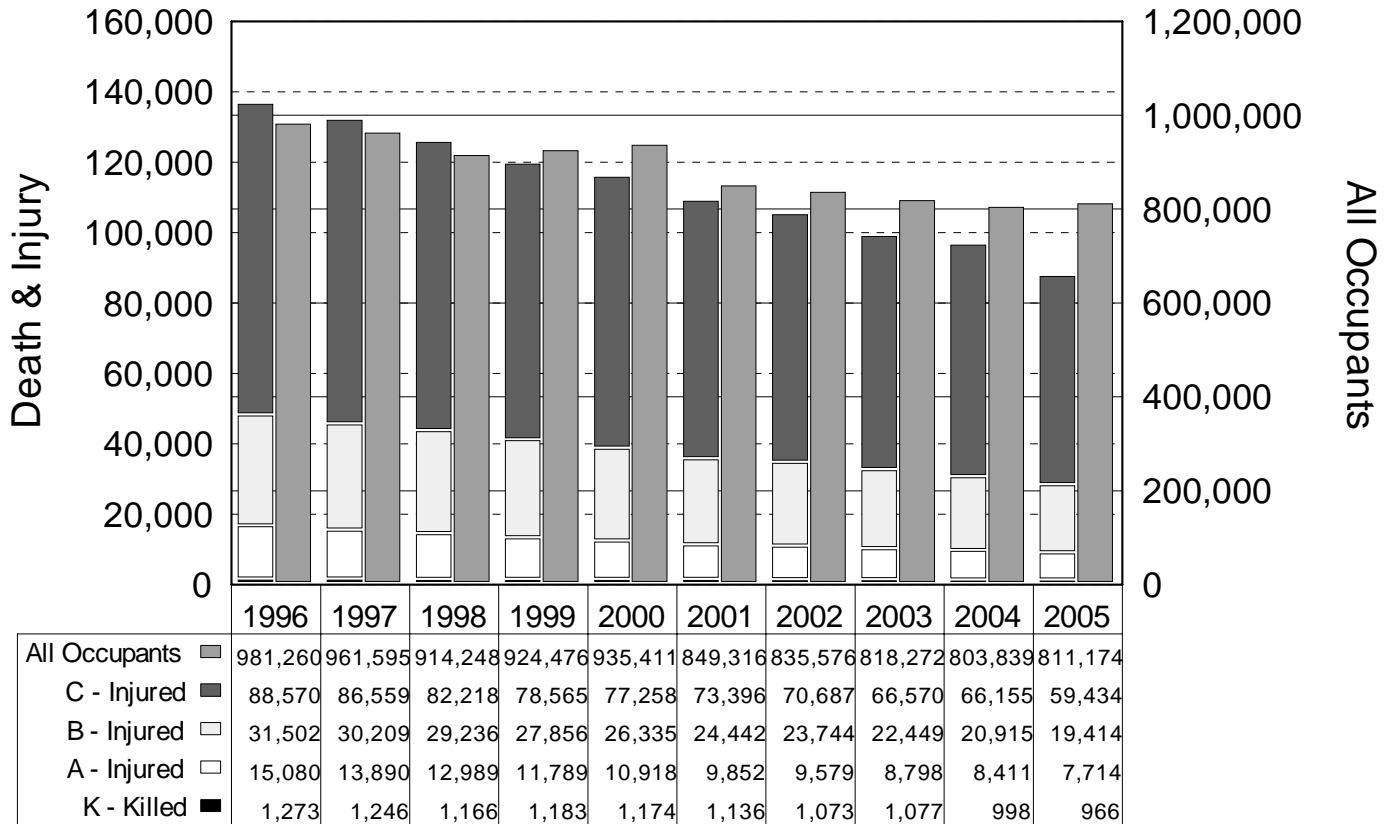


The 153 farm equipment crashes in 2005 marks a 40.2 percent decrease in the ten-year period.

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.

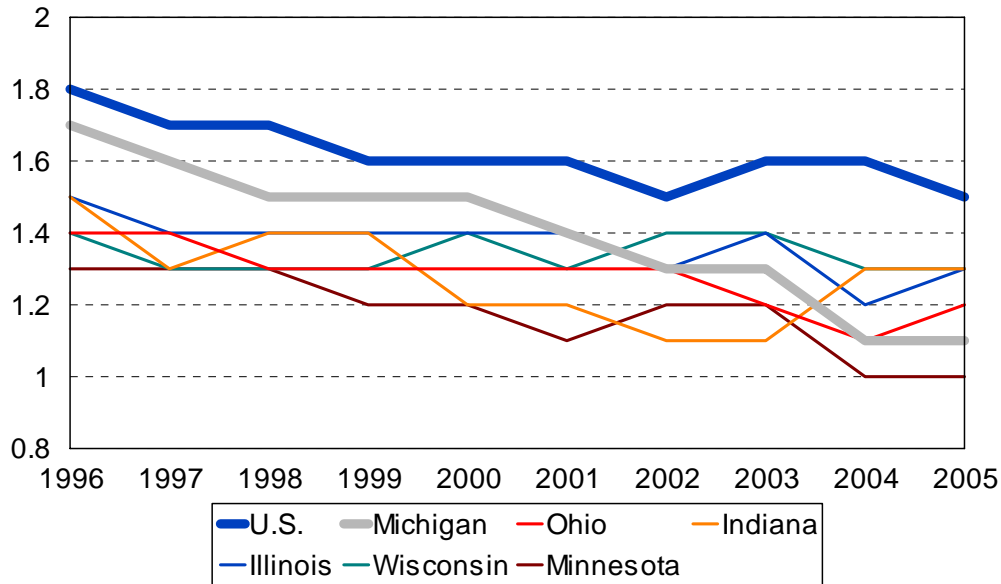
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10 YEAR

MILEAGE DEATH RATES 1996 - 2005

Comparison - Michigan to U.S. and Surrounding States



	U.S.	Michigan	Ohio	Indiana	Illinois	Wisconsin	Minnesota
1996	1.8	1.7	1.4	1.5	1.5	1.4	1.3
1997	1.7	1.6	1.4	1.3	1.4	1.3	1.3
1998	1.7	1.5	1.3	1.4	1.4	1.3	1.3
1999	1.6	1.5	1.3	1.4	1.4	1.3	1.2
2000	1.6	1.5	1.3	1.2	1.4	1.4	1.2
2001	1.6	1.4	1.3	1.2	1.4	1.3	1.1
2002	1.5	1.3	1.3	1.1	1.3	1.4	1.2
2003	1.6	1.3	1.2	1.1	1.4	1.4	1.2
2004	1.6	1.1	1.1	1.3	1.2	1.3	1.0
2005	1.5	1.1	1.2	1.3	1.3	1.3	1.0

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

10 YEAR



MICHIGAN AND SURROUNDING STATES COMPARISON OF FATALITIES AND VMT

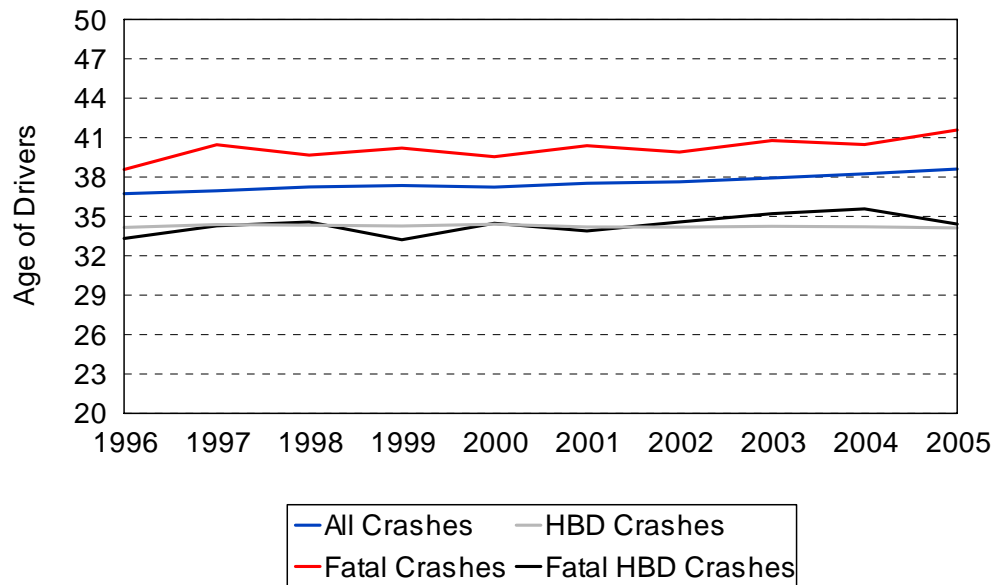
Year	U.S. Persons Killed	Michigan Persons Killed	Ohio Persons Killed	Indiana Persons Killed	Illinois Persons Killed	Wisconsin Persons Killed	Minnesota Persons Killed
1996	43,649	1,505	1,395	982	1,477	759	576
1997	43,458	1,446	1,439	936	1,393	721	600
1998	43,501	1,367	1,423	978	1,393	709	650
1999	42,401	1,386	1,430	1,017	1,456	744	626
2000	43,354	1,382	1,361	875	1,418	801	625
2001	43,788	1,328	1,379	895	1,414	764	568
2002	44,100	1,279	1,417	792	1,420	805	657
2003	44,800	1,283	1,278	833	1,454	836	655
2004	45,300	1,159	1,285	947	1,355	784	567
2005	45,800	1,129	1,326	938	1,360	801	559

The National Safety Council estimates a national increase in traffic fatalities of 1.1 percent between 2004 (45,300) and 2005 (45,800).

Year	U.S. VMT	Michigan VMT	Ohio VMT	Indiana VMT	Illinois VMT	Wisconsin VMT	Minnesota VMT
1996	2,486	87.7	102.8	66.0	96.9	52.6	45.2
1997	2,562	89.2	104.8	70.4	98.7	53.7	46.9
1998	2,632	91.6	106.0	70.7	100.9	56.0	48.5
1999	2,691	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	2,797	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	2,880	100.2	109.9	74.4	106.5	59.6	55.4
2004	2,920	101.8	112.4	74.5	108.9	60.5	56.5
2005	2,967	103.2	111.5	74.3	107.9	60.0	56.5

VMT described in billions of miles

AVERAGE AGE OF DRIVERS IN CRASHES 1996 - 2005

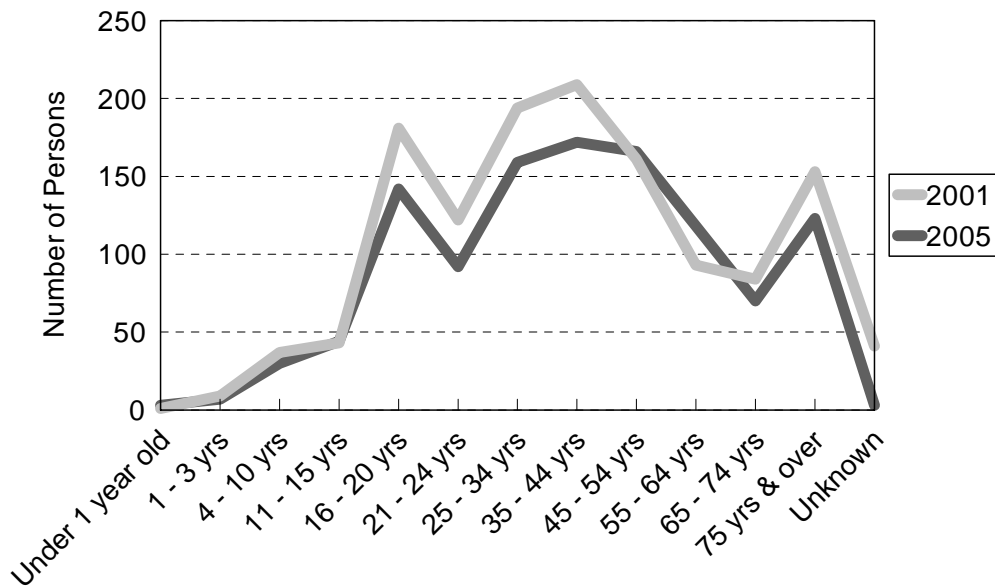


Reflecting the demographic trend of increasing age in the general population, the average age of drivers involved in all crashes, fatal crashes, and fatal HBD crashes has increased over the ten-year period. The average age of drivers in HBD crashes has remained flat.

TREND DATA FOR FATALITIES

TREND DATA FOR FATALITIES	2001	2002	2003	2004	2005
Age of Persons Killed, Total					
Under 1 year old	1	6	4	4	3
1 - 3 years	9	8	9	12	7
4 - 10 years	37	25	31	26	30
11 - 15 years	43	51	50	41	44
16 - 20 years	181	184	165	172	142
21 - 24 years	122	111	125	111	92
25 - 34 years	194	186	161	171	159
35 - 44 years	209	196	184	165	172
45 - 54 years	161	154	178	153	166
55 - 64 years	93	90	126	107	118
65 - 74 years	84	80	88	67	70
75 years and over	153	139	145	124	123
Unknown	41	49	17	6	3
Totals	1,328	1,279	1,283	1,159	1,129

Age of Persons Killed, Total



5 YEAR

TREND DATA FOR FATALITIES	2001	2002	2003	2004	2005
---------------------------	------	------	------	------	------

Age of Drivers Involved in Fatal Crashes

13 years and under	3	4	5	3	5
14 years	0	7	3	2	2
15 years	9	8	7	10	6
16 years	35	50	40	29	25
17 years	55	44	48	50	37
18 years	50	57	60	50	51
19 years	73	57	46	55	45
20 years	51	51	43	44	38
21 - 24 years	177	177	190	168	153
25 - 34 years	351	336	337	297	269
35 - 44 years	347	328	356	335	292
45 - 54 years	275	255	280	259	307
55 - 64 years	140	147	161	149	169
65 - 69 years	50	48	40	50	39
70 - 74 years	51	38	53	43	38
75 - 79 years	55	53	51	38	35
80 - 84 years	50	38	46	37	43
85 - 89 years	24	20	32	25	22
90 years and over	7	15	7	8	9
Unknown	178	174	87	76	97
Totals	1,981	1,907	1,892	1,728	1,682

Age of Drivers Involved in Single Vehicle Fatal Crashes

13 years and under	2	2	4	0	1
14 years	0	3	1	1	1
15 years	4	3	3	7	2
16 years	11	17	10	14	10
17 years	13	18	15	13	12
18 years	18	20	28	18	13
19 years	29	25	17	22	13
20 years	24	20	14	12	16
21 - 24 years	74	65	70	73	60
25 - 34 years	106	101	85	89	94
35 - 44 years	98	85	121	87	77
45 - 54 years	71	73	62	65	70
55 - 64 years	36	32	38	38	44
65 - 69 years	12	5	16	10	13
70 - 74 years	13	8	13	10	9
75 - 79 years	11	15	13	5	5
80 - 84 years	11	5	8	7	15
85 - 89 years	3	4	4	6	3
90 years and over	0	1	2	1	0
Unknown	53	39	25	23	25
Totals	589	541	549	501	483

5 YEAR

TREND DATA FOR FATALITIES	2001	2002	2003	2004	2005
---------------------------	------	------	------	------	------

Age of Bicyclists Killed

Under 1 year old	0	0	0	0	0
1 - 3 years	0	0	0	0	0
4 - 10 years	4	0	4	4	5
11 - 15 years	2	5	6	3	2
16 - 20 years	3	1	3	0	3
21 - 24 years	0	2	3	1	0
25 - 34 years	1	3	0	1	1
35 - 44 years	7	3	4	3	9
45 - 54 years	4	1	8	7	1
55 - 64 years	2	0	2	2	1
65 - 74 years	1	3	2	0	3
75 years and over	2	2	0	0	0
Unknown	0	0	0	0	0
Totals	26	20	32	21	25

Age of Pedestrians Killed

Under 1 year old	0	0	1	1	1
1 - 3 years	2	3	2	3	2
4 - 10 years	11	10	5	5	8
11 - 15 years	8	14	10	3	6
16 - 20 years	9	11	13	11	9
21 - 24 years	5	8	8	7	6
25 - 34 years	22	23	11	18	18
35 - 44 years	32	34	33	26	26
45 - 54 years	28	25	34	20	24
55 - 64 years	10	14	23	11	16
65 - 74 years	9	13	11	9	12
75 years and over	23	16	17	21	9
Unknown	1	2	1	5	1
Totals	160	173	169	140	138

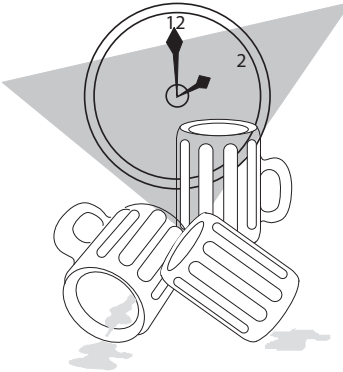
Action of Pedestrians Killed

Crossing at intersection	22	10	18	20	18
Cross not at intersection	47	67	74	41	49
Getting on/off vehicle	2	1	0	1	2
In road with traffic	23	19	16	24	11
In road against traffic	6	4	5	1	6
Standing or lying in road	16	13	12	11	18
Pushing/working on vehicle	3	3	5	3	4
Other working in road	2	0	3	1	2
Playing in road	1	1	0	0	0
In road for other reason	8	16	8	11	8
Not in road	8	11	9	8	10
Other/Unknown	22	28	19	19	10
Totals	160	173	169	140	138

5 YEAR

FATAL CRASHES AND PERSONS KILLED FOR SELECTED HOLIDAY PERIODS IN MICHIGAN

Revised February 19, 2010

HOLIDAY PERIOD	Fatal Crashes	Persons Killed	SUMMARY 2005
Memorial Day 2005 (3) MON 2004 (3) MON 2003 (3) MON 2002 (3) MON 2001 (3) MON	10 [7] 12 [4] 10 [5] 13 [6] 15 [6]	14 [9] 12 [4] 10 [5] 14 [6] 18 [8]	<p>This table shows traffic death tolls in Michigan for the past five years for the major holiday periods as defined by the NSC.</p> <p>Based on the <i>total 2005</i> experience, deaths averaged 3.09 per day. Alcohol-related deaths averaged 0.99 per day.</p> <p>Based on the <i>2005 holiday period</i> experience, deaths averaged 4.47 per day. Alcohol-related deaths averaged 2.37 per day.</p> 
Fourth of July 2005 (3) MON 2004 (3) SUN 2003 (3) FRI 2002 (4) THU 2001 (1) WED	16 [7] 16 [6] 15 [2] 26 [10] 10 [4]	20 [11] 19 [7] 15 [2] 30 [11] 10 [4]	
Labor Day 2005 (3) MON 2004 (3) MON 2003 (3) MON 2002 (3) MON 2001 (3) MON	15 [7] 12 [4] 14 [6] 13 [7] 18 [10]	15 [7] 15 [5] 15 [6] 13 [7] 21 [12]	
Thanksgiving 2005 (4) THU 2004 (4) THU 2003 (4) THU 2002 (4) THU 2001 (4) THU	17 [7] 11 [4] 17 [4] 18 [8] 11 [7]	18 [8] 11 [4] 20 [4] 20 [8] 12 [8]	
Christmas 2005 (3) SUN 2004 (3) SAT 2003 (4) THU 2002 (1) WED 2001 (4) TUE	7 [3] 10 [3] 8 [6] 0 [0] 10 [2]	7 [3] 11 [4] 9 [6] 0 [0] 10 [2]	
New Years 2005 (3) SUN 2004 (3) SAT 2003 (4) THU 2002 (1) WED 2001 (4) TUE	10 [6] 8 [6] 6 [4] 4 [0] 10 [5]	11 [7] 8 [6] 6 [4] 4 [0] 11 [5]	

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.

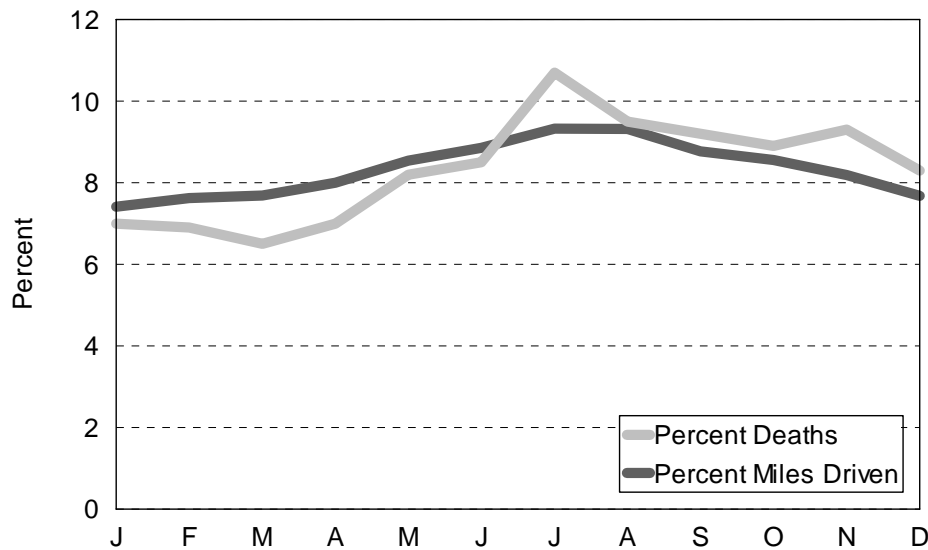
Please view the [glossary](#) for an explanation of holiday periods

5 YEAR

MOTOR VEHICLE DEATHS AND MILEAGE BY MONTH

Month	TRAFFIC DEATHS					2005 PERCENTAGES	
	2001	2002	2003	2004	2005	Percent Deaths	Percent Miles Driven
January	79	105	97	81	73	6.5	7.43
February	99	101	80	68	77	6.8	7.71
March	102	81	88	63	68	6.0	7.74
April	83	93	100	81	77	6.8	8.02
May	106	112	84	97	105	9.3	8.53
June	113	115	96	106	95	8.4	8.86
July	143	137	132	117	130	11.5	9.30
August	131	110	127	123	96	8.5	9.25
September	143	96	111	116	102	9.0	8.75
October	120	117	122	81	112	9.9	8.55
November	109	102	130	122	110	9.7	8.16
December	100	110	116	104	84	7.4	7.70
Totals	1,328	1,279	1,283	1,159	1,129	100.0	100.00

Average of Percent Deaths & Percent Miles Driven
2001 - 2005



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

2004 - 2005 SUMMARY TRENDS

- ★ Michigan experienced a **2.6** percent decrease in traffic fatalities, as well as a **9.2** percent decrease in injuries and a **5.9** percent decrease in crashes.
- ★ Deaths among vehicle occupants (drivers and passengers) decreased **7.3** percent.
- ★ Persons sustaining "A" level injuries (the most serious) decreased **8.5** percent.

	2004	2005	% CHANGE
NUMBER OF CRASHES			
Fatal Crashes	1,055	1,030	-2.4
Personal Injury Crashes	73,118	66,729	-8.7
Property Damage Crashes	298,855	283,079	-5.3
Total	373,028	350,838	-5.9
ALCOHOL-INVOLVED CRASHES			
Fatal Crashes	338	317	-6.2
Personal Injury Crashes	5,777	5,335	-7.7
Property Damage Crashes	8,432	7,886	-6.5
Total	14,547	13,538	-6.9
FATAL CRASHES			
Had Been Drinking (HBD)	338 (32.0%)	317 (30.8%)	-6.2
Had Not Been Drinking / Not Known If Drinking	717 (68.0%)	713 (69.2%)	-0.6
PERSONS IN CRASHES			
Killed	1,159	1,129	-2.6
Injured	99,680	90,510	-9.2
Not Injured	554,547	515,806	-7.0
Unknown Injury	90,088	89,771	-0.4
Total	745,474	697,216	-6.5
PERSONS IN ALCOHOL-INVOLVED CRASHES			
Killed	364	360	-1.1
Injured	8,096	7,421	-8.3
Not Injured	16,375	14,910	-8.9
Unknown Injury	3,024	3,028	0.1
Total	27,859	25,719	-7.7
PERSONS INJURED BY GENDER			
Male	45,329	41,242	-9.0
Female	52,777	47,857	-9.3
Unknown Gender	1,574	1,411	-10.4
Total	99,680	90,510	-9.2
PERSONS INJURED BY SEVERITY			
"A" Injury	9,270	8,486	-8.5
"B" Injury	22,456	20,891	-7.0
"C" Injury	67,954	61,133	-10.0
Total	99,680	90,510	-9.2

Note: The 2000 thru 2005 information provided for alcohol contains data for alcohol-related crashes only.

1

YEAR 2004 - 2005 SUMMARY TRENDS (continued)

	2004	2005	% CHANGE
PERSONS KILLED BY GENDER			
Male	767	773	0.8
Female	384	348	-9.4
Unknown Gender	8	8	0.0
Total	1,159	1,129	-2.6
PERSONS KILLED			
Driver	613	579	-5.5
Passenger	277	246	-11.2
Pedestrian	140	138	-1.4
Bicyclist	21	25	19.0
Motorcyclist	79	122	54.4
Farm Equipment	2	1	-50.0
Train Engineer	0	0	0.0
Snowmobile	14	4	-71.4
ORV/ATV	12	12	0.0
Other/Unknown	1	2	100.0
Total	1,159	1,129	-2.6
BELT RESTRAINT USE BY DRIVER			
"Reported Restrained" - Killed	312	326	4.5
"Reported Not Restrained" - Killed	226	195	-13.7
"Reported Restrained" - Injured	61,587	56,363	-8.5
"Reported Not Restrained" - Injured	3,325	2,969	-10.7
BELT RESTRAINT USE BY INJURED PASSENGER			
"Reported Restrained" - Killed	138	128	-7.2
"Reported Not Restrained" - Killed	93	79	-15.1
"Reported Restrained" - Injured	19,416	17,066	-12.1
"Reported Not Restrained" - Injured	2,715	2,312	-14.8
DRIVER AGE 16-19 INVOLVED			
Fatal Crashes	175	156	-10.9
Personal Injury Crashes	16,034	13,994	-12.7
Property Damage Crashes	51,361	47,183	-8.1
Total All Crashes	67,570	61,333	-9.2
Persons Killed	206	178	-13.6
Persons Injured	23,278	20,452	-12.1
DRIVER AGE 65 & OVER INVOLVED			
Fatal Crashes	192	177	-7.8
Personal Injury Crashes	9,290	8,837	-4.9
Property Damage Crashes	31,687	30,290	-4.4
Total All Crashes	41,169	39,304	-4.5
Persons Killed	209	191	-8.6
Persons Injured	13,565	12,767	-5.9

MORE MICHIGAN CRASH FACTS

CRASH FACTS	2004	2005	% Change
Licensed Drivers	7,225,851	7,217,208	-0.1
Registered Vehicles in Michigan	8,578,224	8,464,905	-1.3
Michigan Population	10,112,620	10,120,860	0.1
Drivers Involved in Crashes	635,913	592,671	-6.8
Vehicles Involved in Crashes	635,913	592,671	-6.8
Occupants Involved in Crashes	803,839	811,174	0.9
Estimated MV Mileage Traveled (thousands)	101,820,238	103,158,621	1.3
Death Rate Per 100 Million Vehicle Miles	1.1	1.1	0.0
Fatal Crash Rate Per 100 Million Veh Miles	1.0	1.0	0.0

Vehicle mileage increased 1.3 percent and the death rate per 100 million vehicle miles remained constant at 1.1.



2005 COST OF CRASHES IN MICHIGAN

The cost estimate for Michigan crashes in 2005 is **\$9,079,563,900**. This estimate is based on the National Safety Council's cost estimating procedures. Average comprehensive costs are based on the following figures:

Comprehensive Costs, 2005	
Death	\$3,840,000
Incapacitating injury	\$193,800
Nonincapacitating evident injury	\$49,500
Possible injury	\$23,600
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 December 5, 2006.

MOTOR VEHICLE TRAFFIC DEATHS IN MICHIGAN BY MONTH

Revised December 18, 2006

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1954	130	126	100	119	149	132	182	167	168	167	153	200	1,793
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

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
1954	1,793	56,444	185,534	26,041.2	2,889,740	6.9
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

* Excludes trailers and trailer coaches, and includes mopeds

2005
2005
2005
2005
2005
2005
2005
2005
2005

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

RED-LIGHT-RUNNING CRASHES

INTERSECTION CRASH TYPE	Crashes	Fatal	MOST SEVERE OUTCOME IN CRASH			PDO
			Injury			
			A	B	C	
Related to intersection	104,266	267	2,255	5,772	17,923	78,049
In intersection	51,541	216	1,567	3,723	10,101	35,934
With traffic control signal	23,804	63	676	1,736	5,148	16,181
With hazardous action	6,699	23	281	708	1,793	3,894

“Related to intersection” captures crashes that were related to or within 150 feet of an intersection. This corresponds to the crash information on page 139, *Intersection Crashes by Traffic Control Type*.

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

“With 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 **6,699** 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	1	0	0	0	0	1
10 miles per hour	1	0	0	0	0	1
15 miles per hour	1	0	0	0	0	1
20 miles per hour	0	0	0	0	0	0
25 miles per hour	795	2	17	72	195	509
30 miles per hour	1,004	2	29	91	272	610
35 miles per hour	1,737	4	66	187	451	1,029
40 miles per hour	939	3	48	93	275	520
45 miles per hour	1,455	5	80	157	394	819
50 miles per hour	273	2	11	35	80	145
55 miles per hour	340	5	25	54	82	174
60 miles per hour	1	0	0	0	1	0
65 miles per hour	2	0	0	0	1	1
70 miles per hour	1	0	0	0	0	1
75 miles per hour	1	0	0	0	0	1
Unknown	148	0	5	19	42	82
Total	6,699	23	281	708	1,793	3,894

MOST SEVERE OUTCOME IN CRASH

CRASH TYPE	Crashes	Fatal	Injury			PDO
			A	B	C	
Single Vehicle	47	0	8	19	13	7
Head on	57	0	5	8	17	27
Head on left turn	607	0	34	67	163	343
Angle	5,694	23	226	597	1,554	3,294
Rear end	44	0	0	1	9	34
Rear end left turn	11	0	0	1	0	10
Rear end right turn	1	0	0	0	0	1
Sideswipe same direction	80	0	2	1	6	71
Sideswipe opposite direction	51	0	0	6	10	35
Other/ Unknown	107	0	6	8	21	72
Total	6,699	23	281	708	1,793	3,894

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	18	0	0	2	3	13
Drinking Involved	214	4	31	30	60	89
Drug Use Involved	21	2	2	4	6	7
Pedestrian Involved	31	1	9	12	6	3
Bicyclist Involved	48	0	6	23	14	5
Snowmobile Involved	0	0	0	0	0	0
Motorcycle Involved	12	2	2	5	0	3
Train Involved	8	0	1	2	2	3
Truck/Bus Involved	279	1	24	37	69	148
Emergency Vehicle Involved	45	0	2	6	13	24
Driver Hazardous Citation	4,147	3	163	490	1,200	2,291

*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	5,477	10	208	572	1,501	3,186
Had Been Drinking	191	3	26	33	53	76
Illegal Drug Use	13	0	1	3	4	5
Sick	19	0	1	3	4	11
Fatigue	15	0	0	4	6	5
Asleep	1	0	1	0	0	0
Medication	21	0	1	4	10	6
Driver Distracted	116	0	5	20	35	56
Using Cellular Phone	69	0	2	10	21	36
Unknown	378	9	24	27	85	233

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

HEAVY TRUCK/BUS

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 Driver Action Prior)
- More collisions with bridge/pier/abutments, utility poles, jackknife, cargo loss/shift, and other non-collisions (see Most Harmful Event)
- Fewer collisions with ditches and trees
- Fewer single-vehicle crashes but more sideswipes (see Crash Type)
- Fewer drivers indicated to be speeding, failing to yield, and reckless driving, but more drivers indicated to be making backing, lane use, and turning errors (see Hazardous Action, Citation)
- Fewer crashes outside of the shoulder/curb (see Relationship to Roadway - Location of First Impact in Crash - On Road)
- 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 Time of Day)
- More weekday crashes, and a significant drop in weekend crashes (see Day of Week)

HEAVY TRUCK/BUS

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	7,421	45.7	91	74.6	1,607	54.3
Turning left	1,354	8.3	2	1.6	194	6.6
Turning right	1,279	7.9	0	0.0	115	3.9
Stopped on roadway	1,119	6.9	7	5.7	201	6.8
In prior crash	29	0.2	0	0.0	4	0.1
Changing lanes	708	4.4	0	0.0	85	2.9
Backing	956	5.9	1	0.8	52	1.8
Slowing/stopping on roadway	1,033	6.4	6	4.9	252	8.5
Slowing/stopping other	25	0.2	0	0.0	4	0.1
Starting up on roadway	318	2.0	0	0.0	79	2.7
Starting up other	11	0.1	0	0.0	2	0.1
Entering parking	32	0.2	0	0.0	1	0.0
Leaving parking	20	0.1	0	0.0	0	0.0
Entering roadway	160	1.0	0	0.0	27	0.9
Leaving roadway	30	0.2	1	0.8	7	0.2
Making U-turn	51	0.3	0	0.0	8	0.3
Overtaking or passing	108	0.7	0	0.0	20	0.7
Avoiding object	12	0.1	1	0.8	2	0.1
Avoiding animal	9	0.1	0	0.0	2	0.1
Avoiding pedestrian	2	0.0	0	0.0	2	0.1
Avoiding vehicle (front/back)	189	1.2	5	4.1	53	1.8
Avoiding vehicle (angle)	82	0.5	1	0.8	22	0.7
Driverless moving	14	0.1	0	0.0	1	0.0
Parked	310	1.9	7	5.7	56	1.9
Crossing at intersection	0	0.0	0	0.0	0	0.0
Crossing not at intersection	0	0.0	0	0.0	0	0.0
Getting on/off vehicle	0	0.0	0	0.0	0	0.0
In roadway with traffic	0	0.0	0	0.0	0	0.0
In roadway against traffic	3	0.0	0	0.0	1	0.0
Standing/lying in roadway	0	0.0	0	0.0	0	0.0
Pushing/working on vehicle	2	0.0	0	0.0	0	0.0
Other working in roadway	11	0.1	0	0.0	0	0.0
Playing in roadway	1	0.0	0	0.0	0	0.0
In roadway other reason	1	0.0	0	0.0	0	0.0
Not in roadway	3	0.0	0	0.0	0	0.0
Other	7	0.0	0	0.0	1	0.0
Unknown	938	5.8	0	0.0	159	5.4
Total	16,238	100.0	122	100.0	2,957	100.0

HEAVY TRUCK/BUS

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	47	0.3	0	0.0	5	0.2
Cross center/median	14	0.1	0	0.0	2	0.1
Ran off road left	24	0.1	0	0.0	2	0.1
Ran off road right	33	0.2	0	0.0	8	0.3
Re-enter road	2	0.0	0	0.0	0	0.0
Overturn	227	1.4	2	1.6	106	3.6
Separation of units	42	0.3	0	0.0	8	0.3
Fire/explosion	42	0.3	0	0.0	3	0.1
Immersion	2	0.0	0	0.0	0	0.0
Jackknife	102	0.6	0	0.0	8	0.3
Downhill runaway	48	0.3	0	0.0	11	0.4
Cargo loss/shift	180	1.1	0	0.0	15	0.5
Individual fell off	12	0.1	0	0.0	3	0.1
Other noncollision	178	1.1	0	0.0	23	0.8
NONCOLLISION Subtotal	953	5.9	2	1.6	194	6.6

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	46	0.3	2	1.6	39	1.3
Bicyclist	13	0.1	2	1.6	9	0.3
Motor vehicle in transport	11,651	71.8	110	90.2	2,344	79.3
Parked motor vehicle	560	3.4	2	1.6	20	0.7
Railway train	21	0.1	1	0.8	4	0.1
Animal	435	2.7	0	0.0	3	0.1
Other nonfixed objects	196	1.2	0	0.0	16	0.5
COLLISION NONFIXED Subtotal	12,922	79.6	117	95.9	2,435	82.3

HEAVY TRUCK/BUS

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	97	0.6	0	0.0	4	0.1
Bridge parapet end	10	0.1	0	0.0	1	0.0
Bridge rail	19	0.1	0	0.0	5	0.2
Guardrail face	70	0.4	1	0.8	15	0.5
Guardrail end	23	0.1	0	0.0	1	0.0
Median barrier	44	0.3	1	0.8	11	0.4
Highway traffic sign post	62	0.4	0	0.0	3	0.1
Signal post	20	0.1	0	0.0	0	0.0
Luminaire/light support	42	0.3	0	0.0	3	0.1
Utility pole	180	1.1	0	0.0	7	0.2
Other pole	40	0.2	0	0.0	2	0.1
Culvert	6	0.0	0	0.0	2	0.1
Curb	19	0.1	0	0.0	2	0.1
Ditch	93	0.6	0	0.0	22	0.7
Embankment	25	0.2	0	0.0	7	0.2
Fence	7	0.0	0	0.0	0	0.0
Mailbox	25	0.2	0	0.0	0	0.0
Tree	101	0.6	1	0.8	25	0.8
Rail crossing signal	21	0.1	0	0.0	0	0.0
Building	20	0.1	0	0.0	1	0.0
Traffic island	2	0.0	0	0.0	0	0.0
Fire hydrant	37	0.2	0	0.0	1	0.0
Impact attenuator	3	0.0	0	0.0	0	0.0
Other fixed object	206	1.3	0	0.0	16	0.5
COLLISION FIXED Subtotal	1,172	7.2	3	2.5	128	4.3

	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	1,191	7.3	0	0.0	200	6.8
TOTAL MOST HARMFUL EVENT	16,238	100.0	122	100.0	2,957	100.0

HEAVY TRUCK/BUS

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	2,141	13.2	7	5.7	276	9.3
Head On	264	1.6	36	29.5	102	3.4
Head On - Left Turn	211	1.3	1	0.8	87	2.9
Angle	2,723	16.8	31	25.4	755	25.5
Rear End	3,786	23.3	25	20.5	981	33.2
Rear End - Left Turn	131	0.8	1	0.8	34	1.1
Rear End - Right Turn	138	0.8	1	0.8	19	0.6
Sideswipe - Same Direction	4,301	26.5	6	4.9	392	13.3
Sideswipe - Opposite Direct	922	5.7	6	4.9	103	3.5
Other/Unknown	1,621	10.0	8	6.6	208	7.0
Total	16,238	100.0	122	100.0	2,957	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	7,160	44.1	87	71.3	1,460	49.4	11	0.4
Speed too fast	475	2.9	5	4.1	143	4.8	188	7.4
Speed too slow	16	0.1	0	0.0	3	0.1	4	0.2
Failed to yield	809	5.0	1	0.8	180	6.1	326	12.7
Disregard traffic control	230	1.4	2	1.6	88	3.0	127	5.0
Drove wrong way	19	0.1	0	0.0	3	0.1	7	0.3
Drove left of center	105	0.6	2	1.6	6	0.2	24	0.9
Improper passing	103	0.6	0	0.0	9	0.3	25	1.0
Improper lane use	810	5.0	0	0.0	79	2.7	247	9.7
Improper turn	683	4.2	0	0.0	52	1.8	211	8.3
Improper/no signal	30	0.2	0	0.0	3	0.1	5	0.2
Improper backing	777	4.8	0	0.0	36	1.2	220	8.6
Unable to stop in assured clear distance	1,498	9.2	7	5.7	429	14.5	652	25.5
Reckless driving	19	0.1	1	0.8	4	0.1	7	0.3
Careless/Negligent driving	327	2.0	3	2.5	72	2.4	168	6.6
Other	1,430	8.8	6	4.9	135	4.6	277	10.8
Unknown	1,747	10.8	8	6.6	255	8.6	58	2.3
Total	16,238	100.0	122	100.0	2,957	100.0	2,557	100.0

HEAVY TRUCK/BUS

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	14,070	86.6	107	87.7	2,597	87.8
Median	90	0.6	2	1.6	21	0.7
Shoulder	554	3.4	8	6.6	99	3.3
Outside of Shoulder/Curb	565	3.5	3	2.5	88	3.0
Gore	21	0.1	0	0.0	6	0.2
Other/Unknown	938	5.8	2	1.6	146	4.9
Total	16,238	100.0	122	100.0	2,957	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
12:00 mid. - 02:59 a.m.	490	3.0	8	6.6	106	3.6
03:00 a.m. - 05:59 a.m.	579	3.6	6	4.9	119	4.0
06:00 a.m. - 08:59 a.m.	3,003	18.5	15	12.3	513	17.3
09:00 a.m. - 11:59 a.m.	3,523	21.7	24	19.7	654	22.1
12:00 noon - 02:59 p.m.	3,563	21.9	30	24.6	628	21.2
03:00 p.m. - 05:59 p.m.	3,247	20.0	25	20.5	572	19.3
06:00 p.m. - 08:59 p.m.	1,130	7.0	5	4.1	231	7.8
09:00 p.m. - 11:59 p.m.	642	4.0	9	7.4	125	4.2
Unknown	61	0.4	0	0.0	9	0.3
Total	16,238	100.0	122	100.0	2,957	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	4,033	24.8	27	22.1	839	28.4
U.S. & Michigan Roads	4,908	30.2	62	50.8	940	31.8
County & City Roads	7,297	44.9	33	27.0	1,178	39.8
Total	16,238	100.0	122	100.0	2,957	100.0

HEAVY TRUCK/BUS

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	503	3.1	3	2.5	86	2.9
Monday	2,769	17.1	21	17.2	471	15.9
Tuesday	2,964	18.3	21	17.2	566	19.1
Wednesday	3,118	19.2	31	25.4	548	18.5
Thursday	3,052	18.8	10	8.2	593	20.1
Friday	2,887	17.8	28	23.0	502	17.0
Saturday	945	5.8	8	6.6	191	6.5
Total	16,238	100.0	122	100.0	2,957	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	13,580	83.6	111	91.0	2,580	87.3
Female	1,621	10.0	3	2.5	256	8.7
Unknown	1,037	6.4	8	6.6	121	4.1
Total	16,238	100.0	122	100.0	2,957	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	12,483	76.9	98	80.3	2,257	76.3
2 occupants	1,224	7.5	11	9.0	258	8.7
3 occupants	206	1.3	3	2.5	45	1.5
4 occupants	149	0.9	1	0.8	27	0.9
5 occupants	90	0.6	0	0.0	24	0.8
6 + occupants	797	4.9	3	2.5	160	5.4
0 occupants	223	1.4	6	4.9	39	1.3
Unknown	1,066	6.6	0	0.0	147	5.0
Total	16,238	100.0	122	100.0	2,957	100.0

HEAVY TRUCK/BUS

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	10,321	72.8	98	66.7	2,247	71.8
Van and Motorhome	1,167	8.2	17	11.6	255	8.2
Pickup	1,896	13.4	18	12.2	415	13.3
Small Truck (under 10,000 lbs.)	388	2.7	2	1.4	79	2.5
Motorcycle	30	0.2	3	2.0	19	0.6
Moped	1	0.0	0	0.0	0	0.0
Go Cart	0	0.0	0	0.0	0	0.0
Snowmobile	0	0.0	0	0.0	0	0.0
Off Road Vehicle	1	0.0	1	0.7	0	0.0
Other	106	0.7	1	0.7	25	0.8
Unknown	265	1.9	7	4.8	88	2.8
Subtotal	14,175	100.0	147	100.0	3,128	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	7,949	49.0	70	57.4	1,571	53.1
Commercial Vehicle: Group B	3,329	20.5	30	24.6	601	20.3
Commercial Vehicle: Group C	511	3.1	0	0.0	88	3.0
Other Truck	546	3.4	17	13.9	102	3.4
Unknown Truck	3,903	24.0	5	4.1	595	20.1
Subtotal	16,238	100.0	122	100.0	2,957	100.0

Total Vehicle Types in Heavy Truck/Bus Crashes	30,413		269		6,085	
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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	Only Heavy Truck/Bus Involved			Multi-Vehicle Heavy Truck/Bus and Passenger Vehicles Involved Crash		Only Passenger Vehicles Involved				
	Single Vehicle Crash		Multi-Vehicle Crash	Involved Crash		Single Vehicle Crash		Multi-Vehicle All Crashes		
	Number of Vehicles	% of citation	Number of Vehicles	% of citation	Number of Vehicles	% of citation	Number of Vehicles	% of citation		
None	1	0.2	10	0.5	12	0.5	57	0.3	511	0.6
Speed too fast	129	31.4	59	2.7	325	13.0	7,920	48.4	3,990	4.4
Speed too slow	1	0.2	3	0.1	4	0.2	59	0.4	186	0.2
Failed to yield	7	1.7	319	14.9	536	21.4	404	2.5	25,222	27.5
Disregard traffic control	8	1.9	119	5.5	164	6.5	176	1.1	6,526	7.1
Drove wrong way	1	0.2	6	0.3	5	0.2	17	0.1	243	0.3
Drove left of center	1	0.2	23	1.1	34	1.4	80	0.5	847	0.9
Improper passing	1	0.2	24	1.1	99	3.9	36	0.2	924	1.0
Improper lane use	5	1.2	242	11.3	215	8.6	127	0.8	3,987	4.4
Improper turn	32	7.8	179	8.3	46	1.8	48	0.3	2,025	2.2
Improper/no signal	0	0.0	5	0.2	8	0.3	8	0.0	157	0.2
Improper backing	16	3.9	204	9.5	26	1.0	96	0.6	2,493	2.7
Unable to stop in assured clear distance	19	4.6	633	29.5	570	22.7	640	3.9	35,866	39.1
Reckless driving	3	0.7	4	0.2	25	1.0	677	4.1	453	0.5
Careless/Negligent driving	89	21.7	79	3.7	229	9.1	3,607	22.1	2,879	3.1
Other	81	19.7	196	9.1	146	5.8	1,850	11.3	3,600	3.9
Unknown	17	4.1	41	1.9	64	2.6	556	3.4	1,714	1.9
Total Cited Vehicles	411	100.0	2,146	100.0	2,508	100.0	16,358	100.0	91,623	100.0
Percent of Total Vehicles		18.5		15.3		18.1		12.8		21.8
Vehicles with No Citation Issued	1,813	81.5	11,868	84.7	11,384	81.9	111,072	87.2	329,399	78.2
Total Vehicles Involved	2,224	100.0	14,014	100.0	13,892	100.0	127,430	100.0	421,022	100.0



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Age

PERSON'S AGE and THEIR INJURY SEVERITY by PERSON TYPE

Age	Driver				Passenger			Bicyclist			Pedestrian		
	Total	Killed	Injured	No Injury	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured
0	7	0	2	4	196	2	194	0	0	0	6	1	3
1	1	0	0	1	185	0	185	0	0	0	6	0	6
2	2	0	0	2	197	2	195	2	0	2	15	1	12
3	2	0	0	2	235	3	232	7	0	7	21	1	17
4	1	0	0	1	277	2	275	11	0	7	32	1	29
5	4	0	1	2	322	2	320	21	0	19	43	3	33
6	7	0	1	5	307	2	305	23	0	19	32	0	27
7	3	0	1	2	306	1	305	35	0	30	48	2	42
8	12	0	7	5	285	2	283	41	2	37	41	0	37
9	10	0	6	4	354	4	350	53	1	41	43	1	35
10	22	0	13	9	390	4	386	40	2	35	40	1	34
11	23	0	13	9	363	5	358	72	0	54	44	0	35
12	44	2	24	18	378	2	376	120	1	101	75	0	68
13	76	1	30	44	414	3	411	147	1	118	87	0	80
14	226	0	55	168	614	7	607	116	0	97	82	3	71
15	922	4	150	757	844	12	832	129	0	108	92	3	84
16	13,198	6	1,567	11,551	989	13	976	86	0	74	67	1	57
17	17,140	17	2,034	14,999	951	13	938	62	2	50	64	1	59
18	18,528	26	2,438	15,902	880	8	872	47	1	41	59	1	52
19	17,162	19	2,273	14,730	717	5	712	59	0	53	68	3	62
20	15,989	18	2,001	13,804	566	5	561	34	0	27	60	3	51
21	14,982	21	2,006	12,815	593	8	585	40	0	35	51	1	38
22	14,320	13	1,855	12,325	437	5	432	38	0	36	40	2	33
23	13,465	16	1,604	11,712	445	8	437	29	0	24	49	0	39
24	12,829	12	1,571	11,108	334	3	331	23	0	17	46	3	39
25	11,964	12	1,424	10,403	355	4	351	17	0	15	38	2	30
26	11,422	11	1,396	9,876	274	3	271	20	0	18	38	3	30
27	10,733	15	1,239	9,372	286	4	282	23	0	22	25	1	22
28	10,167	10	1,204	8,843	254	5	249	19	0	16	26	1	19
29	9,652	16	1,107	8,414	258	3	255	12	0	12	40	2	33
30	9,682	9	1,116	8,449	196	1	195	23	0	21	37	3	27
31	9,796	9	1,137	8,518	221	4	217	12	0	10	24	2	21
32	9,989	12	1,158	8,704	214	0	214	19	0	17	28	0	28
33	10,391	11	1,187	9,066	217	1	216	14	0	13	35	2	30
34	11,091	8	1,289	9,671	199	2	197	16	1	14	31	2	23
35	11,163	10	1,255	9,776	201	3	198	15	0	11	23	0	19
36	10,462	14	1,171	9,174	207	4	203	22	0	20	29	2	26
37	10,194	12	1,241	8,830	192	4	188	11	0	10	31	3	24
38	10,378	14	1,214	9,035	166	1	165	23	1	19	30	4	25
39	10,429	8	1,199	9,102	215	3	212	28	1	26	37	1	32
40	10,596	19	1,266	9,184	205	0	205	23	0	20	43	6	30
41	10,889	8	1,257	9,534	195	2	193	23	1	19	34	1	29

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

**PERSON'S AGE and THEIR INJURY SEVERITY
by PERSON TYPE (continued)**

Age	Driver				Passenger			Bicyclist			Pedestrian		
	Total	Killed	Injured	No Injury	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured
42	10,640	4	1,214	9,303	185	4	181	33	4	28	39	3	30
43	10,557	13	1,190	9,234	222	3	219	22	1	16	31	2	26
44	10,581	7	1,199	9,282	218	4	214	21	1	19	38	4	33
45	10,347	14	1,203	9,003	194	3	191	24	0	19	40	6	33
46	10,156	17	1,196	8,850	193	1	192	29	0	28	41	0	38
47	10,066	16	1,164	8,790	204	2	202	30	0	25	37	1	34
48	9,950	12	1,166	8,683	191	5	186	24	0	21	37	4	29
49	9,403	10	1,127	8,174	199	2	197	22	1	21	47	3	39
50	9,098	11	1,097	7,897	178	3	175	17	0	17	48	4	42
51	8,489	11	1,010	7,374	197	0	197	20	0	18	31	0	27
52	8,067	8	979	7,007	156	2	154	18	0	15	30	1	27
53	7,840	10	913	6,837	167	2	165	9	0	8	31	2	28
54	7,636	10	943	6,601	168	2	166	19	0	16	30	3	22
55	7,229	11	850	6,309	157	3	154	15	0	15	28	3	21
56	6,839	5	881	5,887	158	1	157	14	1	12	19	1	15
57	6,673	8	799	5,801	159	1	158	10	0	7	13	1	11
58	6,653	14	794	5,786	145	2	143	13	0	12	20	0	19
59	5,022	13	631	4,334	116	2	114	6	0	5	19	2	15
60	4,633	9	550	4,026	116	1	115	5	0	4	16	4	11
61	4,462	5	532	3,887	108	1	107	11	0	10	9	1	8
62	4,527	7	555	3,928	115	2	113	3	0	2	8	1	6
63	3,975	6	468	3,467	115	0	115	2	0	2	18	3	14
64	3,384	8	426	2,919	81	2	79	8	0	7	15	0	13
65	3,122	7	365	2,735	85	2	83	3	1	2	9	2	7
66	3,007	6	358	2,616	84	0	84	4	2	1	11	1	7
67	2,705	5	317	2,356	79	0	79	2	0	2	12	2	10
68	2,480	2	294	2,164	82	1	81	6	0	6	5	1	4
69	2,337	4	262	2,047	78	1	77	2	0	2	8	1	7
70	2,313	4	274	2,013	67	2	65	5	0	5	10	1	9
71	2,097	3	261	1,808	69	1	68	3	0	3	4	0	4
72	1,971	3	291	1,662	82	1	81	3	0	3	3	0	2
73	1,976	5	257	1,695	78	4	74	0	0	0	6	1	5
74	1,924	2	273	1,630	74	2	72	1	0	0	11	3	8
75	1,901	2	247	1,635	74	4	70	1	0	1	12	2	10
76	1,742	3	215	1,511	73	4	69	4	0	4	3	0	2
77	1,804	2	245	1,541	76	2	74	0	0	0	3	0	3
78	1,687	7	210	1,457	81	1	80	2	0	2	12	1	10
79	1,517	8	221	1,270	72	2	70	2	0	1	6	1	5
80	1,383	9	223	1,135	83	3	80	3	0	3	6	0	5
81	1,211	6	174	1,009	68	2	66	0	0	0	3	0	3
82	1,101	8	168	917	54	1	53	1	0	1	3	0	2
83	1,027	8	145	858	52	1	51	1	0	1	6	0	5

**PERSONS AGE and THEIR INJURY SEVERITY
by PERSON TYPE (continued)**

Age	Driver				Passenger			Bicyclist			Pedestrian		
	Total	Killed	Injured	No Injury	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured
84	870	5	133	728	41	0	41	0	0	0	2	0	2
85	720	4	111	603	43	1	42	0	0	0	3	0	3
86	583	5	89	487	34	2	32	2	0	2	5	0	4
87	466	4	62	393	36	1	35	0	0	0	3	0	3
88	356	3	61	290	18	1	17	0	0	0	3	0	2
89	281	2	39	239	22	1	21	0	0	0	1	0	1
90	208	2	36	169	16	0	16	0	0	0	1	0	1
91	118	3	16	97	9	2	7	1	0	0	3	3	0
92	92	0	16	76	9	1	8	0	0	0	0	0	0
93	58	1	12	44	4	0	4	0	0	0	0	0	0
94	40	2	7	31	9	0	9	0	0	0	1	1	0
95	16	1	4	11	1	0	1	0	0	0	1	1	0
96	12	0	4	7	2	0	2	0	0	0	0	0	0
97	6	0	1	5	1	0	1	0	0	0	0	0	0
98	4	0	3	1	1	0	1	0	0	0	0	0	0
99	2	0	1	1	2	0	2	0	0	0	0	0	0
100	2	0	0	2	5	0	5	0	0	0	0	0	0
101	1	0	0	1	0	0	0	0	0	0	0	0	0
102	0	0	0	0	3	0	3	0	0	0	0	0	0
103	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
106	0	0	0	0	1	0	1	0	0	0	0	0	0
109	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	1	0	1	0	0	0
Unknown	57,331	1	198	7,558	985	1	984	143	0	48	150	1	89
Totals	592,671*	709	64,992	472,111	21,829*	257	21,572	2,120*	25	1,730	2,711*	138	2,245
	* Includes 54,859 drivers with unknown injury severity				* Uninjured passengers not included in total			* Includes 92 bicyclists with unknown injury severity and 273 with no injury			* Includes 141 pedestrians with unknown injury severity and 187 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	74,087	53.8	276	79.1	17,268	56.0
Turning left	11,292	8.2	19	5.4	2,970	9.6
Turning right	3,928	2.9	1	0.3	543	1.8
Stopped on roadway	10,523	7.6	6	1.7	2,497	8.1
In prior crash	261	0.2	2	0.6	64	0.2
Changing lanes	3,625	2.6	1	0.3	492	1.6
Backing	2,599	1.9	1	0.3	148	0.5
Slowing/stopping on roadway	14,028	10.2	3	0.9	2,734	8.9
Slowing/stopping other	231	0.2	0	0.0	50	0.2
Starting up on roadway	2,906	2.1	7	2.0	737	2.4
Starting up other	115	0.1	0	0.0	28	0.1
Entering parking	102	0.1	0	0.0	14	0.0
Leaving parking	452	0.3	0	0.0	91	0.3
Entering roadway	2,509	1.8	4	1.1	575	1.9
Leaving roadway	382	0.3	2	0.6	120	0.4
Making U-turn	284	0.2	3	0.9	68	0.2
Overtaking or passing	1,313	1.0	10	2.9	314	1.0
Avoiding object	246	0.2	1	0.3	62	0.2
Avoiding animal	630	0.5	2	0.6	176	0.6
Avoiding pedestrian	40	0.0	1	0.3	16	0.1
Avoiding vehicle (front/back)	1,534	1.1	8	2.3	371	1.2
Avoiding vehicle (angle)	618	0.4	2	0.6	154	0.5
Driverless moving	23	0.0	0	0.0	4	0.0
Parked	424	0.3	0	0.0	41	0.1
Crossing at intersection	11	0.0	0	0.0	2	0.0
Crossing not at intersection	7	0.0	0	0.0	2	0.0
Getting on/off vehicle	5	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	8	0.0	0	0.0	1	0.0
Standing/lying in roadway	0	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	99	0.1	0	0.0	22	0.1
Playing in roadway	16	0.0	0	0.0	4	0.0
In roadway other reason	8	0.0	0	0.0	2	0.0
Not in roadway	39	0.0	0	0.0	5	0.0
Other	39	0.0	0	0.0	14	0.0
Unknown	5,225	3.8	0	0.0	1,252	4.1
Total Drivers	137,613	100.0	349	100.0	30,843	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	752	0.5	1	0.3	180	0.6
Cross center/median	150	0.1	0	0.0	50	0.2
Ran off road left	222	0.2	0	0.0	39	0.1
Ran off road right	349	0.3	0	0.0	76	0.2
Re-enter road	32	0.0	0	0.0	11	0.0
Overturn	3,102	2.3	27	7.7	1,457	4.7
Separation of units	107	0.1	0	0.0	20	0.1
Fire/explosion	154	0.1	3	0.9	23	0.1
Immersion	18	0.0	0	0.0	3	0.0
Jackknife	45	0.0	0	0.0	3	0.0
Downhill runaway	400	0.3	0	0.0	91	0.3
Cargo loss/shift	136	0.1	0	0.0	30	0.1
Individual fell off	132	0.1	1	0.3	107	0.3
Other noncollision	380	0.3	0	0.0	74	0.2
NONCOLLISION Subtotal	5,979	4.3	32	9.2	2,164	7.0

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	443	0.3	19	5.4	381	1.2
Pedalcycle (Bicyclist)	321	0.2	9	2.6	266	0.9
Motor vehicle in transport	93,258	67.8	206	59.0	21,592	70.0
Parked motor vehicle	2,720	2.0	6	1.7	275	0.9
Railway train	68	0.0	0	0.0	20	0.1
Animal	9,098	6.6	0	0.0	221	0.7
Other nonfixed objects	941	0.7	0	0.0	97	0.3
COLLISION NONFIXED Subtotal	106,849	77.6	240	68.8	22,852	74.1

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	158	0.1	2	0.6	48	0.2
Bridge parapet end	44	0.0	0	0.0	7	0.0
Bridge rail	154	0.1	1	0.3	36	0.1
Guardrail face	1,287	0.9	1	0.3	230	0.7
Guardrail end	226	0.2	0	0.0	51	0.2
Median barrier	1,186	0.9	2	0.6	297	1.0
Highway traffic sign post	1,042	0.8	0	0.0	58	0.2
Signal post	117	0.1	0	0.0	12	0.0
Luminaire/light support	208	0.2	0	0.0	47	0.2
Utility pole	1,386	1.0	7	2.0	456	1.5
Other pole	341	0.2	0	0.0	56	0.2
Culvert	263	0.2	3	0.9	88	0.3
Curb	774	0.6	1	0.3	106	0.3
Ditch	3,237	2.4	4	1.1	735	2.4
Embankment	617	0.4	2	0.6	194	0.6
Fence	465	0.3	0	0.0	57	0.2
Mailbox	831	0.6	2	0.6	47	0.2
Tree	4,778	3.5	49	14.0	1,596	5.2
Rail crossing signal	12	0.0	0	0.0	4	0.0
Building	250	0.2	0	0.0	77	0.2
Traffic island	13	0.0	0	0.0	1	0.0
Fire hydrant	200	0.1	0	0.0	33	0.1
Impact attenuator	14	0.0	0	0.0	4	0.0
Other fixed object	1,031	0.7	3	0.9	217	0.7
COLLISION FIXED Subtotal	18,634	13.5	77	22.1	4,457	14.5

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	6,151	4.5	0	0.0	1,370	4.4
TOTAL MOST HARMFUL EVENT	137,613	100.0	349	100.0	30,843	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	32,819	23.8	124	35.5	6,640	21.5
Head On	2,475	1.8	58	16.6	1,043	3.4
Head On - Left Turn	5,045	3.7	9	2.6	1,927	6.2
Angle	32,211	23.4	109	31.2	8,822	28.6
Rear End	42,034	30.5	23	6.6	9,312	30.2
Rear End - Left Turn	2,087	1.5	1	0.3	580	1.9
Rear End - Right Turn	1,440	1.0	0	0.0	205	0.7
Sideswipe - Same Direction	11,627	8.4	5	1.4	1,016	3.3
Sideswipe - Opposite Direct	3,278	2.4	6	1.7	471	1.5
Other/Unknown	4,597	3.3	14	4.0	827	2.7
Total Drivers	137,613	100.0	349	100.0	30,843	100.0

Teen and young adult drivers are involved in the largest proportion of single vehicle 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	111,579	81.1	248	71.1	24,380	79.0
Median	892	0.6	6	1.7	251	0.8
Shoulder	5,650	4.1	21	6.0	1,308	4.2
Outside of Shoulder/Curb	11,786	8.6	60	17.2	3,212	10.4
Gore	374	0.3	2	0.6	99	0.3
Other/Unknown	7,332	5.3	12	3.4	1,593	5.2
Total Drivers	137,613	100.0	349	100.0	30,843	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	13,918	10.1	30	8.6	3,131	10.2
U.S. & Michigan Roads	38,319	27.8	100	28.7	8,561	27.8
County & City Roads	85,376	62.0	219	62.8	19,151	62.1
Total Drivers	137,613	100.0	349	100.0	30,843	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
12:00 mid. - 02:59 a.m.	7,595	5.5	59	16.9	1,852	6.0
03:00 a.m. - 05:59 a.m.	3,864	2.8	33	9.5	949	3.1
06:00 a.m. - 08:59 a.m.	15,340	11.1	31	8.9	3,066	9.9
09:00 a.m. - 11:59 a.m.	14,849	10.8	28	8.0	3,303	10.7
12:00 noon – 02:59 p.m.	24,552	17.8	46	13.2	5,731	18.6
03:00 p.m. - 05:59 p.m.	35,223	25.6	53	15.2	7,963	25.8
06:00 p.m. - 08:59 p.m.	21,097	15.3	54	15.5	4,641	15.0
09:00 p.m. - 11:59 p.m.	14,612	10.6	42	12.0	3,235	10.5
Unknown	481	0.3	3	0.9	103	0.3
Total Drivers	137,613	100.0	349	100.0	30,843	100.0

3:00 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	50,755	36.9	85	24.4	9,931	32.2	162	0.4
Speed too fast	15,414	11.2	69	19.8	3,656	11.9	5,837	14.0
Speed too slow	223	0.2	1	0.3	41	0.1	87	0.2
Failed to yield	14,947	10.9	35	10.0	4,042	13.1	9,128	22.0
Disregard traffic control	3,653	2.7	25	7.2	1,439	4.7	2,351	5.7
Drove wrong way	187	0.1	1	0.3	55	0.2	80	0.2
Drove left of center	819	0.6	23	6.6	273	0.9	347	0.8
Improper passing	838	0.6	2	0.6	132	0.4	388	0.9
Improper lane use	2,786	2.0	2	0.6	295	1.0	1,394	3.4
Improper turn	1,424	1.0	1	0.3	241	0.8	725	1.7
Improper/no signal	159	0.1	0	0.0	25	0.1	54	0.1
Improper backing	1,915	1.4	0	0.0	74	0.2	711	1.7
Unable to stop in assured clear distance	25,065	18.2	9	2.6	5,391	17.5	13,998	33.7
Reckless driving	1,013	0.7	25	7.2	422	1.4	538	1.3
Careless\Negligent driving	4,956	3.6	20	5.7	1,750	5.7	2,975	7.2
Other	5,473	4.0	19	5.4	1,282	4.2	1,928	4.6
Unknown	7,986	5.8	32	9.2	1,794	5.8	851	2.0
Total Drivers	137,613	100.0	349	100.0	30,843	100.0	41,554	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	14,925	10.8	61	17.5	3,640	11.8
Monday	18,613	13.5	38	10.9	4,235	13.7
Tuesday	18,751	13.6	41	11.7	4,147	13.4
Wednesday	21,712	15.8	53	15.2	4,571	14.8
Thursday	21,533	15.6	38	10.9	4,570	14.8
Friday	23,806	17.3	60	17.2	5,350	17.3
Saturday	18,273	13.3	58	16.6	4,330	14.0
Total Drivers	137,613	100.0	349	100.0	30,843	100.0

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

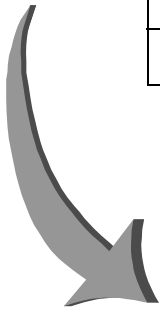
DRIVER GENDER IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Male	75,104	54.6	237	67.9	16,179	52.5
Female	62,418	45.4	112	32.1	14,653	47.5
Unknown	91	0.1	0	0.0	11	0.0
Total Drivers	137,613	100.0	349	100.0	30,843	100.0

OCCUPANTS IN MOTOR VEHICLE	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
1 occupant	94,483	68.7	196	56.2	19,436	63.0
2 occupants	28,008	20.4	92	26.4	7,193	23.3
3 occupants	7,597	5.5	27	7.7	2,258	7.3
4 occupants	2,895	2.1	23	6.6	867	2.8
5 occupants	907	0.7	8	2.3	300	1.0
6 + occupants	360	0.3	2	0.6	121	0.4
0 occupants	464	0.3	0	0.0	62	0.2
Unknown	2,899	2.1	1	0.3	606	2.0
Total Drivers	137,613	100.0	349	100.0	30,843	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	110,663	80.4	263	75.4	24,706	80.1
Van and Motorhome	4,480	3.3	12	3.4	1,070	3.5
Pickup	17,177	12.5	45	12.9	3,486	11.3
Small Truck (under 10,000 lbs.)	3,335	2.4	2	0.6	695	2.3
Motorcycle	617	0.4	16	4.6	493	1.6
Moped	68	0.0	0	0.0	53	0.2
Go Cart	4	0.0	0	0.0	3	0.0
Snowmobile	59	0.0	0	0.0	41	0.1
Off Road Vehicle	76	0.1	1	0.3	68	0.2
Other	157	0.1	0	0.0	39	0.1
Unknown	196	0.1	0	0.0	39	0.1
CDL Truck/Bus (breakdown below)	781	0.6	10	2.9	150	0.5
Total Number of Drivers	137,613	100.0	349	100.0	30,843	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	330	42.3	6	60.0	55	36.7
Commercial Vehicle: Group B	162	20.7	0	0.0	36	24.0
Commercial Vehicle: Group C	34	4.4	0	0.0	6	4.0
Other Truck	81	10.4	4	40.0	18	12.0
Unknown Truck	174	22.3	0	0.0	35	23.3
Total Number of Drivers	781	100.0	10	100.0	150	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	187,174	52.7	823	79.4	38852	51.9
Turning left	22,291	6.3	40	3.9	5,720	7.6
Turning right	9,401	2.6	5	0.5	1,404	1.9
Stopped on roadway	42,969	12.1	27	2.6	10,784	14.4
In prior crash	585	0.2	7	0.7	156	0.2
Changing lanes	7,420	2.1	14	1.4	1,054	1.4
Backing	8,410	2.4	2	0.2	399	0.5
Slowing/stopping on roadway	35,401	10.0	29	2.8	7,602	10.1
Slowing/stopping other	652	0.2	1	0.1	159	0.2
Starting up on roadway	7,098	2.0	10	1.0	1,618	2.2
Starting up other	289	0.1	0	0.0	68	0.1
Entering parking	399	0.1	0	0.0	47	0.1
Leaving parking	902	0.3	0	0.0	168	0.2
Entering roadway	4,499	1.3	8	0.8	939	1.3
Leaving roadway	656	0.2	6	0.6	208	0.3
Making U-turn	697	0.2	1	0.1	167	0.2
Overtaking or passing	2,579	0.7	21	2.0	455	0.6
Avoiding object	478	0.1	1	0.1	112	0.1
Avoiding animal	881	0.2	4	0.4	225	0.3
Avoiding pedestrian	85	0.0	2	0.2	38	0.1
Avoiding vehicle (front/back)	3,166	0.9	22	2.1	788	1.1
Avoiding vehicle (angle)	1,578	0.4	4	0.4	402	0.5
Driverless moving	66	0.0	0	0.0	9	0.0
Parked	2,014	0.6	4	0.4	211	0.3
Crossing at intersection	48	0.0	0	0.0	12	0.0
Crossing not at intersection	12	0.0	0	0.0	3	0.0
Getting on/off vehicle	4	0.0	0	0.0	2	0.0
In roadway with traffic	9	0.0	0	0.0	2	0.0
In roadway against traffic	29	0.0	0	0.0	5	0.0
Standing/lying in roadway	0	0.0	0	0.0	0	0.0
Pushing/working on vehicle	13	0.0	0	0.0	4	0.0
Other working in roadway	281	0.1	0	0.0	68	0.1
Playing in roadway	29	0.0	0	0.0	8	0.0
In roadway other reason	19	0.0	0	0.0	0	0.0
Not in roadway	131	0.0	0	0.0	22	0.0
Other	83	0.0	0	0.0	22	0.0
Unknown	14,877	4.2	6	0.6	3,178	4.2
Total Drivers	355,225	100.0	1,037	100.0	74,911	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	1,388	0.4	2	0.2	379	0.5
Cross center/median	299	0.1	1	0.1	82	0.1
Ran off road left	383	0.1	0	0.0	83	0.1
Ran off road right	788	0.2	0	0.0	162	0.2
Re-enter road	76	0.0	0	0.0	16	0.0
Overturn	4,655	1.3	85	8.2	2,282	3.0
Separation of units	318	0.1	0	0.0	59	0.1
Fire/explosion	425	0.1	7	0.7	52	0.1
Immersion	34	0.0	0	0.0	4	0.0
Jackknife	220	0.1	0	0.0	23	0.0
Downhill runaway	1,116	0.3	1	0.1	248	0.3
Cargo loss/shift	582	0.2	0	0.0	71	0.1
Individual fell off	284	0.1	2	0.2	201	0.3
Other noncollision	988	0.3	4	0.4	169	0.2
NONCOLLISION Subtotal	11,556	3.3	102	9.8	3,831	5.1

Drivers age 25-64 have the highest incidence of overturn in fatal crashes when compared to the other two age groups (16-24 and 65 & over).

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	1,126	0.3	80	7.7	898	1.2
Pedalcycle (Bicyclist)	1,028	0.3	12	1.2	842	1.1
Motor vehicle in transport	239,596	67.4	668	64.4	56,761	75.8
Parked motor vehicle	6,177	1.7	10	1.0	583	0.8
Railway train	193	0.1	3	0.3	50	0.1
Animal	43,970	12.4	4	0.4	885	1.2
Other nonfixed objects	3,769	1.1	2	0.2	362	0.5
COLLISION NONFIXED Subtotal	295,859	83.3	779	75.1	60,381	80.6

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	419	0.1	6	0.6	101	0.1
Bridge parapet end	118	0.0	0	0.0	15	0.0
Bridge rail	307	0.1	3	0.3	60	0.1
Guardrail face	2,318	0.7	8	0.8	411	0.5
Guardrail end	415	0.1	2	0.2	87	0.1
Median barrier	2,341	0.7	3	0.3	638	0.9
Highway traffic sign post	1,571	0.4	3	0.3	99	0.1
Signal post	176	0.0	0	0.0	16	0.0
Luminaire/light support	380	0.1	2	0.2	73	0.1
Utility pole	2,111	0.6	20	1.9	619	0.8
Other pole	642	0.2	3	0.3	106	0.1
Culvert	314	0.1	2	0.2	101	0.1
Curb	959	0.3	0	0.0	156	0.2
Ditch	4,658	1.3	11	1.1	1,108	1.5
Embankment	890	0.3	4	0.4	248	0.3
Fence	678	0.2	2	0.2	91	0.1
Mailbox	1,118	0.3	0	0.0	79	0.1
Tree	6,869	1.9	78	7.5	2,168	2.9
Rail crossing signal	58	0.0	0	0.0	8	0.0
Building	357	0.1	5	0.5	134	0.2
Traffic island	30	0.0	0	0.0	7	0.0
Fire hydrant	304	0.1	0	0.0	43	0.1
Impact attenuator	36	0.0	0	0.0	9	0.0
Other fixed object	1,941	0.5	3	0.3	463	0.6
COLLISION FIXED Subtotal	29,010	8.2	155	14.9	6,840	9.1

	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Unknown Event	18,800	5.3	1	0.1	3,859	5.2
TOTAL MOST HARMFUL EVENT	355,225	100.0	1,037	100.0	74,911	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	83,390	23.5	285	27.5	11,229	15.0
Head On	5,893	1.7	214	20.6	2,526	3.4
Head On - Left Turn	10,792	3.0	43	4.1	4,345	5.8
Angle	75,151	21.2	259	25.0	20,844	27.8
Rear End	112,914	31.8	112	10.8	27,240	36.4
Rear End - Left Turn	4,429	1.2	9	0.9	1,291	1.7
Rear End - Right Turn	4,210	1.2	2	0.2	604	0.8
Sideswipe - Same Direction	33,807	9.5	32	3.1	3,094	4.1
Sideswipe - Opposite Direct	9,314	2.6	29	2.8	1,300	1.7
Other/Unknown	15,325	4.3	52	5.0	2,438	3.3
Total Drivers	355,225	100.0	1,037	100.0	74,911	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	307,298	86.5	805	77.6	63,805	85.2
Median	1,797	0.5	18	1.7	520	0.7
Shoulder	9,476	2.7	56	5.4	2,141	2.9
Outside of Shoulder/Curb	17,012	4.8	124	12.0	4,520	6.0
Gore	534	0.2	1	0.1	137	0.2
Other/Unknown	19,108	5.4	33	3.2	3,788	5.1
Total Drivers	355,225	100.0	1,037	100.0	74,911	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	43,558	12.3	133	12.8	9,394	12.5
U.S. & Michigan Roads	107,112	30.2	391	37.7	23,074	30.8
County & City Roads	204,555	57.6	513	49.5	42,443	56.7
Total Drivers	355,225	100.0	1,037	100.0	74,911	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
12:00 mid. - 02:59 a.m.	12,107	3.4	124	12.0	2,730	3.6
03:00 a.m. - 05:59 a.m.	12,224	3.4	56	5.4	1,816	2.4
06:00 a.m. - 08:59 a.m.	53,889	15.2	106	10.2	9,731	13.0
09:00 a.m. - 11:59 a.m.	46,924	13.2	107	10.3	10,539	14.1
12:00 noon - 02:59 p.m.	63,678	17.9	190	18.3	14,907	19.9
03:00 p.m. - 05:59 p.m.	88,402	24.9	178	17.2	20,154	26.9
06:00 p.m. - 08:59 p.m.	50,836	14.3	169	16.3	9,821	13.1
09:00 p.m. - 11:59 p.m.	25,932	7.3	105	10.1	4,990	6.7
Unknown	1,233	0.3	2	0.2	223	0.3
Total Drivers	355,225	100.0	1,037	100.0	74,911	100.0

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	192,130	54.1	474	45.7	37,413	49.9	391	0.6
Speed too fast	21,137	6.0	124	12.0	5,163	6.9	6,270	10.0
Speed too slow	489	0.1	3	0.3	103	0.1	156	0.2
Failed to yield	25,759	7.3	41	4.0	6,847	9.1	13,955	22.3
Disregard traffic control	6,754	1.9	37	3.6	2,546	3.4	3,820	6.1
Drove wrong way	453	0.1	4	0.4	114	0.2	156	0.2
Drove left of center	1,726	0.5	41	4.0	520	0.7	554	0.9
Improper passing	1,696	0.5	4	0.4	218	0.3	611	1.0
Improper lane use	6,565	1.8	7	0.7	757	1.0	2,675	4.3
Improper turn	3,301	0.9	1	0.1	522	0.7	1,323	2.1
Improper/no signal	439	0.1	1	0.1	67	0.1	105	0.2
Improper backing	6,255	1.8	2	0.2	207	0.3	1,868	3.0
Unable to stop in assured clear distance	44,056	12.4	35	3.4	9,917	13.2	21,702	34.6
Reckless driving	1,244	0.4	21	2.0	492	0.7	587	0.9
Careless/Negligent driving	6,579	1.9	62	6.0	2,273	3.0	3,587	5.7
Other	12,726	3.6	70	6.8	2,826	3.8	3,574	5.7
Unknown	23,916	6.7	110	10.6	4,926	6.6	1,326	2.1
Total Drivers	355,225	100.0	1,037	100.0	74,911	100.0	62,660	100.0

In fatal crashes, 45.7 percent of drivers age 25-64 have no hazardous action listed on the police report (about twice as many as the other two age groups).

DRIVER AGE 25-64 (continued)

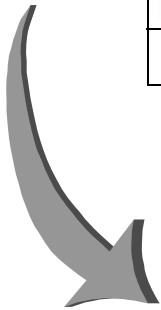
DAY OF WEEK IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Sunday	31,864	9.0	129	12.4	7,041	9.4
Monday	51,103	14.4	130	12.5	10,542	14.1
Tuesday	52,865	14.9	132	12.7	11,128	14.9
Wednesday	58,499	16.5	178	17.2	12,133	16.2
Thursday	56,803	16.0	93	9.0	11,549	15.4
Friday	61,099	17.2	194	18.7	13,123	17.5
Saturday	42,992	12.1	181	17.5	9,395	12.5
Total Drivers	355,225	100.0	1,037	100.0	74,911	100.0

DRIVER GENDER IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Male	201,111	56.6	765	73.8	40,594	54.2
Female	153,695	43.3	272	26.2	34,247	45.7
Unknown	419	0.1	0	0.0	70	0.1
Total Drivers	355,225	100.0	1,037	100.0	74,911	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	263,608	74.2	703	67.8	52,026	69.5
2 occupants	54,486	15.3	210	20.3	13,714	18.3
3 occupants	16,174	4.6	72	6.9	4,312	5.8
4 occupants	7,183	2.0	27	2.6	1,949	2.6
5 occupants	2,492	0.7	8	0.8	714	1.0
6 + occupants	2,123	0.6	16	1.5	546	0.7
0 occupants	1,853	0.5	0	0.0	209	0.3
Unknown	7,306	2.1	1	0.1	1,441	1.9
Total Drivers	355,225	100.0	1,037	100.0	74,911	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	232,874	65.6	521	50.2	49,557	66.2
Van and Motorhome	30,981	8.7	82	7.9	6,718	9.0
Pickup	58,644	16.5	193	18.6	10,494	14.0
Small Truck (under 10,000 lbs.)	13,807	3.9	25	2.4	2,759	3.7
Motorcycle	2,735	0.8	97	9.4	2,093	2.8
Moped	139	0.0	1	0.1	107	0.1
Go Cart	8	0.0	0	0.0	8	0.0
Snowmobile	162	0.0	4	0.4	119	0.2
Off Road Vehicle	109	0.0	7	0.7	88	0.1
Other	1,155	0.3	3	0.3	222	0.3
Unknown	831	0.2	1	0.1	141	0.2
CDL Truck/Bus (breakdown below)	13,780	3.9	103	9.9	2,605	3.5
Total Number of Drivers	355,225	100.0	1,037	100.0	74,911	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	7,250	52.6	57	55.3	1,460	56.0
Commercial Vehicle: Group B	2,997	21.7	30	29.1	547	21.0
Commercial Vehicle: Group C	428	3.1	0	0.0	72	2.8
Other Truck	438	3.2	12	11.7	77	3.0
Unknown Truck	2,667	19.4	4	3.9	449	17.2
Total Number of Drivers	13,780	100.0	103	100.0	2,605	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	20,092	48.8	116	62.4	4,580	49.1
Turning left	4,368	10.6	29	15.6	1,280	13.7
Turning right	1,447	3.5	2	1.1	210	2.3
Stopped on roadway	3,889	9.5	4	2.2	1,032	11.1
In prior crash	67	0.2	0	0.0	19	0.2
Changing lanes	1,160	2.8	1	0.5	107	1.1
Backing	1,356	3.3	2	1.1	51	0.5
Slowing/stopping on roadway	3,141	7.6	2	1.1	777	8.3
Slowing/stopping other	66	0.2	0	0.0	15	0.2
Starting up on roadway	1,041	2.5	11	5.9	279	3.0
Starting up other	44	0.1	0	0.0	15	0.2
Entering parking	75	0.2	0	0.0	11	0.1
Leaving parking	218	0.5	0	0.0	39	0.4
Entering roadway	1,103	2.7	9	4.8	240	2.6
Leaving roadway	77	0.2	2	1.1	23	0.2
Making U-turn	144	0.4	2	1.1	38	0.4
Overtaking or passing	315	0.8	1	0.5	41	0.4
Avoiding object	38	0.1	0	0.0	4	0.0
Avoiding animal	37	0.1	0	0.0	4	0.0
Avoiding pedestrian	11	0.0	2	1.1	3	0.0
Avoiding vehicle (front/back)	234	0.6	1	0.5	58	0.6
Avoiding vehicle (angle)	128	0.3	1	0.5	40	0.4
Driverless moving	9	0.0	0	0.0	2	0.0
Parked	198	0.5	0	0.0	15	0.2
Crossing at intersection	8	0.0	0	0.0	5	0.1
Crossing not at intersection	6	0.0	0	0.0	1	0.0
Getting on/off vehicle	0	0.0	0	0.0	0	0.0
In roadway with traffic	0	0.0	0	0.0	0	0.0
In roadway against traffic	1	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	24	0.1	0	0.0	6	0.1
Playing in roadway	3	0.0	0	0.0	0	0.0
In roadway other reason	3	0.0	0	0.0	0	0.0
Not in roadway	16	0.0	0	0.0	2	0.0
Other	8	0.0	0	0.0	0	0.0
Unknown	1,813	4.4	1	0.5	425	4.6
Total Drivers	41,140	100.0	186	100.0	9,322	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	115	0.3	0	0.0	30	0.3
Cross center/median	50	0.1	0	0.0	17	0.2
Ran off road left	56	0.1	0	0.0	11	0.1
Ran off road right	71	0.2	0	0.0	12	0.1
Re-enter road	5	0.0	0	0.0	0	0.0
Overturn	315	0.8	7	3.8	179	1.9
Separation of units	47	0.1	0	0.0	9	0.1
Fire/explosion	40	0.1	0	0.0	2	0.0
Immersion	3	0.0	0	0.0	2	0.0
Jackknife	20	0.0	0	0.0	5	0.1
Downhill runaway	145	0.4	0	0.0	32	0.3
Cargo loss/shift	33	0.1	0	0.0	2	0.0
Individual fell off	17	0.0	1	0.5	11	0.1
Other noncollision	103	0.3	0	0.0	22	0.2
NONCOLLISION Subtotal	1,020	2.5	8	4.3	334	3.6

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	168	0.4	11	5.9	135	1.4
Pedalcycle (Bicyclist)	177	0.4	3	1.6	144	1.5
Motor vehicle in transport	29,856	72.6	138	74.2	7,357	78.9
Parked motor vehicle	1,007	2.4	0	0.0	89	1.0
Railway train	31	0.1	1	0.5	8	0.1
Animal	3,833	9.3	2	1.1	68	0.7
Other nonfixed objects	355	0.9	1	0.5	25	0.3
COLLISION NONFIXED Subtotal	35,427	86.1	156	83.9	7,826	84.0

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	28	0.1	2	1.1	7	0.1
Bridge parapet end	17	0.0	0	0.0	0	0.0
Bridge rail	25	0.1	0	0.0	6	0.1
Guardrail face	148	0.4	1	0.5	32	0.3
Guardrail end	33	0.1	0	0.0	13	0.1
Median barrier	121	0.3	0	0.0	40	0.4
Highway traffic sign post	138	0.3	0	0.0	8	0.1
Signal post	16	0.0	0	0.0	4	0.0
Luminaire/light support	39	0.1	0	0.0	10	0.1
Utility pole	187	0.5	3	1.6	63	0.7
Other pole	52	0.1	0	0.0	13	0.1
Culvert	40	0.1	0	0.0	21	0.2
Curb	79	0.2	0	0.0	12	0.1
Ditch	366	0.9	1	0.5	91	1.0
Embankment	73	0.2	1	0.5	20	0.2
Fence	74	0.2	0	0.0	14	0.2
Mailbox	104	0.3	0	0.0	11	0.1
Tree	577	1.4	11	5.9	209	2.2
Rail crossing signal	12	0.0	0	0.0	0	0.0
Building	78	0.2	2	1.1	37	0.4
Traffic island	6	0.0	0	0.0	0	0.0
Fire hydrant	24	0.1	0	0.0	9	0.1
Impact attenuator	2	0.0	0	0.0	1	0.0
Other fixed object	195	0.5	1	0.5	43	0.5
COLLISION FIXED Subtotal	2,434	5.9	22	11.8	664	7.1

	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Total	Number	% of Total
Unknown Event	2,259	5.5	0	0.0	498	5.3
TOTAL MOST HARMFUL EVENT	41,140	100.0	186	100.0	9,322	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	7,201	17.5	45	24.2	1,077	11.6
Head On	663	1.6	28	15.1	325	3.5
Head On - Left Turn	1,783	4.3	17	9.1	712	7.6
Angle	12,744	31.0	79	42.5	3,433	36.8
Rear End	10,446	25.4	9	4.8	2,812	30.2
Rear End - Left Turn	531	1.3	1	0.5	137	1.5
Rear End - Right Turn	378	0.9	1	0.5	72	0.8
Sideswipe - Same Direction	4,407	10.7	1	0.5	336	3.6
Sideswipe - Opposite Direct	1,150	2.8	3	1.6	133	1.4
Other/Unknown	1,837	4.5	2	1.1	285	3.1
Total Drivers	41,140	100.0	186	100.0	9,322	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	36,341	88.3	157	84.4	8,138	87.3
Median	131	0.3	0	0.0	40	0.4
Shoulder	824	2.0	6	3.2	186	2.0
Outside of Shoulder/Curb	1,495	3.6	20	10.8	445	4.8
Gore	48	0.1	0	0.0	13	0.1
Other/Unknown	2,301	5.6	3	1.6	500	5.4
Total Drivers	41,140	100.0	186	100.0	9,322	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	3,039	7.4	12	6.5	702	7.5
U.S. & Michigan Roads	13,348	32.4	78	41.9	3,072	33.0
County & City Roads	24,753	60.2	96	51.6	5,548	59.5
Total Drivers	41,140	100.0	186	100.0	9,322	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
12:00 mid. - 02:59 a.m.	430	1.0	2	1.1	70	0.8
03:00 a.m. - 05:59 a.m.	414	1.0	2	1.1	65	0.7
06:00 a.m. - 08:59 a.m.	3,271	8.0	15	8.1	686	7.4
09:00 a.m. - 11:59 a.m.	8,671	21.1	42	22.6	2,024	21.7
12:00 noon - 02:59 p.m.	11,121	27.0	53	28.5	2,727	29.3
03:00 p.m. - 05:59 p.m.	10,230	24.9	47	25.3	2,472	26.5
06:00 p.m. - 08:59 p.m.	4,951	12.0	18	9.7	946	10.1
09:00 p.m. - 11:59 p.m.	1,870	4.5	7	3.8	301	3.2
Unknown	182	0.4	0	0.0	31	0.3
Total Drivers	41,140	100.0	186	100.0	9,322	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	18,928	46.0	50	26.9	3,840	41.2	34	0.4
Speed too fast	1,294	3.1	13	7.0	334	3.6	253	3.0
Speed too slow	48	0.1	0	0.0	7	0.1	10	0.1
Failed to yield	6,733	16.4	55	29.6	1,856	19.9	3,306	39.7
Disregard traffic control	1,398	3.4	8	4.3	552	5.9	799	9.6
Drove wrong way	76	0.2	1	0.5	18	0.2	31	0.4
Drove left of center	274	0.7	13	7.0	103	1.1	82	1.0
Improper passing	230	0.6	1	0.5	27	0.3	84	1.0
Improper lane use	1,189	2.9	2	1.1	108	1.2	488	5.9
Improper turn	628	1.5	3	1.6	106	1.1	274	3.3
Improper/no signal	73	0.2	0	0.0	10	0.1	18	0.2
Improper backing	1,031	2.5	1	0.5	36	0.4	242	2.9
Unable to stop in assured clear distance	4,294	10.4	7	3.8	1,144	12.3	1,958	23.5
Reckless driving	32	0.1	0	0.0	14	0.2	17	0.2
Careless/Negligent driving	670	1.6	9	4.8	230	2.5	259	3.1
Other	1,572	3.8	13	7.0	352	3.8	308	3.7
Unknown	2,670	6.5	10	5.4	585	6.3	173	2.1
Total Drivers	41,140	100.0	186	100.0	9,322	100.0	8,336	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)

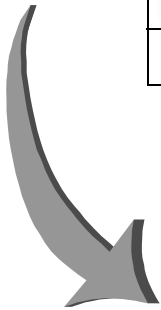
DAY OF WEEK IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Sunday	3,637	8.8	22	11.8	839	9.0
Monday	6,075	14.8	30	16.1	1,369	14.7
Tuesday	6,291	15.3	28	15.1	1,449	15.5
Wednesday	6,741	16.4	25	13.4	1,509	16.2
Thursday	6,541	15.9	34	18.3	1,425	15.3
Friday	7,079	17.2	32	17.2	1,602	17.2
Saturday	4,776	11.6	15	8.1	1,129	12.1
Total Drivers	41,140	100.0	186	100.0	9,322	100.0

DRIVER GENDER IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Drivers	% of Total	Number	% of Fatal	Number	% of Injury
Male	24,068	58.5	123	66.1	5,227	56.1
Female	17,034	41.4	63	33.9	4,088	43.9
Unknown	38	0.1	0	0.0	7	0.1
Total Drivers	41,140	100.0	186	100.0	9,322	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	30,033	73.0	132	71.0	6,489	69.6
2 occupants	8,530	20.7	49	26.3	2,187	23.5
3 occupants	992	2.4	3	1.6	290	3.1
4 occupants	352	0.9	0	0.0	93	1.0
5 occupants	83	0.2	0	0.0	20	0.2
6 + occupants	115	0.3	1	0.5	25	0.3
0 occupants	206	0.5	0	0.0	24	0.3
Unknown	829	2.0	1	0.5	194	2.1
Total Drivers	41,140	100.0	186	100.0	9,322	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	31,353	76.2	137	73.7	7,205	77.3
Van and Motorhome	3,434	8.3	17	9.1	773	8.3
Pickup	4,685	11.4	19	10.2	944	10.1
Small Truck (under 10,000 lbs.)	1,004	2.4	4	2.2	210	2.3
Motorcycle	106	0.3	8	4.3	80	0.9
Moped	12	0.0	0	0.0	12	0.1
Go Cart	0	0.0	0	0.0	0	0.0
Snowmobile	4	0.0	0	0.0	3	0.0
Off Road Vehicle	1	0.0	0	0.0	1	0.0
Other	64	0.2	0	0.0	18	0.2
Unknown	81	0.2	0	0.0	16	0.2
CDL Truck/Bus (breakdown below)	396	1.0	1	0.5	60	0.6
Total Number of Drivers	41,140	100.0	186	100.0	9,322	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	181	45.7	1	100.0	32	53.3
Commercial Vehicle: Group B	90	22.7	0	0.0	11	18.3
Commercial Vehicle: Group C	33	8.3	0	0.0	6	10.0
Other Truck	5	1.3	0	0.0	0	0.0
Unknown Truck	87	22.0	0	0.0	11	18.3
Total Number of Drivers	396	100.0	1	100.0	60	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.

2005

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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	25	4	0	3	7	2	0	3	5
Injured	1,730	65	6	3	74	48	3	3	54
In Crashes	2,120	82	7	6	95	60	3	6	69




PEDESTRIAN	Total	In Crash				Pedestrian			
		Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
Killed	138	42	7	10	59	31	6	8	45
Injured	2,245	196	11	18	225	133	2	11	146
In Crashes	2,711	257	18	29	304	173	8	20	201




MOTORCYCLIST	Total	In Crash				Motorcyclist			
		Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
Killed	122	32	7	7	46	28	6	7	41
Injured	2,895	242	4	8	254	206	1	6	213
In Crashes	3,935	323	12	15	350	269	7	13	289




SNOWMOBILER	Total	In Crash				Snowmobiler			
		Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
Killed	4	3	0	1	4	3	0	1	4
Injured	181	45	0	0	45	44	0	0	44
In Crashes	291	57	0	1	58	54	0	1	55



ORV/ATV RIDER	Total	In Crash				ORV/ATV Rider			
		Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
Killed	12	3	0	0	3	3	0	0	3
Injured	218	33	1	2	36	32	1	2	35
In Crashes	301	46	1	2	49	45	1	2	48



DRIVER	Total	In Crash				Driver			
		Drinking Only	Drug Only	Both	Total	Drinking Only	Drug Only	Both	Total
Killed	709	180	32	39	251	157	30	33	220
Injured	64,992	5,005	413	311	5,729	3,766	278	242	4,286
In Crashes	592,671	19,045	1,369	1,032	21,446	12,803	788	649	14,240



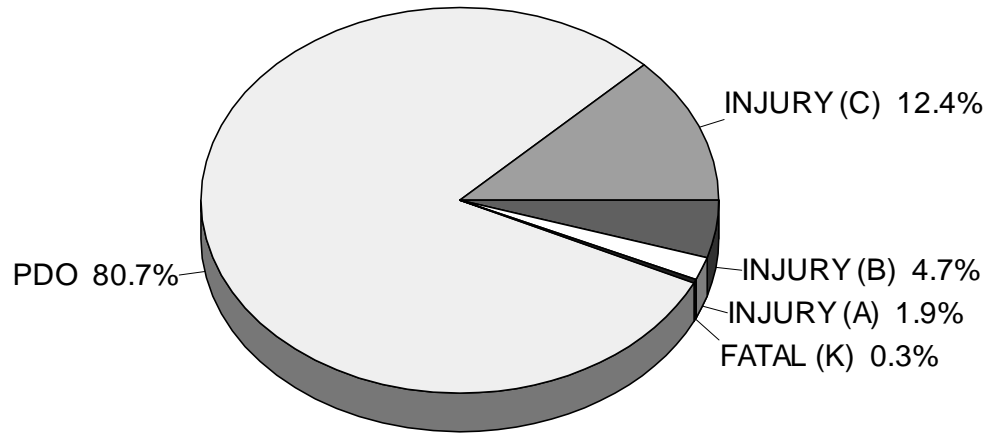
NOTE: These crashes involve a motor vehicle in transport on a public trafficway (in Michigan) and result in injury, death, or at least \$1,000 in property damage.

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

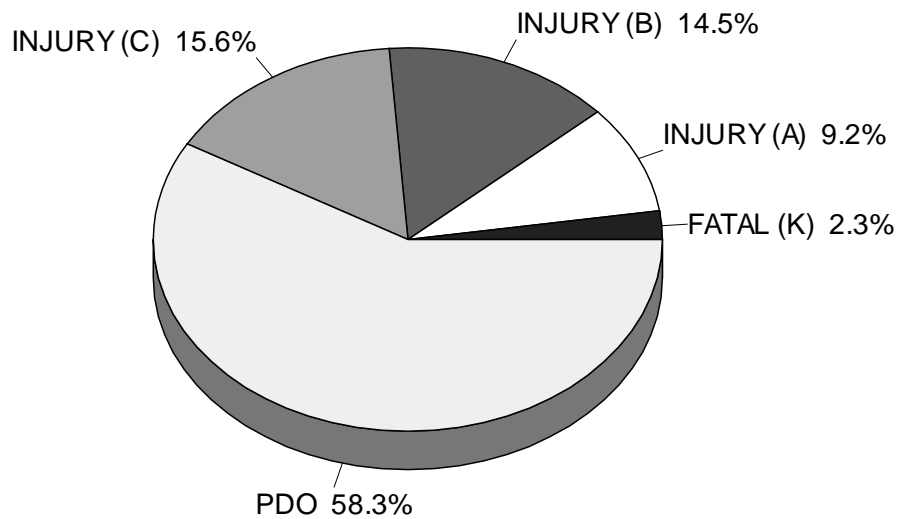
MOST SEVERE OUTCOME IN CRASH

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	2	0	0	2	0	0	0	0	2	0	0	2
14 years	6	0	0	6	0	0	0	0	3	0	0	3
15 years	8	0	5	13	0	0	0	0	3	0	3	6
16 years	84	8	8	100	1	1	0	2	34	2	4	40
17 years	211	20	12	243	3	1	2	6	72	11	0	83
18 years	339	27	18	384	8	2	0	10	124	10	10	144
19 years	400	29	23	452	6	1	1	8	156	10	9	175
20 years	440	33	18	491	7	2	0	9	166	15	8	189
21 - 24 years	2,530	65	106	2,701	44	6	10	60	973	27	52	1,052
25 - 34 years	3,201	185	141	3,527	64	8	13	85	1,242	74	58	1,374
35 - 44 years	2,673	179	155	3,007	67	8	5	80	1,076	85	66	1,227
45 - 54 years	1,853	169	105	2,127	36	11	10	57	708	80	44	832
55 - 64 years	653	49	34	736	10	2	2	14	242	23	15	280
65 - 69 years	142	8	5	155	2	0	0	2	56	3	2	61
70 - 74 years	77	3	4	84	0	0	1	1	37	0	0	37
75 - 79 years	49	5	6	60	0	0	0	0	26	1	3	30
80 - 84 years	23	1	4	28	2	0	0	2	9	1	2	12
85 - 89 years	5	0	0	5	0	0	0	0	1	0	0	1
90 years & over	1	0	0	1	0	0	0	0	0	0	0	0
Unknown	106	7	5	118	0	0	0	0	24	3	1	28
Total	12,803	788	649	14,240	250	42	44	336	4,954	345	277	5,576

ALL CRASHES BY INJURY SEVERITY



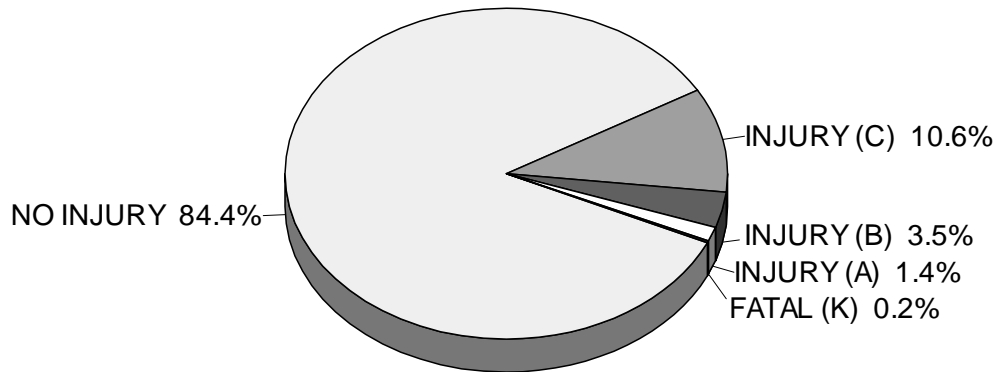
HBD CRASHES BY INJURY SEVERITY



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 **seven and a half times** more likely when one of the crash-involved operators is reported as had been drinking.

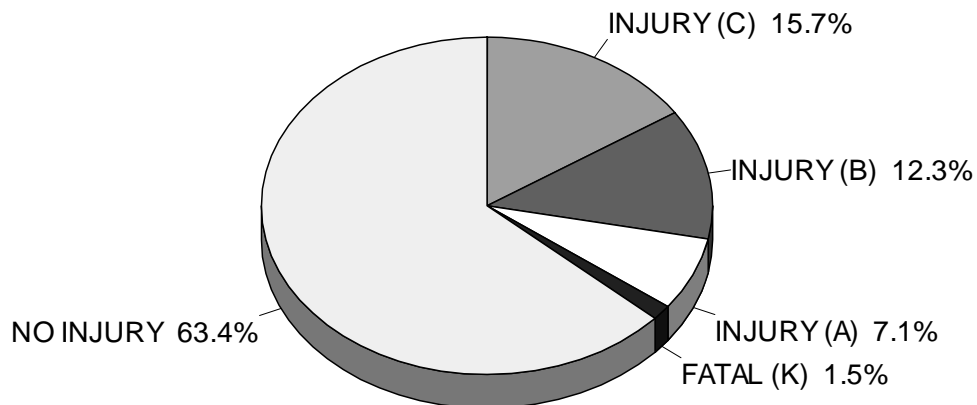
DEATH & INJURY FOR CRASH INVOLVED OCCUPANTS

Occupants in Crashes



The majority of occupants involved in crashes are not injured (84.4%). Two thirds of those who are injured receive only minor (C) injuries.

Occupants in HBD Crashes

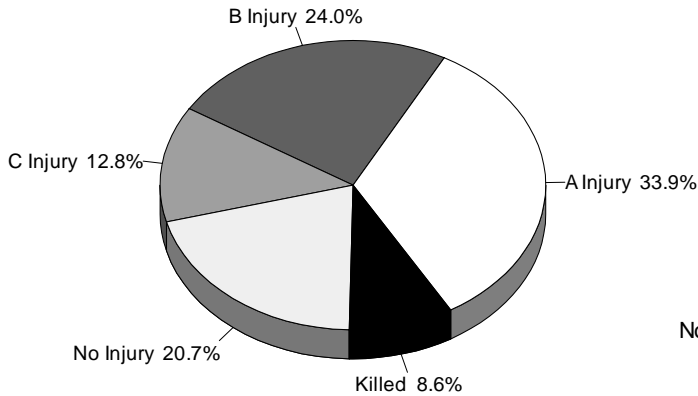


Crashes involving drinking tend to be more serious than nondrinking crashes. The percentage of fatalities is seven and a half times higher than in all crashes and the most serious injury level (A) is five times higher.

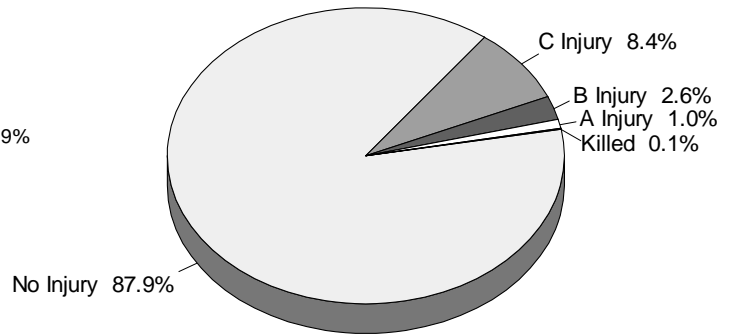
ALL DRIVERS and HBD DRIVERS INJURY SEVERITY - EJECTED vs. NOT EJECTED

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

Ejected

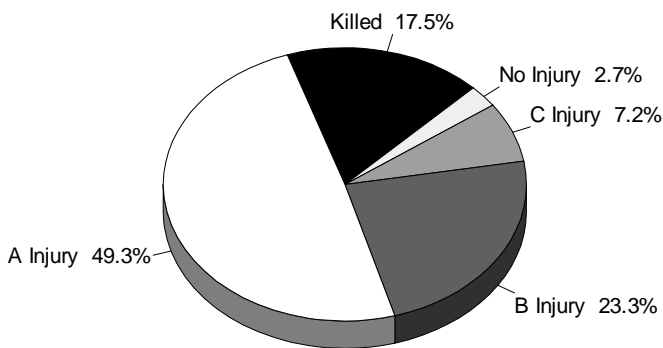


Not Ejected

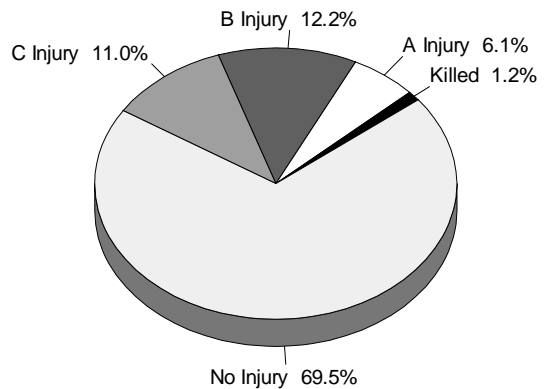


When compared to the charts above, the charts below demonstrate that the injury severity is much worse for drivers who had been drinking in both ejected and nonejected events.

HBD Ejected

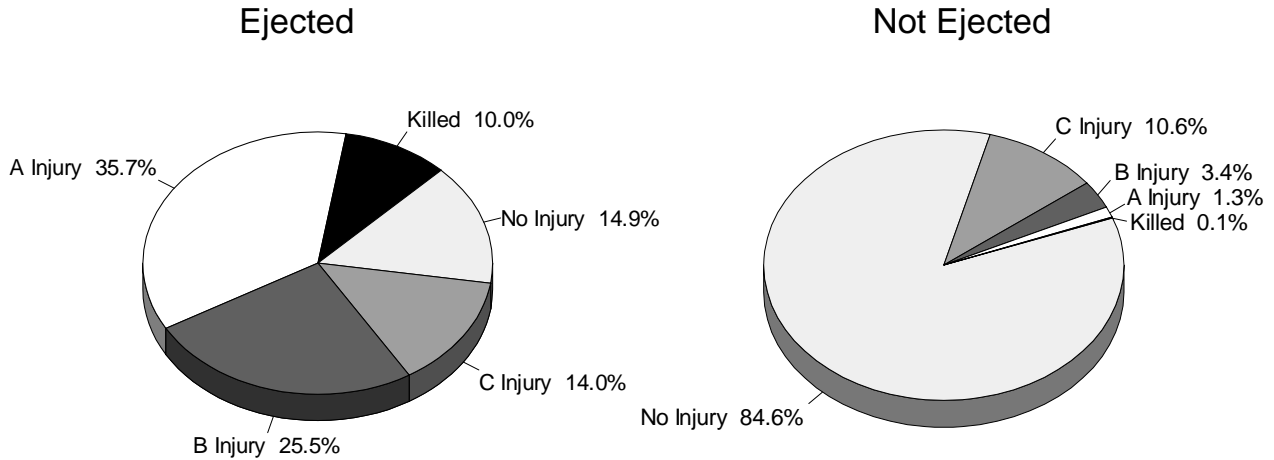


HBD Not Ejected

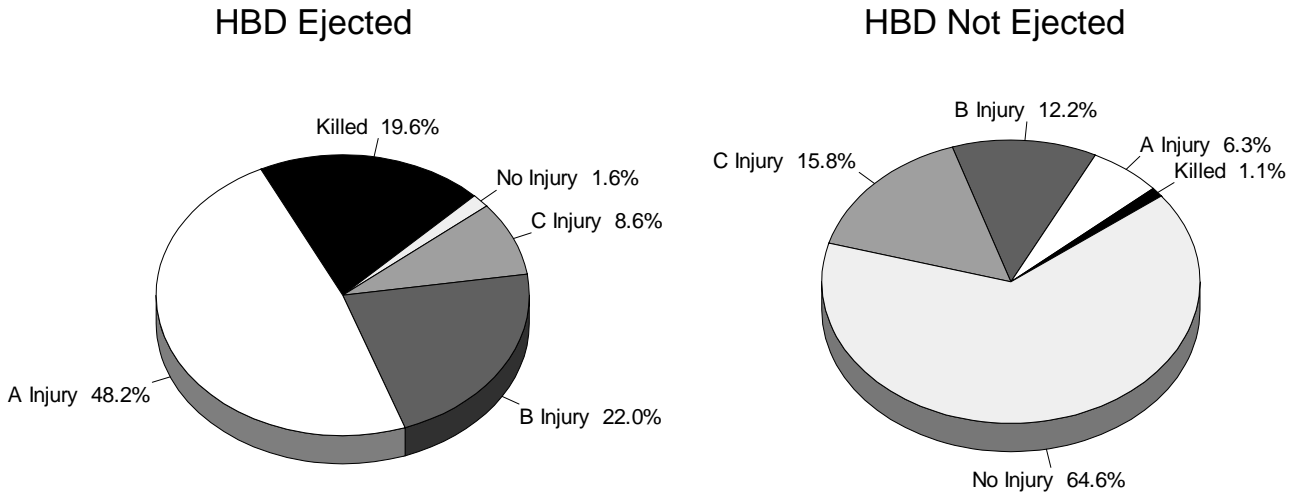


ALL OCCUPANTS and OCCUPANTS of HBD CRASHES INJURY SEVERITY - EJECTED vs. NOT EJECTED

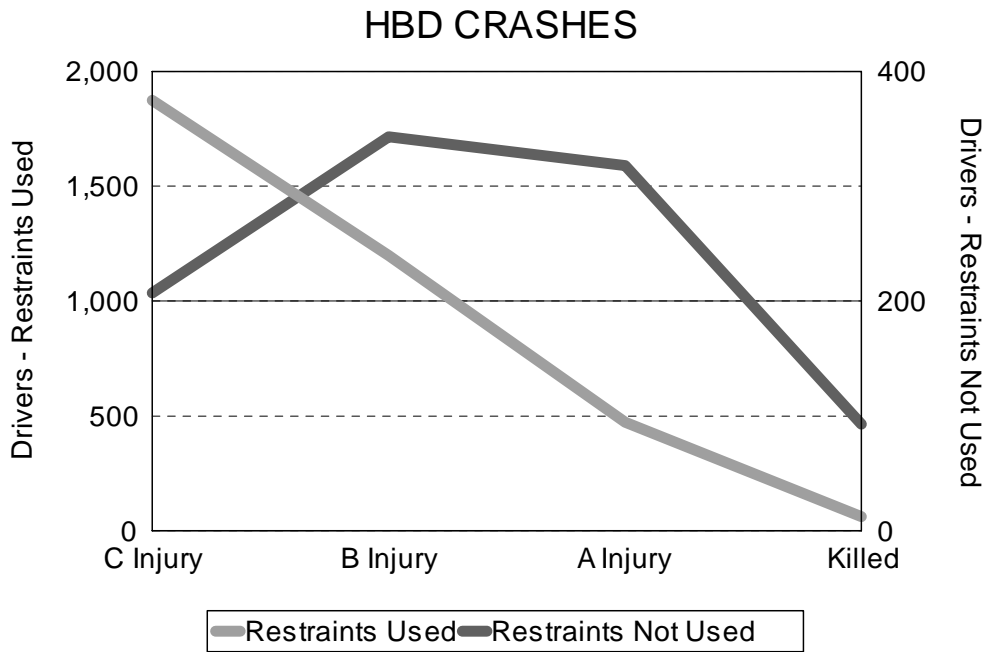
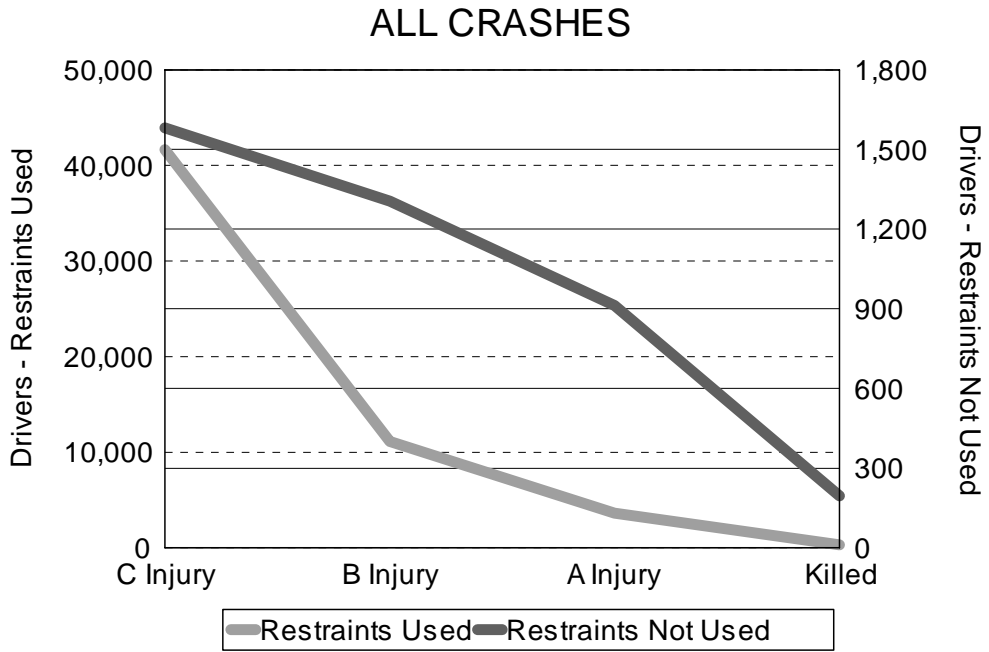
As can be seen in the two charts below, death and injury are much more likely when *occupants are ejected* from their vehicles.



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 nonejected events.

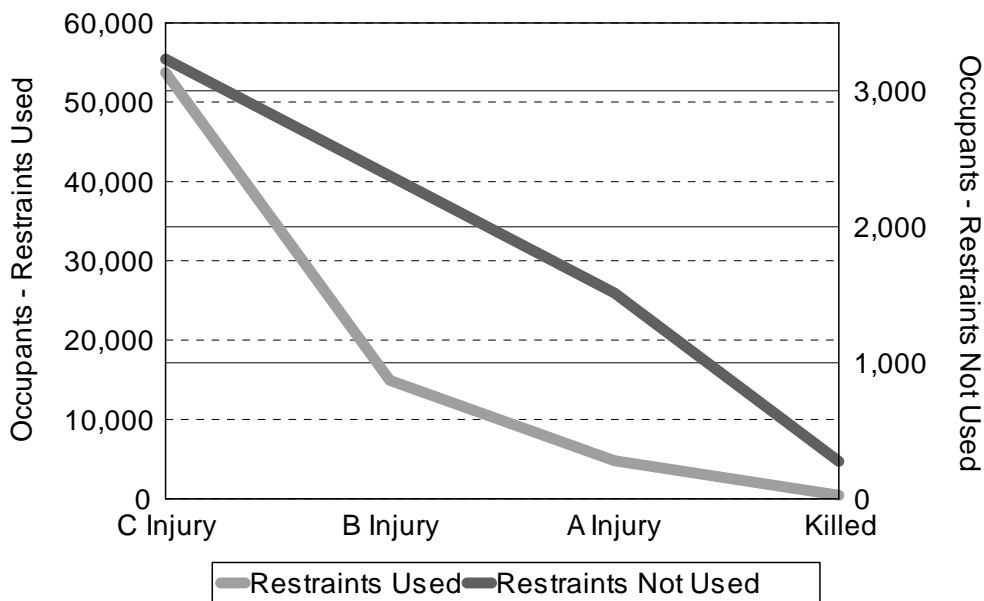


INJURY SEVERITY & RESTRAINT USE FOR CRASH INVOLVED KABC DRIVERS

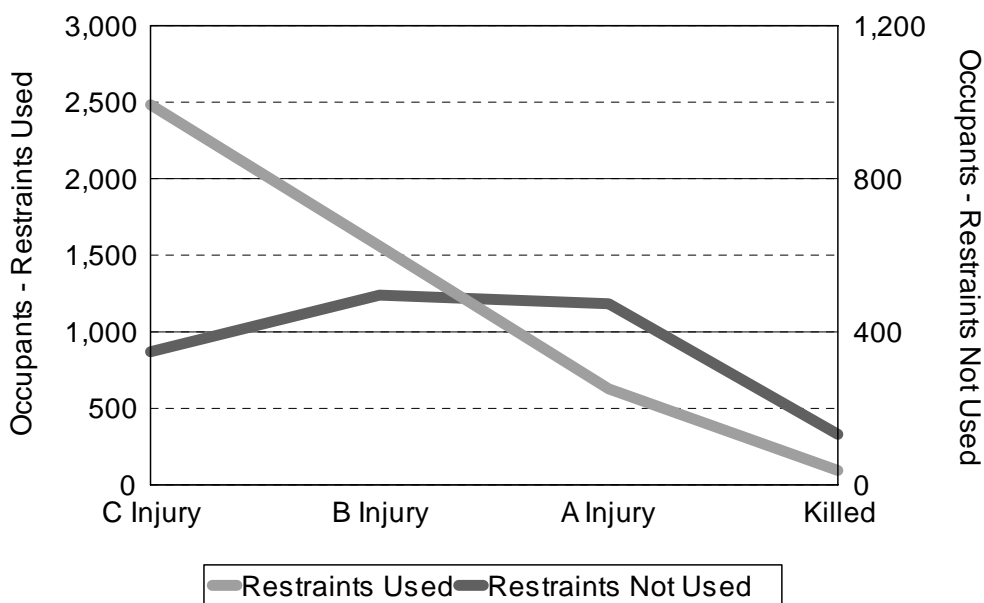


INJURY SEVERITY & RESTRAINT USE FOR CRASH INVOLVED KABC OCCUPANTS

ALL CRASHES



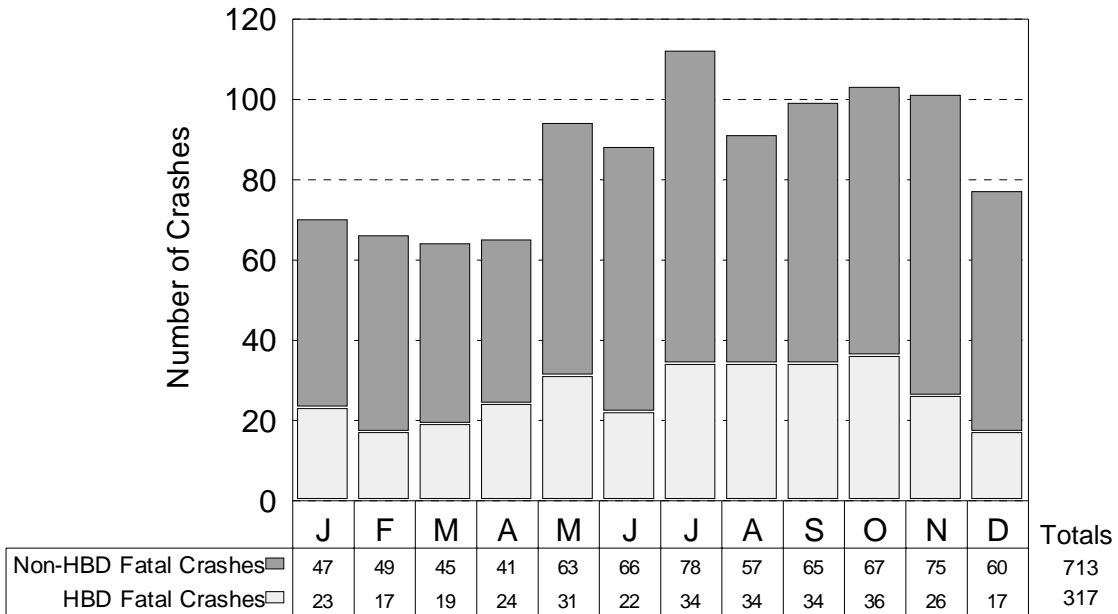
HBD CRASHES



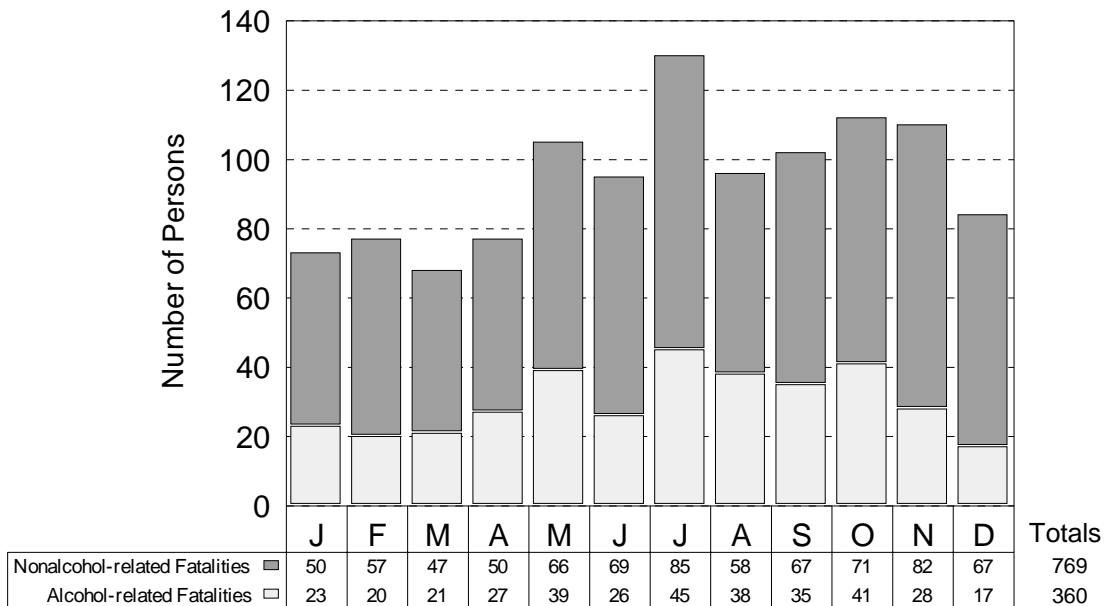
ALCOHOL INVOLVEMENT IN FATAL CRASHES

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

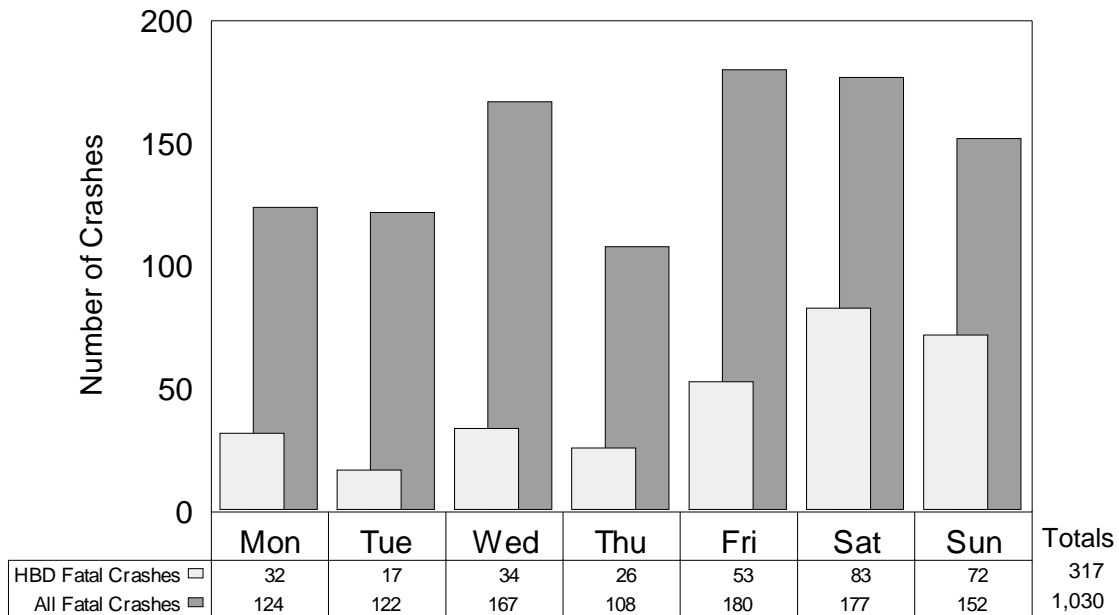
HBD Fatal Crashes by Month



Alcohol-related Fatalities by Month

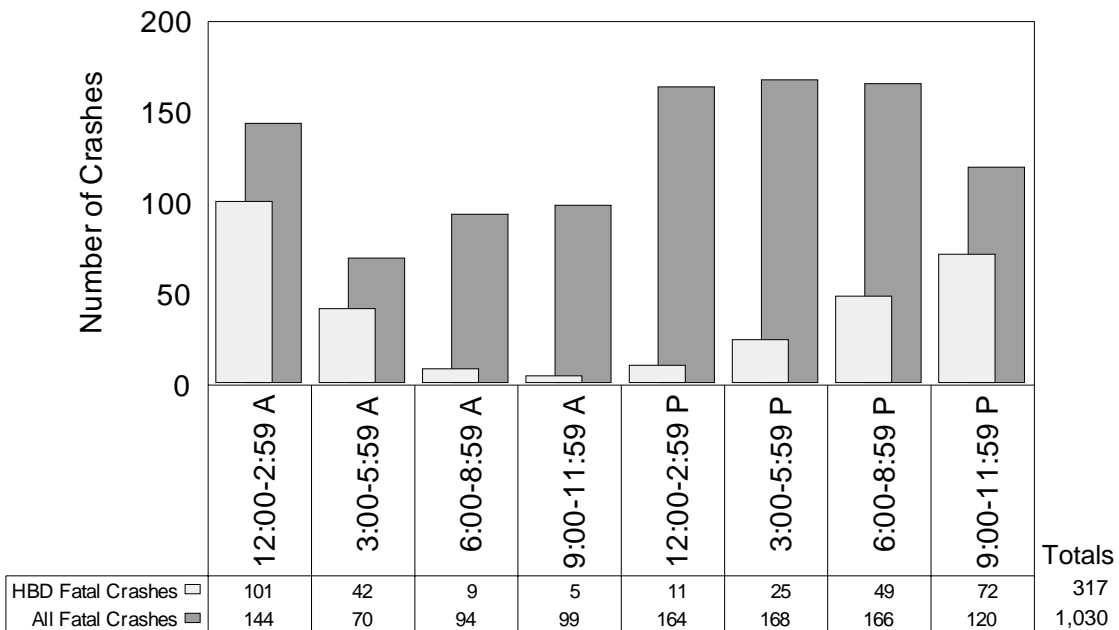


HBD Fatal Crashes by Day of Week



Friday and Saturday had the most fatal crashes in 2005. Saturday and Sunday had the highest proportions of drinking-related fatal crashes. 47.4 percent of the fatal crashes on Sunday involved drinking, while only 13.9 percent of fatal crashes on Tuesday involved drinking.

HBD Fatal Crashes by Time of Day



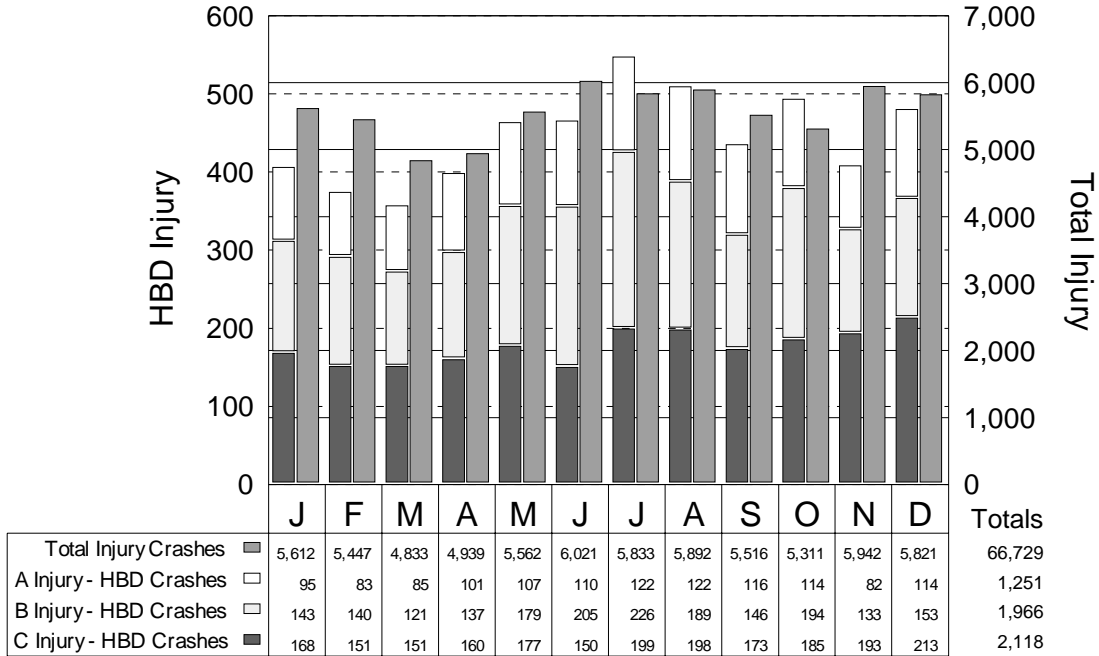
Not surprisingly, the 9:00 to 11:59 PM, midnight to 2:59 AM, and 3:00 to 5:59 AM time periods had the highest rate of drinking involvement (60%, 70.1% and 60%), while the late morning hours had the lowest (5.1%).

There were 5 fatal crashes where the time of day was unknown. Of these 5 fatal crashes, 3 were HBD.

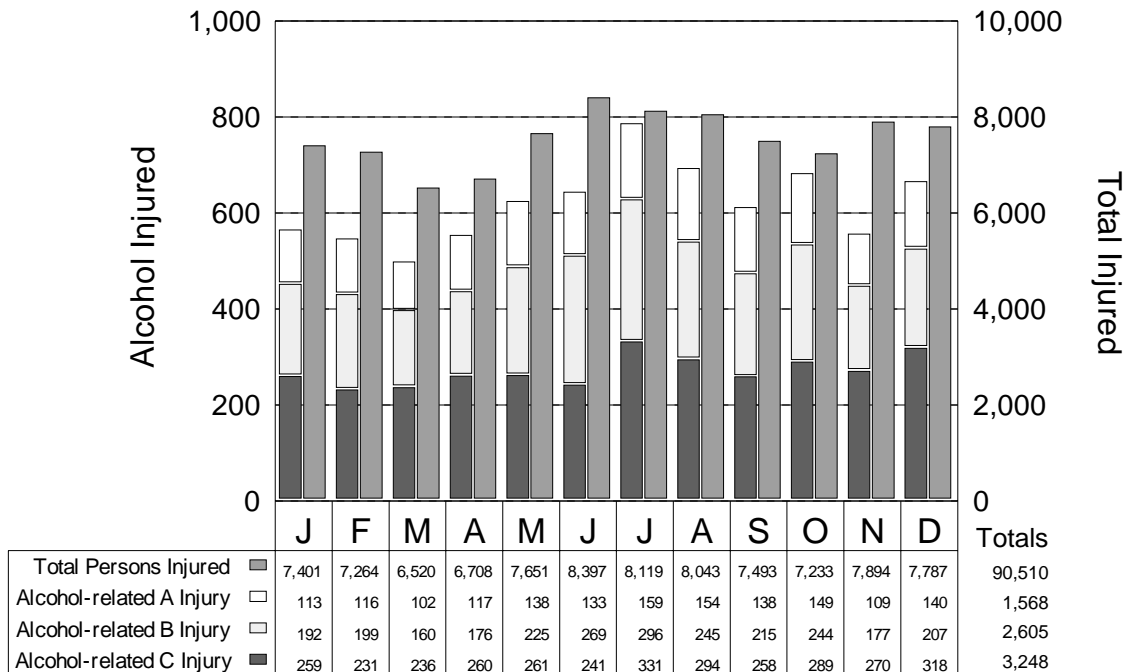
ALCOHOL INVOLVEMENT IN INJURY CRASHES

Alcohol involvement in injury crashes is an important indicator of the alcohol impaired driving problem. In 2005, the highest number of HBD injury crashes occurred in July with 547. The highest proportion of HBD injury crashes also occurred in July with 9.4 percent of the injury crashes in that month involving alcohol.

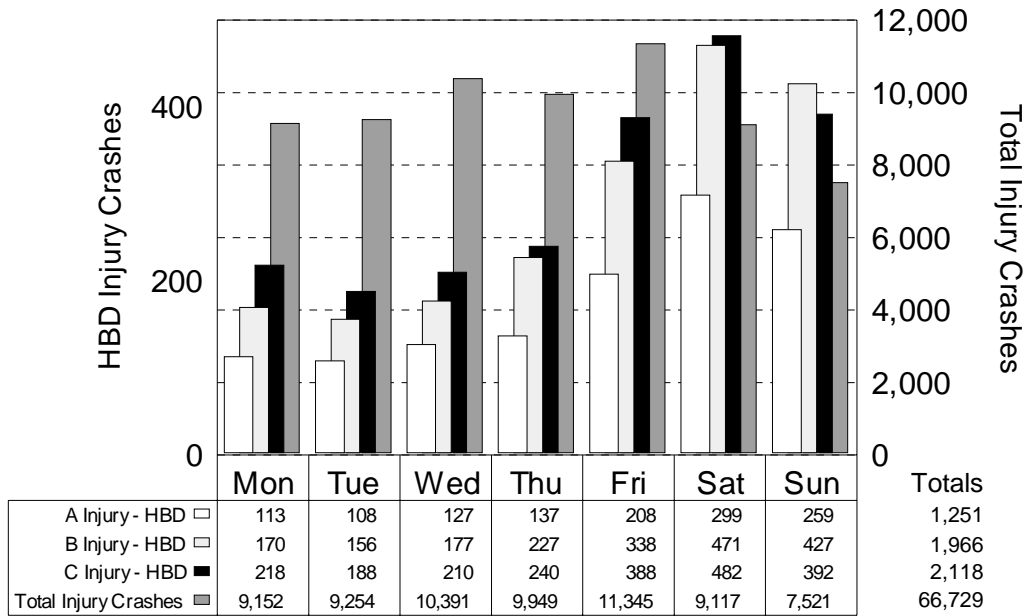
HBD Injury Crashes by Month



Alcohol-related Injuries by Month

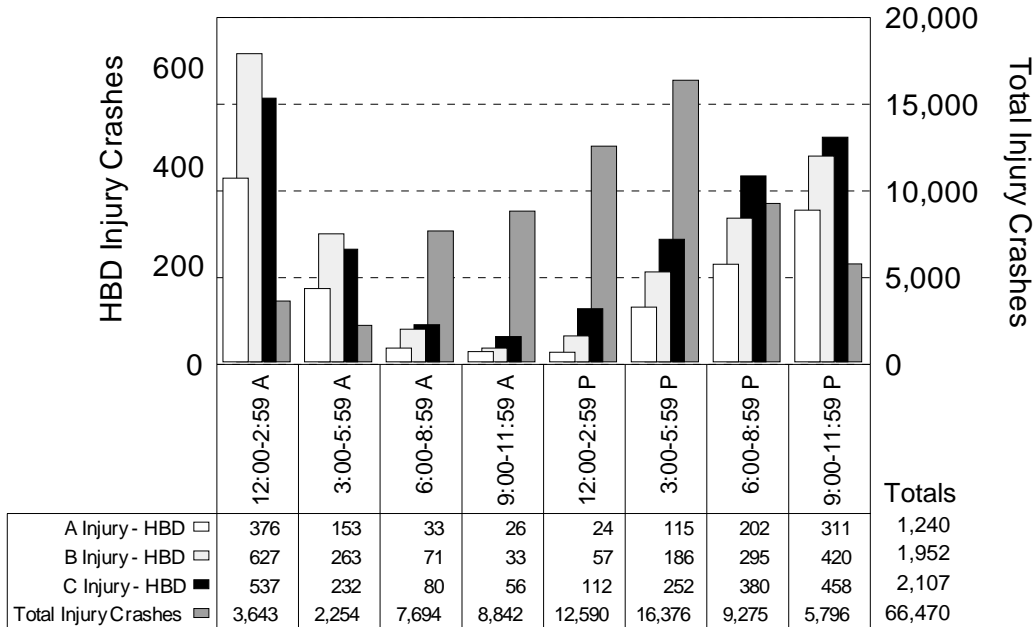


HBD Injury Crashes by Day of Week



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 12:00 AM and 2:59 AM (a particularly hazardous travel period). Excludes 259 injury crashes and 36 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	22	0	1	2	3	4	7	3	1	1	0
Alger	9	0	1	1	3	1	0	3	0	0	0
Allegan	172	0	26	43	38	34	23	3	1	2	2
Alpena	45	0	9	8	9	9	5	4	1	0	0
Antrim	59	0	3	18	12	18	6	1	1	0	0
Arenac	34	0	7	8	8	5	4	1	1	0	0
Baraga	18	0	2	3	4	6	1	2	0	0	0
Barry	89	0	16	16	19	21	13	1	3	0	0
Bay	223	1	31	38	67	41	29	8	6	0	2
Benzie	36	0	3	8	10	7	4	2	1	1	0
Berrien	190	1	21	34	44	45	28	8	7	0	2
Branch	57	0	11	9	12	13	9	0	1	0	2
Calhoun	214	1	30	56	35	45	31	5	5	3	3
Cass	111	1	7	27	30	22	14	7	2	1	0
Charlevoix	35	0	3	6	14	7	4	1	0	0	0
Cheboygan	42	0	6	11	8	12	2	1	0	2	0
Chippewa	64	0	7	14	13	16	10	4	0	0	0
Clare	55	2	4	9	11	23	4	0	1	1	0
Clinton	103	0	24	18	16	18	15	8	2	1	1
Crawford	24	0	2	5	2	8	6	1	0	0	0
Delta	61	0	11	11	18	6	8	3	4	0	0
Dickinson	44	0	7	8	9	5	7	4	2	2	0
Eaton	133	0	16	33	24	26	19	10	2	1	2
Emmet	63	0	7	9	15	17	8	5	2	0	0
Genesee	647	3	54	108	154	147	113	33	14	10	11
Gladwin	38	0	1	7	10	8	8	3	1	0	0
Gogebic	18	0	0	4	4	2	6	1	1	0	0
Grand Traverse	132	0	15	23	24	35	22	9	1	2	1
Gratiot	56	0	11	19	9	12	2	2	0	1	0
Hillsdale	59	0	10	13	15	9	6	4	0	1	1
Houghton	83	0	16	22	14	18	7	2	3	1	0
Huron	58	0	11	11	9	11	11	3	1	1	0
Ingham	348	0	41	89	103	62	35	10	3	1	4
Ionia	98	0	10	23	26	17	10	6	2	2	2
Iosco	56	0	8	7	11	14	11	4	1	0	0
Iron	21	0	1	3	8	3	3	1	0	1	1
Isabella	133	0	23	39	25	19	16	8	1	0	2
Jackson	237	0	26	33	74	46	36	15	1	1	5
Kalamazoo	401	0	55	93	97	74	50	23	6	0	3
Kalkaska	36	0	5	4	7	12	3	4	1	0	0
Kent	1,027	0	99	233	312	183	133	35	16	5	11
Keweenaw	6	0	0	1	1	2	0	2	0	0	0
Lake	19	0	3	3	2	3	3	3	1	1	0
Lapeer	133	1	16	20	38	31	18	8	0	1	0
Leelanau	31	0	5	7	9	6	3	0	1	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	155	0	13	32	47	31	20	7	2	1	2
Livingston	245	0	38	41	57	57	33	15	3	1	0
Luce	9	0	1	0	3	2	1	1	0	0	1
Mackinac	36	0	6	6	6	13	3	2	0	0	0
Macomb	932	4	103	179	219	197	152	39	20	12	7
Manistee	36	0	4	7	9	12	2	0	2	0	0
Marquette	103	0	15	20	21	17	18	7	3	1	1
Mason	41	0	8	10	6	4	9	1	2	0	1
Mecosta	73	0	8	17	13	20	10	3	1	1	0
Menominee	58	0	3	14	11	13	9	6	2	0	0
Midland	87	0	13	12	16	24	16	5	0	1	0
Missaukee	29	0	3	10	6	7	3	0	0	0	0
Monroe	267	0	26	48	62	61	54	9	3	3	1
Montcalm	110	0	11	28	21	24	18	3	4	1	0
Montmorency	13	0	1	0	4	3	5	0	0	0	0
Muskegon	233	1	30	41	48	60	31	18	2	0	2
Newaygo	81	0	16	17	17	11	11	6	3	0	0
Oakland	1,398	0	161	264	344	299	201	86	25	10	8
Oceana	57	0	8	8	15	14	8	4	0	0	0
Ogemaw	34	0	4	5	7	10	6	1	0	0	1
Ontonagon	9	0	2	2	1	2	2	0	0	0	0
Osceola	50	0	5	13	9	11	9	1	1	0	1
Oscoda	16	0	2	1	2	3	6	2	0	0	0
Otsego	34	0	2	9	10	9	3	1	0	0	0
Ottawa	321	0	47	88	86	45	40	9	2	1	3
Presque Isle	19	1	2	6	3	2	5	0	0	0	0
Roscommon	56	0	6	8	8	15	8	8	3	0	0
Saginaw	271	2	27	44	71	49	52	16	6	3	1
St. Clair	215	0	32	33	50	52	32	12	0	2	2
St. Joseph	94	0	8	20	26	17	12	4	4	0	3
Sanilac	53	0	10	10	15	12	4	1	0	1	0
Schoolcraft	10	0	2	3	2	0	3	0	0	0	0
Shiawassee	111	0	21	29	26	20	8	6	1	0	0
Tuscola	107	1	13	12	24	32	17	6	1	0	1
Van Buren	149	0	19	29	37	34	17	12	1	0	0
Washtenaw	409	0	47	96	102	71	58	23	9	1	2
Wayne	1,925	1	164	298	548	442	310	109	28	6	19
Wexford	66	1	7	19	14	10	9	3	3	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0
Total	13,452	21	1,553	2,636	3,342	2,828	1,958	687	228	88	111



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	137	0.0	3	0.3	28	33	17	56
14 years	139	0.0	1	0.1	15	19	20	84
15 years	530	0.2	6	0.5	30	60	81	353
16 years	6,975	2.3	12	1.1	141	445	970	5,407
17 years	9,134	3.0	26	2.3	197	552	1,233	7,126
18 years	10,243	3.3	31	2.7	235	573	1,420	7,984
19 years	9,480	3.1	30	2.6	216	546	1,336	7,352
20 years	8,757	2.8	27	2.4	205	456	1,170	6,899
21 - 24 years	30,515	9.9	111	9.7	738	1,741	4,005	23,920
25 - 34 years	58,338	18.8	206	18.1	1,250	2,929	7,688	46,265
35 - 44 years	59,246	19.1	212	18.6	1,263	2,756	7,984	47,031
45 - 54 years	51,966	16.8	226	19.8	1,118	2,375	6,909	41,338
55 - 64 years	31,561	10.2	121	10.6	697	1,411	4,214	25,118
65 - 69 years	8,234	2.7	26	2.3	161	393	1,058	6,596
70 - 74 years	6,080	2.0	27	2.4	132	309	880	4,732
75 - 79 years	4,986	1.6	22	1.9	125	268	705	3,866
80 - 84 years	3,102	1.0	31	2.7	69	208	469	2,325
85 - 89 years	1,331	0.4	13	1.1	40	99	223	956
90 years and over	335	0.1	4	0.4	9	30	49	243
Unknown	8,398	2.7	6	0.5	81	250	996	7,065
Total	309,487	100.0	1,141	100.0	6,750	15,453	41,427	244,716

NOTE: Gender tables exclude 45,841 drivers of unknown gender.

The crash involvement for male drivers is down 7.2 percent from 2004.

The fatal crash involvement for male drivers is down 3.0 percent from 2004.



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	2	0.0	0	0.0	1	0	1	0
14 years	6	0.1	0	0.0	0	3	0	3
15 years	11	0.1	0	0.0	0	1	3	7
16 years	64	0.6	0	0.0	5	7	13	39
17 years	164	1.6	4	1.6	13	22	20	105
18 years	284	2.7	7	2.8	24	40	33	180
19 years	329	3.2	7	2.8	25	57	43	197
20 years	365	3.5	6	2.4	27	65	55	212
21 - 24 years	2,099	20.3	47	18.5	212	318	282	1,240
25 - 34 years	2,596	25.1	64	25.2	233	389	399	1,511
35 - 44 years	2,078	20.1	64	25.2	211	295	334	1,174
45 - 54 years	1,464	14.1	38	15.0	126	214	238	848
55 - 64 years	581	5.6	12	4.7	56	65	101	347
65 - 69 years	119	1.1	2	0.8	11	18	20	68
70 - 74 years	69	0.7	1	0.4	7	12	13	36
75 - 79 years	43	0.4	0	0.0	6	7	11	19
80 - 84 years	21	0.2	2	0.8	3	4	1	11
85 - 89 years	4	0.0	0	0.0	0	0	1	3
90 years and over	1	0.0	0	0.0	0	0	0	1
Unknown	59	0.6	0	0.0	0	7	11	41
Total	10,359	100.0	254	100.0	960	1,524	1,579	6,042

NOTE: Gender/alcohol tables exclude 48 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	75	0.0	2	0.4	6	17	9	41
14 years	86	0.0	1	0.2	2	8	13	62
15 years	392	0.2	0	0.0	12	34	58	288
16 years	6,217	2.6	13	2.9	109	396	944	4,755
17 years	7,999	3.4	11	2.4	158	458	1,277	6,095
18 years	8,279	3.5	20	4.4	141	481	1,394	6,243
19 years	7,675	3.2	15	3.3	135	400	1,325	5,800
20 years	7,217	3.0	11	2.4	117	394	1,205	5,490
21 - 24 years	25,031	10.5	42	9.3	407	1,211	4,101	19,270
25 - 34 years	46,420	19.6	63	13.9	792	2,066	7,656	35,843
35 - 44 years	46,523	19.6	80	17.7	759	1,981	7,562	36,141
45 - 54 years	38,976	16.4	81	17.9	645	1,499	6,412	30,339
55 - 64 years	21,776	9.2	48	10.6	318	936	3,621	16,853
65 - 69 years	5,402	2.3	13	2.9	106	269	886	4,128
70 - 74 years	4,192	1.8	11	2.4	88	216	691	3,186
75 - 79 years	3,657	1.5	13	2.9	83	203	592	2,766
80 - 84 years	2,486	1.0	12	2.7	63	134	423	1,854
85 - 89 years	1,073	0.5	9	2.0	27	66	164	807
90 years and over	224	0.1	5	1.1	9	23	45	142
Unknown	3,643	1.5	2	0.4	32	91	343	3,175
Total	237,343	100.0	452	100.0	4,009	10,883	38,721	183,278

NOTE: Gender tables exclude 45,841 drivers of unknown gender.

The crash involvement for female drivers is down 5.5 percent from 2004.

The fatal crash involvement for female drivers is down 4.8 percent from 2004.



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	0	0.0	0	0.0	0	0	0	0
14 years	0	0.0	0	0.0	0	0	0	0
15 years	2	0.1	0	0.0	1	1	0	0
16 years	28	0.9	1	2.5	2	8	3	14
17 years	59	1.9	1	2.5	7	5	5	41
18 years	73	2.4	1	2.5	7	16	14	35
19 years	94	3.1	0	0.0	9	13	18	54
20 years	92	3.0	1	2.5	6	11	10	64
21 - 24 years	536	17.6	7	17.5	34	83	95	317
25 - 34 years	746	24.5	13	32.5	73	114	92	454
35 - 44 years	749	24.6	8	20.0	72	92	138	439
45 - 54 years	493	16.2	8	20.0	26	39	109	311
55 - 64 years	105	3.4	0	0.0	3	6	25	71
65 - 69 years	28	0.9	0	0.0	2	3	4	19
70 - 74 years	12	0.4	0	0.0	3	1	1	7
75 - 79 years	12	0.4	0	0.0	0	2	3	7
80 - 84 years	6	0.2	0	0.0	0	3	0	3
85 - 89 years	1	0.0	0	0.0	0	0	0	1
90 years and over	0	0.0	0	0.0	0	0	0	0
Unknown	9	0.3	0	0.0	0	2	1	6
Total	3,045	100.0	40	100.0	245	399	518	1,843

NOTE: Gender/alcohol tables exclude 48 unknown gender drinking drivers.

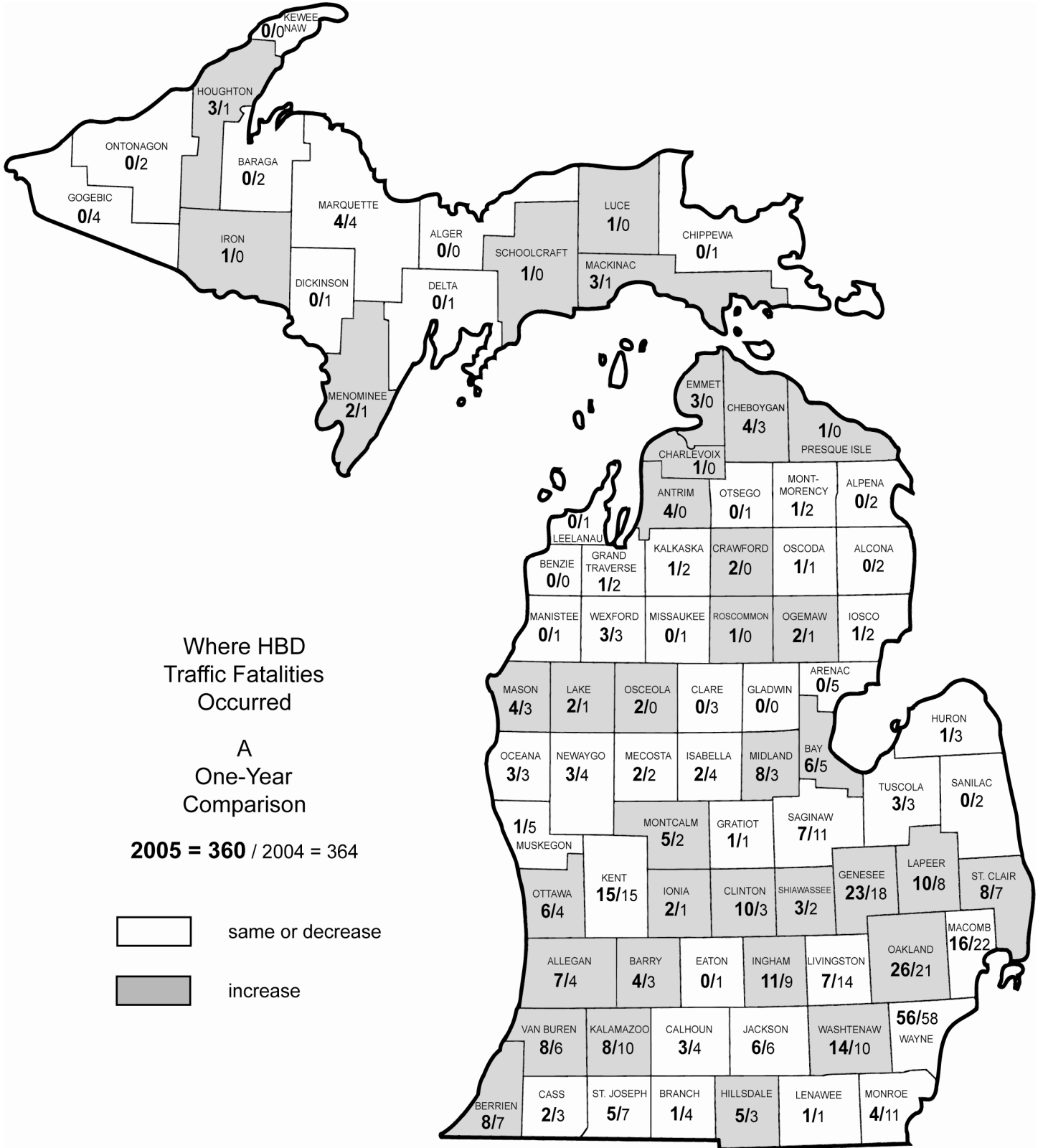
FATAL CRASHES AND FATALITIES WITH DRINKING INVOLVEMENT BY COUNTY

COUNTY	CRASHES			PERSONS		
	All Fatal Crashes	HBD Fatal Crashes	Percent HBD	Total Fatalities	HBD Fatalities	Percent HBD
Alcona	2	0	0.0	2	0	0.0
Alger	3	0	0.0	4	0	0.0
Allegan	20	7	35.0	21	7	33.3
Alpena	6	0	0.0	6	0	0.0
Antrim	5	3	60.0	6	4	66.7
Arenac	2	0	0.0	2	0	0.0
Baraga	1	0	0.0	1	0	0.0
Barry	8	4	50.0	8	4	50.0
Bay	15	3	20.0	19	6	31.6
Benzie	3	0	0.0	3	0	0.0
Berrien	21	6	28.6	26	8	30.8
Branch	9	1	11.1	10	1	10.0
Calhoun	16	3	18.8	16	3	18.8
Cass	10	2	20.0	10	2	20.0
Charlevoix	3	1	33.3	3	1	33.3
Cheboygan	8	4	50.0	8	4	50.0
Chippewa	1	0	0.0	1	0	0.0
Clare	7	0	0.0	8	0	0.0
Clinton	12	5	41.7	17	10	58.8
Crawford	6	2	33.3	6	2	33.3
Delta	2	0	0.0	2	0	0.0
Dickinson	3	0	0.0	3	0	0.0
Eaton	11	0	0.0	11	0	0.0
Emmet	7	3	42.9	7	3	42.9
Genesee	42	20	47.6	49	23	46.9
Gladwin	1	0	0.0	1	0	0.0
Gogebic	0	0	0.0	0	0	0.0
Grand Traverse	6	1	16.7	7	1	14.3
Gratiot	5	1	20.0	5	1	20.0
Hillsdale	9	4	44.4	10	5	50.0
Houghton	6	3	50.0	6	3	50.0
Huron	6	1	16.7	7	1	14.3
Ingham	27	11	40.7	27	11	40.7
Ionia	9	2	22.2	9	2	22.2
Iosco	4	1	25.0	4	1	25.0
Iron	1	1	100.0	1	1	100.0
Isabella	5	2	40.0	5	2	40.0
Jackson	14	5	35.7	16	6	37.5
Kalamazoo	26	8	30.8	26	8	30.8
Kalkaska	3	1	33.3	3	1	33.3
Kent	49	14	28.6	52	15	28.8
Keweenaw	0	0	0.0	0	0	0.0
Lake	2	1	50.0	3	2	66.7
Lapeer	20	7	35.0	28	10	35.7

**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	5	0	0.0	5	0	0.0
Lenawee	15	1	6.7	16	1	6.3
Livingston	16	7	43.8	18	7	38.9
Luce	1	1	100.0	1	1	100.0
Mackinac	5	3	60.0	5	3	60.0
Macomb	41	15	36.6	44	16	36.4
Manistee	4	0	0.0	7	0	0.0
Marquette	6	3	50.0	7	4	57.1
Mason	8	4	50.0	8	4	50.0
Mecosta	5	2	40.0	5	2	40.0
Menominee	3	2	66.7	3	2	66.7
Midland	12	4	33.3	16	8	50.0
Missaukee	2	0	0.0	2	0	0.0
Monroe	20	4	20.0	20	4	20.0
Montcalm	14	4	28.6	17	5	29.4
Montmorency	2	1	50.0	2	1	50.0
Muskegon	16	1	6.3	16	1	6.3
Newaygo	9	2	22.2	11	3	27.3
Oakland	77	23	29.9	88	26	29.5
Oceana	6	3	50.0	6	3	50.0
Ogemaw	5	2	40.0	5	2	40.0
Ontonagon	0	0	0.0	0	0	0.0
Osceola	4	2	50.0	4	2	50.0
Oscoda	3	1	33.3	3	1	33.3
Otsego	4	0	0.0	5	0	0.0
Ottawa	29	5	17.2	30	6	20.0
Presque Isle	1	1	100.0	1	1	100.0
Roscommon	5	1	20.0	5	1	20.0
Saginaw	28	7	25.0	28	7	25.0
St. Clair	18	7	38.9	20	8	40.0
St. Joseph	9	3	33.3	12	5	41.7
Sanilac	7	0	0.0	7	0	0.0
Schoolcraft	4	1	25.0	4	1	25.0
Shiawassee	9	3	33.3	9	3	33.3
Tuscola	12	3	25.0	13	3	23.1
Van Buren	15	5	33.3	19	8	42.1
Washtenaw	32	14	43.8	35	14	40.0
Wayne	156	53	34.0	166	56	33.7
Wexford	6	2	33.3	7	3	42.9
Total	1,030	317	30.8	1,129	360	31.9

TRAFFIC FATALITIES WITH DRINKING INVOLVEMENT BY COUNTY



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	22	0	6	1	4	11
Alger	9	0	0	2	0	7
Allegan	174	7	16	31	24	96
Alpena	45	0	5	5	8	27
Antrim	59	3	8	8	4	36
Arenac	34	0	4	11	5	14
Baraga	18	0	2	1	2	13
Barry	89	4	9	20	8	48
Bay	224	3	23	33	33	132
Benzie	36	0	3	8	10	15
Berrien	193	6	19	23	36	109
Branch	58	1	6	14	10	27
Calhoun	216	3	18	31	35	129
Cass	111	2	21	13	9	66
Charlevoix	35	1	0	4	3	27
Cheboygan	40	4	4	12	3	17
Chippewa	64	0	14	15	6	29
Clare	53	0	10	12	5	26
Clinton	101	5	12	16	10	58
Crawford	24	2	0	3	5	14
Delta	63	0	14	7	4	38
Dickinson	44	0	4	8	5	27
Eaton	135	0	13	22	16	84
Emmet	62	3	4	9	10	36
Genesee	655	20	49	116	115	355
Gladwin	37	0	3	7	3	24
Gogebic	17	0	2	2	3	10
Grand Traverse	133	1	13	20	21	78
Gratiot	56	1	6	14	3	32
Hillsdale	58	4	7	7	15	25
Houghton	85	3	16	9	10	47
Huron	56	1	7	16	5	27
Ingham	354	11	27	52	58	206
Ionia	97	2	10	17	13	55
Iosco	57	1	9	13	8	26
Iron	21	1	3	4	4	9
Isabella	133	2	13	26	15	77
Jackson	236	5	23	27	40	141
Kalamazoo	406	8	30	63	65	240
Kalkaska	35	1	3	3	8	20
Kent	1,034	14	85	146	169	620
Keweenaw	6	0	2	0	1	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	4	3	2	9
Lapeer	135	7	16	23	19	70
Leelanau	31	0	2	8	4	17
Lenawee	154	1	12	21	28	92
Livingston	244	7	32	31	36	138
Luce	9	1	1	2	1	4
Mackinac	36	3	3	6	3	21
Macomb	945	15	69	92	156	613
Manistee	37	0	5	4	7	21
Marquette	103	3	9	20	11	60
Mason	42	4	4	2	8	24
Mecosta	74	2	6	18	7	41
Menominee	57	2	5	12	7	31
Midland	88	4	15	13	7	49
Missaukee	29	0	11	3	2	13
Monroe	269	4	19	47	57	142
Montcalm	110	4	11	21	9	65
Montmorency	13	1	0	3	2	7
Muskegon	237	1	31	26	44	135
Newaygo	77	2	9	13	7	46
Oakland	1,405	23	95	181	243	863
Oceana	56	3	6	8	5	34
Ogemaw	35	2	1	8	3	21
Ontonagon	9	0	3	0	1	5
Osceola	50	2	3	5	5	35
Oscoda	16	1	2	1	1	11
Otsego	34	0	5	6	6	17
Ottawa	315	5	16	45	51	198
Presque Isle	19	1	6	2	1	9
Roscommon	56	1	7	10	4	34
Saginaw	280	7	29	43	38	163
St. Clair	218	7	17	32	39	123
St. Joseph	94	3	10	14	13	54
Sanilac	53	0	8	10	9	26
Schoolcraft	10	1	2	0	0	7
Shiawassee	113	3	9	31	10	60
Tuscola	105	3	18	12	12	60
Van Buren	148	5	13	23	25	82
Washtenaw	413	14	34	70	74	221
Wayne	1,948	53	171	238	340	1,146
Wexford	67	2	9	8	10	38
Unknown	0	0	0	0	0	0
Total	13,538	317	1,251	1,966	2,118	7,886

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

COUNTY	2005 Population Estimate	All Crashes	Fatal Crashes	HBD Crashes	HBD Fatal Crashes	HBD Fatal Crash Rate per 1,000 people	Rank
Mackinac	11,331	743	5	36	3	0.2648	1
Luce	6,789	245	1	9	1	0.1473	2
Cheboygan	27,463	1,109	8	40	4	0.1457	3
Mason	28,986	1,515	8	42	4	0.1380	4
Crawford	15,074	649	6	24	2	0.1327	5
Antrim	24,422	1,055	5	59	3	0.1228	6
Schoolcraft	8,819	493	4	10	1	0.1134	7
Oscoda	9,298	345	3	16	1	0.1076	8
Oceana	28,473	1,110	6	56	3	0.1054	9
Montmorency	10,445	386	2	13	1	0.0957	10
Ogemaw	21,905	1,028	5	35	2	0.0913	11
Emmet	33,580	1,619	7	62	3	0.0893	12
Hillsdale	47,066	2,041	9	58	4	0.0850	13
Osceola	23,750	1,193	4	50	2	0.0842	14
Houghton	35,705	1,127	6	85	3	0.0840	15
Lake	12,069	456	2	19	1	0.0829	16
Iron	12,299	739	1	21	1	0.0813	17
Menominee	24,996	1,358	3	57	2	0.0800	18
Lapeer	93,361	3,405	20	135	7	0.0750	19
Clinton	69,329	2,828	12	101	5	0.0721	20
Presque Isle	14,330	594	1	19	1	0.0698	21
Barry	59,892	2,278	8	89	4	0.0668	22
Van Buren	78,812	2,687	15	148	5	0.0634	23
Wexford	31,876	1,392	6	67	2	0.0627	24
Montcalm	63,893	3,085	14	110	4	0.0626	25
Allegan	113,174	3,417	20	174	7	0.0619	26
Kalkaska	17,239	680	3	35	1	0.0580	27
Tuscola	58,428	2,076	12	105	3	0.0513	28
Midland	84,064	2,531	12	88	4	0.0476	29
St. Joseph	62,984	2,197	9	94	3	0.0476	30
Mecosta	42,391	2,246	5	74	2	0.0472	31
Marquette	64,760	2,051	6	103	3	0.0463	32
Genesee	443,883	13,925	42	655	20	0.0451	33
Shiawassee	72,945	2,574	9	113	3	0.0411	34
Washtenaw	341,847	11,795	32	413	14	0.0410	35
St. Clair	171,426	4,774	18	218	7	0.0408	36
Newaygo	50,019	1,866	9	77	2	0.0400	37
Ingham	278,592	10,663	27	354	11	0.0395	38
Livingston	181,517	5,628	16	244	7	0.0386	39
Cass	51,996	2,034	10	111	2	0.0385	40
Roscommon	26,079	999	5	56	1	0.0383	41
Charlevoix	26,722	1,164	3	35	1	0.0374	42
Iosco	26,992	959	4	57	1	0.0370	43
Berrien	162,611	5,108	21	193	6	0.0369	44
Saginaw	208,356	6,731	28	280	7	0.0336	45

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

COUNTY	2005 Population Estimate	All Crashes	Fatal Crashes	HBD Crashes	HBD Fatal Crashes	HBD Fatal Crash Rate per 1,000 people	Rank
Kalamazoo	240,536	9,182	26	406	8	0.0333	46
Ionia	64,608	2,776	9	97	2	0.0310	47
Jackson	163,629	6,556	14	236	5	0.0306	48
Isabella	65,618	3,083	5	133	2	0.0305	49
Huron	34,640	1,761	6	56	1	0.0289	50
Bay	109,029	3,317	15	224	3	0.0275	51
Wayne	1,998,217	63,159	156	1,948	53	0.0265	52
Monroe	153,935	4,709	20	269	4	0.0260	53
Gratiot	42,345	1,704	5	56	1	0.0236	54
Kent	596,666	21,447	49	1,034	14	0.0235	55
Calhoun	139,191	6,130	16	216	3	0.0216	56
Branch	46,460	2,238	9	58	1	0.0215	57
Ottawa	255,406	7,973	29	315	5	0.0196	58
Oakland	1,214,361	41,958	77	1,405	23	0.0189	59
Macomb	829,453	25,261	41	945	15	0.0181	60
Grand Traverse	83,971	3,496	6	133	1	0.0119	61
Lenawee	102,033	3,203	15	154	1	0.0098	62
Muskegon	175,554	5,562	16	237	1	0.0057	63
Alcona	11,653	628	2	22	0	0.0000	64
Alger	9,662	355	3	9	0	0.0000	64
Alpena	30,428	938	6	45	0	0.0000	64
Arenac	17,154	910	2	34	0	0.0000	64
Baraga	8,746	390	1	18	0	0.0000	64
Benzie	17,644	623	3	36	0	0.0000	64
Chippewa	38,780	1,197	1	64	0	0.0000	64
Clare	31,653	1,372	7	53	0	0.0000	64
Delta	38,347	1,994	2	63	0	0.0000	64
Dickinson	28,032	1,147	3	44	0	0.0000	64
Eaton	107,394	4,181	11	135	0	0.0000	64
Gladwin	27,209	847	1	37	0	0.0000	64
Gogebic	16,861	372	0	17	0	0.0000	64
Keweenaw	2,195	80	0	6	0	0.0000	64
Leelanau	22,157	576	5	31	0	0.0000	64
Manistee	25,226	964	4	37	0	0.0000	64
Missaukee	15,299	658	2	29	0	0.0000	64
Ontonagon	7,363	409	0	9	0	0.0000	64
Otsego	24,665	938	4	34	0	0.0000	64
Sanilac	44,752	1,846	7	53	0	0.0000	64
Total	10,120,860	350,838	1,030	13,538	317	0.03132	

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	22	0	11	11	0	2	2	18	0	12
Alger	9	0	2	7	0	0	2	7	0	2
Allegan	174	7	71	96	5	6	25	138	7	103
Alpena	45	0	18	27	0	5	3	37	0	18
Antrim	59	3	20	36	0	4	15	40	4	26
Arenac	34	0	20	14	3	4	4	23	0	35
Baraga	18	0	5	13	0	3	1	14	0	6
Barry	89	4	37	48	0	0	21	68	4	54
Bay	224	3	89	132	6	6	43	169	6	115
Benzie	36	0	21	15	0	5	2	29	0	23
Berrien	193	6	78	109	25	9	30	129	8	110
Branch	58	1	30	27	1	6	3	48	1	50
Calhoun	216	3	84	129	27	0	45	144	3	116
Cass	111	2	43	66	0	12	18	81	2	59
Charlevoix	35	1	7	27	0	6	6	23	1	11
Cheboygan	40	4	19	17	4	1	7	28	4	25
Chippewa	64	0	35	29	6	0	6	52	0	54
Clare	53	0	27	26	0	7	7	39	0	41
Clinton	101	5	38	58	14	10	17	60	10	69
Crawford	24	2	8	14	5	0	3	16	2	9
Delta	63	0	25	38	0	7	8	48	0	36
Dickinson	44	0	17	27	0	8	8	28	0	20
Eaton	135	0	51	84	9	0	33	93	0	63
Emmet	62	3	23	36	0	10	2	50	3	30
Genesee	655	20	280	355	65	19	85	486	23	412
Gladwin	37	0	13	24	0	0	9	28	0	15
Gogebic	17	0	7	10	0	5	2	10	0	11
Grand Traverse	133	1	54	78	0	15	10	108	1	77
Gratiot	56	1	23	32	0	11	6	39	1	28
Hillsdale	58	4	29	25	0	8	1	49	5	38
Houghton	85	3	35	47	0	20	21	44	3	49
Huron	56	1	28	27	0	0	10	46	1	42
Ingham	354	11	137	206	59	9	65	221	11	190
Ionia	97	2	40	55	11	0	24	62	2	60
Iosco	57	1	30	26	0	6	6	45	1	38
Iron	21	1	11	9	0	7	1	13	1	21
Isabella	133	2	54	77	0	19	7	107	2	80
Jackson	236	5	90	141	37	8	31	160	6	118
Kalamazoo	406	8	158	240	48	15	64	279	8	208
Kalkaska	35	1	14	20	0	9	1	25	1	16
Kent	1,034	14	400	620	108	89	139	698	15	551
Keweenaw	6	0	3	3	0	2	0	4	0	4
Lake	19	1	9	9	0	1	1	17	2	12
Lapeer	135	7	58	70	11	0	31	93	10	79
Leelanau	31	0	14	17	0	0	11	20	0	19
Lenawee	154	1	61	92	0	22	26	106	1	85

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	244	7	99	138	33	14	9	188	7	134
Luce	9	1	4	4	0	0	4	5	1	7
Mackinac	36	3	12	21	4	4	5	23	3	17
Macomb	945	15	317	613	99	0	188	658	16	436
Manistee	37	0	16	21	0	7	5	25	0	21
Marquette	103	3	40	60	0	13	18	72	4	57
Mason	42	4	14	24	0	10	1	31	4	22
Mecosta	74	2	31	41	0	3	16	55	2	35
Menominee	57	2	24	31	0	7	6	44	2	36
Midland	88	4	35	49	0	9	14	65	8	44
Missaukee	29	0	16	13	0	0	9	20	0	24
Monroe	269	4	123	142	42	36	19	172	4	166
Montcalm	110	4	41	65	0	4	18	88	5	56
Montmorency	13	1	5	7	0	0	0	13	1	7
Muskegon	237	1	101	135	1	38	31	167	1	137
Newaygo	77	2	29	46	0	0	14	63	3	45
Oakland	1,405	23	519	863	218	46	226	915	26	709
Oceana	56	3	19	34	0	8	6	42	3	29
Ogemaw	35	2	12	21	4	0	5	26	2	14
Ontonagon	9	0	4	5	0	2	2	5	0	4
Osceola	50	2	13	35	0	12	3	35	2	17
Oscoda	16	1	4	11	0	0	5	11	1	5
Otsego	34	0	17	17	5	0	5	24	0	24
Ottawa	315	5	112	198	26	25	28	236	6	156
Presque Isle	19	1	9	9	0	2	3	14	1	12
Roscommon	56	1	21	34	3	1	17	35	1	28
Saginaw	280	7	110	163	13	0	82	185	7	157
St. Clair	218	7	88	123	26	0	36	156	8	143
St. Joseph	94	3	37	54	0	10	21	63	5	53
Sanilac	53	0	27	26	0	0	19	34	0	33
Schoolcraft	10	1	2	7	0	2	2	6	1	6
Shiawassee	113	3	50	60	5	0	24	84	3	68
Tuscola	105	3	42	60	0	0	13	92	3	65
Van Buren	148	5	61	82	12	0	23	113	8	84
Washtenaw	413	14	178	221	61	68	25	259	14	234
Wayne	1,948	53	749	1,146	320	114	280	1,234	56	1,056
Wexford	67	2	27	38	0	9	20	38	3	40
Unknown	0	0	0	0	0	0	0	0	0	0
Total	13,538	317	5,335	7,886	1,316	820	2,064	9,338	360	7,421

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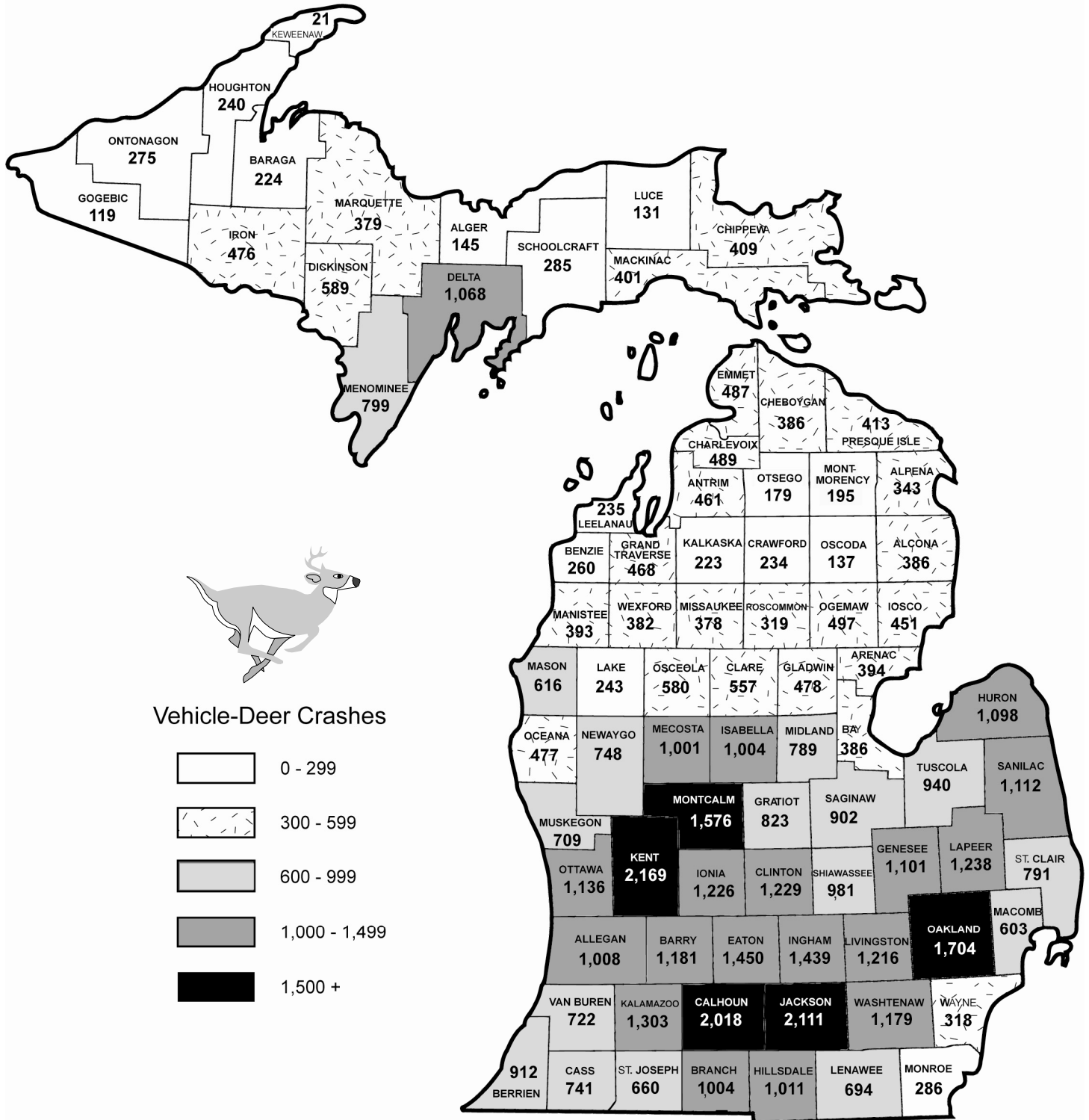
2005

Deer

MICHIGAN MOTOR VEHICLE-DEER INVOLVED CRASHES

Michigan had 58,741 reported motor vehicle-deer crashes during 2005. 1,700 people were injured and 9 people were killed as a result of those collisions. Of the 59,002 vehicles involved, 38,275 (64.9%) were passenger cars, 13,530 (22.9%) were pickups, and 4,330 (7.3%) were minivans, vans, and motorhomes. All other vehicle types (including motorcycle, snowmobile, ORV/ATV, large truck, moped) totaled 2,867 (4.9%).

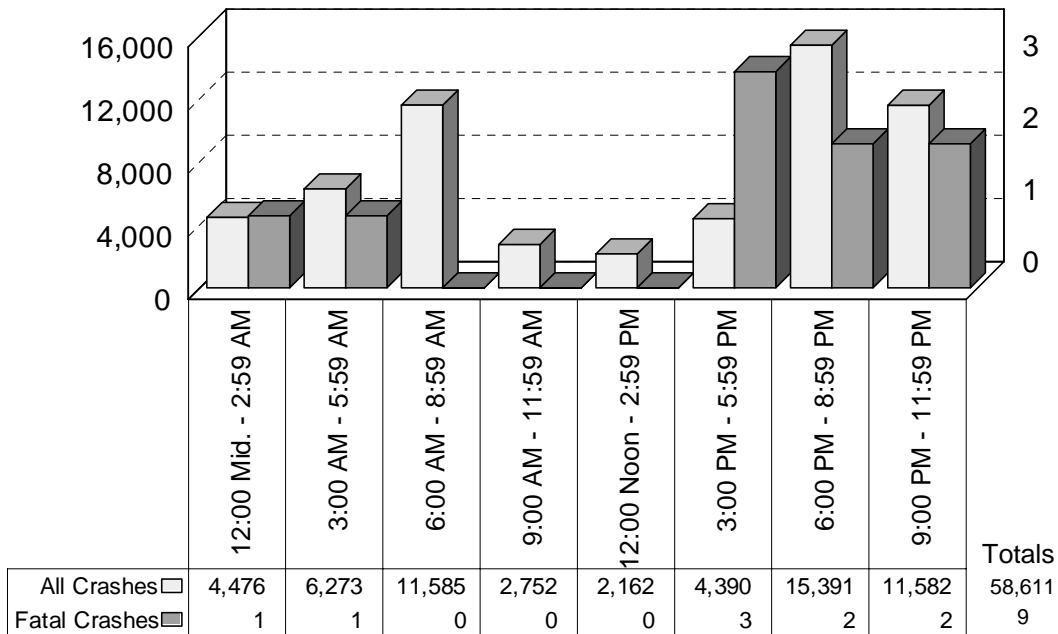
Contrary to common belief, motor vehicle-deer crashes are happening most often in Michigan's southern, heavily populated counties; Kent County had the highest number with 2,169 such crashes in 2005.



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	12,162	20.7	2	22.2	50	197	263	11,650
Dawn	4,752	8.1	0	0.0	11	32	71	4,638
Dusk	2,910	5.0	2	22.2	6	30	32	2,840
Dark – Lighted	1,776	3.0	0	0.0	0	7	16	1,753
Dark – Unlighted	36,413	62.0	5	55.6	59	221	496	35,632
Other/Unknown	728	1.2	0	0.0	2	2	5	719
Total	58,741	100.0	9	100.0	128	489	883	57,232

Time and Severity of All Motor Vehicle-Deer Crashes

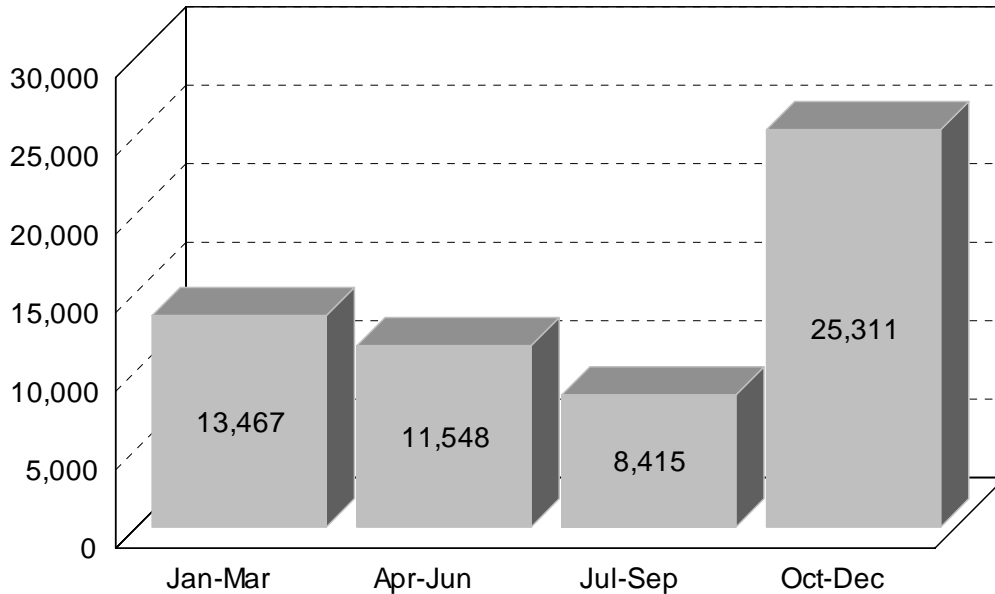


NOTE: Time and Severity chart excludes 130 crashes where time of day is unknown.

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	5,278	9.0	0	0.0	0	10	58	5,210
February	4,076	6.9	0	0.0	1	10	44	4,021
March	4,113	7.0	0	0.0	4	22	41	4,046
April	3,230	5.5	1	11.1	10	28	52	3,139
May	4,100	7.0	2	22.2	13	53	69	3,963
June	4,218	7.2	1	11.1	18	65	102	4,032
July	2,880	4.9	0	0.0	20	58	63	2,739
August	2,168	3.7	0	0.0	14	46	41	2,067
September	3,367	5.7	0	0.0	11	43	64	3,249
October	8,423	14.3	2	22.2	18	60	134	8,209
November	10,504	17.9	3	33.3	15	75	154	10,257
December	6,384	10.9	0	0.0	4	19	61	6,300
Total	58,741	100.0	9	100.0	128	489	883	57,232

All Motor Vehicle-Deer Crashes



25,311 (43.1%) 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	386	0	11	375	0	53	101	232	0	13
Alger	145	0	5	140	0	29	82	34	0	9
Allegan	1,008	0	19	989	79	97	174	658	0	23
Alpena	343	0	5	338	0	35	96	212	0	5
Antrim	461	0	9	452	0	81	99	281	0	9
Arenac	394	0	10	384	39	97	46	212	0	12
Baraga	224	0	5	219	0	90	48	86	0	8
Barry	1,181	0	37	1,144	0	0	479	702	0	42
Bay	386	0	13	373	31	20	85	250	0	15
Benzie	260	0	4	256	0	45	51	164	0	4
Berrien	912	0	34	878	145	148	130	489	0	36
Branch	1,004	0	17	987	84	73	67	780	0	17
Calhoun	2,018	1	50	1,967	289	0	451	1,278	1	52
Cass	741	1	26	714	0	70	241	430	1	29
Charlevoix	489	0	9	480	0	163	88	238	0	10
Cheboygan	386	0	19	367	68	34	95	189	0	23
Chippewa	409	0	13	396	50	0	190	169	0	14
Clare	557	0	9	548	0	129	115	313	0	10
Clinton	1,229	0	38	1,191	139	140	112	838	0	46
Crawford	234	0	3	231	34	5	92	103	0	3
Delta	1,068	0	25	1,043	0	298	225	545	0	25
Dickinson	589	0	10	579	0	181	197	211	0	10
Eaton	1,450	0	33	1,417	171	0	414	865	0	36
Emmet	487	0	5	482	0	144	44	299	0	5
Genesee	1,101	0	37	1,064	128	16	136	821	0	43
Gladwin	478	0	11	467	0	0	180	298	0	16
Gogebic	119	0	4	115	0	76	12	31	0	5
Grand Traverse	468	0	16	452	0	53	92	323	0	18
Gratiot	823	0	23	800	0	141	119	563	0	24
Hillsdale	1,011	0	18	993	0	117	163	731	0	23
Houghton	240	0	13	227	0	68	82	90	0	15
Huron	1,098	0	28	1,070	0	0	444	654	0	33
Ingham	1,439	0	33	1,406	160	94	198	987	0	37
Ionia	1,226	1	18	1,207	89	0	306	831	1	20
Iosco	451	0	12	439	0	62	146	243	0	17
Iron	476	0	9	467	0	223	88	165	0	10
Isabella	1,004	0	20	984	0	125	119	760	0	22
Jackson	2,111	0	32	2,079	138	126	366	1,481	0	34
Kalamazoo	1,303	0	46	1,257	74	102	127	1,000	0	54
Kalkaska	223	0	2	221	0	26	59	138	0	2
Kent	2,169	0	62	2,107	170	117	397	1,485	0	74
Keweenaw	21	0	2	19	0	8	1	12	0	2
Lake	243	0	8	235	0	48	37	158	0	9
Lapeer	1,238	0	31	1,207	103	0	223	912	0	33
Leelanau	235	0	4	231	0	0	107	128	0	5
Lenawee	694	0	30	664	0	160	157	377	0	37

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	48	1,168	131	64	137	884	0	54
Luce	131	0	6	125	0	0	88	43	0	7
Mackinac	401	0	13	388	79	73	133	116	0	13
Macomb	603	0	18	585	19	0	98	486	0	21
Manistee	393	0	4	389	0	76	105	212	0	4
Marquette	379	1	12	366	0	111	90	178	1	17
Mason	616	1	12	603	0	158	28	430	1	12
Mecosta	1,001	0	23	978	0	113	264	624	0	27
Menominee	799	0	27	772	0	304	91	404	0	32
Midland	789	0	19	770	0	84	97	608	0	25
Missaukee	378	0	8	370	0	0	106	272	0	9
Monroe	286	0	9	277	29	61	27	169	0	9
Montcalm	1,576	0	30	1,546	0	45	451	1,080	0	32
Montmorency	195	0	8	187	0	0	88	107	0	8
Muskegon	709	0	25	684	16	104	81	508	0	28
Newaygo	748	0	16	732	0	0	230	518	0	17
Oakland	1,704	1	47	1656	152	27	198	1,327	1	56
Oceana	477	1	12	464	0	116	54	307	1	13
Ogemaw	497	1	14	482	46	0	157	294	1	18
Ontonagon	275	0	8	267	0	83	136	56	0	10
Osceola	580	0	5	575	0	166	89	325	0	5
Oscoda	137	0	1	136	0	0	63	74	0	1
Otsego	179	0	6	173	21	0	30	128	0	6
Ottawa	1,136	0	46	1,090	121	68	97	850	0	50
Presque Isle	413	1	6	406	0	76	108	229	1	8
Roscommon	319	0	7	312	45	44	64	166	0	7
Saginaw	902	0	19	883	57	0	221	624	0	22
St. Clair	791	0	18	773	119	0	105	567	0	18
St. Joseph	660	0	14	646	0	79	155	426	0	14
Sanilac	1,112	0	22	1,090	0	0	417	695	0	23
Schoolcraft	285	0	8	277	0	110	103	72	0	9
Shiawassee	981	0	19	962	89	0	244	648	0	21
Tuscola	940	0	23	917	0	0	326	614	0	28
Van Buren	722	0	31	691	93	0	170	459	0	35
Washtenaw	1,179	0	35	1,144	83	115	113	868	0	37
Wayne	318	0	11	307	43	17	19	239	0	12
Wexford	382	0	2	380	0	46	174	162	0	3
Total	58,741	9	1,500	57,232	3,134	5,634	12,438	37,535	9	1,700

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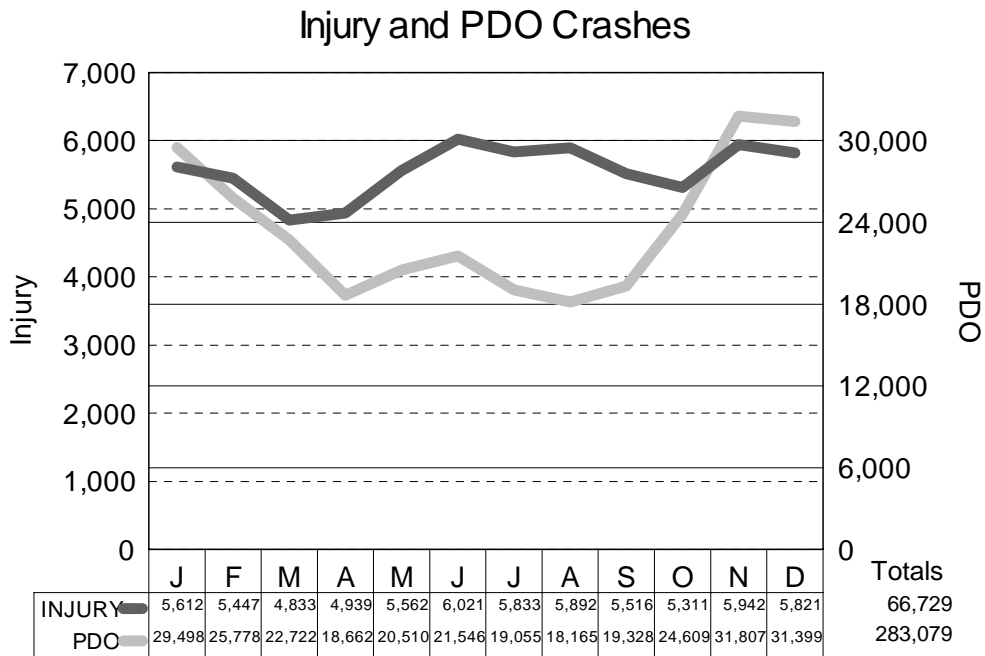
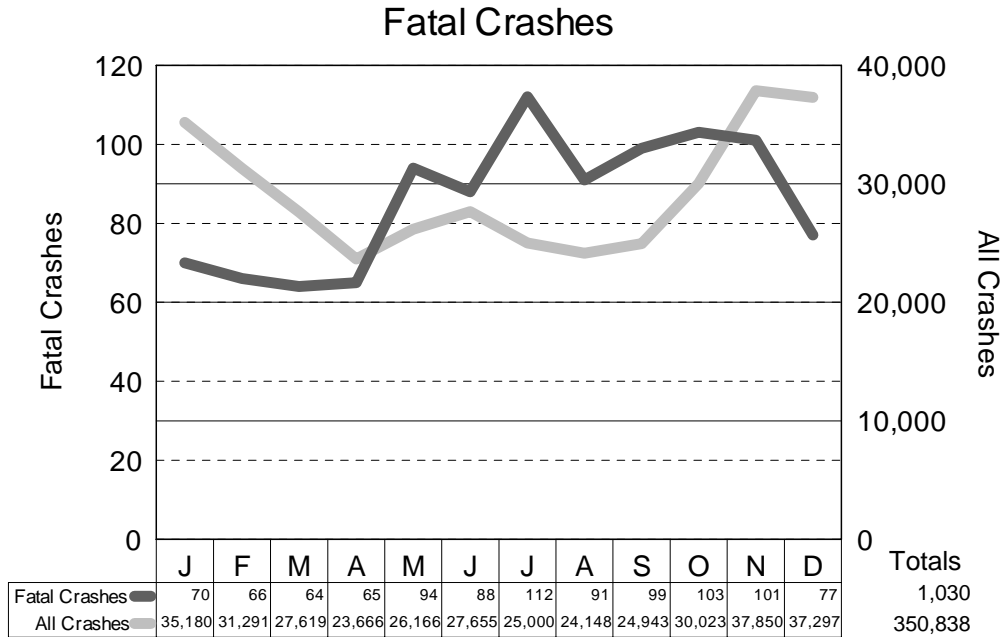
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Crash

ALL CRASHES INJURY SEVERITY BY MONTH



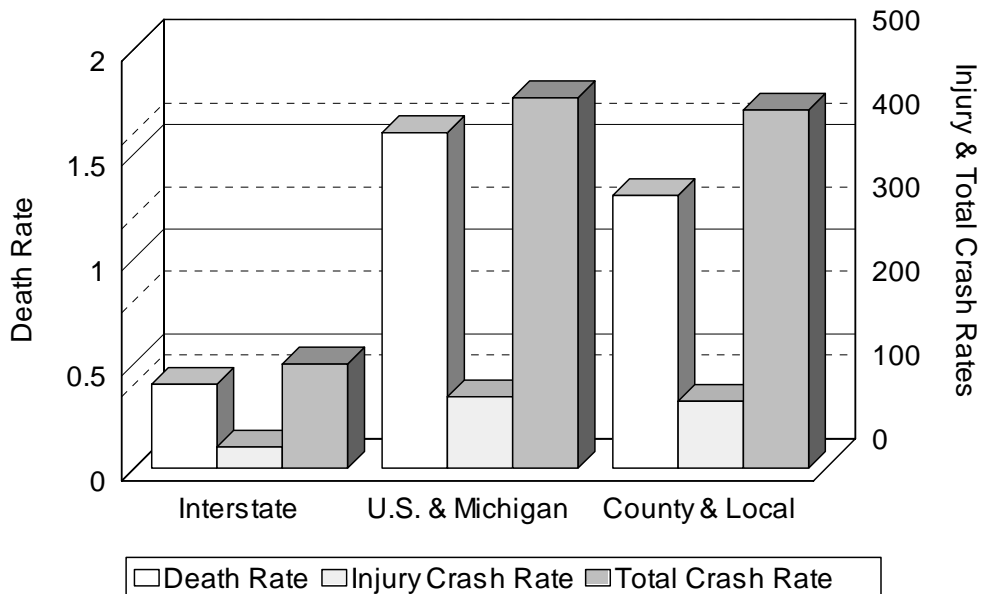
The charts on this page show the months of April through September are peak months (averaging 22.7%) in terms of the number of crashes involving death or injury as a percent of all crashes in the given month. That is, if a person was in a motor vehicle crash during one of these months there was a higher chance of that crash resulting in death or injury to one of the involved persons than if that crash happened during one of the other months.

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. 2005 estimated mileage figures were provided by the Michigan Department of Transportation [9].

STATEWIDE	Estimated Mileage (Billions)	All Crashes	Injury Crashes	Deaths	Total Crash Rate	Injury Crash Rate	Death Rate
Interstate Routes	30.7	38,102	7,734	127	124.1	25.2	0.4
U.S. & Michigan Roads	21.9	96,710	18,617	360	441.6	85.0	1.6
County & City Roads	50.6	216,026	40,378	642	426.9	79.8	1.3
Total	103.2	350,838	66,729	1,129	340.0	64.7	1.1

Rates per 100 Million Vehicle Miles



CRASH TYPE

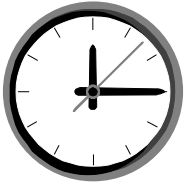
CRASH TYPE	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Single Vehicle	126,064	35.9	483	46.9	2,963	6,761	9,776	106,081
Head On	5,637	1.6	146	14.2	405	620	986	3,480
Head On - Left Turn	8,856	2.5	32	3.1	343	935	2,136	5,410
Angle	65,144	18.6	219	21.3	1,682	4,167	11,123	47,953
Rear End	82,661	23.6	64	6.2	738	2,361	14,855	64,643
Rear End - Left Turn	3,524	1.0	5	0.5	71	174	696	2,578
Rear End - Right Turn	3,111	0.9	2	0.2	14	47	376	2,672
Sideswipe - Same Direction	30,321	8.6	20	1.9	176	455	1,681	27,989
Sideswipe - Opposite Direct	8,767	2.5	16	1.6	106	281	606	7,758
Other/Unknown	16,753	4.8	43	4.2	302	647	1,246	14,515
Total	350,838	100.0	1,030	100.0	6,800	16,448	43,481	283,079

Single Vehicle, Head On, and Angle crash types produce the highest number of fatal crashes (82.3%). Single Vehicle crashes include rollovers, which are particularly deadly crash types. Rear End-Turning and Sideswipe crashes produce the lowest number of fatal crashes (4.2%).

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	278,831	79.5	689	66.9	4,568	11,092	34,535	227,947
Median	2,619	0.7	19	1.8	111	256	373	1,860
Shoulder	15,864	4.5	75	7.3	456	1,161	1,809	12,363
Outside of Shoulder/Curb	31,440	9.0	208	20.2	1,214	2,880	4,120	23,018
Gore	936	0.3	3	0.3	35	83	133	682
Other/Unknown	21,148	6.0	36	3.5	416	976	2,511	17,209
Total	350,838	100.0	1,030	100.0	6,800	16,448	43,481	283,079

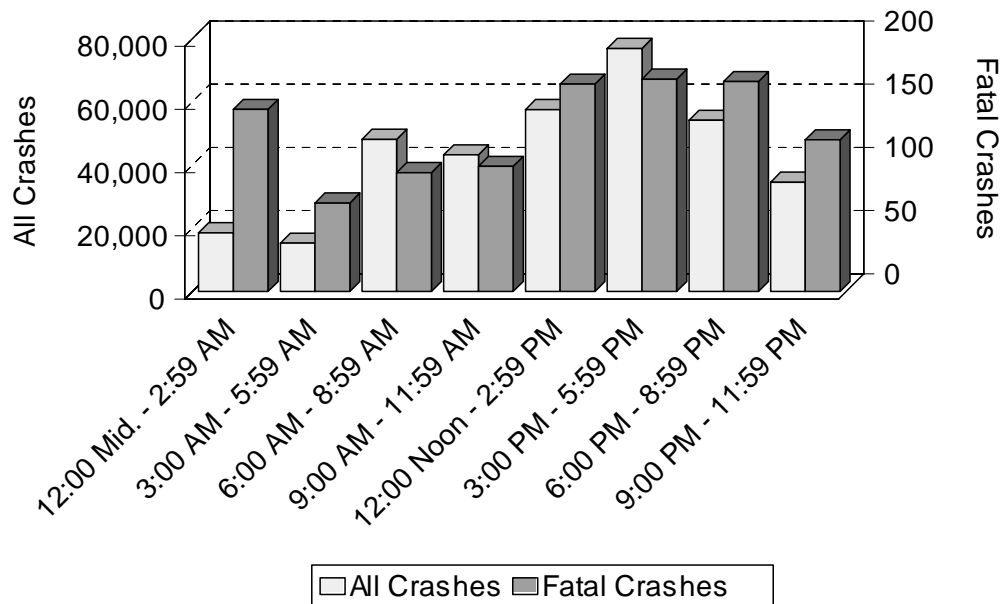
Crashes that happen outside of the normal driving lanes are overrepresented in the fatal count. Only 9 percent of crashes occur outside the shoulder of the road, but these crashes account for 20.2 percent of the fatal crashes.



TIME AND SEVERITY

TIME OF DAY	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
12:00 Mid. - 2:59 AM	18,570	5.3	144	14.0	636	1,264	1,743	14,783
3:00 AM - 5:59 AM	15,294	4.4	70	6.8	353	727	1,174	12,970
6:00 AM - 8:59 AM	48,123	13.7	94	9.1	676	1,755	5,263	40,335
9:00 AM - 11:59 AM	43,230	12.3	99	9.6	780	1,964	6,098	34,289
12:00 Noon - 2:59 PM	57,545	16.4	164	15.9	1,017	2,837	8,736	44,791
3:00 PM - 5:59 PM	76,872	21.9	168	16.3	1,456	3,765	11,155	60,328
6:00 PM - 8:59 PM	54,139	15.4	166	16.1	1,012	2,397	5,866	44,698
9:00 PM - 11:59 PM	34,570	9.9	120	11.7	833	1,667	3,296	28,654
Unknown	2,495	0.7	5	0.5	37	72	150	2,231
Total	350,838	100.0	1,030	100.0	6,800	16,448	43,481	283,079

Time and Severity

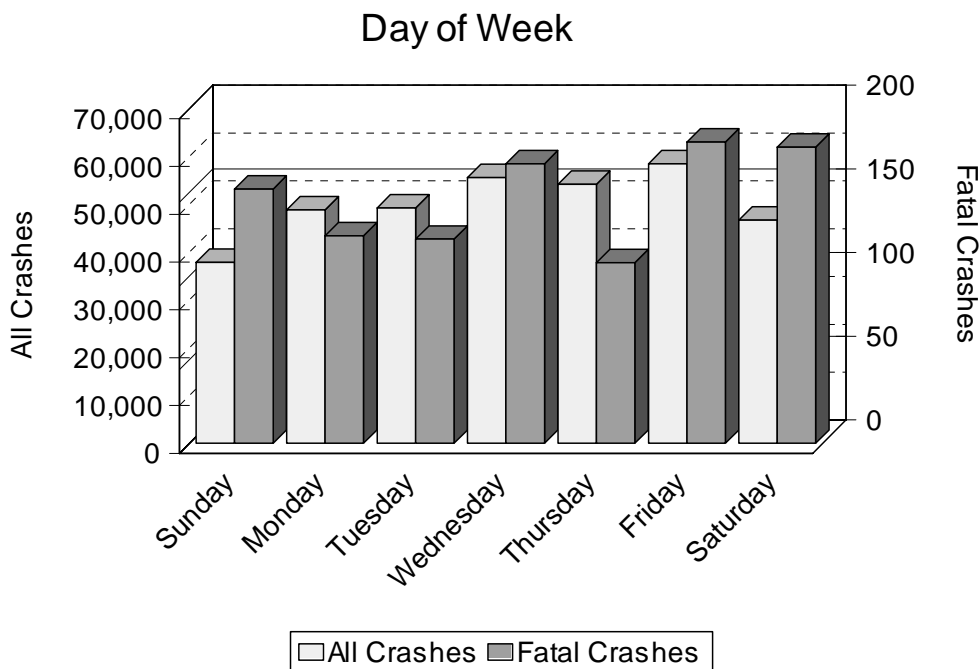


Crash frequencies peak in the late afternoon, then drop off steadily until 6:00 AM (the morning rush hour). Fatal crash frequencies rise with the frequency of other crashes, but continue at a high rate well into the early morning hours. There are proportionally more fatal crashes during the midnight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

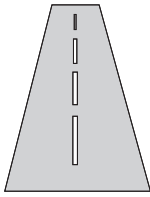
Sun	Mon	Tue	Wed	Thu	Fri	Sat

DAY OF WEEK

DAY OF WEEK	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Sunday	37,832	10.8	152	14.8	977	2,191	4,353	30,159
Monday	48,813	13.9	124	12.0	851	2,143	6,158	39,537
Tuesday	49,262	14.0	122	11.8	877	2,167	6,210	39,886
Wednesday	55,613	15.9	167	16.2	974	2,366	7,051	45,055
Thursday	54,173	15.4	108	10.5	881	2,346	6,722	44,116
Friday	58,481	16.7	180	17.5	1,095	2,797	7,453	46,956
Saturday	46,664	13.3	177	17.2	1,145	2,438	5,534	37,370
Total	350,838	100.0	1,030	100.0	6,800	16,448	43,481	283,079



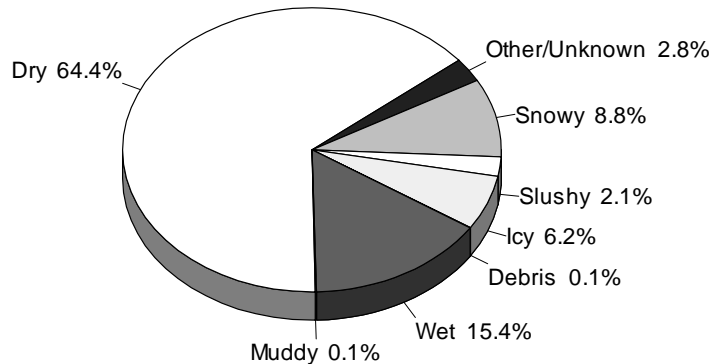
Crash frequencies were higher Monday through Friday than on the weekend. Friday (17.5%) and Saturday (17.2%) had the highest number of fatal crashes.



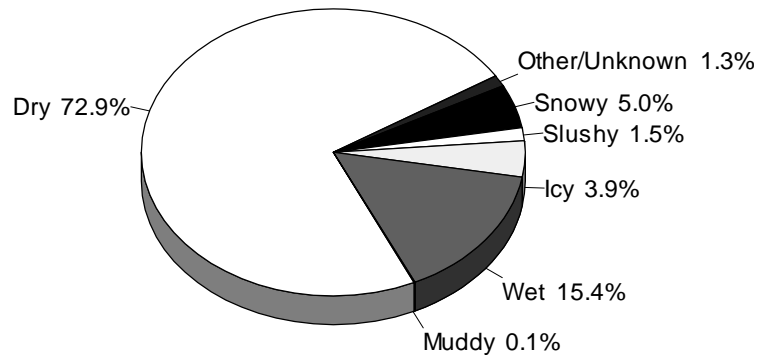
ROAD CONDITION

ROAD SURFACE CONDITION	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Dry	226,043	64.4	751	72.9	4,880	11,616	28,835	179,961
Wet	54,139	15.4	159	15.4	919	2,221	7,473	43,367
Icy	21,926	6.2	40	3.9	327	946	2,495	18,118
Snowy	30,911	8.8	51	5.0	394	975	2,857	26,634
Muddy	399	0.1	1	0.1	12	34	43	309
Slushy	7,459	2.1	15	1.5	139	329	964	6,012
Debris	233	0.1	0	0.0	9	32	36	156
Other/Unknown	9,728	2.8	13	1.3	120	295	778	8,522
Total	350,838	100.0	1,030	100.0	6,800	16,448	43,481	283,079

ALL CRASHES



FATAL CRASHES



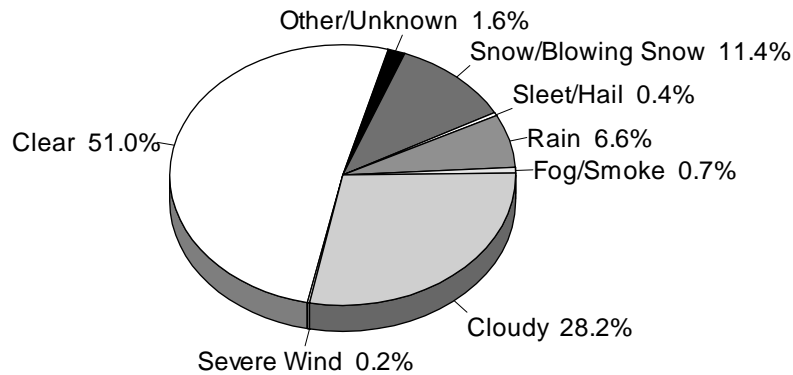
Most crashes (64.4%) and most fatal crashes (72.9%) occur on dry roads.



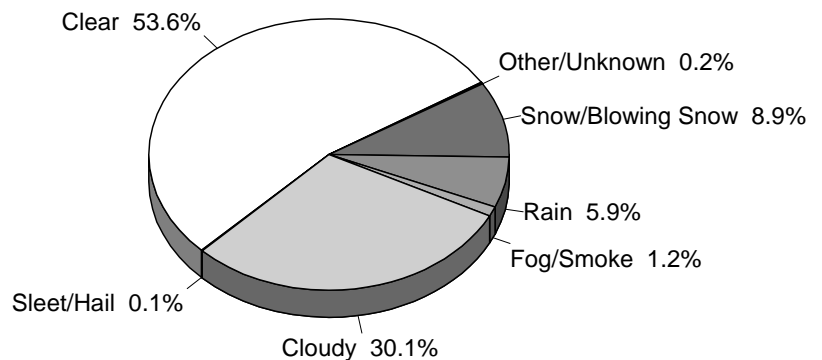
WEATHER CONDITION

WEATHER CONDITION	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Clear	178,895	51.0	552	53.6	3,890	9,178	22,301	142,974
Cloudy	99,018	28.2	310	30.1	1,807	4,498	12,685	79,718
Fog/Smoke	2,300	0.7	12	1.2	66	110	234	1,878
Rain	22,985	6.6	61	5.9	373	1,037	3,294	18,220
Snow/Blowing Snow	39,996	11.4	92	8.9	580	1,416	4,428	33,480
Severe Wind	685	0.2	0	0.0	15	24	54	592
Sleet/Hail	1,352	0.4	1	0.1	22	75	178	1,076
Other/Unknown	5,607	1.6	2	0.2	47	110	307	5,141
Total	350,838	100.0	1,030	100.0	6,800	16,448	43,481	283,079

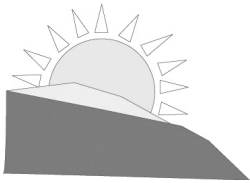
ALL CRASHES



FATAL CRASHES



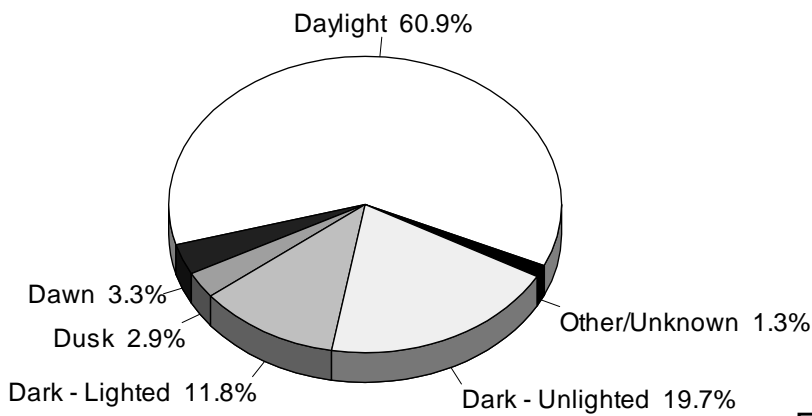
Half of all crashes occur in good weather (51.0%). Fog/smoke is a particularly deadly weather condition as it is overrepresented in fatal crashes.



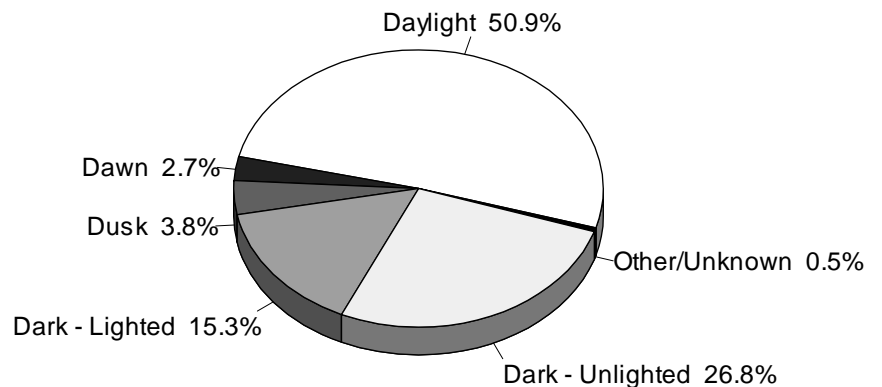
LIGHT CONDITION

LIGHT CONDITION	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Daylight	213,791	60.9	524	50.9	4,098	10,727	31,073	167,369
Dawn	11,667	3.3	28	2.7	143	362	1,011	10,123
Dusk	10,318	2.9	39	3.8	197	440	1,059	8,583
Dark – Lighted	41,434	11.8	158	15.3	1,021	2,170	5,651	32,434
Dark – Unlighted	68,989	19.7	276	26.8	1,299	2,661	4,420	60,333
Other/Unknown	4,639	1.3	5	0.5	42	88	267	4,237
Totals	350,838	100.0	1,030	100.0	6,800	16,448	43,481	283,079

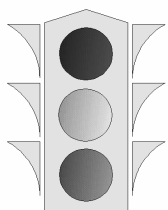
ALL CRASHES



FATAL CRASHES



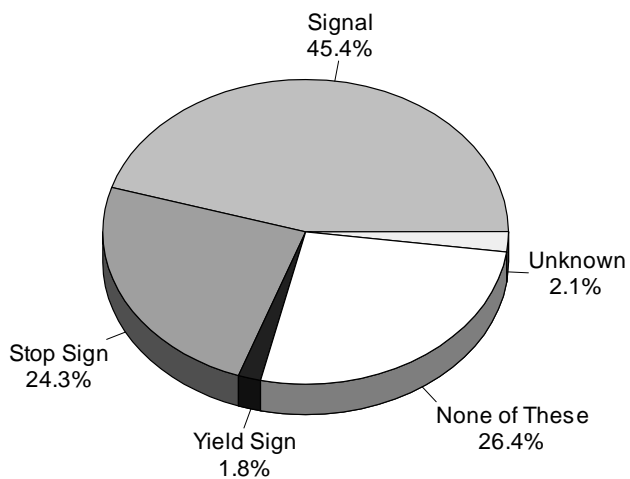
The majority (60.9%) of all crashes happen during daylight hours. Darkened conditions create the greatest hazard, as they are overrepresented in fatal crashes. Areas without street lights have the higher fatality rate for dark conditions.



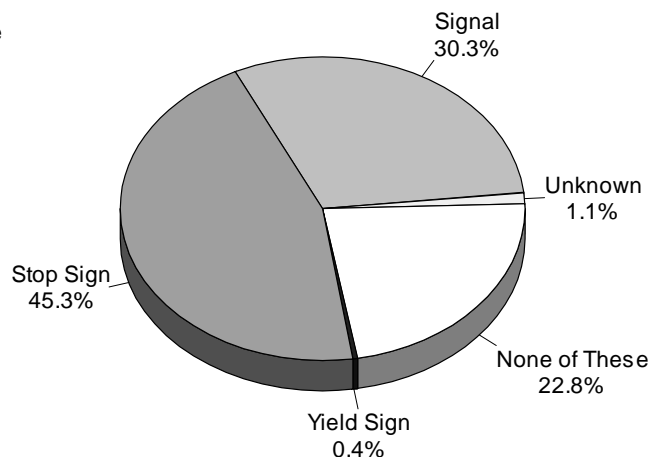
INTERSECTION CRASHES BY TRAFFIC CONTROL TYPE

TRAFFIC CONTROL TYPE	All Crashes		Fatal Crashes		Injury Crashes			PDO Crashes
	Number	% of Total	Number	% of Fatal	A	B	C	
Signal	47,354	45.4	81	30.3	888	2,422	9,163	34,800
Stop Sign	25,368	24.3	121	45.3	743	1,707	4,218	18,579
Yield Sign	1,843	1.8	1	0.4	38	104	331	1,369
None of These	27,560	26.4	61	22.8	533	1,444	3,922	21,600
Unknown	2,141	2.1	3	1.1	53	95	289	1,701
Total	104,266	100.0	267	100.0	2,255	5,772	17,923	78,049

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

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	3,233	50.8	4	21.1	44	119	469	2,597
Lane Open	843	13.3	7	36.8	14	33	117	672
Unknown Lane Closure	115	1.8	0	0.0	3	3	10	99
Activity - Off Road								
Lane Closed	310	4.9	0	0.0	10	15	48	237
Lane Open	334	5.3	0	0.0	2	15	47	270
Unknown Lane Closure	30	0.5	0	0.0	1	1	2	26
Activity - None								
Lane Closed	680	10.7	4	21.1	9	30	111	526
Lane Open	456	7.2	4	21.1	14	30	65	343
Unknown Lane Closure	24	0.4	0	0.0	1	0	4	19
Activity - Unknown								
Lane Closed	128	2.0	0	0.0	1	6	12	109
Lane Open	32	0.5	0	0.0	2	0	3	27
Unknown Lane Closure	174	2.7	0	0.0	4	3	22	145
Subtotal	6,359	100.0	19	100.0	105	255	910	5,070
Utility	Indicates work on facilities other than the roadway such as telephone, electrical, cable television, water, or sewer.							
Activity - On Road								
Lane Closed	71	34.5	0	0.0	0	2	11	58
Lane Open	32	15.5	0	0.0	0	1	5	26
Unknown Lane Closure	3	1.5	0	0.0	0	0	1	2
Activity - Off Road								
Lane Closed	26	12.6	0	0.0	0	0	3	23
Lane Open	42	20.4	1	100.0	1	2	6	32
Unknown Lane Closure	3	1.5	0	0.0	0	1	0	2
Activity - None								
Lane Closed	8	3.9	0	0.0	1	0	0	7
Lane Open	11	5.3	0	0.0	2	2	0	7
Unknown Lane Closure	0	0.0	0	0.0	0	0	0	0
Activity - Unknown								
Lane Closed	3	1.5	0	0.0	0	0	0	3
Lane Open	1	0.5	0	0.0	0	0	0	1
Unknown Lane Closure	6	2.9	0	0.0	0	0	1	5
Subtotal	206	100.0	1	100.0	4	8	27	166
Unknown Type / Unknown Lane Closure / Activity None								
Subtotal	43,720		10		933	2,010	5,089	35,678
Total	50,285		30		1,042	2,273	6,026	40,914

2005

2005

2005

2005

2005

2005

2005

2005

**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	406,970	68.7	976	58.0	84,854	321,140	564	63.7	54,515	351,891
Van and Motorhome	42,306	7.1	118	7.0	8,990	33,198	59	6.7	5,095	37,152
Pickup	86,738	14.6	270	16.1	15,618	70,850	104	11.8	7,849	78,785
Small Truck (under 10,000 lbs.)	19,551	3.3	37	2.2	3,852	15,662	12	1.4	2,179	17,360
Motorcycle	3,589	0.6	121	7.2	2,707	761	120	13.6	2,660	809
Moped	282	0.0	2	0.1	220	60	2	0.2	214	66
Go Cart	20	0.0	0	0.0	16	4	0	0.0	15	5
Snowmobile	264	0.0	4	0.2	184	76	4	0.5	171	89
Off Road Vehicle	266	0.0	13	0.8	210	43	11	1.2	202	53
Other	1,662	0.3	5	0.3	330	1,327	2	0.2	148	1,512
Unknown	14,786	2.5	14	0.8	1,130	13,642	1	0.1	115	14,670
CDL Truck/Bus (breakdown below)	16,237	2.7	122	7.3	2,957	13,158	6	0.7	733	15,498
Total Number of Vehicles	592,671	100.0	1,682	100.0	121,068	469,921	885	100.1	73,896	517,890

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

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	7,949	49.0	70	57.4	1,571	6,308	2	33.3	333	7,614
Commercial Vehicle: Group B	3,328	20.5	30	24.6	601	2,697	2	33.3	198	3,128
Commercial Vehicle: Group C	511	3.1	0	0.0	88	423	0	0.0	39	472
Other Truck	546	3.4	17	13.9	102	427	1	16.7	27	518
Unknown Truck	3,903	24.0	5	4.1	595	3,303	1	16.7	136	3,766
Total Number of Vehicles	16,237	100.0	122	100.0	2,957	13,158	6	100.0	733	15,498

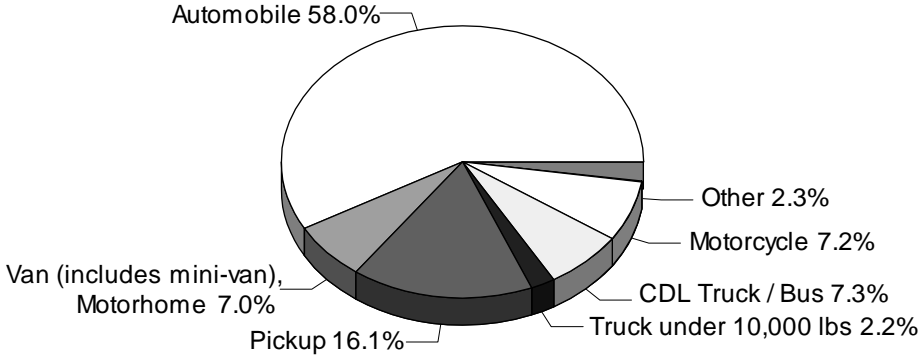
Group "A" is any vehicle that is towing a vehicle or trailer that has a gross vehicle weight rating (GVWR) over 10,000 lbs.

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.

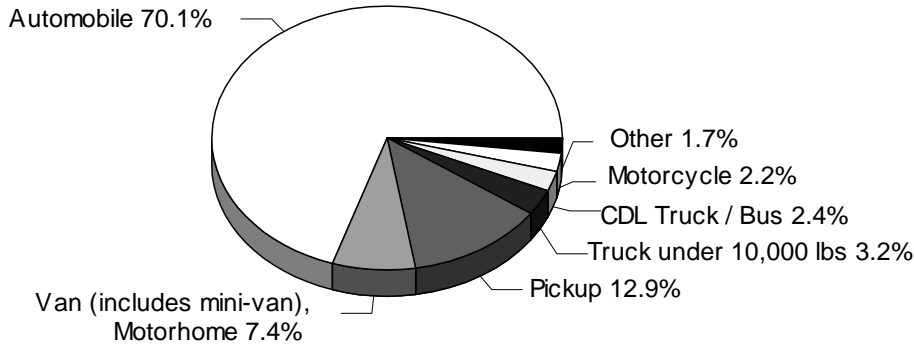
VEHICLE TYPES IN CRASHES BY CRASH SEVERITY

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 7.0 percent.

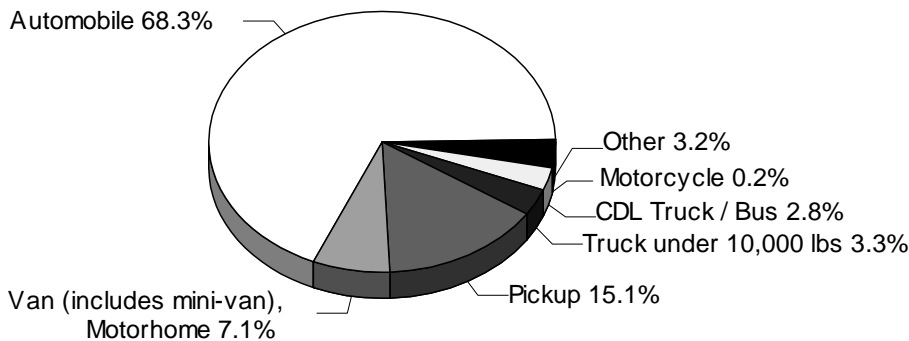
INJURY



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	298,468	50.4	1,253	6,924	15,876	40,359	234,056
Turning left	39,699	6.7	91	935	2,570	6,730	29,373
Turning right	15,925	2.7	10	193	540	1,558	13,624
Stopped on roadway	58,609	9.9	47	734	2,040	11,782	44,006
In prior crash	1,063	0.2	10	29	61	185	778
Changing lanes	13,659	2.3	18	165	357	1,256	11,863
Backing	14,186	2.4	5	44	147	463	13,527
Slowing/stopping on roadway	54,010	9.1	35	361	1,463	9,517	42,634
Slowing/stopping other	997	0.2	1	16	50	163	767
Starting up on roadway	11,313	1.9	28	201	558	1,910	8,616
Starting up other	478	0.1	0	11	25	77	365
Entering parking	651	0.1	0	9	20	47	575
Leaving parking	1,749	0.3	0	12	74	221	1,442
Entering roadway	8,613	1.5	22	162	458	1,194	6,777
Leaving roadway	1,231	0.2	10	74	104	180	863
Making U-turn	1,275	0.2	7	36	80	182	970
Overtaking or passing	4,756	0.8	32	138	252	465	3,869
Avoiding object	997	0.2	2	22	66	104	803
Avoiding animal	1,562	0.3	7	45	146	220	1,144
Avoiding pedestrian	144	0.0	5	12	22	25	80
Avoiding vehicle (front/back)	4,992	0.8	32	160	314	755	3,731
Avoiding vehicle (angle)	2,373	0.4	7	58	160	385	1,763
Driverless moving	295	0.0	4	14	6	16	255
Parked	23,312	3.9	47	191	522	1,011	21,541
Crossing at intersection	76	0.0	0	4	7	14	51
Crossing not at intersection	135	0.0	0	2	4	10	119
Getting on/off vehicle	20	0.0	0	0	3	1	16
In roadway with traffic	40	0.0	0	0	2	4	34
In roadway against traffic	106	0.0	0	1	5	6	94
Standing or lying in roadway	6	0.0	0	0	0	0	6
Pushing/working on vehicle	26	0.0	0	1	3	3	19
Other working in roadway	427	0.1	0	16	27	56	328
Playing in roadway	53	0.0	0	2	4	6	41
In roadway other reason	56	0.0	0	2	0	1	53
Not in roadway	197	0.0	0	1	5	23	168
Other	173	0.0	0	5	16	20	132
Unknown	30,999	5.2	9	582	1,283	3,687	25,438
Total	592,671	100.0	1,682	11,162	27,270	82,636	469,921

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	2,261	63.0	2,496	63.4	101	571	791	564	429
Turning left	164	4.6	181	4.6	3	32	46	53	44
Turning right	106	3.0	115	2.9	1	20	34	24	34
Stopped on roadway	151	4.2	166	4.2	0	13	29	38	82
In prior crash	2	0.1	2	0.1	0	0	0	1	0
Changing lanes	41	1.1	44	1.1	1	7	17	10	7
Backing	1	0.0	1	0.0	0	0	1	0	0
Slowing/stopping on roadway	207	5.8	224	5.7	7	28	62	60	66
Slowing/stopping other	7	0.2	9	0.2	0	3	2	1	3
Starting up on roadway	42	1.2	49	1.2	0	4	14	19	12
Starting up other	5	0.1	6	0.2	0	2	1	3	0
Entering parking	2	0.1	2	0.1	0	0	1	0	1
Leaving parking	7	0.2	7	0.2	0	1	3	1	2
Entering roadway	32	0.9	34	0.9	0	4	16	2	10
Leaving roadway	10	0.3	10	0.3	0	1	3	3	3
Making U-turn	11	0.3	12	0.3	0	1	4	1	6
Overtaking or passing	91	2.5	101	2.6	5	31	24	20	17
Avoiding object	21	0.6	22	0.6	0	2	6	11	3
Avoiding animal	46	1.3	47	1.2	2	6	12	18	9
Avoiding pedestrian	3	0.1	3	0.1	0	0	0	2	1
Avoiding vehicle (front/back)	86	2.4	94	2.4	0	20	36	16	21
Avoiding vehicle (angle)	69	1.9	72	1.8	0	2	35	24	10
Driverless moving	2	0.1	2	0.1	0	0	0	0	1
Parked	42	1.2	44	1.1	1	0	3	1	4
Crossing at intersection	2	0.1	2	0.1	0	0	0	0	2
Crossing not at intersection	1	0.0	1	0.0	0	0	0	1	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	2	0.1	2	0.1	0	1	0	0	1
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	4	0.1	4	0.1	0	1	1	1	1
Playing in roadway	2	0.1	2	0.1	0	1	1	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	167	4.7	179	4.5	1	35	54	37	39
Total	3,589	100.0	3,935	100.0	122	786	1,198	911	808

* This table includes 110 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	1,029	49.5	1,052	49.6	12	95	355	406	136
Turning left	34	1.6	34	1.6	1	6	15	5	6
Turning right	16	0.8	16	0.8	0	2	7	6	1
Stopped on roadway	15	0.7	15	0.7	0	1	5	4	5
In prior crash	0	0.0	0	0.0	0	0	0	0	0
Changing lanes	14	0.7	14	0.7	0	2	8	3	0
Backing	0	0.0	0	0.0	0	0	0	0	0
Slowing/stopping on roadway	5	0.2	5	0.2	0	0	3	1	1
Slowing/stopping other	4	0.2	4	0.2	0	0	2	1	1
Starting up on roadway	13	0.6	13	0.6	0	4	3	5	1
Starting up other	1	0.0	1	0.0	0	0	0	1	0
Entering parking	0	0.0	0	0.0	0	0	0	0	0
Leaving parking	4	0.2	4	0.2	0	1	1	2	0
Entering roadway	124	6.0	126	5.9	2	18	40	45	15
Leaving roadway	2	0.1	2	0.1	0	0	2	0	0
Making U-turn	5	0.2	5	0.2	0	1	1	3	0
Overtaking or passing	3	0.1	3	0.1	0	0	2	1	0
Avoiding object	1	0.0	1	0.0	0	1	0	0	0
Avoiding animal	0	0.0	0	0.0	0	0	0	0	0
Avoiding pedestrian	0	0.0	0	0.0	0	0	0	0	0
Avoiding vehicle (front/back)	5	0.2	6	0.3	0	1	2	3	0
Avoiding vehicle (angle)	7	0.3	7	0.3	0	0	2	4	0
Driverless moving	1	0.0	1	0.0	0	0	0	0	0
Parked	1	0.0	1	0.0	0	0	0	0	0
Crossing at intersection	361	17.4	371	17.5	2	22	124	158	56
Crossing not at intersection	127	6.1	128	6.0	3	24	51	31	15
Getting on/off vehicle	0	0.0	0	0.0	0	0	0	0	0
In roadway with traffic	37	1.8	37	1.7	4	7	12	13	0
In roadway against traffic	25	1.2	25	1.2	1	2	7	13	2
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	3	0.1	3	0.1	0	0	2	1	0
Playing in roadway	12	0.6	12	0.6	0	4	4	2	2
In roadway other reason	20	1.0	20	0.9	0	0	10	8	1
Not in roadway	28	1.3	28	1.3	0	5	10	6	4
Other	35	1.7	35	1.7	0	7	11	15	2
Unknown	148	7.1	151	7.1	0	13	50	48	25
Total	2,080	100.0	2,120	100.0	25	216	729	785	273

* Includes 92 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	119	4.4	1	14	26	47	22
Turning left	10	0.4	0	4	1	1	3
Turning right	2	0.1	0	1	0	1	0
Stopped on roadway	4	0.1	0	1	0	1	1
In prior crash	7	0.3	2	1	0	2	1
Changing lanes	0	0.0	0	0	0	0	0
Backing	1	0.0	0	0	0	1	0
Slowing/stopping on roadway	1	0.0	0	0	0	1	0
Slowing/stopping other	0	0.0	0	0	0	0	0
Starting up on roadway	0	0.0	0	0	0	0	0
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	18	0.7	0	4	7	5	1
Leaving roadway	2	0.1	0	0	0	0	1
Making U-turn	0	0.0	0	0	0	0	0
Overtaking or passing	1	0.0	0	0	1	0	0
Avoiding object	0	0.0	0	0	0	0	0
Avoiding animal	0	0.0	0	0	0	0	0
Avoiding pedestrian	1	0.0	0	0	0	1	0
Avoiding vehicle (front/back)	1	0.0	0	0	1	0	0
Avoiding vehicle (angle)	4	0.1	0	0	2	2	0
Driverless moving	2	0.1	0	0	0	1	1
Parked	8	0.3	0	2	3	1	2
Crossing at intersection	662	24.4	18	101	193	268	48
Crossing not at intersection	725	26.7	49	160	228	221	34
Getting on/off vehicle	56	2.1	2	13	17	17	5
In roadway with traffic	159	5.9	11	33	47	50	10
In roadway against traffic	46	1.7	6	13	10	14	3
Standing or lying in roadway	103	3.8	18	29	21	23	8
Pushing/working on vehicle	37	1.4	4	13	10	9	1
Other working in roadway	45	1.7	2	8	8	23	4
Playing in roadway	57	2.1	0	9	26	17	3
In roadway other reason	146	5.4	8	31	33	57	10
Not in roadway	149	5.5	10	38	39	51	6
Other	87	3.2	0	21	27	28	7
Unknown	257	9.5	7	63	58	85	16
Total	2,711	100.0	138	559	759	927	187

* Includes 141 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	2,579	0.4	3	77	192	356	1,951
Cross center/median	567	0.1	1	16	46	96	408
Ran off road left	699	0.1	0	17	40	80	562
Ran off road right	1,265	0.2	0	28	72	156	1,009
Re-enter road	131	0.0	0	2	12	14	103
Overturn	8,244	1.4	119	660	1,471	1,837	4,157
Separation of units	534	0.1	0	8	28	62	436
Fire/explosion	658	0.1	10	12	20	51	565
Immersion	57	0.0	0	2	2	5	48
Jackknife	309	0.1	0	4	5	24	276
Downhill runaway	1,850	0.3	2	29	63	289	1,467
Cargo loss/shift	888	0.1	0	6	31	70	781
Individual fell off	485	0.1	6	115	151	68	145
Other noncollision	1,679	0.3	5	37	97	149	1,391
NONCOLLISION Subtotal	19,945	3.4	146	1,013	2,230	3,257	13,299

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	2,214	0.4	142	445	607	745	275
Pedalcycle	1,787	0.3	26	182	623	656	300
Motor vehicle in transport	400,909	67.6	1,074	6,879	17,474	65,374	310,108
Parked motor vehicle	16,506	2.8	22	117	305	681	15,381
Railway train	345	0.1	4	15	27	39	260
Animal	57,030	9.6	6	93	382	701	55,848
Other nonfixed objects	5,272	0.9	3	71	161	270	4,767
COLLISION NONFIXED Subtotal	484,063	81.7	1,277	7,802	19,579	68,466	386,939

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	614	0.1	10	23	36	98	447
Bridge parapet end	408	0.1	0	4	6	21	377
Bridge rail	498	0.1	4	4	35	64	391
Guardrail face	3,794	0.6	10	59	174	445	3,106
Guardrail end	693	0.1	2	25	46	85	535
Median barrier	3,693	0.6	5	66	246	672	2,704
Highway traffic sign post	2,887	0.5	3	13	37	120	2,714
Signal post	324	0.1	0	4	8	20	292
Luminaire/light support	689	0.1	2	22	46	66	553
Utility pole	4,002	0.7	30	159	399	606	2,808
Other pole	1,107	0.2	3	22	52	109	921
Culvert	631	0.1	5	33	80	98	415
Curb	1,880	0.3	1	34	89	156	1,600
Ditch	8,399	1.4	17	251	673	1,034	6,424
Embankment	1,620	0.3	7	65	149	251	1,148
Fence	1,413	0.2	2	20	46	100	1,245
Mailbox	2,316	0.4	2	15	39	83	2,177
Tree	12,659	2.1	141	687	1,461	1,901	8,469
Rail crossing signal	95	0.0	0	2	6	4	83
Building	837	0.1	7	51	81	124	574
Traffic island	50	0.0	0	0	3	5	42
Fire hydrant	578	0.1	0	7	28	50	493
Impact attenuator	53	0.0	0	1	4	10	38
Other fixed object	3,388	0.6	7	117	263	362	2,639
COLLISION FIXED Subtotal	52,628	8.9	258	1,684	4,007	6,484	40,195

MOST SEVERE OUTCOME IN CRASH

	Motor Vehicles		Fatal	Injury			PDO
	Number of Vehicles	% of Total		A	B	C	
Unknown Event	36,035	6.1	1	663	1,454	4,429	29,488
TOTAL MOST HARMFUL EVENT	592,671	100.0	1,682	11,162	27,270	82,636	469,921

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	1,900	0.3	5	53	95	311	1,436
Lights/reflectors	279	0.0	0	9	18	32	220
Steering	168	0.0	0	7	18	22	121
Tires/wheels	604	0.1	6	19	49	65	465
Windows	34	0.0	0	1	1	5	27
Other	623	0.1	5	18	40	83	477
Unknown	589,063	99.4	1,666	11,055	27,049	82,118	467,175
TOTAL	592,671	100.0	1,682	11,162	27,270	82,636	469,921

DRIVER HAZARDOUS ACTION

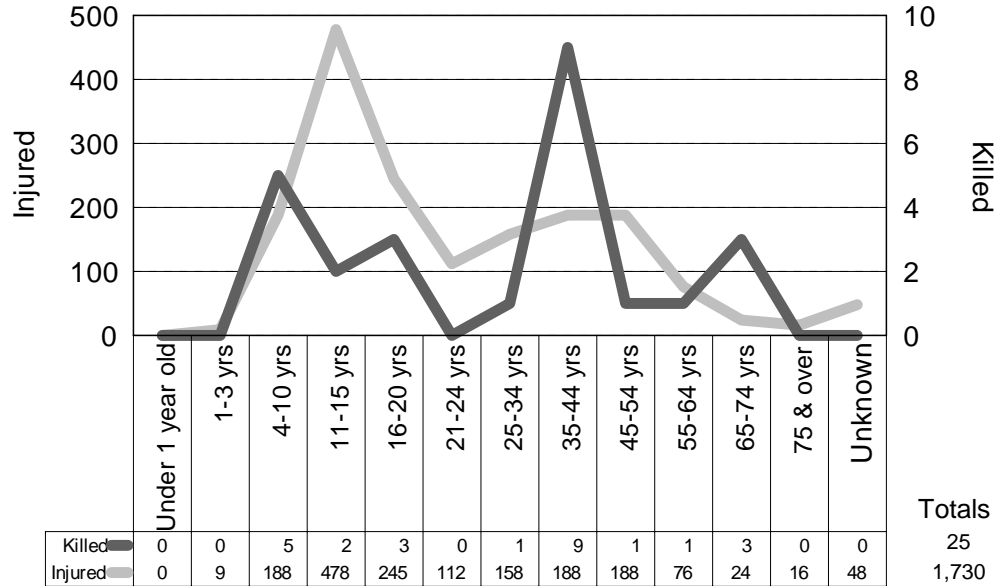
MOST SEVERE OUTCOME IN CRASH

HAZARDOUS ACTION	All Drivers		Fatal	Injury			PDO
	Number of Drivers	% of Total		A	B	C	
None	278,357	47.0	644	4,447	11,102	37,001	225,163
Speed too fast	38,941	6.6	210	1,180	2,714	5,431	29,406
Speed too slow	790	0.1	4	9	35	109	633
Failed to yield	49,512	8.4	133	1,179	3,323	8,677	36,200
Disregard traffic control	13,062	2.2	71	534	1,193	3,115	8,149
Drove wrong way	786	0.1	6	25	55	118	582
Drove left of center	3,213	0.5	78	175	303	459	2,198
Improper passing	3,194	0.5	7	46	102	255	2,784
Improper lane use	12,103	2.0	12	97	268	882	10,844
Improper turn	5,850	1.0	5	82	218	620	4,925
Improper/no signal	715	0.1	1	7	27	70	610
Improper backing	10,179	1.7	3	22	69	259	9,826
Unable to stop in assured clear distance	77,206	13.0	52	666	2,221	14,223	60,044
Reckless driving	2,971	0.5	47	271	364	405	1,884
Careless/negligent driving	13,591	2.3	94	779	1,648	2,012	9,058
Other	21,598	3.6	108	691	1,420	2,569	16,810
Unknown	60,603	10.2	207	952	2,208	6,431	50,805
TOTAL	592,671	100.0	1,682	11,162	27,270	82,636	469,921



MICHIGAN BICYCLE CRASHES

2005 Bicycle Crash Information



In 2005 there were 2,080 bicycles involved in motor vehicles crashes, with 25 bicyclists killed and 1,730 injured.

Children under 16 years of age accounted for 7 (28.0%) of the bicycle deaths in 2005.

BICYCLE HELMET USE AND INJURY SEVERITY

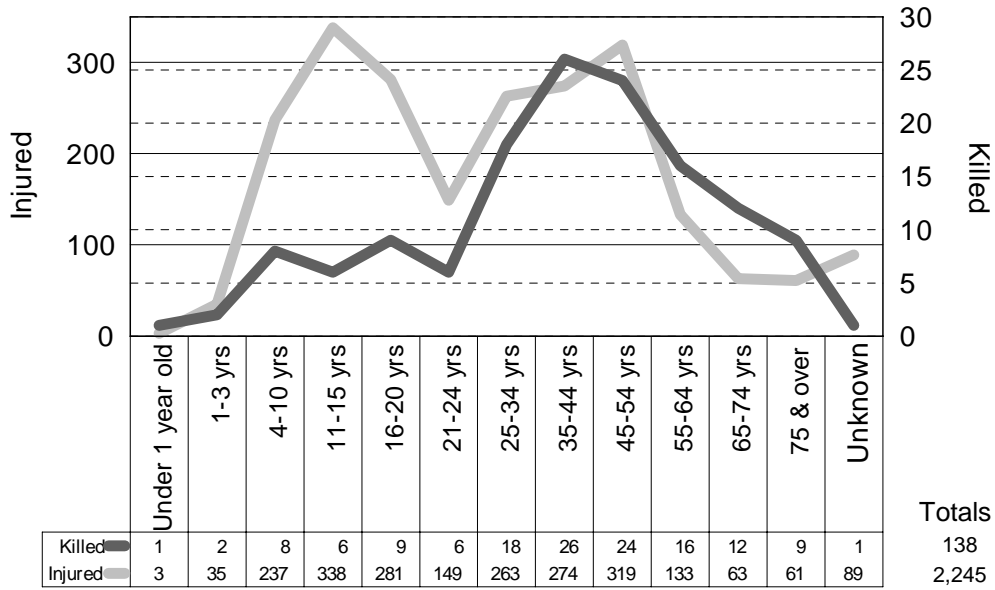
HELMET USE	Fatality	Injury			No Injury
		A	B	C	
Worn	4	20	48	40	9
Not Worn	11	82	241	236	80
Unknown	10	114	440	509	184
Total	25	216	729	785	273

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

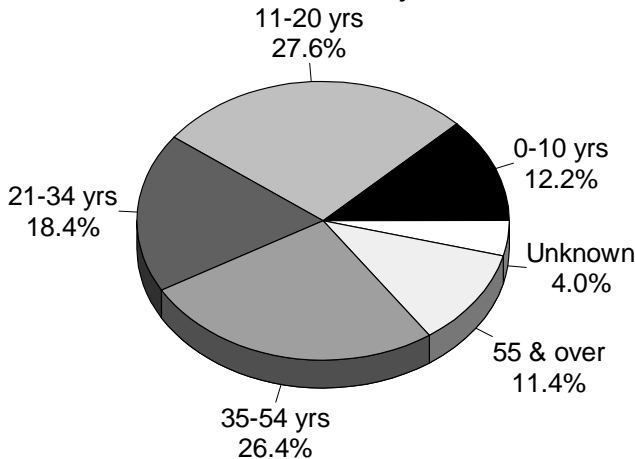
2005 Pedestrian Crash Information



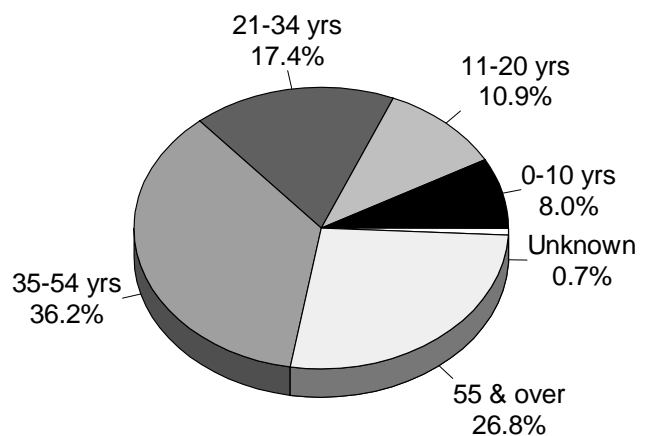
In 2005 there were 2,711 pedestrians involved in motor vehicles crashes, with 138 pedestrians killed and 2,245 injured.

Children under 16 years of age accounted for 17 (12.3%) of the pedestrian deaths in 2005. Adults over the age of 54 accounted for 37 (26.8%) of the pedestrian deaths in 2005.

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	1	0.4	0	0	1	0	0
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	0	0.0	0	0	0	0	0
Re-enter road	0	0.0	0	0	0	0	0
Overturn	24	9.1	2	7	8	4	3
Separation of units	0	0.0	0	0	0	0	0
Fire/explosion	2	0.8	0	1	0	0	1
Immersion	2	0.8	0	0	0	1	1
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	6.1	0	6	5	5	0
Other noncollision	2	0.8	0	0	1	0	1
NONCOLLISION Subtotal	47	17.8	2	14	15	10	6

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	0.8	0	1	1	0	0
Pedalcycle	1	0.4	0	0	0	0	1
Motor vehicle in transport	105	39.8	1	29	16	14	45
Parked motor vehicle	9	3.4	0	1	1	4	3
Railway train	0	0.0	0	0	0	0	0
Animal	8	3.0	0	0	0	2	6
Other nonfixed objects	2	0.8	0	2	0	0	0
COLLISION NONFIXED Subtotal	127	48.1	1	33	18	20	55



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	2	0.8	0	2	0	0	0
Guardrail end	1	0.4	0	0	0	1	0
Median barrier	0	0.0	0	0	0	0	0
Highway traffic sign post	2	0.8	0	1	0	1	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	0.4	0	1	0	0	0
Other pole	2	0.8	0	0	1	0	1
Culvert	1	0.4	0	0	0	0	1
Curb	0	0.0	0	0	0	0	0
Ditch	5	1.9	0	3	1	1	0
Embankment	2	0.8	0	1	1	0	0
Fence	1	0.4	0	0	0	1	0
Mailbox	4	1.5	0	2	0	2	0
Tree	40	15.2	1	15	9	10	5
Rail crossing signal	0	0.0	0	0	0	0	0
Building	1	0.4	0	0	0	0	1
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	14	5.3	0	3	4	3	4
COLLISION FIXED Subtotal	76	28.8	1	28	16	19	12
Unknown Event	14	5.3	0	6	2	3	3
TOTAL MOST HARMFUL EVENT	264	100.0	4	81	51	52	76

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.

A total of 264 snowmobiles were reported in crashes on Michigan public roadways during 2005. Five of these snowmobiles were involved in 4 fatal crashes with 4 of their operators killed. Alcohol was involved in all of the fatal crashes, and one of the 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	6	2.3	0	3	3	0	0
Cross center/median	1	0.4	0	0	1	0	0
Ran off road right	1	0.4	0	1	0	0	0
Overturn	41	15.4	0	15	15	10	1
Separation of unit	0	0.0	0	0	0	0	0
Individual fell off	34	12.8	1	12	10	9	2
Other noncollision	1	0.4	1	0	0	0	0
NONCOLLISION Subtotal	84	31.6	2	31	29	19	3
HAD A COLLISION WITH NONFIXED OBJECT							
Pedestrian	1	0.4	0	1	0	0	0
Motor vehicle in transport	87	32.7	8	22	17	12	28
Parked motor vehicle	3	1.1	0	0	0	0	3
Animal	2	0.8	0	1	0	1	0
Other nonfixed objects	3	1.1	0	0	1	0	2
COLLISION NONFIXED Subtotal	96	36.1	8	24	18	13	33
HAD A COLLISION WITH FIXED OBJECT							
Guardrail face	1	0.4	0	1	0	0	0
Traffic sign post	2	0.8	0	2	0	0	0
Luminaire/light support	1	0.4	0	0	1	0	0
Utility pole	2	0.8	0	0	1	1	0
Other pole	3	1.1	0	1	1	0	1
Ditch	17	6.4	1	7	6	1	2
Embankment	2	0.8	0	1	1	0	0
Fence	3	1.1	0	1	1	0	1
Mailbox	4	1.5	0	2	2	0	0
Tree	26	9.8	2	9	6	8	1
Building	1	0.4	0	1	0	0	0
Other fixed object	15	5.6	0	8	3	4	0
COLLISION FIXED Subtotal	77	28.9	3	33	22	14	5
Unknown Event	9	3.4	0	0	3	4	2
TOTAL MOST HARMFUL EVENT	266	100.0	13	88	72	50	43

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.

A total of 266 off-road vehicles/all-terrain vehicles were reported in crashes on Michigan public roadways during 2005. Thirteen of these ORV/ATVs were involved in 11 fatal crashes with 8 ORV/ATV operators and 4 ORV/ATV passengers killed.



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	55	20.8	0	15	12	12	16
Speed too fast	65	24.6	3	24	18	14	6
Speed too slow	0	0.0	0	0	0	0	0
Failed to yield	37	14.0	0	12	6	5	14
Disregard traffic control	1	0.4	0	0	0	0	1
Drove wrong way	3	1.1	0	1	0	0	2
Drove left of center	2	0.8	0	1	0	0	1
Improper passing	0	0.0	0	0	0	0	0
Improper lane use	1	0.4	0	1	0	0	0
Improper turn	4	1.5	0	1	1	0	2
Improper/no signal	0	0.0	0	0	0	0	0
Improper backing	1	0.4	0	0	0	0	1
Unable to stop in assured clear distance	11	4.2	0	4	2	2	3
Reckless driving	3	1.1	0	1	1	1	0
Careless/negligent driving	25	9.5	1	8	4	4	8
Other	31	11.7	0	6	4	10	11
Unknown	25	9.5	0	7	3	4	11
TOTAL	264	100.0	4	81	51	52	76



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	30	11.3	1	8	6	8	7
Speed too fast	58	21.8	1	26	16	13	2
Speed too slow	1	0.4	0	0	0	1	0
Failed to yield	18	6.8	1	1	4	3	9
Disregard traffic control	1	0.4	0	1	0	0	0
Drove wrong way	0	0.0	0	0	0	0	0
Drove left of center	5	1.9	0	2	0	1	2
Improper passing	0	0.0	0	0	0	0	0
Improper lane use	3	1.1	0	1	1	0	1
Improper turn	2	0.8	0	1	1	0	0
Improper/no signal	0	0.0	0	0	0	0	0
Improper backing	2	0.8	0	0	0	1	1
Unable to stop in assured clear distance	18	6.8	1	7	5	2	3
Reckless driving	9	3.4	0	3	3	1	2
Careless/negligent driving	33	12.4	1	15	9	2	6
Other	50	18.8	4	15	14	11	6
Unknown	36	13.5	4	8	13	7	4
TOTAL	266	100.0	13	88	72	50	43

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.



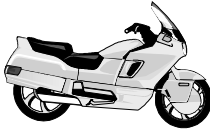
MICHIGAN FARM EQUIPMENT CRASHES

A total of 153 crashes involving farm equipment were reported on Michigan roadways during 2005. Of these crashes, 1 was fatal with 1 operator of the equipment killed.



MICHIGAN VEHICLE - TRAIN CRASHES

A total of 67 crashes involving trains were reported in Michigan during 2005. The National Highway Traffic Safety Administration's 2005 Fatality Analysis Reporting System [11] reported 4 fatal train crashes in Michigan, and 4 persons killed as a result of those collisions.

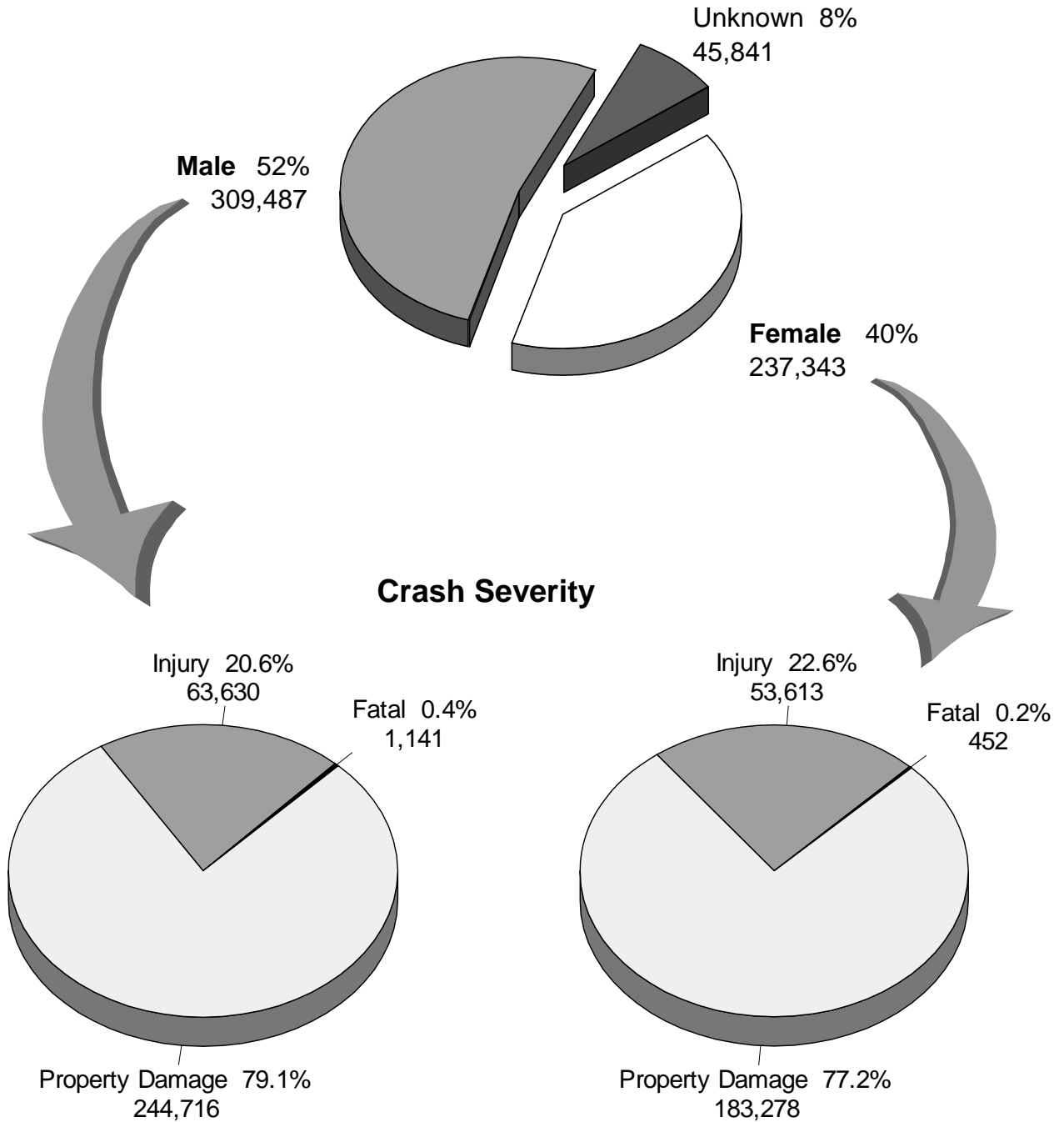


MICHIGAN MOTORCYCLE CRASHES

MOTORCYCLE DATA	2004	2005	% Change
Motorcycle Registrations	219,478	254,480	15.9
Motorcycles in Crashes	3,276	3,589	9.6
Motorcyclist Deaths	79	122	54.4
Motorcyclists Injured	2,679	2,895	8.1
Death Rate based on 10,000 motorcycle registrations	3.6	4.8	33.3
Estimated Mileage based on 3,000 miles per motorcycle	658,434,000	763,440,000	15.9
Death Rate based on deaths per 100 million vehicle miles traveled	12.0	16.0	33.3

Motorcycles were involved in 1.0 percent of all traffic crashes in Michigan in 2005. Injuries were proportionately more severe to motorcyclists than to persons in motor vehicles. The 2005 death rate for motorcyclists was 16.0 per 100 million vehicle miles traveled compared to the overall 1.1 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 2005 chart was processed with data for all drivers (vehicle level).

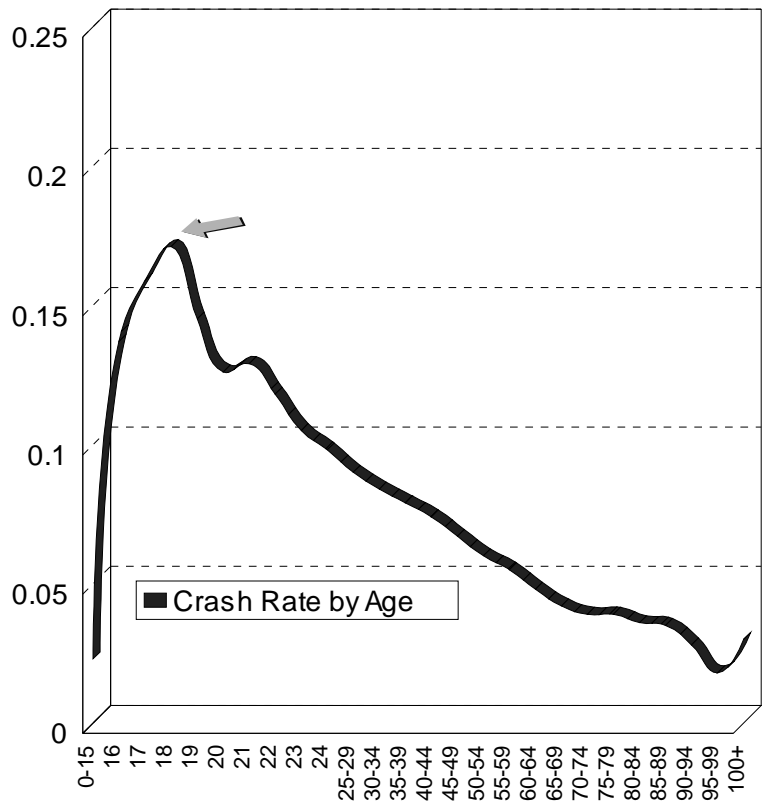
PERSON AGE - DEMOGRAPHICS AND CRASH INVOLVEMENTS

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	58,624	2,226,383	1,362	13	60	5,916	817	8	707	19
16	96,293	150,662	13,198	25	19	2,543	86	0	67	1
17	107,777	147,229	17,140	37	30	2,972	62	2	64	1
18	108,177	144,142	18,528	51	34	3,310	47	1	59	1
19	117,954	143,592	17,162	45	24	2,985	59	0	68	5
20	127,135	143,480	15,989	38	23	2,562	34	0	60	3
21	115,803	138,297	14,982	50	29	2,591	40	0	51	3
22	121,142	138,747	14,320	36	18	2,287	38	0	40	2
23	128,419	140,080	13,465	38	24	2,040	29	0	49	0
24	130,260	141,439	12,829	29	15	1,902	23	0	46	4
25-29	597,824	642,427	53,938	145	83	7,778	91	0	167	10
30-34	605,256	650,908	50,949	124	57	6,926	84	1	155	10
35-39	668,708	710,508	52,626	154	73	7,046	99	3	150	10
40-44	718,879	779,746	53,263	138	64	7,138	122	7	185	16
45-49	747,000	795,317	49,922	178	82	6,824	129	1	202	15
50-54	685,436	713,668	41,130	129	59	5,799	83	0	170	11
55-59	594,208	605,905	32,416	102	60	4,681	58	1	99	7
60-64	435,279	449,836	20,981	67	41	3,060	29	0	66	9
65-69	323,669	341,291	13,651	39	28	2,000	17	3	45	7
70-74	260,384	269,631	10,281	38	27	1,716	12	0	34	6
75-79	224,654	265,647	8,651	35	35	1,501	9	0	36	4
80-84	153,909	197,851	5,592	43	43	1,134	5	0	20	0
85-100+	90,418	184,074	2,965	31	36	669	4	0	21	5
Unknown	---	---	57,331	97	2	1,182	143	0	150	1
Total	7,217,208	10,120,860	592,671	1,682	966	86,562	2,120	27	2,711	150



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

Age	Rate	Licensed Drivers	Drivers in all crashes*
0-15	0.023	58,624	1,362
16	0.137	96,293	13,198
17	0.159	107,777	17,140
18	0.171	108,177	18,528
19	0.145	117,954	17,162
20	0.126	127,135	15,989
21	0.129	115,803	14,982
22	0.118	121,142	14,320
23	0.105	128,419	13,465
24	0.098	130,260	12,829
25-29	0.090	597,824	53,938
30-34	0.084	605,256	50,949
35-39	0.079	668,708	52,626
40-44	0.074	718,879	53,263
45-49	0.067	747,000	49,922
50-54	0.060	685,436	41,130
55-59	0.055	594,208	32,416
60-64	0.048	435,279	20,981
65-69	0.042	323,669	13,651
70-74	0.039	260,384	10,281
75-79	0.039	224,654	8,651
80-84	0.036	153,909	5,592
85-89	0.035	69,685	2,406
90-94	0.028	18,445	516
95-99	0.018	2,188	40
100+	0.030	100	3
Total		7,217,208	535,340



* Excludes 57,331 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	691	1	73	49	90	120	136	115	63	34	10
Alger	460	1	53	39	58	80	89	61	24	15	40
Allegan	4,751	21	793	465	899	872	794	409	191	132	175
Alpena	1,312	3	222	92	199	200	226	145	90	63	72
Antrim	1,309	7	170	122	199	246	252	160	68	45	40
Arenac	1,125	1	147	96	172	203	225	127	78	46	30
Baraga	456	2	62	30	87	89	61	65	26	20	14
Barry	2,781	7	450	264	466	539	508	290	112	69	76
Bay	5,465	16	911	532	893	889	896	480	260	236	352
Benzie	797	5	118	61	128	156	152	81	43	29	24
Berrien	8,068	27	1,112	689	1,429	1,421	1,261	819	421	371	518
Branch	2,959	8	448	310	525	531	483	303	130	84	137
Calhoun	9,000	22	1,185	860	1,639	1,541	1,434	858	451	292	718
Cass	2,626	9	397	250	429	472	443	302	138	66	120
Charlevoix	1,519	2	205	114	256	312	280	157	90	52	51
Cheboygan	1,409	8	203	126	240	260	239	172	80	43	38
Chippewa	1,641	13	235	159	256	276	300	171	99	64	68
Clare	1,733	7	229	163	283	349	262	215	111	59	55
Clinton	3,670	9	609	377	603	698	631	376	154	89	124
Crawford	823	2	95	72	143	158	150	97	55	26	25
Delta	2,651	3	344	194	402	431	514	293	186	115	169
Dickinson	1,540	6	216	107	205	275	301	167	107	83	73
Eaton	6,099	13	1,028	575	1,085	1,140	995	605	225	149	284
Emmet	2,382	6	371	214	408	414	414	239	137	94	85
Genesee	24,251	57	3,401	2,197	4,333	4,199	3,605	2,226	1,091	754	2,388
Gladwin	1,002	1	133	69	158	201	183	133	75	30	19
Gogebic	521	0	84	38	81	84	79	59	33	38	25
Grand Traverse	5,969	17	989	539	1,002	1,021	995	632	283	224	267
Gratiot	2,224	4	321	229	388	427	357	220	133	71	74
Hillsdale	2,618	5	398	249	481	441	437	283	141	98	85
Houghton	1,803	7	360	227	245	247	237	155	103	59	163
Huron	2,080	5	315	166	332	386	383	248	110	78	57
Ingham	18,832	28	2,875	2,529	3,497	3,055	2,720	1,622	616	415	1,475
Ionia	3,633	8	547	334	703	701	633	302	138	77	190
Iosco	1,241	3	148	85	202	205	243	157	95	61	42
Iron	863	1	78	52	113	171	159	124	61	41	63
Isabella	4,552	9	891	760	697	704	615	342	173	112	249
Jackson	9,777	17	1,443	869	1,657	1,783	1,666	955	392	348	647
Kalamazoo	15,848	36	2,677	2,125	2,787	2,416	2,318	1,290	579	435	1,185
Kalkaska	906	6	105	91	138	185	169	118	51	23	20
Kent	38,558	86	5,676	4,550	7,395	6,645	5,416	2,962	1,269	828	3,731
Keweenaw	97	0	13	14	7	17	6	15	9	5	11
Lake	524	3	62	53	82	111	92	57	31	24	9
Lapeer	4,774	14	804	386	834	980	843	475	175	99	164
Leelanau	732	0	135	48	96	128	120	96	48	24	37

REPORTED AGE OF DRIVERS INVOLVED IN ALL CRASHES (continued)

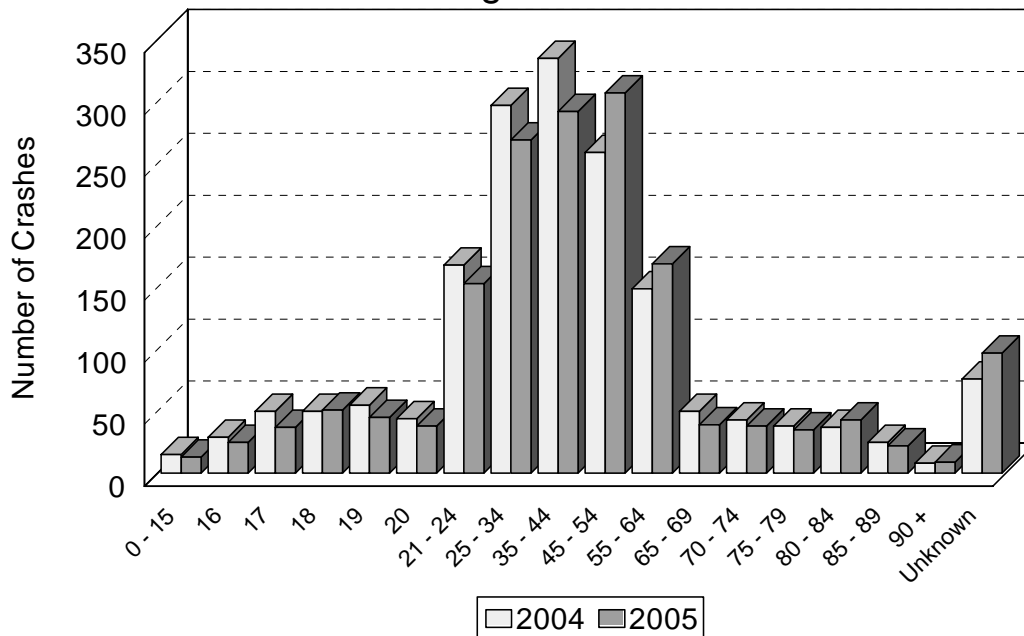
COUNTY	All Ages	0-15 Years	16-20 Years	21-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65-74 Years	75 yrs & Over	DOB Unk
Lenawee	4,918	14	760	441	812	820	819	518	233	188	313
Livingston	8,839	25	1,708	760	1,470	1,832	1,495	769	250	169	361
Luce	296	2	37	28	47	46	65	34	17	11	9
Mackinac	882	10	110	71	132	174	163	109	54	32	27
Macomb	48,915	88	7,098	4,237	8,718	9,014	7,253	4,130	1,923	1,603	4,851
Manistee	1,329	4	143	87	196	262	223	144	98	67	105
Marquette	3,288	12	505	366	460	458	519	318	169	111	370
Mason	2,089	5	286	157	342	368	372	229	134	75	121
Mecosta	2,928	8	465	412	480	482	467	283	120	88	123
Menominee	1,719	7	197	123	279	313	354	200	86	64	96
Midland	3,733	10	671	396	594	715	598	342	165	121	121
Missaukee	796	5	120	88	130	153	131	93	38	21	17
Monroe	7,863	19	1,225	737	1,341	1,431	1,247	673	301	239	650
Montcalm	3,969	12	540	397	739	767	660	405	209	101	139
Montmorency	454	2	62	35	71	81	81	67	30	18	7
Muskegon	9,204	27	1,544	915	1,663	1,569	1,410	862	374	308	532
Newaygo	2,409	8	400	226	416	446	432	247	108	67	59
Oakland	80,601	156	10,725	7,042	15,321	16,304	13,052	7,677	3,005	2,237	5,082
Oceana	1,345	4	179	126	251	240	227	150	66	52	50
Ogemaw	1,271	5	169	108	196	245	231	154	85	55	23
Ontonagon	467	1	45	28	55	75	94	77	49	18	25
Osceola	1,441	4	179	133	263	285	277	132	90	38	40
Oscoda	444	2	50	35	73	80	91	59	29	15	10
Otsego	1,387	7	234	126	251	274	212	131	55	49	48
Ottawa	13,264	37	2,506	1,507	2,370	2,370	1,894	1,125	486	343	626
Presque Isle	675	2	71	51	108	129	121	86	61	34	12
Roscommon	1,312	3	183	115	172	240	247	152	95	65	40
Saginaw	11,292	39	1,702	1,103	1,923	1,942	1,819	1,102	533	445	684
St. Clair	7,794	22	1,321	670	1,295	1,438	1,192	716	372	236	532
St. Joseph	3,074	12	474	296	548	522	503	297	141	86	195
Sanilac	2,217	6	300	204	358	435	418	226	127	85	58
Schoolcraft	591	2	67	55	76	111	120	75	40	27	18
Shiawassee	3,518	9	564	311	647	665	535	333	187	105	162
Tuscola	2,621	12	366	224	481	527	462	270	144	63	72
Van Buren	3,700	9	562	354	693	684	589	340	170	109	190
Washtenaw	20,606	39	2,838	2,509	3,852	3,756	3,246	1,814	655	430	1,467
Wayne	123,320	220	12,193	9,360	21,426	20,491	16,790	9,667	4,172	3,243	25,758
Wexford	2,028	7	287	193	316	366	321	213	116	70	139
Total	592,671	1,362	82,017	55,596	104,887	105,889	91,052	53,397	23,932	17,208	57,331

DRIVER AGE

AGE OF DRIVERS IN FATAL CRASHES	2004	2005	% Change	% 2005 Fatal Crash Involvement	Percent Active Driving Population*
15 years and under	15	13	-13.3	0.8	0.8
16 years	29	25	-13.8	1.5	1.3
17 years	50	37	-26.0	2.2	1.5
18 years	50	51	2.0	3.0	1.5
19 years	55	45	-18.2	2.7	1.6
20 years	44	38	-13.6	2.3	1.8
21 - 24 years	168	153	-8.9	9.1	6.9
25 - 34 years	297	269	-9.4	16.0	16.7
35 - 44 years	335	292	-12.8	17.4	19.2
45 - 54 years	259	307	18.5	18.3	19.8
55 - 64 years	149	169	13.4	10.0	14.3
65 - 69 years	50	39	-22.0	2.3	4.5
70 - 74 years	43	38	-11.6	2.3	3.6
75 - 79 years	38	35	-7.9	2.1	3.1
80 - 84 years	37	43	16.2	2.6	2.1
85 - 89 years	25	22	-12.0	1.3	1.0
90 years and over	8	9	12.5	0.5	0.3
Unknown	76	97	27.6	5.8	---
Total	1,728	1,682	-2.7	100.0	100.0

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

Driver Age in Fatal Crashes



DRIVER CONDITION

MOST SEVERE OUTCOME IN CRASH

POSSIBLE CONDITIONS OF DRIVER*	Conditions Coded by Police	Fatal	Injury			PDO
		Number	A	B	C	
Appeared Normal	478,816	814	7,999	21,719	70,982	377,302
Had Been Drinking	13,688	176	1,154	1,896	2,146	8,316
Illegal Drug Use	1,296	14	63	99	186	934
Sick	1,048	10	77	147	321	493
Fatigue	936	3	40	108	216	569
Asleep	1,228	13	88	214	248	665
Medication	832	4	49	86	202	491
Driver Distracted	3,615	14	125	327	818	2,331
Using Cellular Phone	1,022	5	28	87	206	696
Unknown	32,097	472	889	1,207	2,938	26,591

* 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	506,458	85.5	413	58.3	4,272	12,065	42,309	444,409	2,990
Restraint Not Used	7,360	1.2	205	28.9	874	1,130	1,127	3,896	128
Unknown	78,853	13.3	91	12.8	534	978	1,703	23,806	51,741
Total	592,671	100.0	709	100.0	5,680	14,173	45,139	472,111	54,859

Drinking Only Drivers									
Restraint Used	9,195	71.8	62	39.5	416	975	1,012	6,672	58
Restraint Not Used	1,237	9.7	76	48.4	280	302	153	417	9
Unknown	2,371	18.5	19	12.1	146	278	204	1,635	89
Total	12,803	100.0	157	100.0	842	1,555	1,369	8,724	156

Drugged Only Drivers									
Restraint Used	557	70.7	17	56.7	31	55	93	357	4
Restraint Not Used	86	10.9	10	33.3	15	17	15	28	1
Unknown	145	18.4	3	10.0	13	14	25	81	9
Total	788	100.0	30	100.0	59	86	133	466	14

Drinking and Drugged Drivers									
Restraint Used	415	63.9	13	27.0	23	49	49	279	2
Restraint Not Used	100	15.4	12	48.7	28	21	22	17	0
Unknown	134	20.6	8	24.3	16	20	14	73	3
Total	649	100.0	33	100.0	67	90	85	369	5

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	8,821	2,538	685	446	12,490	1,046,808.43	2,556	943	76				
Alger	5,809	1,990	528	326	8,653	703,805.17	1,798	1,428	20				
Allegan	71,901	18,813	4,050	3,302	98,066	8,749,840.90	11,918	3,740	536				
Alpena	21,298	6,303	1,584	935	30,120	2,742,082.76	4,420	2,469	79				
Antrim	17,624	4,519	1,254	864	24,261	2,133,004.20	5,329	2,232	85				
Arenac	11,238	3,567	818	600	16,223	1,449,452.03	3,798	1,540	90				
Baraga	4,474	1,599	388	173	6,634	597,607.37	1,029	729	9				
Barry	39,626	10,338	2,478	2,170	54,612	4,468,560.12	9,759	2,107	196				
Bay	76,144	16,022	3,953	2,978	99,097	9,032,762.76	9,650	6,051	267				
Benzie	12,962	3,246	968	625	17,801	1,489,392.62	4,066	1,558	99				
Berrien	115,535	21,969	4,019	4,731	146,254	12,221,791.50	12,702	3,077	451				
Branch	28,555	7,776	1,663	1,430	39,424	3,400,752.79	6,272	1,135	150				
Calhoun	95,477	17,628	3,660	4,068	120,833	10,053,078.61	10,031	1,785	540				
Cass	32,697	8,635	1,784	1,649	44,765	3,741,751.62	8,651	2,007	114				
Charlevoix	19,816	5,142	1,297	994	27,249	2,488,836.18	5,115	2,831	129				
Cheboygan	18,728	5,283	1,524	928	26,463	2,298,036.46	5,565	3,225	98				
Chippewa	21,204	6,285	1,661	821	29,971	2,685,954.49	4,749	4,365	113				
Clare	21,614	5,644	1,640	1,040	29,938	2,561,437.27	4,455	2,000	130				
Clinton	47,107	12,039	2,721	1,815	63,682	6,138,281.04	7,296	3,082	167				
Crawford	9,506	2,382	712	442	13,042	1,112,101.96	2,825	1,671	30				
Delta	26,739	8,591	1,933	1,111	38,374	3,442,376.93	4,376	2,883	183				
Dickinson	18,649	6,432	1,136	1,022	27,239	2,460,513.07	3,564	1,569	190				
Eaton	72,383	14,771	3,091	3,055	93,300	8,320,112.40	8,876	2,771	229				
Emmet	24,960	6,060	1,601	1,142	33,763	3,120,084.93	5,592	2,886	128				
Genesee	297,231	49,885	10,984	11,170	369,270	33,199,431.42	30,743	12,893	724				
Gladwin	18,446	5,086	1,431	898	25,861	2,171,526.57	4,966	1,773	103				
Gogebic	10,167	2,982	560	420	14,129	1,135,842.54	2,318	1,624	104				
Grand Traverse	63,791	13,362	3,621	2,700	83,474	8,082,712.91	13,554	5,215	179				



REGISTRATION TRANSACTIONS (continued)

COUNTY	VEHICLE										OTHER			
	Passenger	Commercial	Trailer*	Motorcycle	Total Plates	Total Revenue	Watercraft	Snowmobile	Moped					
Gratiot	26,659	7,389	1,626	1,022	36,696	3,438,929.22	3,483	1,644	167					
Hillsdale	30,624	8,641	1,819	1,581	42,665	3,581,096.95	5,284	1,056	197					
Houghton	21,225	5,460	1,103	874	28,662	2,373,933.55	3,931	2,429	112					
Huron	25,653	8,704	1,513	1,121	36,991	3,537,855.27	2,982	2,636	333					
Ingham	189,473	28,746	5,128	5,587	228,934	19,919,205.55	15,436	3,945	526					
Ionia	39,256	9,935	2,159	1,726	53,076	4,339,320.27	5,225	1,732	154					
Iosco	19,655	5,215	1,419	1,038	27,327	2,354,085.17	5,111	1,604	172					
Iron	8,333	2,976	604	368	12,281	1,011,468.39	2,428	1,016	45					
Isabella	34,325	9,510	1,994	1,416	47,245	4,608,292.87	4,848	2,156	106					
Jackson	109,614	23,778	5,286	5,077	143,755	13,379,946.70	15,716	3,773	559					
Kalamazoo	161,541	25,537	5,052	5,829	197,959	17,954,774.51	18,158	3,362	771					
Kalkaska	11,994	4,022	1,145	696	17,857	1,948,895.79	2,739	2,021	49					
Kent	412,557	74,025	14,701	12,821	514,104	54,061,928.68	45,274	9,965	1,267					
Keweenaw	1,391	418	89	59	1,957	152,553.99	393	203	6					
Lake	7,107	1,989	505	342	9,943	768,100.01	2,263	972	31					
Lapeer	60,571	16,812	3,488	3,807	84,678	7,715,933.78	7,638	4,462	174					
Leelanau	15,826	3,794	1,019	548	21,187	1,916,744.79	5,751	1,683	106					
Lenawee	68,777	16,967	3,295	3,848	92,887	8,013,391.94	9,177	3,329	440					
Livingston	122,417	25,631	5,946	6,443	160,437	15,800,677.83	19,984	6,702	293					
Luce	3,952	1,440	423	135	5,950	559,592.23	1,377	1,523	21					
Mackinac	7,652	2,476	584	280	10,992	986,576.42	2,943	2,260	54					
Macomb	601,337	91,636	14,817	19,808	727,598	70,973,683.73	48,607	17,870	1,487					
Manistee	17,710	4,676	1,129	874	24,389	2,101,888.72	3,735	1,657	103					
Marquette	43,259	10,838	2,328	1,944	58,369	4,967,897.29	7,214	4,550	144					
Mason	20,616	5,176	1,312	1,190	28,294	2,393,445.97	4,317	1,609	154					
Mecosta	24,173	6,322	1,600	975	33,070	2,850,362.58	5,202	1,659	85					
Menominee	15,602	4,879	1,053	737	22,271	1,904,452.56	2,623	1,324	344					
Midland	62,000	12,094	3,265	2,591	79,950	6,844,848.79	9,269	3,157	246					
Missaukee	9,339	3,593	817	489	14,238	1,356,370.17	2,132	1,273	45					



REGISTRATION TRANSACTIONS (continued)

COUNTY	VEHICLE										OTHER		
	Passenger	Commercial	Trailer*	Motorcycle	Total Plates	Total Revenue	Watercraft	Snowmobile	Moped				
Monroe	107,591	25,042	4,585	5,517	142,735	13,015,981.28	11,288	4,761	382				
Montcalm	40,771	11,104	2,728	1,782	56,385	4,920,739.42	7,109	2,305	196				
Montmorency	7,399	2,285	612	385	10,681	935,738.65	2,239	1,415	13				
Muskegon	116,779	21,202	5,225	5,142	148,348	12,121,062.13	14,862	5,069	453				
Newaygo	32,385	8,672	2,293	1,648	44,998	3,681,734.56	7,092	2,627	112				
Oakland	944,355	119,852	20,247	28,595	1,113,049	114,266,625.22	82,563	23,224	1,847				
Oceana	18,446	5,536	1,089	840	25,911	2,164,303.81	3,100	1,967	142				
Ogemaw	15,445	4,843	1,182	1,094	22,564	2,056,389.82	3,235	1,694	51				
Ontonagon	5,043	1,922	398	206	7,569	650,732.67	1,198	1,134	64				
Osceola	15,653	4,765	1,191	660	22,269	1,986,234.25	2,671	1,549	62				
Oscoda	6,342	1,945	513	389	9,189	843,940.64	2,031	941	35				
Otsego	16,660	5,120	1,289	923	23,992	2,444,969.73	3,125	3,084	46				
Ottawa	169,478	32,359	8,094	6,408	216,339	20,722,075.73	25,097	6,424	807				
Presque Isle	10,062	3,437	784	402	14,685	1,282,012.20	2,907	1,671	78				
Roscommon	19,283	4,620	1,541	949	26,393	2,284,154.82	6,203	3,495	177				
Saginaw	139,595	26,297	5,941	4,724	176,557	16,570,604.73	15,534	7,535	443				
St. Clair	116,710	26,860	5,640	5,406	154,616	14,011,540.15	15,657	7,082	397				
St. Joseph	42,662	10,537	2,212	2,346	57,757	4,762,972.40	8,439	1,059	228				
Sanilac	28,874	9,575	1,692	1,582	41,723	3,785,642.80	2,203	2,438	105				
Schoolcraft	5,733	2,019	518	331	8,601	801,716.14	1,704	1,184	58				
Shiawassee	50,641	13,078	2,764	2,387	68,870	6,055,262.30	6,119	3,520	198				
Tuscola	40,041	11,683	2,530	2,147	56,401	4,840,715.62	4,593	3,413	305				
Van Buren	52,288	12,057	2,639	2,769	69,753	5,739,201.14	8,427	2,489	332				
Washtenaw	220,019	30,173	4,779	7,085	262,056	24,211,517.31	15,280	4,122	631				
Wayne	1,212,067	159,983	20,889	33,822	1,426,761	135,491,944.63	64,648	15,952	2,460				
Wexford	22,125	5,523	1,515	1,032	30,195	2,715,177.40	4,550	2,488	90				
Non-Resident	64,932	28,501	3,787	828	98,048	56,846,419.84	36,521	5,914	228				
Unknown County	0	0	0	0	0	0	4,095	0	0				
Total	6,906,519	1,280,556	253,640	254,480	8,695,195	\$862,073,602.16	821,703	289,717	23,350				

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



2005

2005

2005

2005

2005

2005

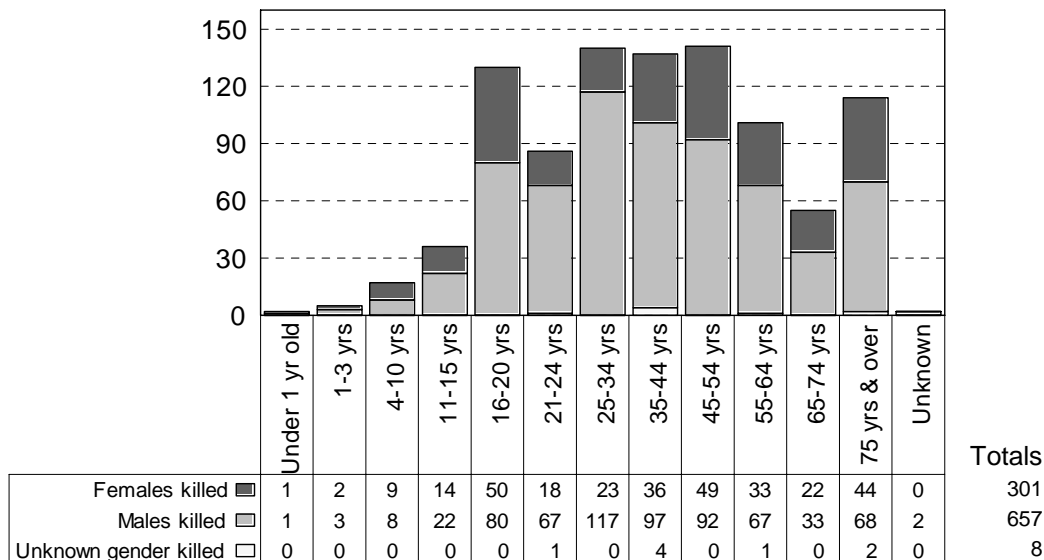
2005

2005

**Occupant/
Person**

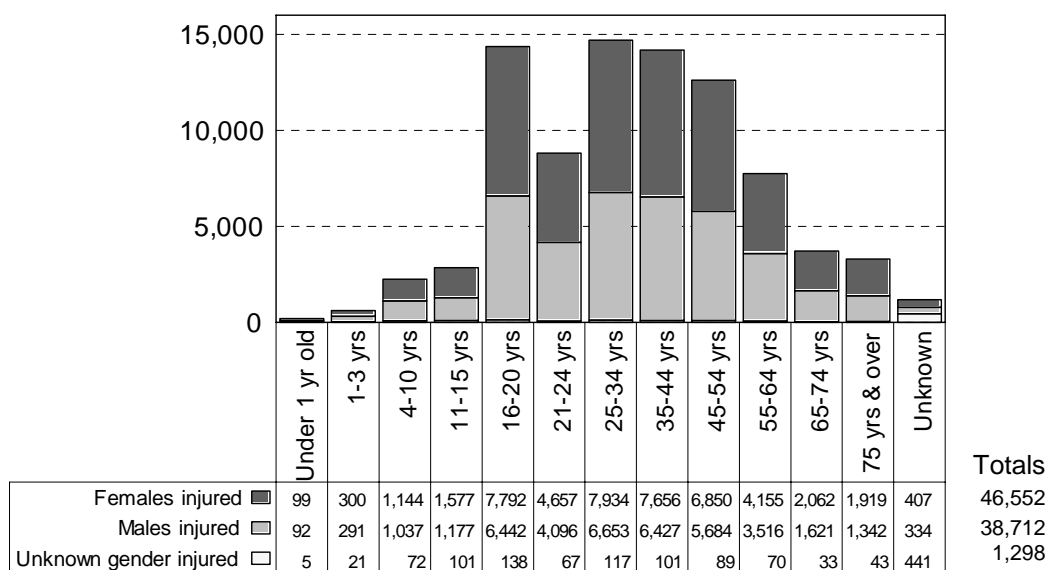
AGE AND GENDER OF OCCUPANTS KILLED & INJURED IN MOTOR VEHICLE CRASHES

Occupants Killed



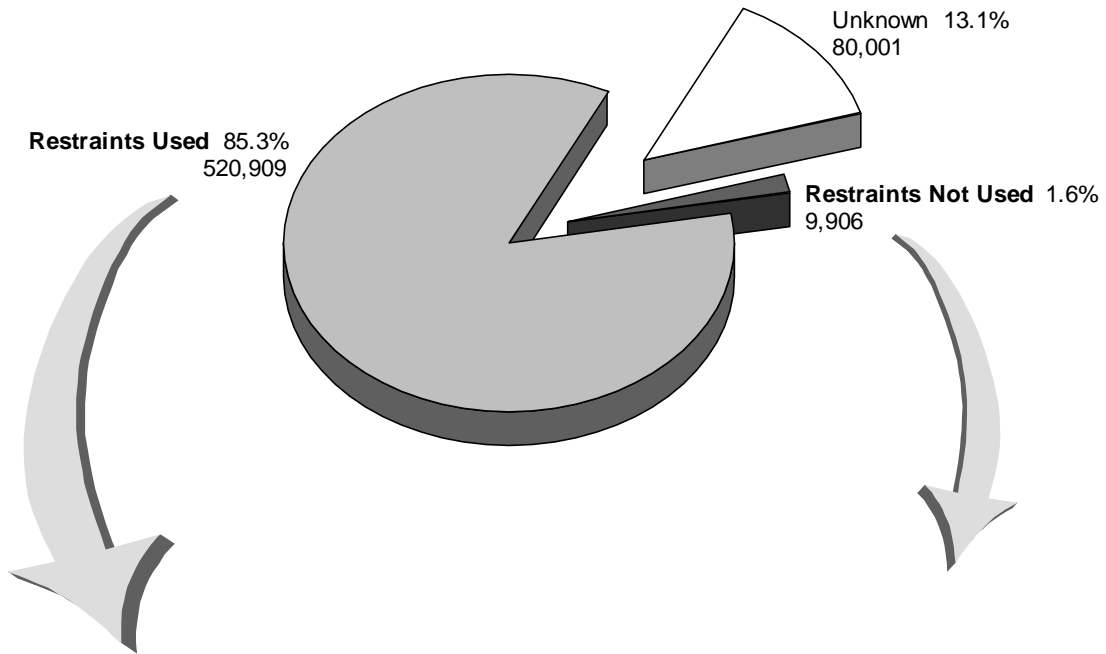
There were 657 male occupants, 301 female occupants, and 8 occupants of unknown gender killed in motor vehicle crashes in 2005. The majority (68.0%) of occupants killed in traffic crashes in 2005 were male.

Occupants Injured

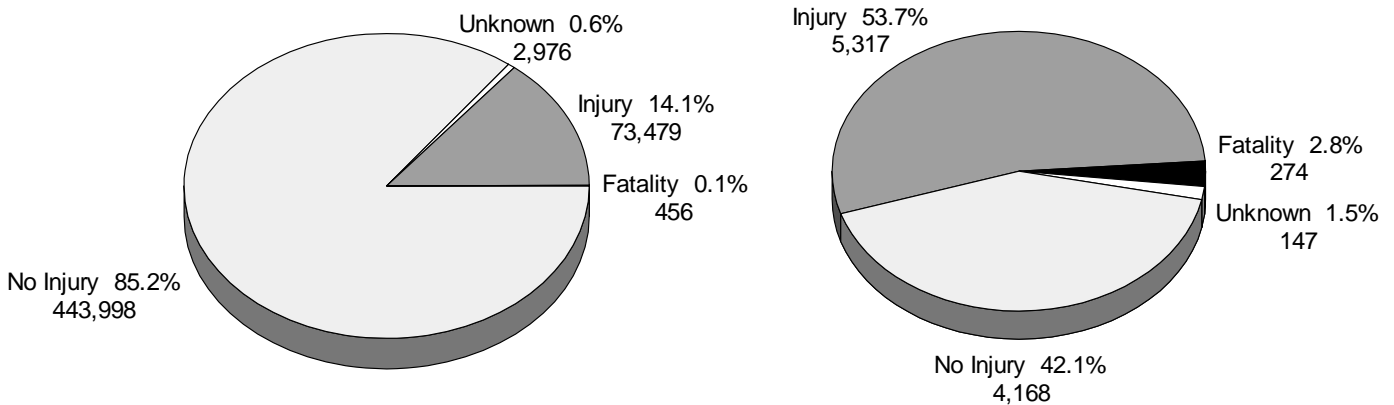


There were 38,712 male occupants, 46,552 female occupants, and 1,298 occupants of unknown gender injured in motor vehicle crashes in 2005. The majority (53.8%) of occupants injured in traffic crashes in 2005 were female.

REPORTED OCCUPANT RESTRAINT USAGE FOR ALL DRIVERS AND INJURED PASSENGERS

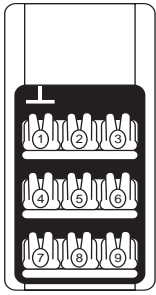


Injury Severity



Of the 610,816 drivers and injured passengers involved in crashes, 520,909 (85.3%) were REPORTED to be using occupant restraints.

Occupants in crashes were twenty-eight 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	497,680	96.3	325	3,626	11,082	41,575	441,072
Center Front	505	0.1	1	25	91	260	128
Right Front	12,043	2.3	104	832	2,595	8,216	296
Left Rear	1,286	0.2	9	87	287	903	0
Center Rear	381	0.1	3	17	84	277	0
Right Rear	1,577	0.3	6	108	341	1,122	0
Left Rear Third Seat	214	0.0	0	12	51	151	0
Center Rear Third Seat	88	0.0	0	11	23	54	0
Right Rear Third Seat	255	0.0	0	16	60	179	0
Unknown	2,600	0.5	2	33	79	316	2,170
Total	516,629**	100.0	450	4,767	14,693	53,053	443,666

* 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 174-175.

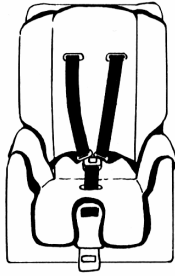
**This total does not include 2,968 occupants with unknown injury severity.

Seating Position	Belts Not Used*		Fatal	Injury			No Injury
	Number	% of Total		A	B	C	
Left Front	6,670	71.6	193	801	1,062	1,067	3,547
Center Front	80	0.9	2	13	32	20	13
Right Front	901	9.7	42	190	303	316	50
Left Rear	405	4.3	11	75	114	205	0
Center Rear	164	1.8	6	34	66	58	0
Right Rear	377	4.0	9	74	113	181	0
Left Rear Third Seat	61	0.7	0	10	13	38	0
Center Rear Third Seat	47	0.5	2	6	11	28	0
Right Rear Third Seat	72	0.8	1	13	17	41	0
Unknown	539	5.8	6	45	71	171	246
Total	9,316**	100.0	272	1,261	1,802	2,125	3,856

* 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 174-175.

**This total does not include 126 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	21	10.7	0	0	7	14
No Belts Used	4	2.0	0	0	0	4
Child Restraint Used	149	76.0	2	7	21	119
Child Restraint Not Used	13	6.6	0	5	2	6
Restraint Failed	0	0.0	0	0	0	0
Unknown	9	4.6	0	1	2	6
Total	196	100.0	2	13	32	149

Children Age 1

Belts Used	22	11.9	0	1	2	19
No Belts Used	2	1.1	0	0	0	2
Child Restraint Used	142	76.8	0	7	50	85
Child Restraint Not Used	12	6.5	0	3	6	3
Restraint Failed	0	0.0	0	0	0	0
Unknown	7	3.8	0	2	1	4
Total	185	100.0	0	13	59	113

Children Age 2

Belts Used	26	13.2	0	1	4	21
No Belts Used	12	6.1	0	1	2	9
Child Restraint Used	137	69.5	0	7	32	98
Child Restraint Not Used	15	7.6	1	2	3	9
Restraint Failed	0	0.0	0	0	0	0
Unknown	7	3.6	1	1	1	4
Total	197	100.0	2	12	42	141

Children Age 3

Belts Used	52	22.1	1	3	11	37
No Belts Used	12	5.1	0	2	2	8
Child Restraint Used	143	60.9	1	5	38	99
Child Restraint Not Used	16	6.8	1	4	5	6
Restraint Failed	0	0.0	0	0	0	0
Unknown	12	5.1	0	1	0	11
Total	235	100.0	3	15	56	161

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	3,674	76.6	23	239	869	2,543
No Belts Used	462	9.6	12	73	141	236
Child Restraint Used	297	6.2	1	15	64	217
Child Restraint Not Used	26	0.5	0	4	9	13
Restraint Failed	4	0.1	0	0	1	3
Unknown	335	7.0	9	50	97	179
Total	4,798	100.0	45	381	1,181	3,191

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.

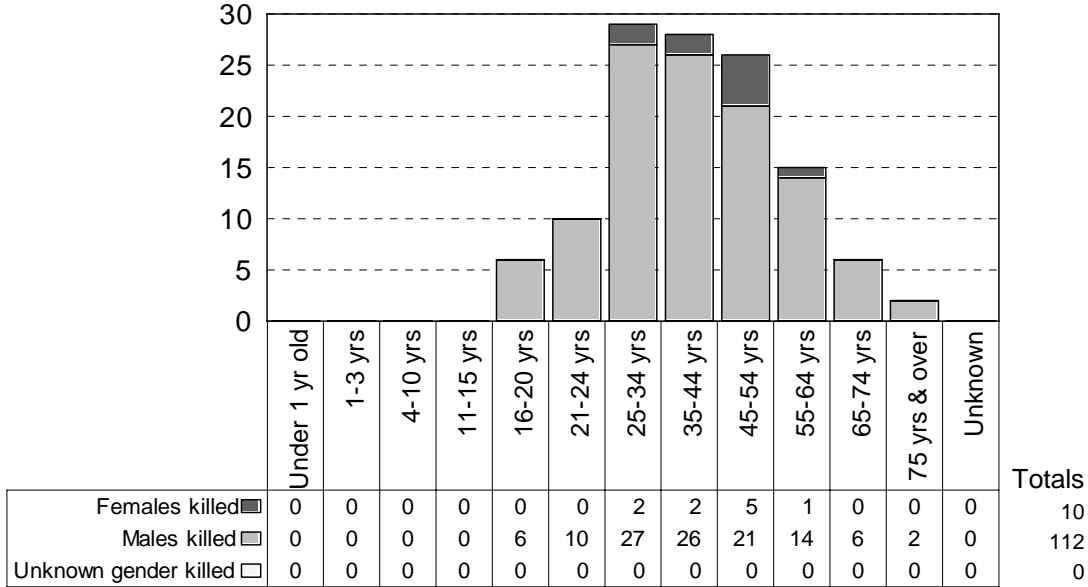
MOTOR VEHICLE OCCUPANT INJURY SEVERITY BY KNOWN AIRBAG DEPLOYMENT

Motor Vehicle Occupant Airbag Deployment	OCCUPANT – INJURY SEVERITY						
	Occupants*		Fatal	Injury			No Injury
	Number	% Total		A	B	C	
Deployed	46,078	7.5	334	2,416	6,554	12,834	23,208
Not deployed	419,438	68.3	216	2,175	6,357	32,763	368,501
Not equipped	70,640	11.5	372	2,460	4,827	9,096	52,340
Unknown	78,341	12.7	44	663	1,676	4,741	28,061
Total	614,497	100.0	966	7,714	19,414	59,434	472,110

* Includes 54,859 occupants (drivers and passengers) with unknown injury severity.

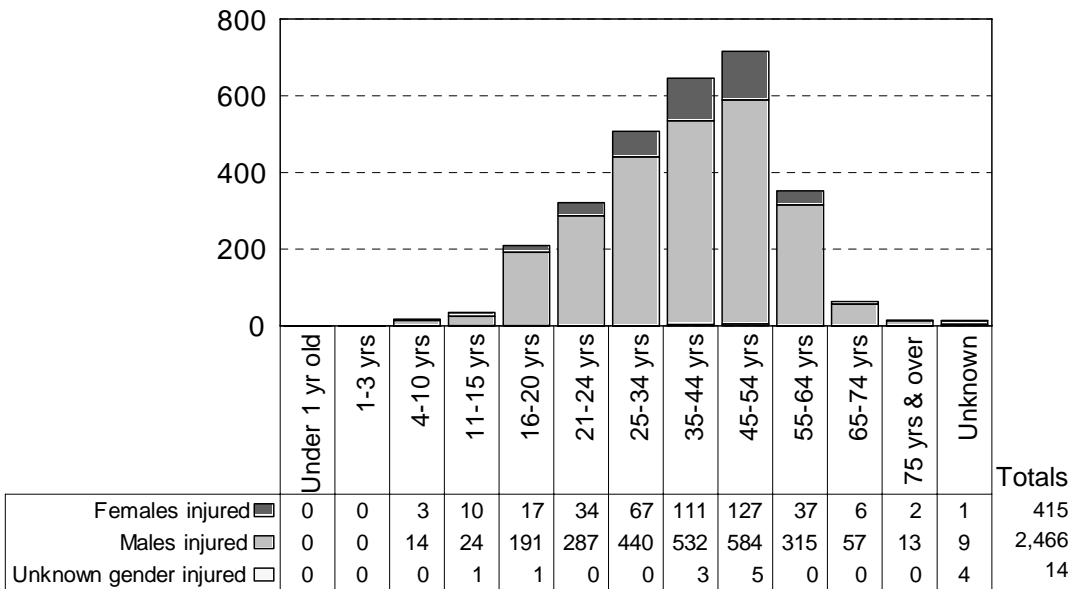
AGE AND GENDER OF MOTORCYCLISTS KILLED & INJURED IN MOTOR VEHICLE CRASHES

Motorcyclists Killed



91.8 percent of the motorcyclists killed in traffic crashes in 2005 were male. In comparison, 68.5 percent of all persons killed in crashes were male.

Motorcyclists Injured



85.2 percent of the motorcyclists injured in traffic crashes in 2005 were male. In comparison, 45.6 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	5	6	0
11 - 15 years	0	10	10	7	2
16 - 20 years	4	33	75	38	30
21 - 24 years	6	57	108	75	53
25 - 34 years	19	97	167	97	106
35 - 44 years	21	128	189	154	126
45 - 54 years	20	144	222	164	131
55 - 64 years	10	95	91	84	63
65 - 74 years	3	19	24	8	12
75 years and over	2	3	9	0	4
Unknown	0	1	2	1	6
Subtotal	85	589	902	634	533



Drivers killed 78
Passengers killed 7

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	0	0	0
11 - 15 years	0	0	0	1	0
16 - 20 years	0	6	2	2	0
21 - 24 years	1	4	3	1	0
25 - 34 years	2	6	7	1	1
35 - 44 years	2	5	2	1	2
45 - 54 years	0	4	2	3	0
55 - 64 years	0	1	1	0	0
65 - 74 years	1	0	0	0	0
75 years and over	0	0	0	0	0
Unknown	0	0	0	1	1
Subtotal	6	26	17	10	4

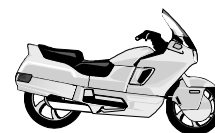


Drivers killed 6
Passengers killed 0

Helmet Use Unknown Age of Motorcyclist	Fatality	Injury			No Injury
		A	B	C	
3 years and under	0	0	0	0	0
4 - 10 years	0	0	0	4	1
11 - 15 years	0	2	3	2	5
16 - 20 years	2	9	25	19	14
21 - 24 years	3	16	29	28	17
25 - 34 years	8	37	48	47	43
35 - 44 years	5	29	75	63	48
45 - 54 years	6	50	59	68	64
55 - 64 years	5	24	30	26	24
65 - 74 years	2	3	6	3	6
75 years and over	0	0	2	1	2
Unknown	0	1	2	6	47
Subtotal	31	171	279	267	271
Total	122	786	1,198	911	808

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	628	5,006	13,513	45,272	64,419	73.6
Van (Minivan) and Motorhome	68	460	1,295	4,613	6,436	7.4
Pickup	108	923	2,347	5,768	9,146	10.4
Small Truck (under 10,000 lbs.)	12	219	537	1,839	2,607	3.0
Motorcycle	122	786	1,198	911	3,017	3.4
Moped	2	44	129	58	233	0.3
Go Cart	0	8	6	4	18	0.0
Snowmobile	4	74	45	62	185	0.2
Off Road Vehicle	12	87	77	54	230	0.3
Other	2	21	63	104	190	0.2
Unknown	1	10	30	105	146	0.2
CDL Truck/Bus (breakdown below)	7	76	174	644	901	1.0
Total Number of Occupants	966	7,714	19,414	59,434	87,528	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	3	33	95	220	351	39.0
Commercial Vehicle: Group B	2	16	39	227	284	31.5
Commercial Vehicle: Group C	0	7	9	40	56	6.2
Other Truck	1	3	7	22	33	3.7
Unknown Truck	1	17	24	135	177	19.6
Total Number of Occupants	7	76	174	644	901	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.

2005

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