

**MTCF**

Michigan Traffic  
Crash Facts

# UPPER PENINSULA

## 2014

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## MISSION STATEMENT

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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.

### **A SUMMARY OF TRAFFIC CRASHES ON MICHIGAN UPPER PENINSULA ROADWAYS IN CALENDAR YEAR 2014**

[MichiganTrafficCrashFacts.org](http://MichiganTrafficCrashFacts.org)

#### **PRODUCED BY:**

Michigan Department of State Police  
Criminal Justice Information Center-Traffic Crash Statistics  
(517) 241-1699  
[Michigan.gov/cjic](http://Michigan.gov/cjic)

Michigan Office of Highway Safety Planning  
(517) 241-1505  
[Michigan.gov/ohsp](http://Michigan.gov/ohsp)

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## ACKNOWLEDGEMENTS

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

**Criminal Justice Information Center**

**Fatality Analysis Reporting System**

**Michigan Department of State Police**

**Michigan Department of State**

**Michigan Department of Transportation**

**Michigan Office of Highway Safety Planning**

**University of Michigan Transportation Research Institute**

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

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## FOREWORD

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Traffic records improvement projects have been ongoing to streamline the process of data collection and processing. Current projects such as the Traffic Crash Reporting System (TCRS) Modernization and the Traffic Records Data Linkage strive to improve the quality, timeliness, and accuracy of data outputs, as well as integration of traffic records data systems. New technologies, including electronic data collection, increased error checking, quality assurance, and crash locating, are continually emerging and improving. By utilizing these technologies as they become available, the quality of Michigan's traffic records data will continue to improve.

Please visit [MichiganTrafficCrashFacts.org](http://MichiganTrafficCrashFacts.org) for easy access to crash data from 1992-2014.

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## STATE OF MICHIGAN TRAFFIC CRASH REPORT

[illegible]

BACK															
Unit Number		State		Driver License Number		Date of Birth		License Type		Sex		Total/On p.		Hazard action	
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NCS															
Unit Type: <input type="checkbox"/> MV <input type="checkbox"/> B <input type="checkbox"/> P <input type="checkbox"/> E (only)															
Name															
Street Address															
City State Zip Phone Number															
Driver Condition															
Interlock: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused <input type="checkbox"/> Not offered (Submit Results To ADOT When Available)															
Alcohol: <input type="checkbox"/> Yes <input type="checkbox"/> No Test Type: <input type="checkbox"/> Field <input type="checkbox"/> PBT <input type="checkbox"/> Breath <input type="checkbox"/> Blood <input type="checkbox"/> Urine Test Results															
Drugs: <input type="checkbox"/> Yes <input type="checkbox"/> No Test Type: <input type="checkbox"/> Blood <input type="checkbox"/> Urine Test Results															
Vehicle Registration State Insurance															
Towed To/By															
VIN															
Vehicle Description Make Model Color Year															
Location of Greatest Damage															
First Impact: <input type="checkbox"/> Front <input type="checkbox"/> Side <input type="checkbox"/> Rear <input type="checkbox"/> Other															
Extent of Damage: <input type="checkbox"/> Yes <input type="checkbox"/> No															
Vehicle Type: <input type="checkbox"/> PA <input type="checkbox"/> GV <input type="checkbox"/> GN <input type="checkbox"/> VA <input type="checkbox"/> WO <input type="checkbox"/> Other <input type="checkbox"/> PU <input type="checkbox"/> OC <input type="checkbox"/> Truck/Bus <input type="checkbox"/> ST <input type="checkbox"/> SM (Complete Truck/Bus Section)															
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Driver: <input type="checkbox"/> Driver <input type="checkbox"/> Witness Name Address Phone Number Age Sex Res.															
Uninjured Passenger: <input type="checkbox"/> Driver <input type="checkbox"/> Witness Name Address Phone Number Age Sex Res.															
Uninjured Passenger: <input type="checkbox"/> Driver <input type="checkbox"/> Witness Name Address Phone Number Age Sex Res.															
<div style="display: flex; justify-content: space-between;"> <div> <b>Unit Reported on Front</b>            Sequence of Events            Action Prior            First Second Third Fourth            Most Harmful         </div> <div> <b>Unit Reported Above</b>            Sequence of Events            Action Prior            First Second Third Fourth            Most Harmful         </div> </div>															
<div style="display: flex;"> <div style="flex: 1;">           Unit Number Carrier Name            Address            City State Zip GVWR            ICCMIC            USDOT            MPSC            Type &amp; Axles            First Second Third Fourth            Cargo Body Type            ID #         </div> <div style="flex: 1;">           Driver's CDL Type  <input type="checkbox"/> A <input type="checkbox"/> C <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> T  <input type="checkbox"/> B <input type="checkbox"/> None <input type="checkbox"/> R <input type="checkbox"/> S <input type="checkbox"/> X  <input type="checkbox"/> Interstate <input type="checkbox"/> CDL Restrictions  <input type="checkbox"/> Intra (MI Only) <input type="checkbox"/> 28 <input type="checkbox"/> 29 <input type="checkbox"/> 30            CDL Examples: <input type="checkbox"/> Farm <input type="checkbox"/> Other            Vehicle Type: <input type="checkbox"/> AS <input type="checkbox"/> AL <input type="checkbox"/> BS <input type="checkbox"/> CK  <input type="checkbox"/> AL <input type="checkbox"/> AT <input type="checkbox"/> SB <input type="checkbox"/> SR <input type="checkbox"/> Other  <input type="checkbox"/> AH <input type="checkbox"/> AX <input type="checkbox"/> SH <input type="checkbox"/> CH  <input type="checkbox"/> AN <input type="checkbox"/> AY <input type="checkbox"/> SM <input type="checkbox"/> CP  <input type="checkbox"/> AP <input type="checkbox"/> AJ <input type="checkbox"/> SP <input type="checkbox"/> CS            Medical Card: <input type="checkbox"/> Y <input type="checkbox"/> N            Hazardous Material: <input type="checkbox"/> Placard <input type="checkbox"/> Cargo Spill            Class #         </div> <div style="flex: 1;"> <b>Crash Diagram and Remarks</b>  <div style="text-align: center;">  North         </div> </div> </div>															
UD-10 SERIAL NUMBER <b>SERIAL #</b> Investigated at Scene Reported Date/Time Investigator Name(s) & badge # (Print Only) Photos By															

Do Not Write or Mark On This Side of The Line

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Forward Original To: Michigan State Police, Traffic Crash Reporting Section, 7150 Harris Drive, Lansing, MI 48913

### Public Act 300 of 1949

Edited by the Michigan Office of Highway Safety Planning (OHSP) 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 10s submitted by all Michigan law enforcement agencies, the Department of State Police processes all UD-10s received at the Criminal Justice Information Center (CJIC). CJIC retains an electronic copy of UD-10s for 10 years plus the current processing year. Electronic databases containing information from UD-10s 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.

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## ABBREVIATIONS & ACRONYMS

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- **ATV**      **All-Terrain Vehicle**
- **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.
- **CDL**      **Commercial Driver's License**  
A CDL is required in the United States to operate any type of vehicle with a gross weight of 26,001 lb or over.
- **CJIC**      **Criminal Justice Information Center**  
A division of the Michigan Department of State Police formerly known as the Central Records Division.
- **CRD**      **Child Restraint Device.**  
Also called child safety seat or child car seat.
- **DOB**      **Date of Birth**
- **FHWA**      **Federal Highway Administration**  
A part of the United States Department of Transportation.
- **GDL**      **Graduated Driver Licensing**  
A system used to identify different tiers of drivers. See Michigan Public Act 387 effective April 1, 1997, phasing in teenage driving privileges.
- **HBD**      **Had Been Drinking**
- **HNBD**      **Had Not Been Drinking**
- **KABC**      **Injury severity scale for traffic crash-related injuries:**
  - K - Fatal
  - A - Incapacitating
  - B - Non-incapacitating
  - C - Possible

See Glossary for definitions.

- **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.
- **ORV**      **Off-Road Vehicle**

## ABBREVIATIONS & ACRONYMS (CONTINUED)

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- **OWI**      **Operating While Intoxicated**  
Refers to a person who is driving a vehicle while either under the influence of alcohol, a controlled substance, or both; OR has a BAC of .08 or greater.
- **PDO**      **Property Damage Only**  
Refers to a traffic crash lacking personal injuries.
- **UD-10**    **Form number ascribed to the Michigan Traffic Crash Report form; the 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.

- **Access Control** - Indicates the degree access to an adjoining roadway is controlled by public authority.
  - No access control (unlimited access)
  - Full access control (ramp entry & exit only)
  - Other (partial access control)

*Note: Access is controlled by roadway configuration, not traffic control devices such as, "No Left Turn" signs, etc.*

- **Bicycle** - 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.
- **Bicyclist** - An operator or passenger riding a bicycle.
- **Bus (Also see School Bus)** - Any passenger-carrying vehicle designed to transport 18 or more passengers, including the driver.
- **Crash Date** - The date the crash occurred. If the date is unknown, and cannot be reasonably estimated, use the date the crash was discovered by the complainant or the date reported. A valid date is necessary to update records of each involved 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 traveled.
- **Driver/Operator** - The person who is in actual physical control of a vehicle in transit.
- **Driver Condition** - Apparent condition of the driver which may have contributed to the crash. Appeared normal; had been drinking; illegal drug use; sick; fatigue; asleep; medication (prescription and over the counter medication); distracted (inside or outside of the unit); using cellular phone; unknown.
- **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.
- **Engineer** - Engineer (railroad train)
- **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-involved crashes only. This figure DOES NOT include the combined number for alcohol and drug involved crashes as has been reported in prior years.
- **Harmful Event** - A harmful event is an occurrence of injury or damage.

## GLOSSARY (CONTINUED)

- **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.

TIME PERIOD			
Holiday day	From	To	Number of Days
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 preventing a motor vehicle from being started at any time without first determining through a deep lung sample the operator's breath alcohol level. Michigan Vehicle Code, Sec. 257.625L (6).
- **Injury Codes**
  - **K (Fatal)** - Any injury resulting in death.
  - **A (Incapacitating Injury)** - Any injury, other than a fatal injury, preventing the injured person from walking, driving or normally continuing the activities the person was capable of performing before the injury occurred.
  - **B (Non-Incapacitating 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 non-incapacitating injury.
  - **O (No injury)** - Person reported as not receiving bodily harm from the motor vehicle crash.

*Note: Uninjured passengers are not required to be recorded by the police with the exception of a fatal crash at which point all involved parties must be listed.*

- **Injury Crash** - Any crash involving an injury other than a fatal injury.
- **In Transport** - Denotes the state or condition of a vehicle that is in motion or within the portion of a way ordinarily used by similar vehicles. When applied to motor vehicles, "in transport" means in motion or on a roadway.

Inclusions: Motor vehicle in traffic on a highway; driverless motor vehicle in motion; motionless motor vehicle abandoned on a roadway; disabled motor vehicle on a roadway; and others.

A parked motor vehicle in roadway lanes used to travel during rush hours and parking during off-peak periods is in transport during periods when parking is forbidden.



## GLOSSARY (CONTINUED)

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- **Licensed Drivers** - All valid Michigan drivers on file, including suspended, revoked, and denied drivers (does not include expired licenses).
- **Location (Crash Location)** - Location of a crash is defined by:
  - The road name on which the crash occurred including prefix, road name, type, and suffix
  - The distance and direction of the point of impact from a cross road (located within the county of the crash)
  - The name of the cross road including prefix, road name, type, and suffix
- **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.
- **Motorcyclist** - An operator or passenger riding a motored cycle.
- **Motor Vehicle** - “Motor vehicle” means every vehicle which is self-propelled and every vehicle which is propelled by electric power obtained from overhead trolley wires, but not operated upon rails.
  - **Standard motor vehicles** - Cars, pickups, vans, buses, trucks, motorcycles, etc.
  - **Emergency vehicles** - Police, fire, ambulance.
  - **Farm equipment** - Farm tractors, combines, etc.
  - **Off Road Vehicles (ORV)** - Snowmobiles, mopeds, all-terrain vehicles (ATV), dirt bikes, motorbikes, go-carts, garden tractors, motorized wheelchairs, scooters.
  - **Road maintenance equipment** - dump trucks, snowplows, road graders
  - **Construction equipment** - Rollers, front-end loaders, scrapers, mobile cranes, etc.
- **Motor Vehicle Crash** - A crash involving a motor vehicle in transport on a public trafficway (in Michigan) resulting in injury, death, or at least \$1,000 in property damage.
- **Non-collision** - A crash not involving a collision with another motor vehicle. Types of non-collision 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 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); non-motorized wheelchair.
- **Property Damage Only (PDO) Crash** - A crash resulting in no fatalities or injuries, with a value of \$1,000 as a reporting threshold.

## GLOSSARY (CONTINUED)

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- **School Bus** - Every motor vehicle, except station wagons, with a manufacturers' rated seating capacity of 18 or more passengers, including the driver, owned by a public, private, or governmental agency and operated for the transportation of children to or from school, or privately owned and operated for compensation for the transportation of children to or from school. School bus does not include buses operated by a municipally owned transportation system or by a common passenger carrier certificated by the state transportation department.
- **Traffic Unit** - Anything in transit on a public trafficway (i.e., motor vehicle, motorcycle, bicycle, pedestrian, snowmobile, farm equipment).
- **Trafficway** - Indicates whether or not a trafficway is not physically divided, or is divided with a median strip, with or without a traffic barrier, and whether it serves one-way or two-way traffic.
- **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.

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# QUICK FACTS AND FIGURES

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## UPPER PENINSULA 2014 QUICK FACTS

- Some exposure factor comparisons between 2014 and 2013 show motor vehicle registrations decreased 0.9 percent, the number of licensed drivers on Upper Peninsula roads decreased 0.03, and vehicle mileage decreased 6.6 percent.
- The 2014 fatality rate decreased to 0.8 deaths per 100 million miles of travel. It remains below the 10-year average of 1.22 (2005-2014).
- There were 23 people killed and 1,696 people injured in 9,126 reported motor vehicle traffic crashes in the Upper Peninsula during 2014. Compared with the 2013 experience, the number of deaths decreased 41.0 percent, people injured decreased 4.6 percent, and total reported crashes decreased 8.3 percent.
- There were 9,126 reported crashes, of which 20 were fatal, 1,321 were personal injury, and 7,785 were property damage only crashes.
- Of all fatal crashes, 25.0 percent occurred at intersections.
- Of all fatal crashes, 25.0 percent involved at least one drinking operator, bicyclist, or pedestrian, 20.0 percent involved drinking but no drugs, 10.0 percent involved drugs but no drinking, and 5.5 percent involved both drinking and drugs.
- Excessive speed was indicated as the hazardous action by 31.6 percent of the drivers involved in fatal crashes.
- In 2014, there were 5,088 single vehicle crashes, a decrease of 16.0 percent from last year's count of 6,059.
- Of the 9,126 total crashes, 5,088 (55.8%) involved one vehicle.
- Of the 20 fatal crashes, 9 (45.0%) involved one vehicle.
- Of the 5 alcohol-involved fatal crashes, 5 (100.0%) involved one vehicle.
- Of the 31 drivers involved in fatal crashes, five (16.1%) were under 21 years of age.
- Of the 307,987 people living in the Upper Peninsula [1. References and Reporting Agencies] one out of every 13,391 was killed in a traffic crash and one out of every 182 was injured.
- For each person killed, 74 people were injured.
- The pedestrian death toll for the Upper Peninsula stands at one person (age 55). Forty pedestrians were injured.
- For each pedestrian killed, there were forty pedestrians injured.
- The pedestrian who was killed failed to yield.
- There were no bicyclist fatalities and 29 bicyclists were injured.
- Of the 12,450 drivers and injured passengers involved in crashes where restraint use was known, 12,164 or 97.7 percent were reported to have been using occupant restraints. Restraint usage among fatal crash victims, where usage was known, was reported to be 54.5 percent in 2014.
- The comprehensive costs in traffic crashes in the Upper Peninsula amounted to \$1,066,646,300 in 2014, which is the most recent year of data available.

*Note: The information on the cost of crashes was provided by the National Safety Council. NSC made revisions to the cost model starting in 2014 that take advantage of data sources not previously available and estimates cannot be compared across multiple years.*



# **HISTORICAL INFORMATION**

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## UPPER PENINSULA 2013-2014 SUMMARY TRENDS: 1 YEAR TRENDS

	2013	2014	PERCENT OF CHANGE
NUMBER OF CRASHES			
Fatal Crashes	36	20	-44.8
Personal Injury Crashes	1,332	1,321	-0.8
Property Damage Crashes	8,588	7,785	-9.4
TOTAL	9,956	9,126	-8.3
ALCOHOL-INVOLVED CRASHES			
Fatal Crashes	18	5	-72.2
Personal Injury Crashes	108	124	14.8
Property Damage Crashes	203	185	-8.9
TOTAL	329	314	-4.6
FATAL CRASHES			
Had Been Drinking	18 (50.0%)	5 (25.0%)	-72.2
Had Not Been Drinking / Not Known If Drinking	18 (50.0%)	15 (75.0%)	-16.7
PERSONS IN CRASHES			
Killed	39	23	-41.0
Injured	1,778	1,696	-4.6
Not Injured	13,666	13,080	-4.3
Unknown Injury	1,051	956	-9.0
TOTAL	16,534	15,755	-4.7
PERSONS IN ALCOHOL-INVOLVED CRASHES			
Killed	20	5	-75.0
Injured	140	152	8.6
Not Injured	355	300	-15.5
Unknown Injury	41	33	-19.5
TOTAL	556	490	-11.9
PERSONS INJURED BY GENDER			
Male	852	824	-3.3
Female	923	869	-5.9
Unknown Gender	3	3	0.0
TOTAL	1,778	1,696	-4.6
PERSONS INJURED BY SEVERITY			
"A" Injury	212	198	-6.6
"B" Injury	422	390	-7.6
"C" Injury	1,144	1,108	-3.1
TOTAL	1,778	1,696	-4.6

Upper Peninsula experienced a 41.0 percent decrease in traffic fatalities, a 4.6 percent decrease in injuries, and a 8.3 percent decrease in crashes.

Persons sustaining "A" level injuries (the most serious) decreased 6.6 percent.

## UPPER PENINSULA 2013-2014 SUMMARY TRENDS: 1 YEAR TRENDS (CONTINUED)

	2013	2014	PERCENT OF CHANGE
<b>PERSONS KILLED BY GENDER</b>			
Male	25	15	-40.0
Female	14	8	-42.9
TOTAL	39	23	-41.0
<b>PERSONS KILLED</b>			
Motor Vehicle Driver	31	15	-51.6
Passenger	5	7	40.0
Bicyclist	0	0	0.0
Pedestrian	3	1	-66.7
Train Engineer	0	0	0.0
TOTAL	39	23	-41.0
<b>BELT RESTRAINT USE BY DRIVER</b>			
"Reported Restrained" - Killed	11	8	-27.3
"Reported Not Restrained" - Killed	10	4	-60.0
"Reported Restrained" - Injured	1,026	977	-4.8
"Reported Not Restrained" - Injured	54	48	-11.1
<b>BELT RESTRAINT USE BY INJURED PASSENGER</b>			
"Reported Restrained" - Killed	4	2	-50.0
"Reported Not Restrained" - Killed	0	2	0.0
"Reported Restrained" - Injured	357	320	-10.4
"Reported Not Restrained" - Injured	48	45	-6.3
<b>DRIVER AGE 16-20 INVOLVED</b>			
Fatal Crashes	6	3	-50.0
Personal Injury Crashes	293	264	-9.9
Property Damage Crashes	1,197	1,107	-7.5
TOTAL ALL CRASHES	1,496	1,374	-8.2
Persons Killed	6	4	-33.3
Persons Injured	412	357	-13.3
<b>DRIVER AGE 65 &amp; OVER INVOLVED</b>			
Fatal Crashes	8	3	-62.5
Personal Injury Crashes	272	290	6.6
Property Damage Crashes	1,471	1,481	0.7
TOTAL ALL CRASHES	1,751	1,774	1.3
Persons Killed	10	3	-70.0
Persons Injured	392	383	-2.3

Deaths among vehicle occupants (drivers and passengers only) decreased 38.9 percent.



## UPPER PENINSULA 2013-2014 SUMMARY TRENDS: 1 YEAR TRENDS (CONTINUED)

	2013	2014	PERCENT OF CHANGE
<b>CRASH FACTS</b>			
Licensed Drivers	223,975	223,910	0.0
Registered Vehicles	262,485	260,036	-0.9
Michigan Population	309,387	307,987	-0.5
Drivers Involved in Crashes	13,950	13,287	-4.8
Occupants Involved in Crashes	16,455	15,671	-4.8
Estimated Vehicle Miles Traveled (thousands)	3,100,105	2,894,265	-6.6
Death Rate Per 100 Million Vehicle Miles	1.3	0.8	-38.5
Fatal Crash Rate Per 100 Million Vehicle Miles	1.2	0.7	-41.7

## 2014 COST OF CRASHES IN THE UPPER PENINSULA

The cost estimate for Upper Peninsula crashes in 2014 was **\$1,066,646,300**. This estimate is based on the National Safety Council's [3] cost estimating procedures. Average comprehensive costs are based on the following national figures:

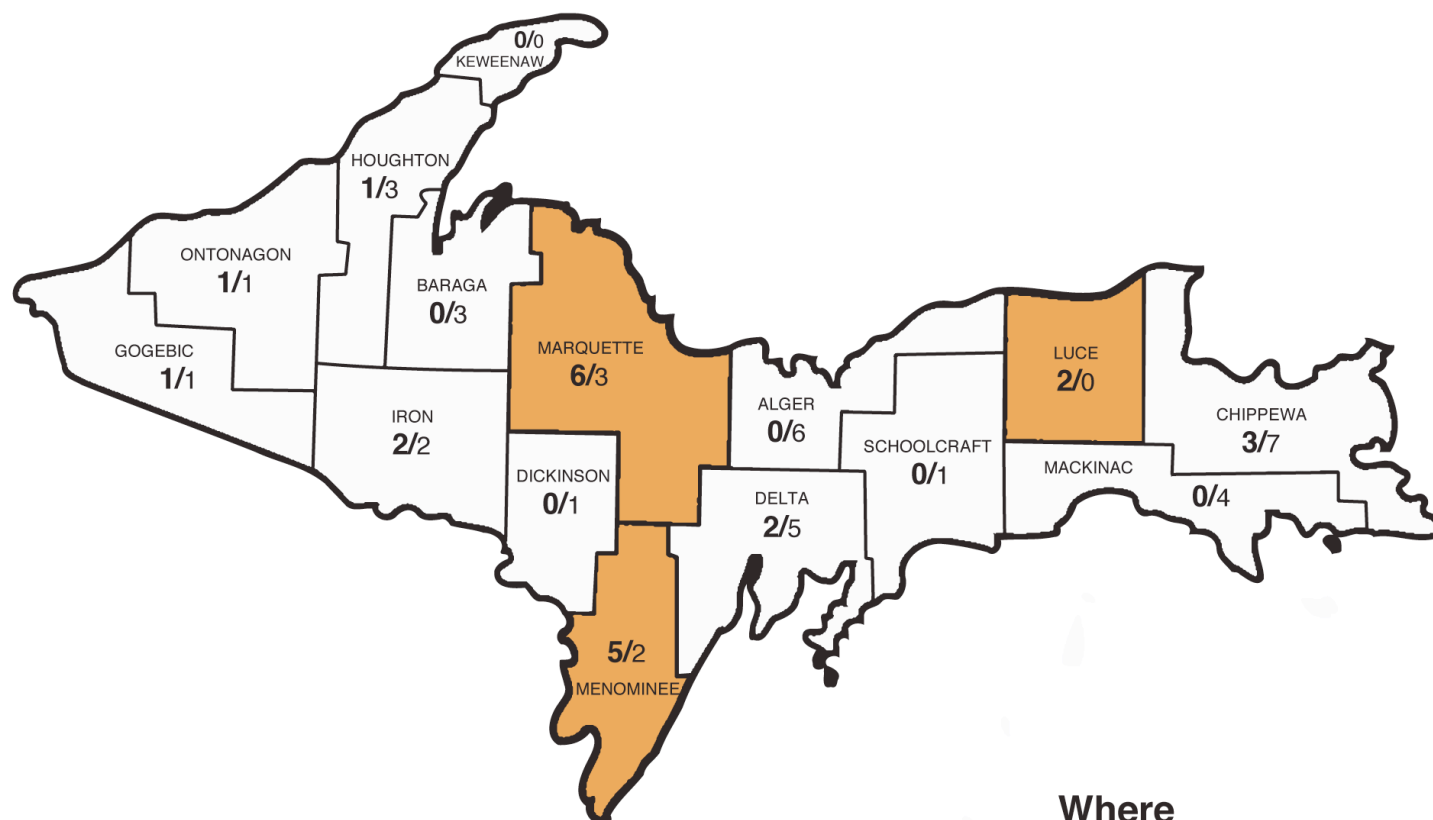
### COMPREHENSIVE COSTS, 2014

Death	\$9,887,000
Incapacitating Injury	\$1,082,000
Non-incapacitating Injury	\$298,000
Possible Injury	\$138,100
No Injury	\$45,700

These cost estimates are not intended for comparisons to previous years. The National Safety Council made revisions to the cost model starting in 2014 that take advantage of data sources not previously available. Deaths and injuries are calculated by number of persons. "No injury" is calculated per crash.

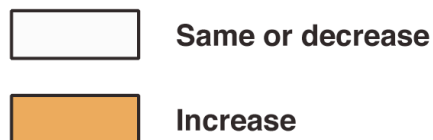
*Note: Information on the cost of crashes is provided by the National Safety Council.*

## UPPER PENINSULA WHERE TRAFFIC FATALITIES OCCURRED



### Where Traffic Fatalities Occurred A One-Year Comparison

2014 = 23 / 2013 = 39

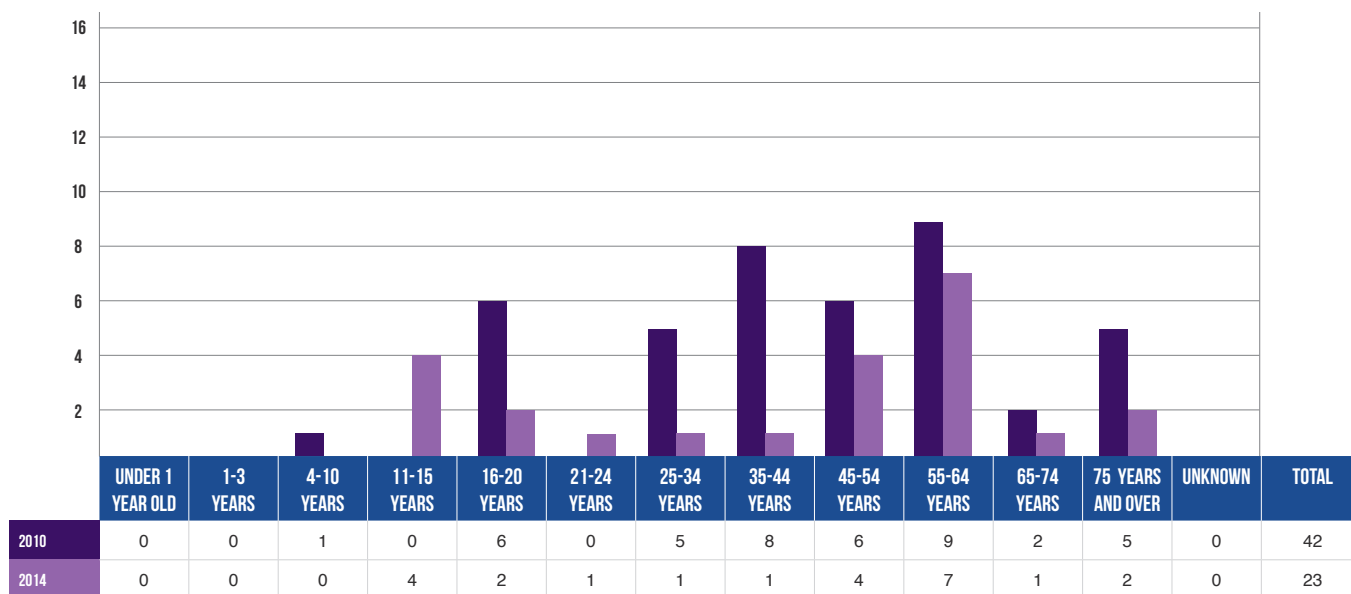


## 5 YEAR TRENDS-UPPER PENINSULA TREND DATA FOR FATALITIES

FATALITIES BY AGE	2010	2011	2012	2013	2014
Under 1 year old	0	0	0	0	0
1 - 3 years	0	0	0	0	0
4 - 10 years	1	0	0	0	0
11 - 15 years	0	1	0	0	4
16 - 20 years	6	4	1	5	2
21 - 24 years	0	3	1	4	1
25 - 34 years	5	5	2	3	1*
35 - 44 years	8	4	3	5	1*
45 - 54 years	6	12	8	9	4*
55 - 64 years	9	5	4	2	7
65 - 74 years	2	4	5	7	1*
75 years and over	5	3	6	4	2*
Unknown	0	0	0	0	0
<b>TOTAL</b>	<b>42</b>	<b>41</b>	<b>30</b>	<b>39</b>	<b>23*</b>

*\*Indicates the lowest total in the five year period*

### FATALITIES BY AGE



## 5 YEAR TRENDS-UPPER PENINSULA TREND DATA FOR FATALITIES (CONTINUED)

FATALITIES BY AGE	2010	2011	2012	2013	2014
AGE OF DRIVERS INVOLVED IN FATAL CRASHES					
13 years and under	0	0	0	0	0
14 years	0	0	0	0	0
15 years	0	1	0	0	1
16 years	0	1	0	0	0
17 years	1	0	0	1	0
18 years	2	3	0	1	1
19 years	2	2	1	3	3
20 years	4	0	0	1	0
21 - 24 years	3	6	0	5	2
25 - 34 years	7	8	5	6	1
35 - 44 years	11	6	5	7	7
45 - 54 years	9	17	12	10	4
55 - 64 years	13	9	3	6	8
65 - 69 years	3	2	3	4	2
70 - 74 years	1	2	3	4	0
75 - 79 years	0	1	0	0	0
80 - 84 years	1	2	1	1	1
85 - 89 years	2	1	3	1	1
90 years and over	0	0	1	0	0
Unknown	2	0	0	1	0
Totals	61	61	37	51	31
AGE OF DRIVERS INVOLVED IN SINGLE VEHICLE FATAL CRASHES					
13 years and under	0	0	0	0	0
14 years	0	0	0	0	0
15 years	0	1	0	0	0
16 years	0	1	0	0	0
17 years	0	0	0	1	0
18 years	0	1	0	1	0
19 years	2	1	1	1	0
20 years	2	0	0	0	0
21 - 24 years	0	4	0	3	1
25 - 34 years	3	1	3	2	0
35 - 44 years	3	2	3	3	3
45 - 54 years	6	5	7	6	0
55 - 64 years	5	1	1	2	4
65 - 69 years	1	1	3	1	1
70 - 74 years	0	0	2	1	0
75 - 79 years	0	0	0	0	0
80 - 84 years	0	1	0	0	0
85 - 89 years	0	0	2	0	0
90 years and over	0	0	1	0	0
Unknown	1	0	0	0	0
Totals	23	19	23	21	9

## 5 YEAR TRENDS-UPPER PENINSULA TREND DATA FOR FATALITIES (CONTINUED)

FATALITIES BY AGE	2010	2011	2012	2013	2014
AGE OF BICYCLISTS KILLED					
Under 1 year old	0	0	0	0	0
1 - 3 years	0	0	0	0	0
4 - 10 years	0	0	0	0	0
11 - 15 years	0	0	0	0	0
16 - 20 years	0	0	0	0	0
21 - 24 years	0	0	0	0	0
25 - 34 years	0	0	0	0	0
35 - 44 years	0	0	0	0	0
45 - 54 years	0	0	0	0	0
55 - 64 years	0	0	0	0	0
65 - 74 years	0	0	0	0	0
75 years and over	0	0	1	0	0
Unknown	0	0	0	0	0
Totals	0	0	1	0	0
AGE OF PEDESTRIANS KILLED					
Under 1 year old	0	0	0	0	0
1 - 3 years	0	0	0	0	0
4 - 10 years	0	0	0	0	0
11 - 15 years	0	0	0	0	0
16 - 20 years	0	1	0	0	0
21 - 24 years	0	0	0	0	0
25 - 34 years	0	0	1	0	0
35 - 44 years	2	1	1	0	0
45 - 54 years	0	0	1	2	0
55 - 64 years	1	0	1	0	1
65 - 74 years	1	0	1	0	0
75 years and over	0	0	1	1	0
Unknown	0	0	0	0	0
Totals	4	2	6	3	1*

\*Indicates the lowest total in the five year period

## 5 YEAR TRENDS- UPPER PENINSULA FATAL CRASHES AND PERSONS KILLED FOR SELECT HOLIDAY PERIODS

HOLIDAY PERIOD	FATAL CRASHES	PERSONS KILLED	SUMMARY 2014
MEMORIAL DAY			<p>This table shows traffic death tolls in the Upper Peninsula for the past five years for the major holiday periods as defined by the National Safety Council.</p> <p>Based on the total 2014 Upper Peninsula experience,deaths averaged 1.92 per month.Alcohol-related deaths averaged 0.42 per month.</p> <p>Based on the 2014 Upper Peninsula holiday period experience, deaths averaged 0.17 per month.Alcohol-related deaths averaged 0.00 per month.</p>
2014 (3) MON	0 [0]	0 [0]	
2013 (3) MON	1 [0]	1 [0]	
2012 (3) MON	0 [0]	0 [0]	
2011 (3) MON	1 [1]	1 [1]	
2010 (3) MON	1 [0]	2 [0]	
FOURTH OF JULY			
2014 (3) FRI	0 [0]	0 [0]	
2013 (4) THU	1 [1]	1 [1]	
2012 (1) WED	2 [1]	2 [1]	
2011 (3) MON	0 [0]	0 [0]	
2010 (3) SUN	1 [0]	1 [0]	
LABOR DAY			
2014 (3) MON	0 [0]	0 [0]	
2013 (3) MON	0 [0]	0 [0]	
2012 (3) MON	0 [0]	0 [0]	
2011 (3) MON	0 [0]	0 [0]	
2010 (3) MON	0 [0]	0 [0]	
THANKSGIVING			
2014 (4) THU	0 [0]	0 [0]	
2013 (4) THU	0 [0]	0 [0]	
2012 (4) THU	0 [0]	0 [0]	
2011 (4) THU	0 [0]	0 [0]	
2010 (4) THU	0 [0]	0 [0]	
CHRISTMAS			
2014 (4) THU	1 [0]	1 [0]	
2013 (1) WED	0 [0]	0 [0]	
2012 (4) TUES	1 [1]	1 [1]	
2011 (3) SUN	0 [0]	0 [0]	
2010 (3) SAT	0 [0]	0 [0]	
NEW YEARS			
2014 (4) THU	1 [0]	1 [0]	
2013 (1) WED	0 [0]	0 [0]	
2012 (4) TUES	1 [1]	1 [1]	
2011 (3) SUN	0 [0]	0 [0]	
2010 (3) SAT	0 [0]	0 [0]	

Figures in parentheses in the 1st column show number of full days in each holiday period.

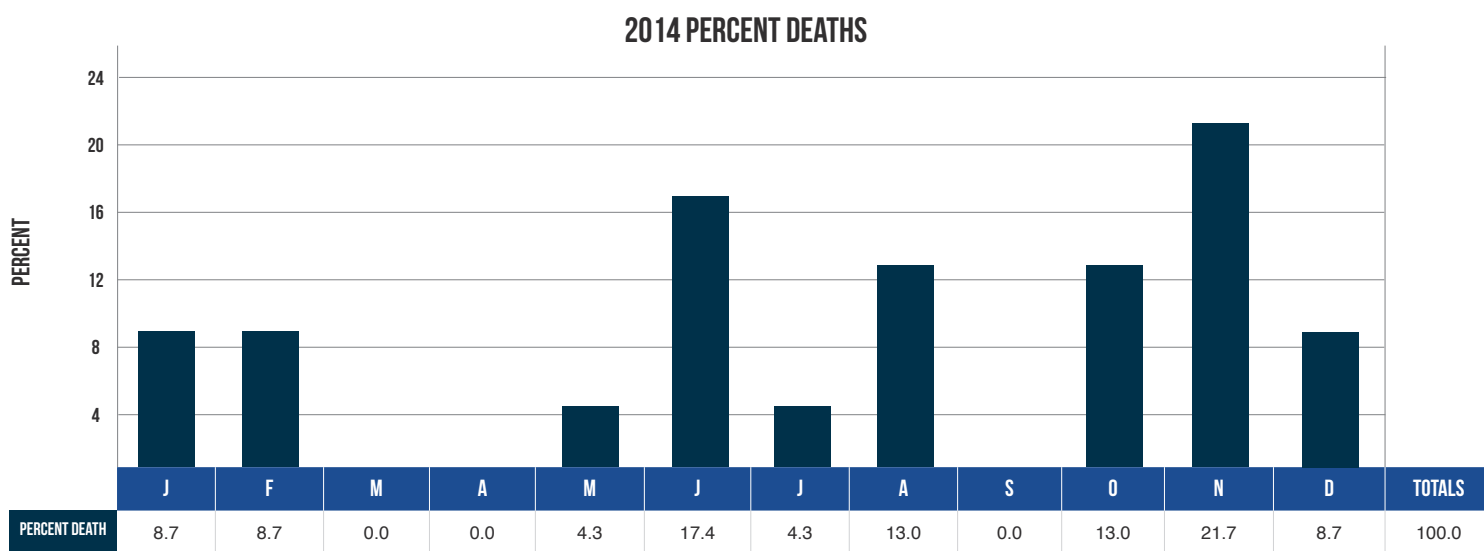
Fatal crashes and deaths are for these days plus six hours of the preceding day.

Figures in brackets in the 2nd and 3rd columns show the number of alcohol-related fatal crashes and deaths.

Please view the glossary for an explanation of holiday periods.

## 5 YEAR TRENDS- UPPER PENINSULA MOTOR VEHICLE CRASH DEATHS AND MILEAGE BY MONTH

MONTH	TRAFFIC DEATHS					2014 PERCENTAGES
	2010	2011	2012	2013	2014	Percent Deaths
January	5	5	3	5	2	8.7
February	5	2	2	0	2	8.7
March	2	3	1	4	0	0.0
April	2	0	0	3	0	0.0
May	3	2	1	4	1	4.3
June	4	6	4	2	4	17.4
July	3	4	5	3	1	4.3
August	3	7	2	5	3	13.0
September	2	2	1	4	0	0.0
October	8	3	2	2	3	13.0
November	2	3	4	3	5	21.7
December	3	4	5	4	2	8.7
TOTAL	42	41	30	39	23	100.0



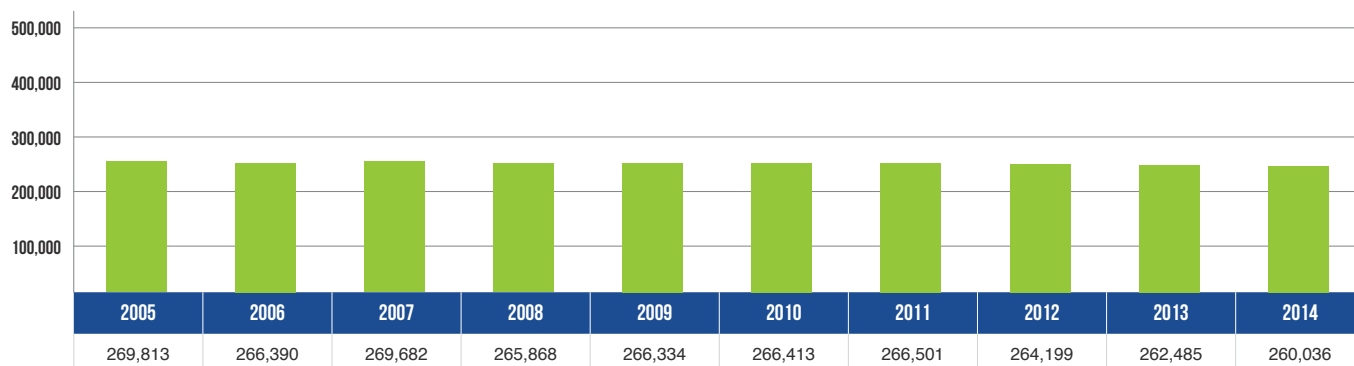
*Note: Data for percent miles driven is not available for the Upper Peninsula.*

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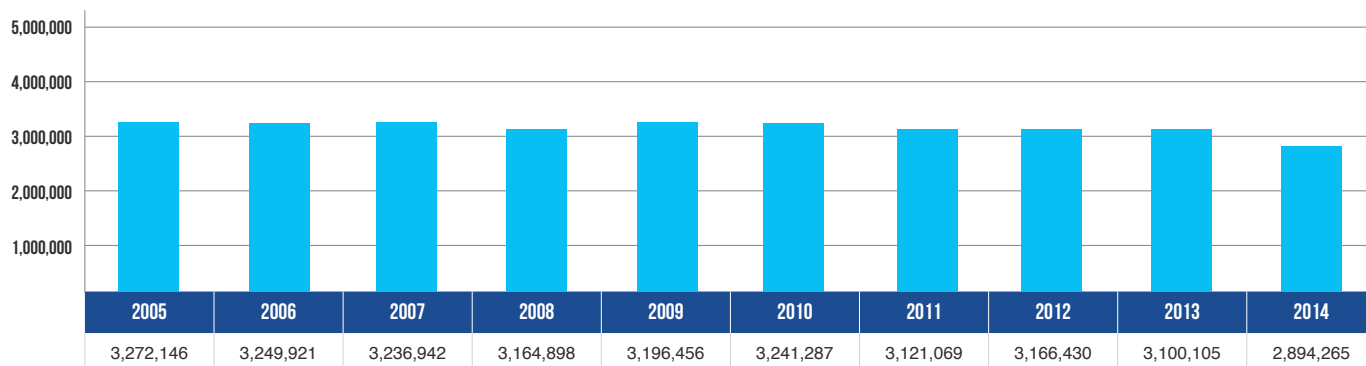
## 10 YEAR TRENDS-UPPER PENINSULA

### UPPER PENINSULA VEHICLE REGISTRATIONS



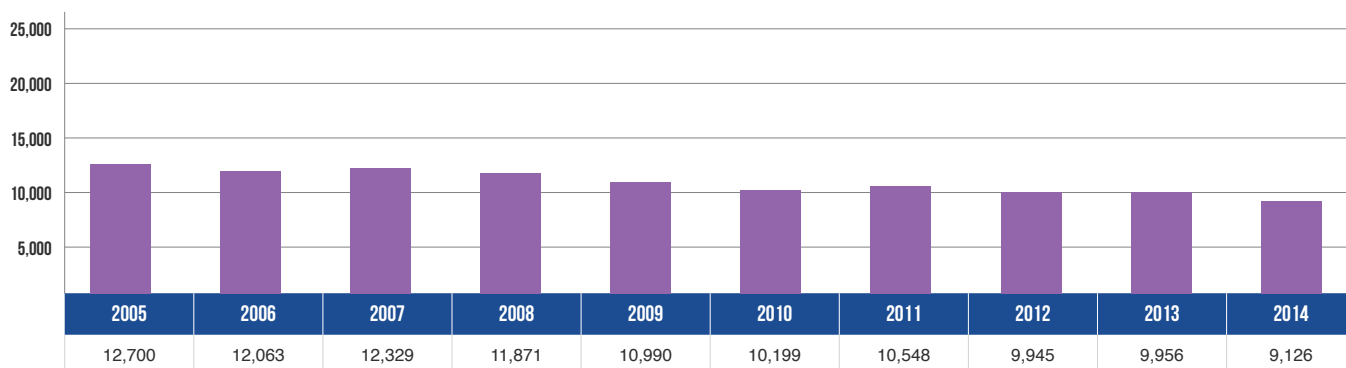
Vehicle registrations in the Upper Peninsula decreased 3.6 percent over the 10-year period.

### UPPER PENINSULA VEHICLE MILES TRAVELED



Vehicle miles traveled in the Upper Peninsula decreased 11.5 percent over the 10-year period.

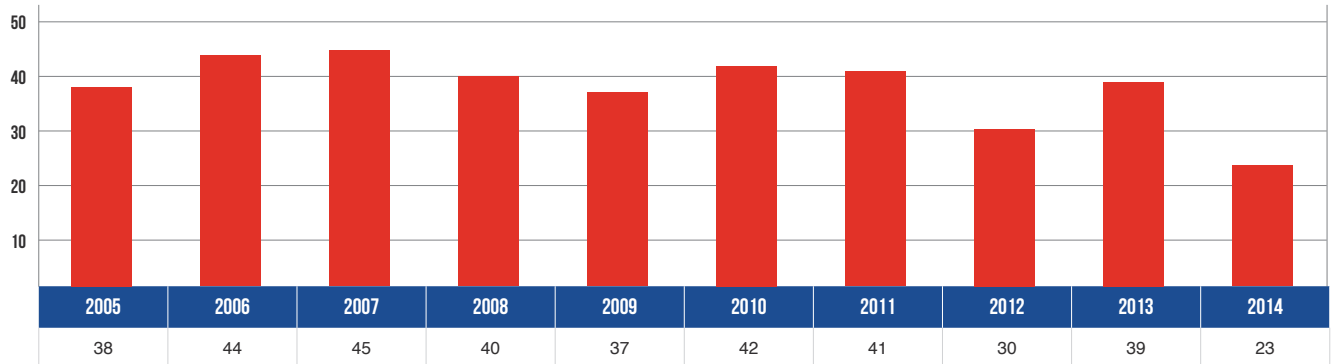
### UPPER PENINSULA CRASHES



There were 9,126 Upper Peninsula crashes in 2014 – a 28.1 percent decrease from 2005.

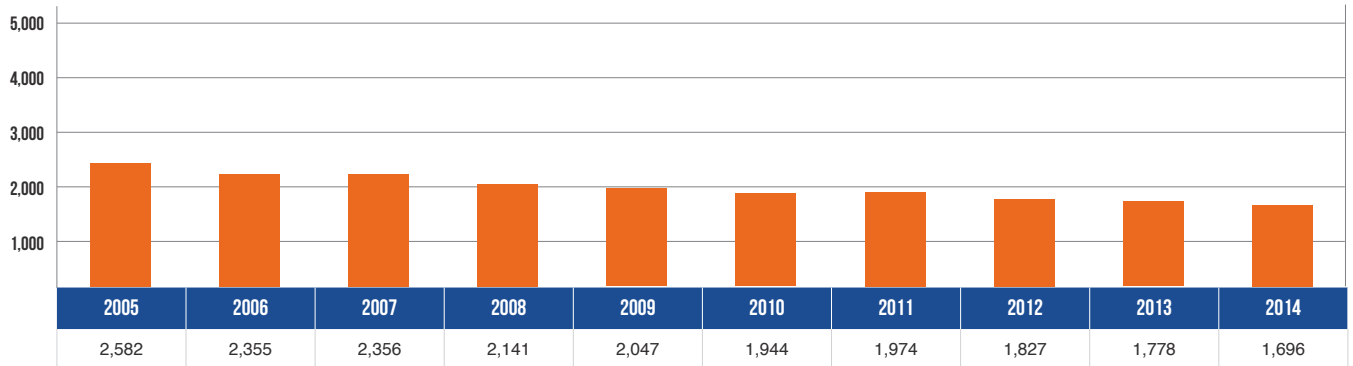
## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

### UPPER PENINSULA DEATHS



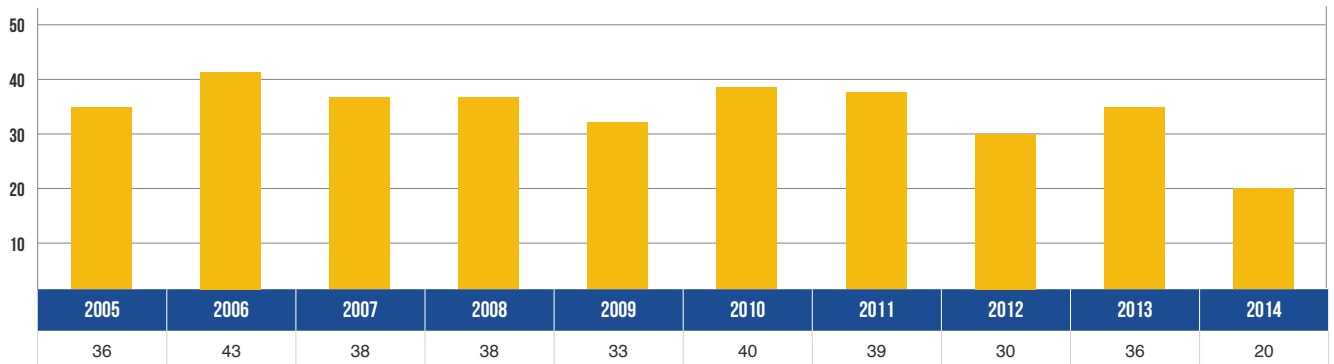
In 2014, 23 people died in motor vehicle crashes in the Upper Peninsula – a decrease of 39.5 percent from 2005.

### UPPER PENINSULA INJURIES



In 2014, 1,696 people received injuries in motor vehicle crashes in the Upper Peninsula – down 34.3 percent from 2,582 in 2005.

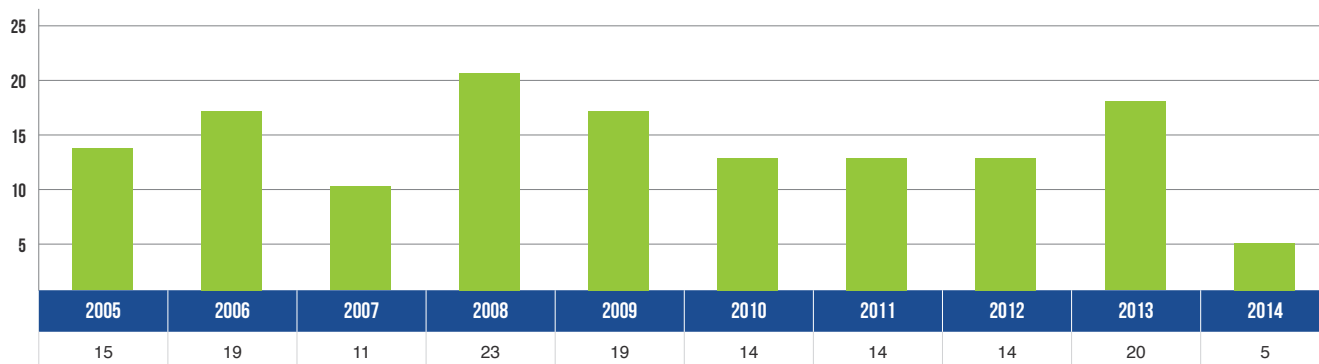
### UPPER PENINSULA FATAL CRASHES



In 2014, there were 20 fatal crashes in the Upper Peninsula – down 44.4 percent from 36 in 2005.

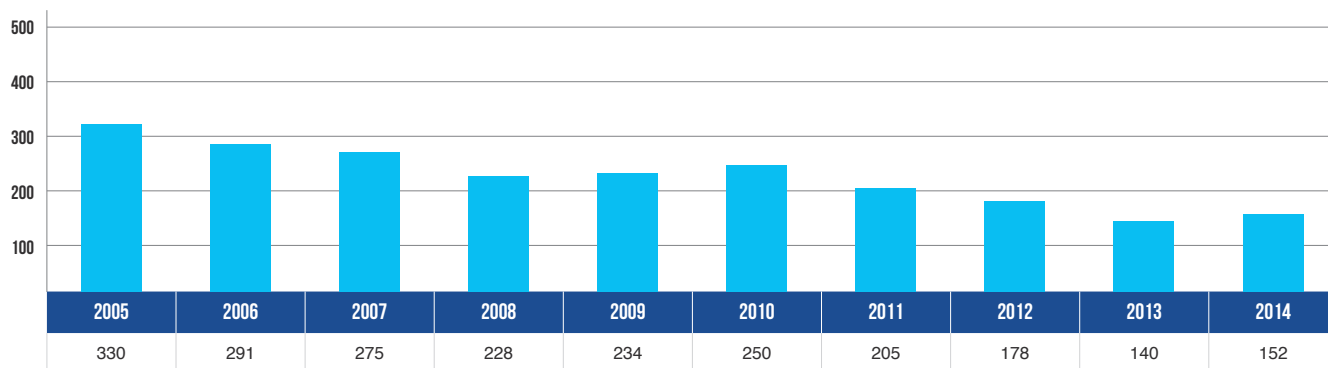
## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

### UPPER PENINSULA ALCOHOL-INVOLVED DEATHS



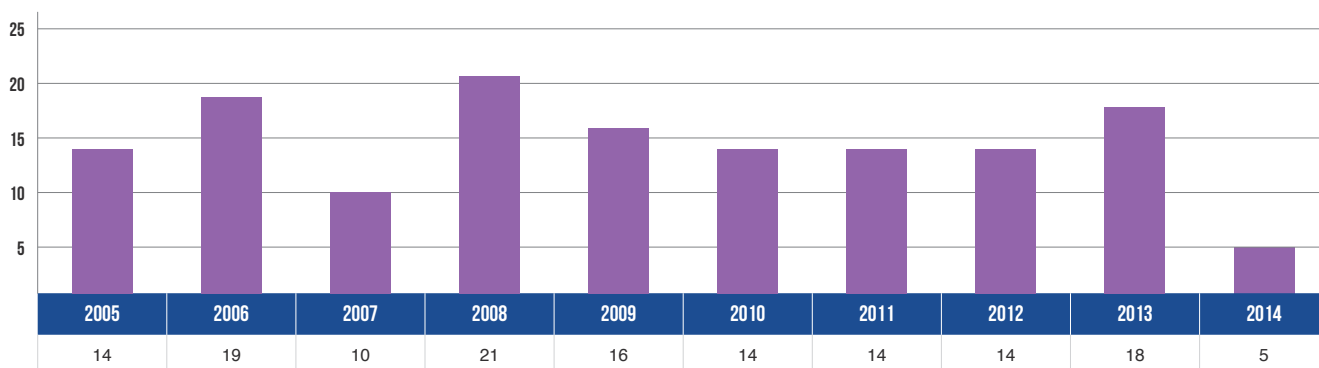
There were five deaths in alcohol-involved crashes in the Upper Peninsula in 2014 – down 66.7 percent from 2005.

### UPPER PENINSULA ALCOHOL-INVOLVED INJURIES



There were 152 alcohol-involved injuries in the Upper Peninsula in 2014 – down 53.9 percent from 2005.

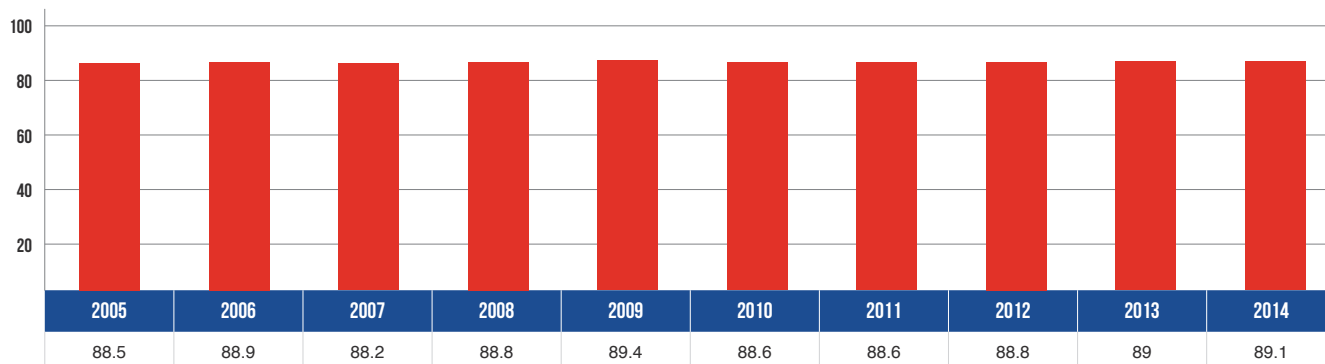
### UPPER PENINSULA ALCOHOL-INVOLVED FATAL CRASHES



There were five injuries in alcohol-involved fatal crashes in the Upper Peninsula in 2014 – down 64.3 percent from 2005..

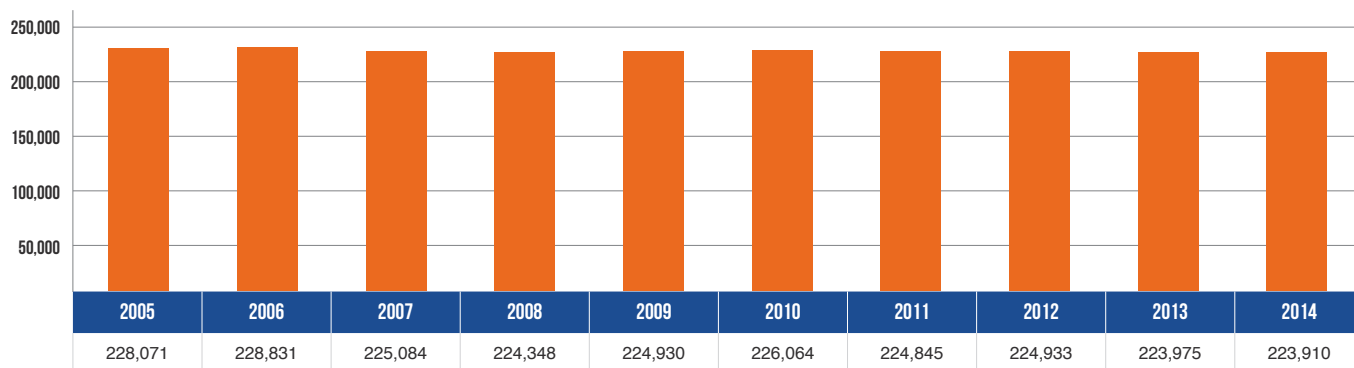
## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

### UPPER PENINSULA RESTRAINT USAGE IN CRASHES



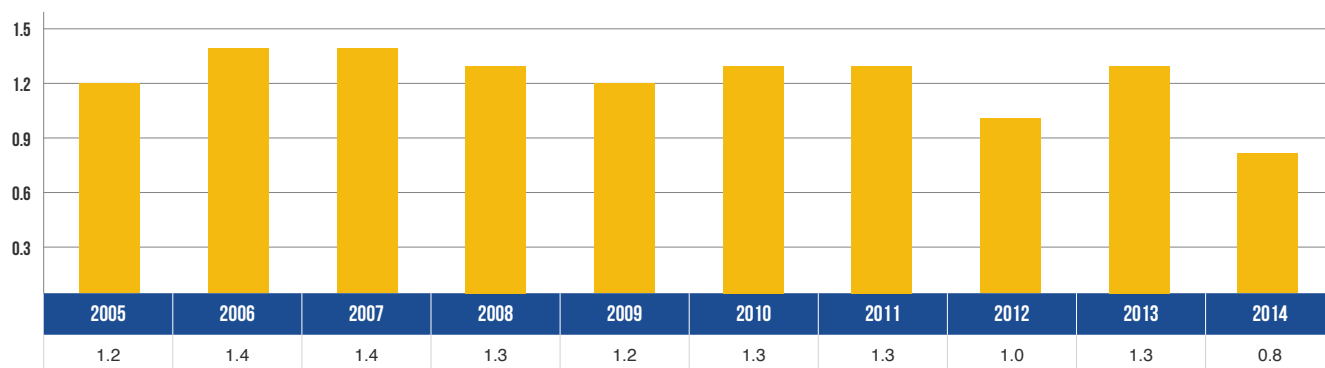
The percentage of motor vehicle occupants using restraints as reported by police in traffic crashes increased 0.6 percent over the last ten years in the Upper Peninsula.

### UPPER PENINSULA DRIVERS



There were 223,910 licensed drivers on Upper Peninsula roadways in 2014 – a decrease of 1.8 percent from 2005.

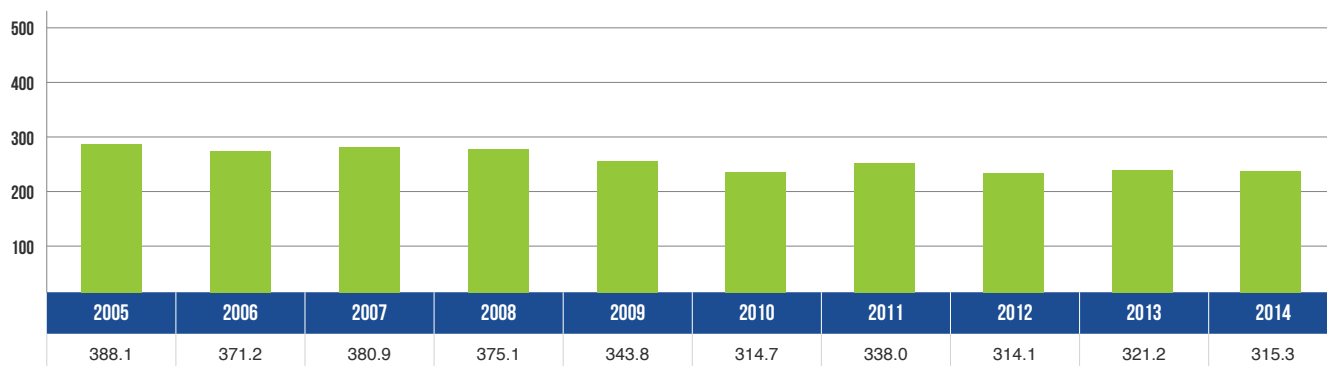
### UPPER PENINSULA MILEAGE DEATH RATE



The 0.8 death rate for the Upper Peninsula in 2014 was a 33.3 percent decrease from 1.2 in 2005.

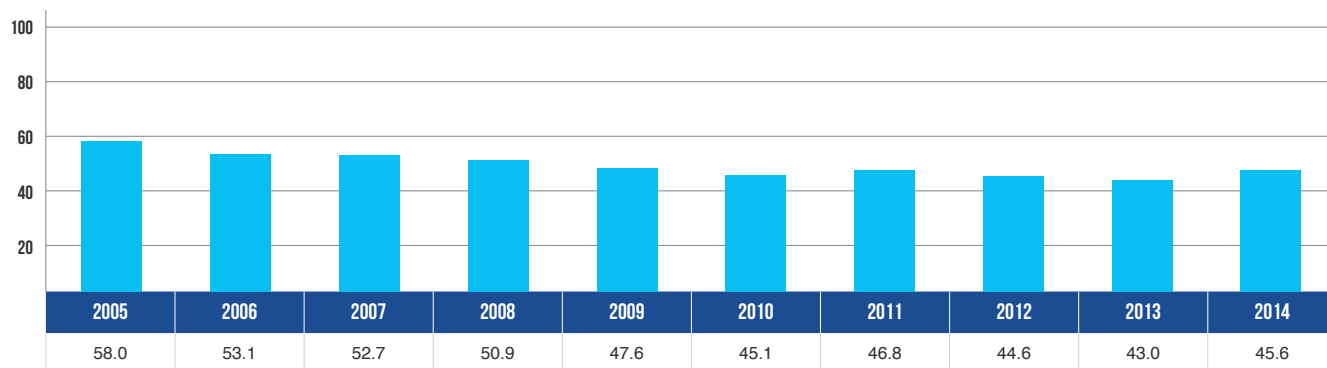
## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

### UPPER PENINSULA TOTAL CRASH RATE



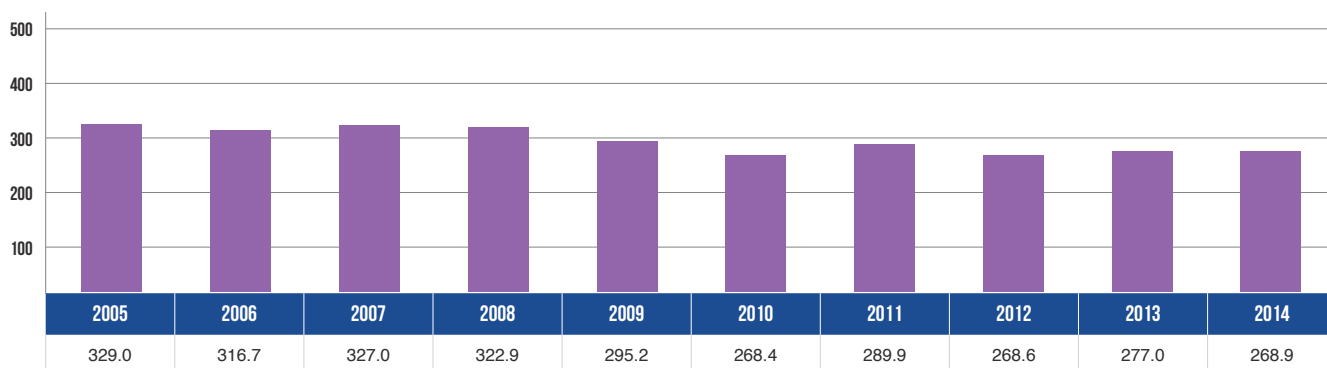
The 10-year total crash rate for the Upper Peninsula peaked in 2005 at 388.1, then decreased by 18.8 percent to 315.3 in 2014.

### UPPER PENINSULA INJURY CRASH RATE



The 10-year injury crash rate of 45.6 in the Upper Peninsula in 2014 was a 21.4 percent decrease from 2005.

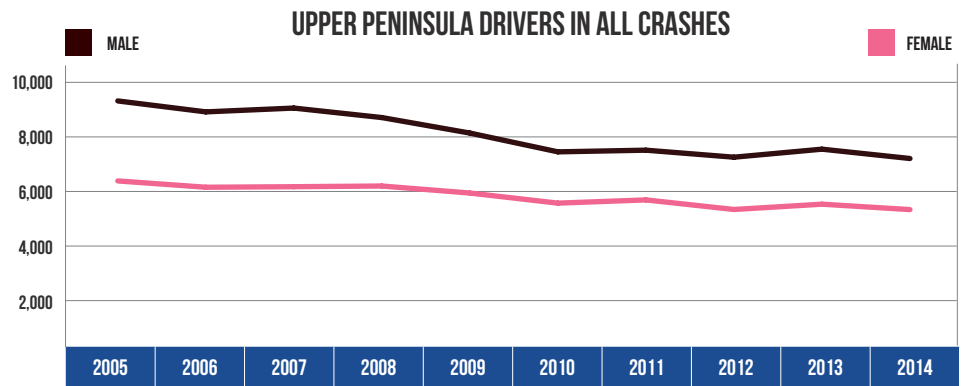
### UPPER PENINSULA PROPERTY DAMAGE CRASH RATE



The property damage crash rate of 268.9 in the Upper Peninsula in 2014 was a 18.3 percent decrease from 2005.

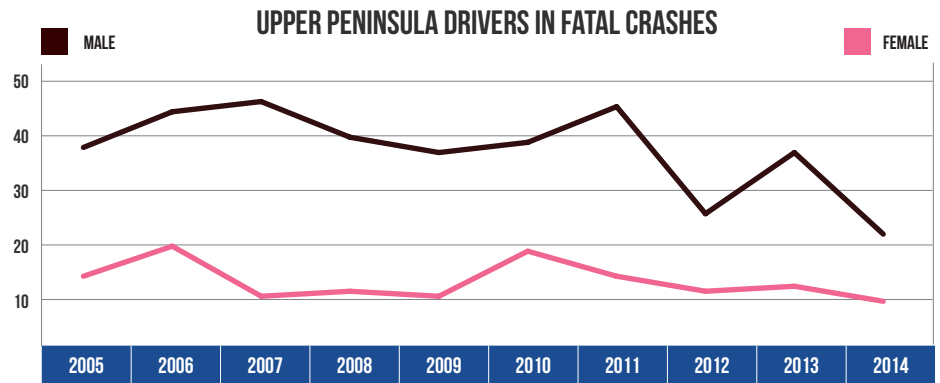
## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

UPPER PENINSULA DRIVERS IN ALL CRASHES		
Year	Male	Female
2005	9,688	6,462
2006	9,222	6,179
2007	9,384	6,203
2008	8,980	6,234
2009	8,319	5,918
2010	7,519	5,465
2011	7,590	5,610
2012	7,291	5,180
2013	7,633	5,418
2014	7,235	5,175



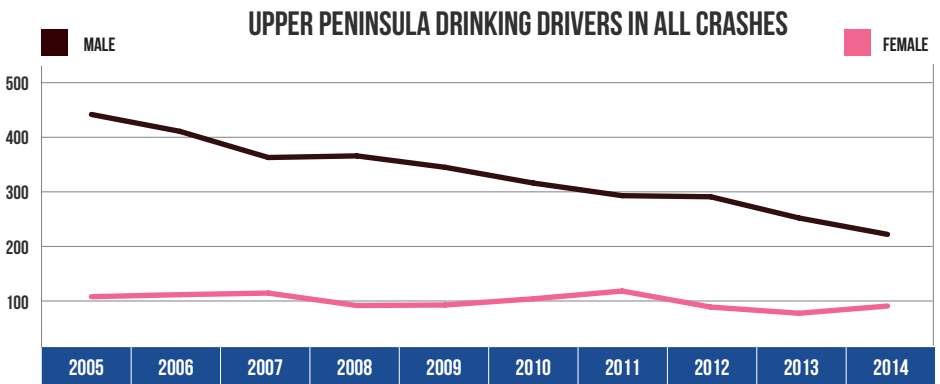
Male drivers accounted for 58.3 percent of all drivers in crashes in the Upper Peninsula during 2014, which was down from 60.0 percent in 2005. Female drivers accounted for 41.7 percent of all drivers in crashes during 2014, which was up from 40.0 percent in 2005.

UPPER PENINSULA DRIVERS IN FATAL CRASHES		
Year	Male	Female
2005	39	14
2006	46	20
2007	48	10
2008	41	11
2009	38	10
2010	40	19
2011	47	14
2012	26	11
2013	38	12
2014	22	9



Male drivers made up 71.0 percent of all drivers in fatal crashes in the Upper Peninsula in 2014, which was down from 73.6 percent in 2005. Female drivers made up 29.0 percent of all drivers in fatal crashes in 2014, which was up from 36.4 percent in 2005.

UPPER PENINSULA DRINKING DRIVERS IN ALL CRASHES		
Year	Male	Female
2005	440	109
2006	409	113
2007	361	116
2008	364	92
2009	343	93
2010	314	105
2011	291	120
2012	289	89
2013	250	77
2014	220	91

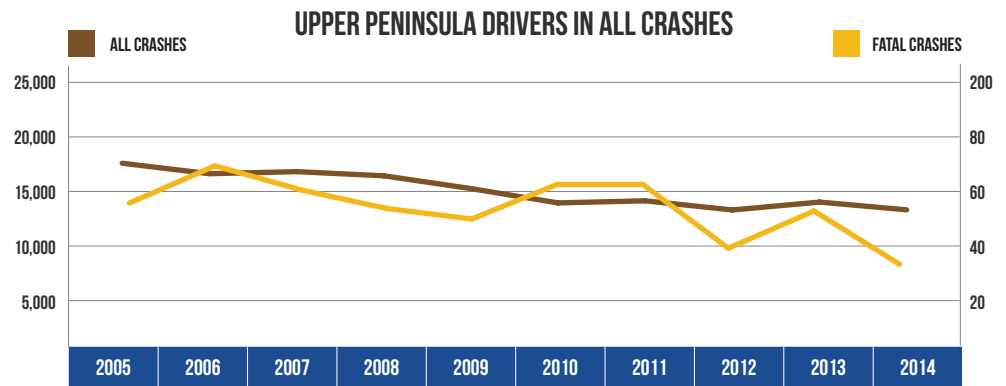


In 2014, males represented 70.7 percent of all drinking drivers in the Upper Peninsula, which was down from 80.1 percent in 2005. Females represented 29.3 percent of all drinking drivers, which was up from 19.9 percent in 2005.

Note: 877 drivers in all crashes were coded as unknown gender in the Upper Peninsula in 2014 and are not included in the tables.

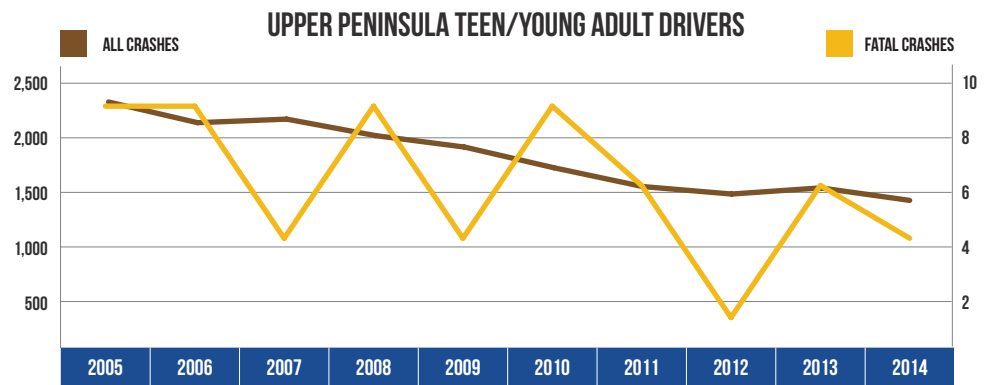
## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

UPPER PENINSULA ALL CRASHES		
Year	All Crashes	Fatal Crashes
2005	17,275	54
2006	16,379	68
2007	16,555	59
2008	16,201	52
2009	15,105	48
2010	13,879	61
2011	14,059	61
2012	13,276	37
2013	13,950	51
2014	13,287	31



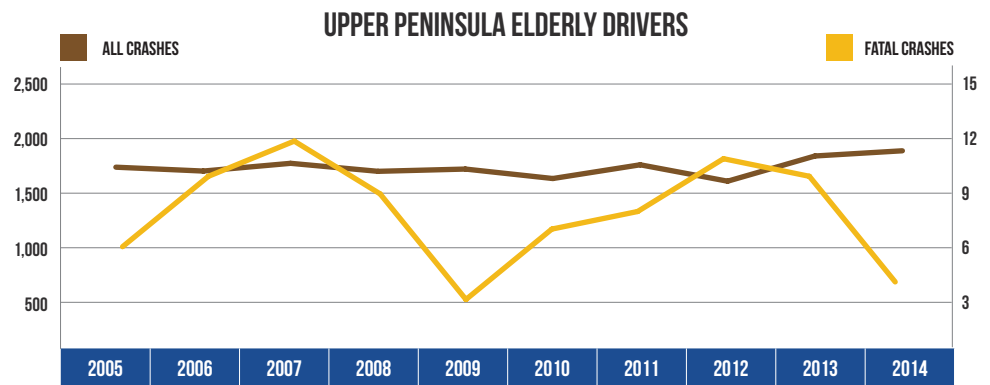
The number of drivers involved in all crashes in the Upper Peninsula decreased 23.1 percent over the 10-year period. The number of drivers involved in fatal crashes in the Upper Peninsula decreased 42.6 percent over the 10-year period.

UPPER PENINSULA TEEN/YOUNG ADULT DRIVERS (AGE 16-20)		
Year	All Crashes	Fatal Crashes
2005	2,406	9
2006	2,204	9
2007	2,239	4
2008	2,078	9
2009	1,966	4
2010	1,765	9
2011	1,581	6
2012	1,508	1
2013	1,568	6
2014	1,446	4



Teen/young adult drivers (age 16-20) in all crashes in the Upper Peninsula has decreased by 39.9 percent since 2005. The number of teen/young adult drivers in fatal crashes in the Upper Peninsula has decreased by 55.6 percent since 2005.

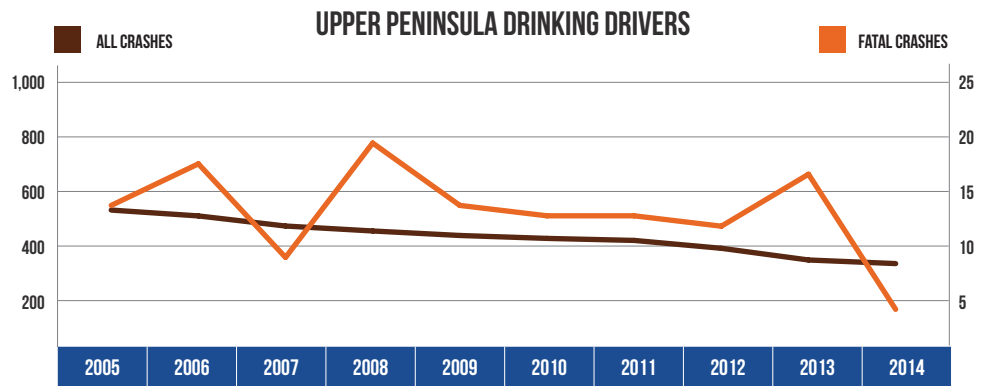
UPPER PENINSULA ELDERLY DRIVERS (AGE 65 & OVER)		
Year	All Crashes	Fatal Crashes
2005	1,766	6
2006	1,737	10
2007	1,795	12
2008	1,735	9
2009	1,752	3
2010	1,681	7
2011	1,784	8
2012	1,661	11
2013	1,850	10
2014	1,889	4



The number of drivers age 65 and over in all crashes in the Upper Peninsula has increased 7.0 percent since 2005. Their involvement in fatal crashes decreased 33.3 percent from 2005.

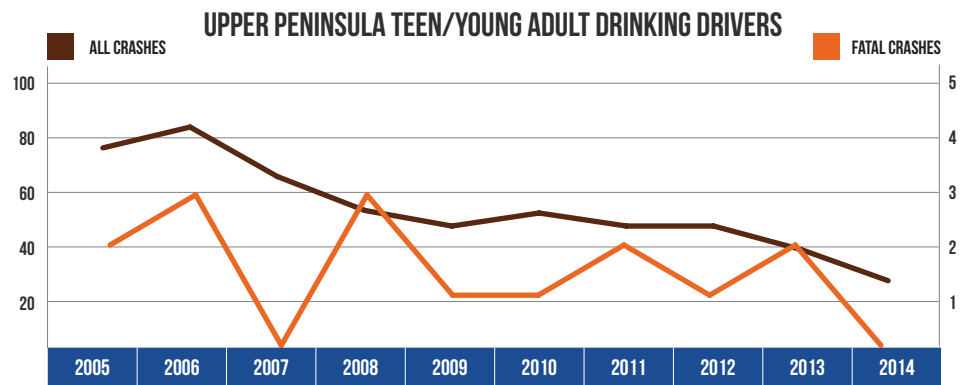
## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

UPPER PENINSULA DRINKING DRIVERS		
Year	All Crashes	Fatal Crashes
2005	549	14
2006	523	18
2007	478	9
2008	456	20
2009	436	14
2010	423	13
2011	414	13
2012	379	12
2013	327	17
2014	311	4



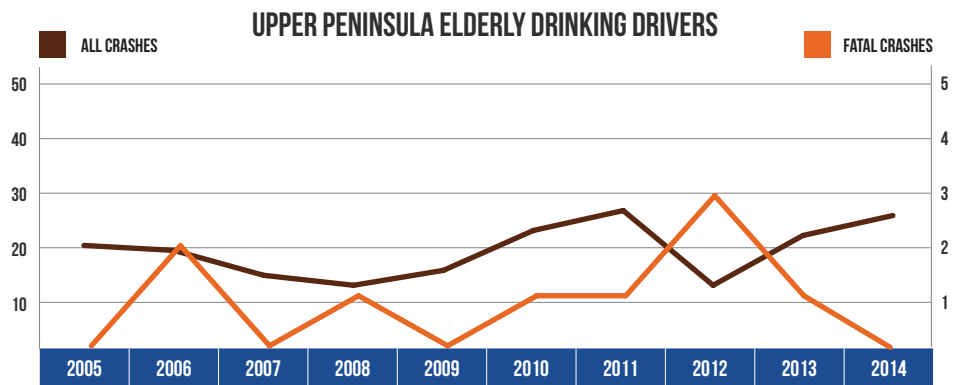
Drinking driver involvement in all crashes in the Upper Peninsula decreased by 43.4 percent since 2005. Drinking driver involvement in fatal crashes decreased by 71.4 percent from 2005.

UPPER PENINSULA TEEN/YOUNG ADULT DRINKING DRIVERS (AGE 16-20)		
Year	All Crashes	Fatal Crashes
2005	74	2
2006	82	3
2007	63	0
2008	50	3
2009	44	1
2010	49	1
2011	44	2
2012	44	1
2013	35	2
2014	23	0



The number of teen/young adult drinking drivers (age 16-20) in all crashes in the Upper Peninsula decreased by 68.9 percent. There were no fatal crashes involving teen/young adult drinking drivers in 2014.

UPPER PENINSULA ELDERLY DRINKING DRIVERS (AGE 65 & OVER)		
Year	All Crashes	Fatal Crashes
2005	20	0
2006	19	2
2007	14	0
2008	12	1
2009	15	0
2010	23	1
2011	27	1
2012	12	3
2013	22	1
2014	26	0

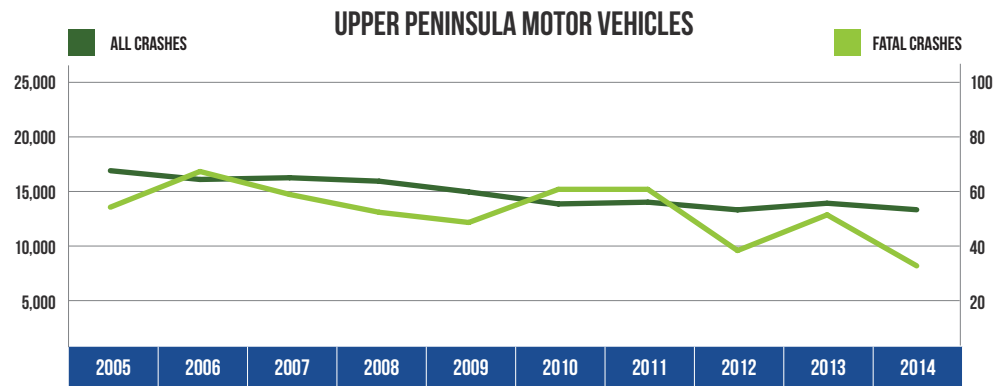


The number of elderly drinking drivers (age 65 and over) in all crashes in the Upper Peninsula has increased 30.0 percent over the 10-year period. There were no fatal crashes involving elderly drinking drivers in 2014.



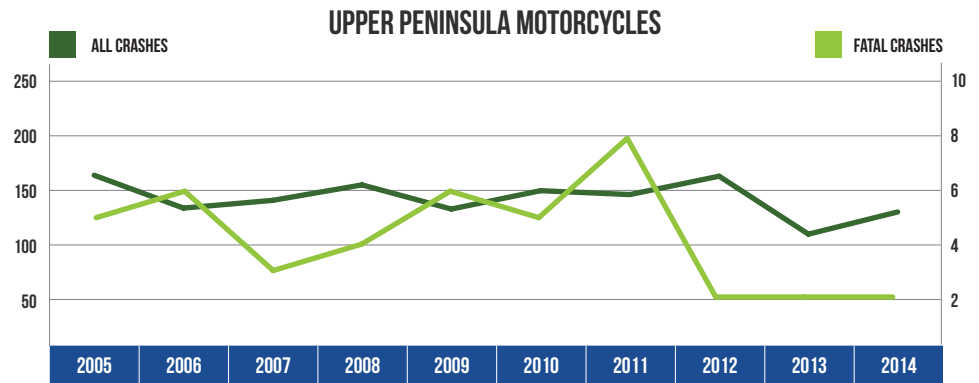
## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

UPPER PENINSULA MOTOR VEHICLES		
Year	All Crashes	Fatal Crashes
2005	17,275	54
2006	16,379	68
2007	16,555	59
2008	16,201	52
2009	15,105	48
2010	13,879	61
2011	14,059	61
2012	13,276	37
2013	13,950	51
2014	13,287	31



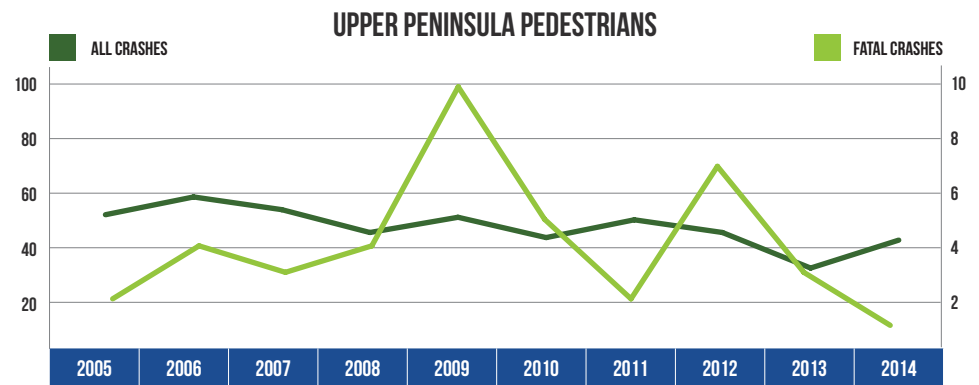
There were 13,287 motor vehicles involved in all Upper Peninsula crashes in 2014, down 23.1 percent from 2005. There were 31 motor vehicles involved in fatal crashes in 2014, down 42.6 percent from 2005.

UPPER PENINSULA MOTORCYCLES		
Year	All Crashes	Fatal Crashes
2005	166	5
2006	132	6
2007	140	3
2008	156	4
2009	131	6
2010	150	5
2011	146	8
2012	165	2
2013	105	2
2014	128	2



There were 128 motorcycles involved in crashes in the Upper Peninsula in 2014, a 22.9 percent increase from 2005. There were two motorcycles involved in fatal crashes in 2014, down 60.0 percent from 2005.

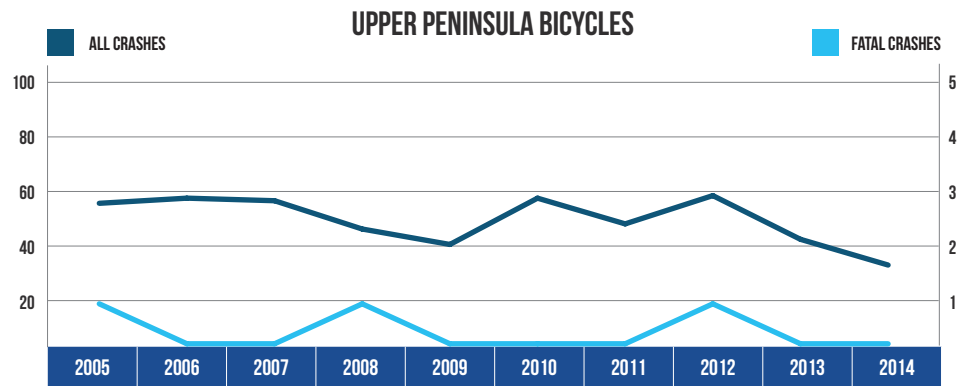
UPPER PENINSULA PEDESTRIANS		
Year	All Crashes	Fatal Crashes
2005	53	2
2006	60	4
2007	55	3
2008	46	4
2009	52	10
2010	44	5
2011	51	2
2012	46	7
2013	32	3
2014	43	1



There were 43 pedestrians involved in crashes in the Upper Peninsula in 2014, down 18.9 percent from 2005. There was one pedestrian involved in fatal crashes in 2014, down 50.0 percent from 2005.

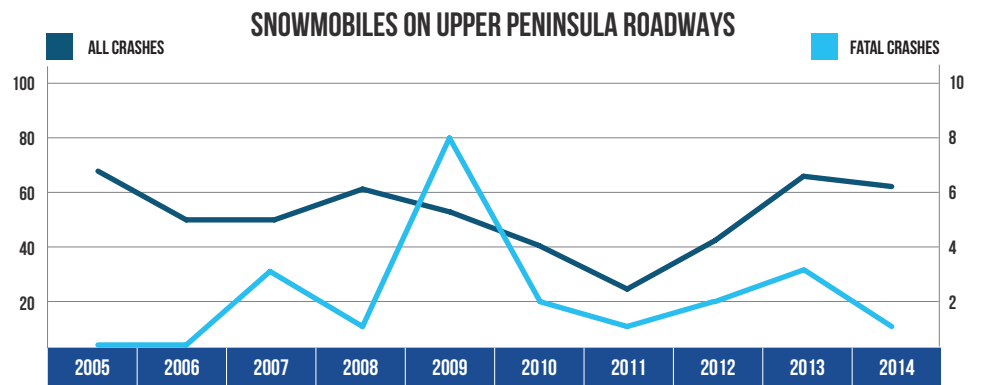
## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

UPPER PENINSULA BICYCLES		
Year	All Crashes	Fatal Crashes
2005	57	1
2006	59	0
2007	58	0
2008	47	1
2009	41	0
2010	59	0
2011	49	0
2012	60	1
2013	43	0
2014	33	0



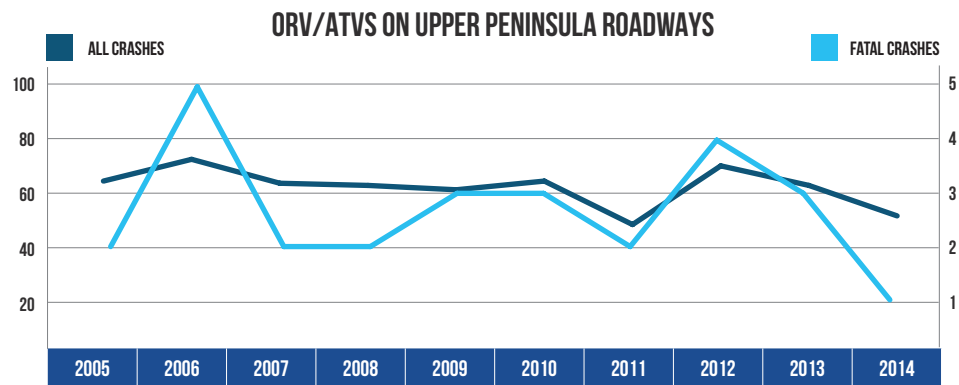
There were 33 bicycles involved in Upper Peninsula crashes in 2014, down 42.1 percent from 2005. There were 0 bicycles involved in fatal crashes in 2014, compared to one bicycle in a fatal crash in 2005.

SNOWMOBILES ON UPPER PENINSULA ROADWAYS		
Year	All Crashes	Fatal Crashes
2005	69	0
2006	50	0
2007	50	3
2008	62	1
2009	53	8
2010	40	2
2011	23	1
2012	42	2
2013	67	3
2014	63	1



There were 63 snowmobiles in crashes on roadways in the Upper Peninsula in 2014, down 8.7 percent from 2005. There was one snowmobile in a fatal crash, compared to 0 fatal snowmobile crashes in 2005.

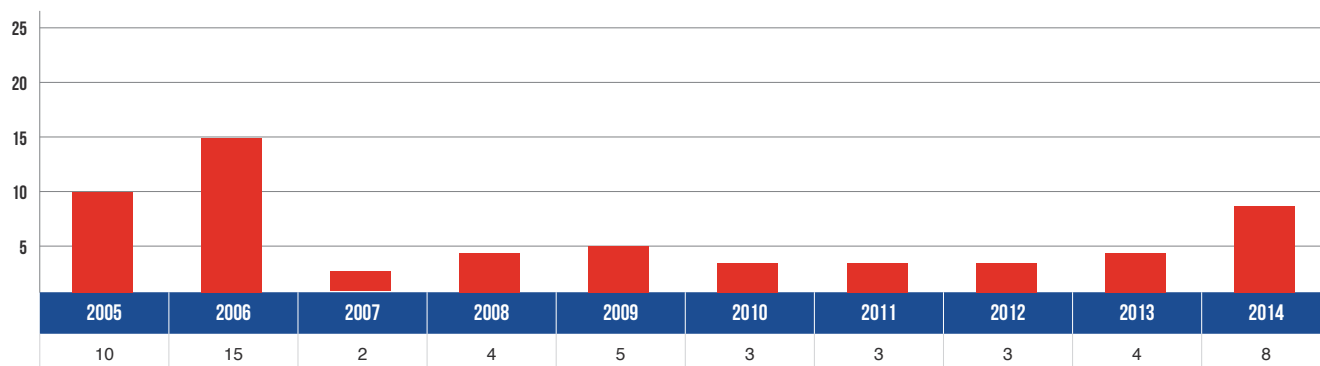
ORV/ATVS ON UPPER PENINSULA ROADWAYS		
Year	All Crashes	Fatal Crashes
2005	64	2
2006	74	5
2007	63	2
2008	62	2
2009	60	3
2010	64	3
2011	44	2
2012	71	4
2013	62	3
2014	48	1



There were 48 ORV/ATVs in crashes on roadways in the Upper Peninsula in 2014, down 25.0 percent from 2005. There was one ORV/ATV in a fatal crash in 2014, down 50.0 percent from 2005.

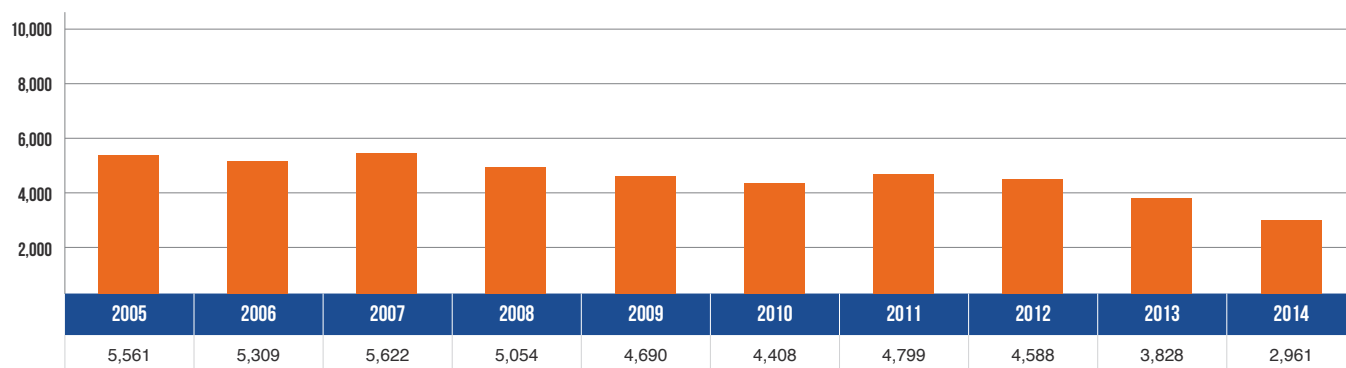
## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

### UPPER PENINSULA VEHICLE-TRAIN CRASHES



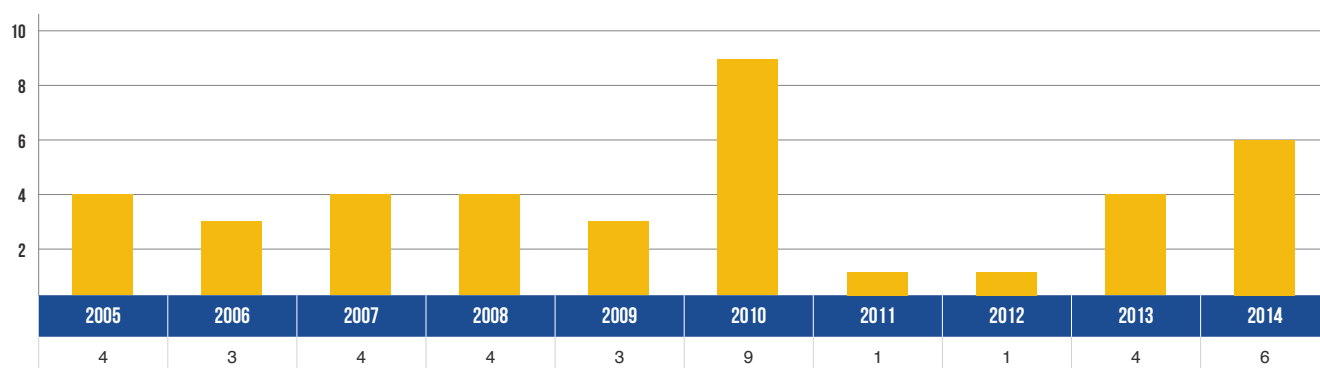
There were eight vehicle-train crashes in the Upper Peninsula in 2014 – a decrease of 20.0 percent in the 10-year period.

### UPPER PENINSULA VEHICLE-DEER CRASHES



The number of vehicle-deer crashes in the Upper Peninsula decreased 46.6 percent in the 10-year period to 2,961 in 2014.

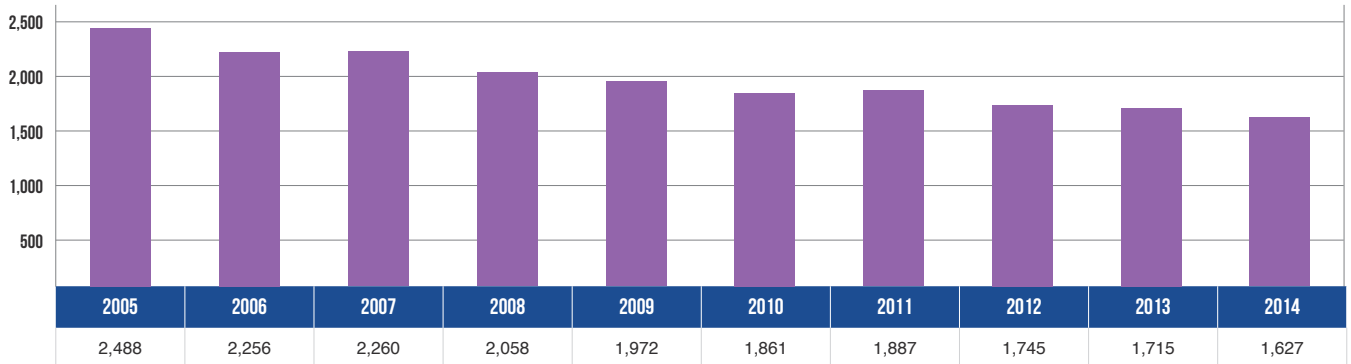
### UPPER PENINSULA FARM EQUIPMENT CRASHES



There were six farm equipment crashes in the Upper Peninsula in 2014 – an increase of 50.0 percent from 2005.

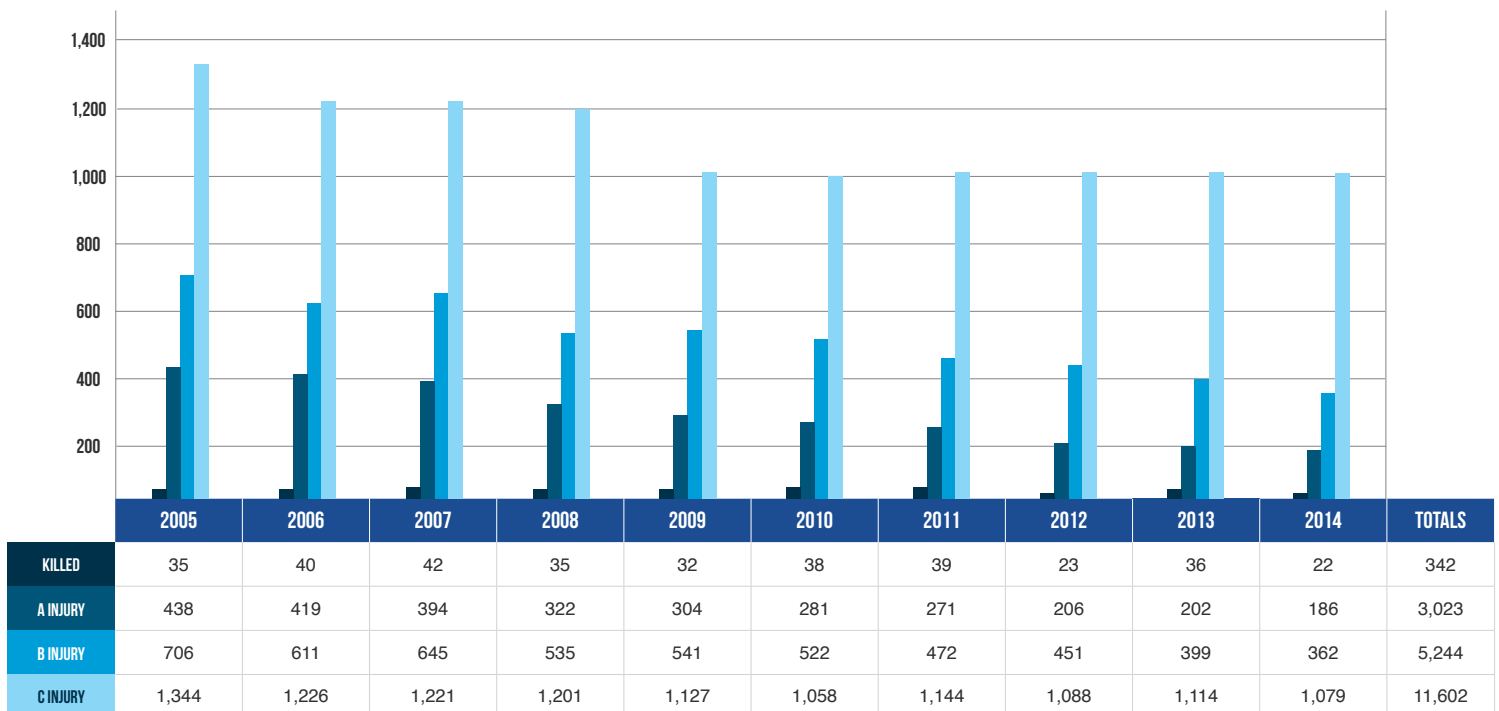
## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

### UPPER PENINSULA INJURED OCCUPANTS IN CRASHES



There were 1,627 occupants injured in the Upper Peninsula in 2014 – a decrease of 34.6 percent from 2005.

### UPPER PENINSULA DEATH AND INJURY FOR CRASH-INVOLVED OCCUPANTS

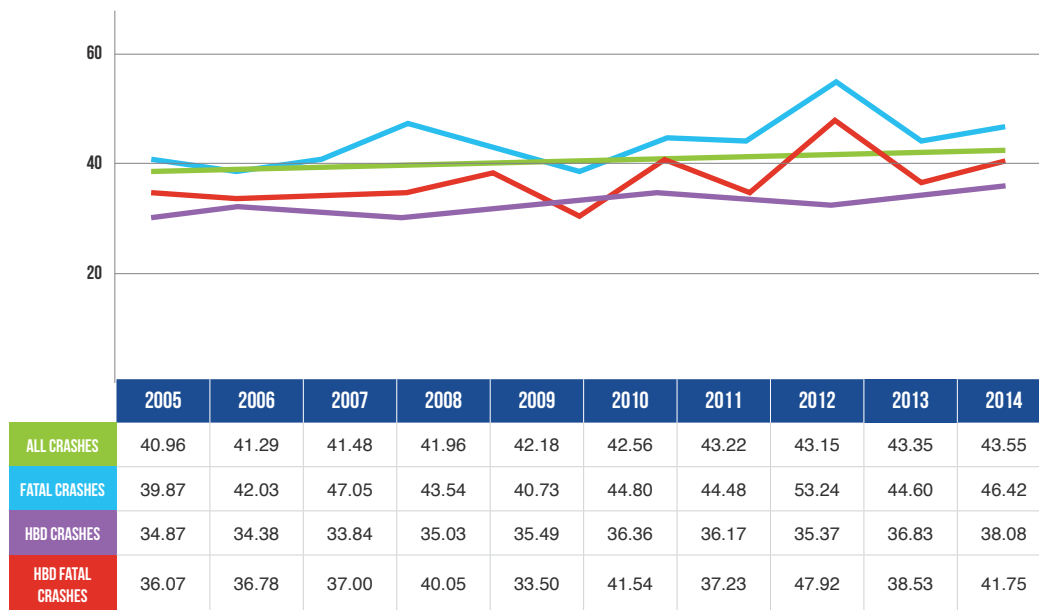


Over the period from 2005 to 2014 in the Upper Peninsula, occupant deaths decreased 37.1 percent, A injuries decreased 57.5 percent, B injuries decreased 48.7 percent, and C injuries decreased 19.7 percent.

Note: These figures contain the number of occupants recorded as injured by the police officer on the UD-10.

## 10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

AVERAGE AGE OF DRIVERS IN CRASHES 2005 - 2014



Over the 10-year period in the Upper Peninsula, reflecting the demographic trend of increasing age in the general population, the average age of drivers involved in all crashes has increased more than six percent. The average age of drivers involved in fatal crashes has increased more than 16 percent, and the average age of drivers in had-been-drinking fatal crashes has increased more than 15 percent. The average age of drivers in had-been-drinking crashes has increased more than nine percent.

## UPPER PENINSULA MOTOR VEHICLE TRAFFIC DEATHS BY MONTH

YEAR	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
1982	3	2	1	1	2	8	12	5	7	6	9	2	58
1983	2	1	5	5	3	7	5	6	6	5	5	11	61
1984	3	1	1	0	4	6	10	7	4	9	3	7	55
1985	0	1	2	7	3	3	9	2	7	4	7	8	53
1986	2	1	1	6	9	4	9	5	7	3	10	4	61
1987	1	3	7	5	5	2	9	4	5	6	9	8	64
1988	5	4	3	7	4	7	5	8	5	4	8	7	67
1989	4	1	2	7	3	2	5	5	8	8	4	13	62
1990	0	0	2	7	3	7	5	10	1	7	9	7	58
1991	7	1	6	8	4	7	3	5	6	3	2	2	54
1992	6	5	6	5	2	4	4	1	2	3	8	8	54
1993	6	6	3	8	5	6	16	1	12	9	9	3	84
1994	6	3	3	5	1	7	6	6	4	10	3	10	64
1995	8	3	3	8	2	6	7	7	5	6	8	2	65
1996	4	6	3	0	3	7	10	5	2	5	3	8	56
1997	4	7	4	0	3	6	9	2	4	4	2	9	54
1998	5	5	1	9	4	5	9	4	7	3	1	9	62
1999	1	2	3	1	5	12	10	7	6	3	4	8	62
2000	8	3	2	3	3	3	6	6	5	5	1	6	51
2001	1	1	3	4	0	3	5	4	3	8	4	4	40
2002	8	5	1	2	4	10	8	2	2	5	4	9	60
2003	4	1	1	5	2	8	9	6	6	2	6	7	57
2004	2	4	4	0	2	6	10	9	3	2	3	8	53
2005	1	3	2	2	3	2	3	4	5	3	5	5	38
2006	2	0	1	0	2	6	6	5	3	7	7	5	44
2007	5	5	3	1	4	2	7	4	3	2	5	4	45
2008	4	2	2	3	4	4	3	3	4	3	7	1	40
2009	5	2	1	3	1	4	6	3	5	5	0	2	37
2010	5	5	2	2	3	4	3	3	2	8	2	3	42
2011	5	2	3	0	2	6	4	7	2	3	3	4	41
2012	3	2	1	0	1	4	5	2	1	2	4	5	30
2013	5	0	4	3	4	2	3	5	4	2	3	4	39
2014	2	2	0	0	1	4	1	3	0	3	5	2	23

*Note: Data for the Upper Peninsula is not available by month prior to 1982.*

## UPPER PENINSULA MOTOR VEHICLE TRAFFIC CRASH AND RELATED DATA

YEAR	DEATHS	NUMBER OF PERSONS INJURED	CRASHES	ESTIMATED MILEAGE (MILLIONS)	MOTOR VEHICLE REGISTRATIONS*	DEATH RATE PER 100 MILLION MILES OF TRAVEL
1982	58	3,546	11,137	Upper Peninsula exposure data not available prior to 1996		
1983	61	3,320	10,840			
1984	55	3,498	11,665			
1985	53	3,605	13,033			
1986	61	3,788	12,773			
1987	64	3,659	12,816			
1988	67	3,918	14,634			
1989	62	4,124	16,538			
1990	58	3,856	14,360			
1991	54	3,724	15,929			
1992	54	3,487	15,052			
1993	84	3,779	14,866			
1994	64	3,672	16,622			
1995	65	4,037	18,656			
1996	56	4,020	18,621	3,093,620	260,906	1.8
1997	54	3,619	16,569	3,139,864	261,670	1.7
1998	62	3,419	15,473	3,136,510	263,079	2.0
1999	62	3,442	17,422	3,183,447	268,507	1.9
2000	51	3,379	17,757	3,195,509	274,010	1.6
2001	40	3,096	16,674	3,191,826	275,400	1.3
2002	60	3,354	16,677	3,259,597	277,332	1.8
2003	57	3,199	16,210	3,282,744	278,548	1.7
2004	53	2,884	14,514	3,316,529	272,886	1.6
2005	38	2,582	12,700	3,272,146	269,813	1.2
2006	44	2,355	12,063	3,249,921	266,390	1.4
2007	45	2,356	12,329	3,236,942	269,682	1.4
2008	40	2,141	11,871	3,164,898	265,868	1.3
2009	37	2,047	10,990	3,196,456	266,334	1.2
2010	42	1,944	10,199	3,241,287	266,413	1.3
2011	41	1,974	10,548	3,121,069	266,501	1.3
2012	30	1,827	9,945	3,960,576	264,199	1.0
2013	39	1,778	9,956	3,100,105	262,485	1.3
2014	23	1,696	9,126	2,894,265	260,036	0.8

\*Excludes trailers and trailer coaches, and includes mopeds

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**AGE**

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## UPPER PENINSULA AGE AND INJURY SEVERITY BY PERSON TYPE

AGE	DRIVER			INJURED PASSENGER			MOTORCYCLIST			BICYCLIST			PEDESTRIAN		
	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured
0*	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0
1	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
2	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0
3	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
4	0	0	0	13	0	13	0	0	0	0	0	0	0	0	0
5	1	0	1	3	0	3	0	0	0	0	0	0	3	0	3
6	0	0	0	7	0	7	0	0	0	0	0	0	0	0	0
7	0	0	0	8	0	8	0	0	0	0	0	0	1	0	1
8	0	0	0	4	0	4	1	0	1	0	0	0	0	0	0
9	0	0	0	5	0	5	0	0	0	1	0	0	0	0	0
10	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0
11	0	0	0	4	1	3	0	0	0	1	0	1	0	0	0
12	1	0	0	10	2	8	0	0	0	3	0	2	0	0	0
13	2	0	1	3	0	3	0	0	0	0	0	0	0	0	0
14	3	0	2	9	1	8	1	0	0	2	0	2	0	0	0
15	29	0	10	10	0	10	0	0	0	0	0	0	0	0	0
16	189	0	24	15	0	15	1	0	1	2	0	2	2	0	2
17	270	0	28	16	0	16	0	0	0	0	0	0	2	0	2
18	339	0	37	19	1	18	0	0	0	0	0	0	1	0	1
19	326	1	41	9	0	9	1	0	1	3	0	3	0	0	0
20	322	0	25	9	0	9	1	0	1	0	0	0	0	0	0
21	314	0	32	12	0	12	1	0	1	2	0	2	0	0	0
22	277	1	34	7	0	7	2	0	2	2	0	2	2	0	2
23	298	0	24	10	0	10	1	0	1	1	0	1	1	0	1
24	250	0	31	9	0	9	4	0	4	0	0	0	0	0	0
25	248	0	28	6	0	6	1	0	0	0	0	0	2	0	1
26	228	0	23	7	0	7	3	0	3	1	0	1	0	0	0
27	192	0	17	4	0	4	1	0	1	2	0	2	1	0	1
28	208	0	20	1	0	1	1	0	1	0	0	0	0	0	0
29	230	0	20	2	0	2	1	0	1	1	0	1	0	0	0
30	192	0	19	6	0	6	2	0	2	0	0	0	2	0	2
31	194	0	21	6	0	6	1	0	1	0	0	0	0	0	0
32	194	0	18	3	0	3	0	0	0	0	0	0	1	0	1
33	209	1	14	4	0	4	0	0	0	0	0	0	0	0	0
34	195	0	22	4	0	4	3	0	2	0	0	0	0	0	0
35	202	0	24	3	0	3	2	0	1	0	0	0	1	0	1
36	178	0	13	2	0	2	1	0	1	0	0	0	1	0	1
37	185	0	17	2	0	2	0	0	0	0	0	0	3	0	3

\*Driver age is calculated from birth date, and invalid date of birth entry errors result in age "0" drivers.

## UPPER PENINSULA AGE AND INJURY SEVERITY BY PERSON TYPE (CONTINUED)

AGE	DRIVER			INJURED PASSENGER			MOTORCYCLIST			BICYCLIST			PEDESTRIAN		
	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured
38	150	0	15	3	0	3	1	0	0	0	0	0	0	0	0
39	154	0	13	4	0	4	3	0	2	0	0	0	0	0	0
40	188	0	20	4	0	4	1	0	1	1	0	1	1	0	1
41	149	0	12	4	0	4	1	0	1	0	0	0	1	0	1
42	182	1	19	3	0	3	3	0	3	0	0	0	0	0	0
43	198	0	24	4	0	4	3	0	1	0	0	0	0	0	0
44	201	0	19	5	0	5	4	0	3	0	0	0	1	0	1
45	194	0	17	3	1	2	2	1	1	0	0	0	0	0	0
46	189	0	21	4	0	4	1	0	1	1	0	1	0	0	0
47	190	0	16	1	0	1	3	0	2	0	0	0	0	0	0
48	178	0	15	4	0	4	7	0	7	0	0	0	0	0	0
49	202	1	22	7	0	7	2	0	2	0	0	0	0	0	0
50	229	0	23	3	0	3	7	0	4	1	0	1	1	0	1
51	221	0	21	2	0	2	4	0	3	1	0	1	0	0	0
52	195	0	25	4	1	3	4	1	2	0	0	0	1	0	1
53	240	0	23	6	0	6	5	0	5	1	0	1	0	0	0
54	241	1	24	4	0	4	6	0	4	0	0	0	1	0	1
55	189	0	22	4	0	4	4	0	3	0	0	0	1	1	0
56	224	0	24	5	0	5	3	0	2	0	0	0	1	0	1
57	247	2	17	6	0	6	4	0	1	1	0	1	1	0	1
58	197	0	24	3	0	3	3	0	2	0	0	0	1	0	1
59	193	0	17	3	0	3	3	0	2	1	0	1	0	0	0
60	181	0	24	6	0	6	6	0	5	1	0	1	2	0	2
61	188	1	21	4	0	4	0	0	0	0	0	0	1	0	1
62	163	1	7	3	0	3	4	0	2	2	0	1	0	0	0
63	145	1	9	2	0	2	4	0	2	0	0	0	0	0	0
64	178	1	18	1	0	1	6	1	4	0	0	0	0	0	0
65	165	0	8	3	0	3	1	0	1	0	0	0	0	0	0
66	180	0	16	2	0	2	2	0	1	0	0	0	0	0	0
67	160	1	20	2	0	2	5	0	3	0	0	0	3	0	2
68	96	0	12	2	0	2	1	0	1	0	0	0	1	0	1
69	122	0	6	2	0	2	1	0	0	0	0	0	0	0	0
70	94	0	11	7	0	7	3	0	2	0	0	0	1	0	1
71	90	0	7	4	0	4	0	0	0	0	0	0	0	0	0
72	110	0	8	2	0	2	1	0	0	0	0	0	0	0	0
73	93	0	3	2	0	2	2	0	1	0	0	0	1	0	1
74	88	0	11	2	0	2	1	0	1	0	0	0	0	0	0
75	85	0	7	3	0	3	1	0	1	0	0	0	0	0	0
76	67	0	5	1	0	1	0	0	0	0	0	0	0	0	0

## UPPER PENINSULA AGE AND INJURY SEVERITY BY PERSON TYPE (CONTINUED)

AGE	DRIVER			INJURED PASSENGER			MOTORCYCLIST			BICYCLIST			PEDESTRIAN		
	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured
77	62	0	8	4	0	4	1	0	1	0	0	0	0	0	0
78	62	0	4	0	0	0	0	0	0	0	0	0	0	0	0
79	64	0	7	1	0	1	0	0	0	0	0	0	0	0	0
80	56	0	6	1	0	1	0	0	0	0	0	0	0	0	0
81	41	0	4	0	0	0	0	0	0	0	0	0	0	0	0
82	44	0	5	3	0	3	0	0	0	0	0	0	0	0	0
83	29	1	3	3	0	3	0	0	0	0	0	0	0	0	0
84	32	0	6	0	0	0	0	0	0	0	0	0	0	0	0
85	31	0	3	2	0	2	0	0	0	0	0	0	0	0	0
86	28	0	4	0	0	0	0	0	0	0	0	0	0	0	0
87	20	0	3	0	0	0	0	0	0	0	0	0	0	0	0
88	15	1	3	0	0	0	0	0	0	0	0	0	0	0	0
89	19	0	2	0	0	0	0	0	0	0	0	0	0	0	0
90	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	9	0	0	1	0	1	0	0	0	1	0	1	0	0	0
92	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	4	0	1	1	0	1	0	0	0	0	0	0	0	0	0
94	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0
97	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown Age	915	0	2	4	0	4	4	0	0	1	0	0	1	0	1
2014 TOTALS	13,287*	15	1,233	401	7	394	146*	3	102	33*	0	29	43*	1	40
	* Includes 850 drivers with unknown injury severity and 11,189 with no injury						*Includes 4 motorcyclists with unknown injury severity and 37 with no injury			*Includes 1 bicyclist with unknown injury severity and 3 with no injury			*Includes 2 pedestrians with no injury		

## UPPER PENINSULA DRIVER AGE 16-20

DRIVER ACTION PRIOR TO CRASH	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Going straight ahead	906	62.7	2	50.0	182	68.2
Turning left	90	6.2	2	50.0	20	7.5
Turning right	47	3.3	0	0.0	8	3.0
Stopped on roadway	64	4.4	0	0.0	7	2.6
In prior crash	1	0.1	0	0.0	0	0.0
Changing lanes	20	1.4	0	0.0	1	0.4
Backing	49	3.4	0	0.0	2	0.7
Slowing/stopping on roadway	131	9.1	0	0.0	16	6.0
Slowing/stopping other	3	0.2	0	0.0	1	0.4
Starting up on roadway	26	1.8	0	0.0	3	1.1
Starting up other	3	0.2	0	0.0	1	0.4
Entering parking	1	0.1	0	0.0	0	0.0
Leaving parking	6	0.4	0	0.0	1	0.4
Entering roadway	23	1.6	0	0.0	4	1.5
Leaving roadway	0	0.0	0	0.0	0	0.0
Making U-turn	2	0.1	0	0.0	0	0.0
Overtaking or passing	22	1.5	0	0.0	6	2.2
Avoiding object	4	0.3	0	0.0	1	0.4
Avoiding animal	14	1.0	0	0.0	6	2.2
Avoiding pedestrian	0	0.0	0	0.0	0	0.0
Avoiding vehicle (front/back)	19	1.3	0	0.0	6	2.2
Avoiding vehicle (angle)	5	0.3	0	0.0	2	0.7
Driverless moving	1	0.1	0	0.0	0	0.0
Parked	6	0.4	0	0.0	0	0.0
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	0	0.0	0	0.0	0	0.0
Standing/lying in roadway	0	0.0	0	0.0	0	0.0
Pushing/working on vehicle	0	0.0	0	0.0	0	0.0
Other working in roadway	0	0.0	0	0.0	0	0.0
Playing in roadway	0	0.0	0	0.0	0	0.0
In roadway other reason	0	0.0	0	0.0	0	0.0
Not in roadway	0	0.0	0	0.0	0	0.0
Other	2	0.1	0	0.0	0	0.0
Unknown	1	0.1	0	0.0	0	0.0
TOTAL DRIVERS	1,446	100.0	4	100.0	267	100.0

## UPPER PENINSULA DRIVER AGE 16-20 (CONTINUED)

MOST HARMFUL EVENT IN A NONCOLLISION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Loss of control	4	0.3	0	0.0	0	0.0
Cross center/median	3	0.2	0	0.0	0	0.0
Ran off road left	5	0.3	0	0.0	1	0.4
Ran off road right	5	0.3	0	0.0	1	0.4
Re-enter road	0	0.0	0	0.0	0	0.0
Overturn	76	5.3	0	0.0	27	10.1
Separation of units	0	0.0	0	0.0	0	0.0
Fire/explosion	2	0.1	0	0.0	1	0.4
Immersion	0	0.0	0	0.0	0	0.0
Jackknife	1	0.1	0	0.0	0	0.0
Downhill runaway	0	0.0	0	0.0	0	0.0
Cargo loss/shift	0	0.0	0	0.0	0	0.0
Individual fell off	3	0.2	0	0.0	3	1.1
Other noncollision	9	0.6	0	0.0	2	0.7
<b>SUBTOTAL</b>	<b>108</b>	<b>7.5</b>	<b>0</b>	<b>0.0</b>	<b>35</b>	<b>13.1</b>

For drivers age 16-20 in the Upper Peninsula, an overturn is the most harmful event in a noncollision with the highest proportion of all crashes (5.3%) and injury crashes (10.1%)

MOST HARMFUL EVENT IN A COLLISION WITH A NONFIXED OBJECT	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Pedestrian	5	0.3	0	0.0	5	1.9
Bicyclist	0	0.0	0	0.0	0	0.0
Motor vehicle in transport	876	60.6	4	100.0	165	61.8
Parked motor vehicle	65	4.5	0	0.0	8	3.0
Railway train	2	0.1	0	0.0	1	0.4
Animal	158	10.9	0	0.0	3	1.1
Other nonfixed objects	14	1.0	0	0.0	2	0.7
<b>SUBTOTAL</b>	<b>1,120</b>	<b>77.5</b>	<b>4</b>	<b>100.0</b>	<b>184</b>	<b>68.9</b>

## UPPER PENINSULA DRIVER AGE 16-20 (CONTINUED)

MOST HARMFUL EVENT IN A COLLISION WITH A FIXED OBJECT	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Bridge/pier/abutment	0	0.0	0	0.0	0	0.0
Bridge parapet end	0	0.0	0	0.0	0	0.0
Bridge rail	0	0.0	0	0.0	0	0.0
Guardrail face	17	1.2	0	0.0	3	1.1
Guardrail end	3	0.2	0	0.0	1	0.4
Median barrier	2	0.1	0	0.0	0	0.0
Highway traffic sign post	13	0.9	0	0.0	0	0.0
Highway signal post	0	0.0	0	0.0	0	0.0
Luminaire/light support	2	0.1	0	0.0	0	0.0
Utility pole	14	1.0	0	0.0	4	1.5
Other pole	3	0.2	0	0.0	0	0.0
Culvert	3	0.2	0	0.0	1	0.4
Curb	3	0.2	0	0.0	1	0.4
Ditch	46	3.2	0	0.0	7	2.6
Embankment	22	1.5	0	0.0	2	0.7
Fence	5	0.3	0	0.0	0	0.0
Mailbox	9	0.6	0	0.0	1	0.4
Tree	56	3.9	0	0.0	24	9.0
Rail crossing signal	0	0.0	0	0.0	0	0.0
Building	1	0.1	0	0.0	0	0.0
Traffic island	0	0.0	0	0.0	0	0.0
Fire hydrant	1	0.1	0	0.0	0	0.0
Impact attenuator	0	0.0	0	0.0	0	0.0
Other fixed object	17	1.2	0	0.0	4	1.5

For drivers age 16-20 in the Upper Peninsula, a tree is the fixed object associated with the highest proportion of all crashes (3.9%) and injury crashes (9.0%).

	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Unknown Event	1	0.1	0	0.0	0	0.0
MOST HARMFUL EVENT TOTAL	1,446	100.0	4	100.0	267	100.0



## UPPER PENINSULA DRIVER AGE 16-20 (CONTINUED)

CRASH TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Single Vehicle	479	33.1	0	0.0	89	33.3
Head On	38	2.6	2	50.0	10	3.7
Head On - Left Turn	32	2.2	0	0.0	14	5.2
Angle	350	24.2	2	50.0	69	25.8
Rear End	318	22.0	0	0.0	53	19.9
Rear End - Left Turn	18	1.2	0	0.0	7	2.6
Rear End - Right Turn	21	1.5	0	0.0	1	0.4
Sideswipe - Same Direction	66	4.6	0	0.0	5	1.9
Sideswipe - Opposite Direction	49	3.4	0	0.0	6	2.2
Other/Unknown	75	5.2	0	0.0	13	4.9
TOTAL	1,446	100.0	4	100.0	267	100.0

Based on crash type, drivers age 16-20 in the Upper Peninsula are involved in the largest proportion of single vehicle crashes for all crashes (33.1%) and injury crashes (33.3%). Head on and angle crashes have equal involvement for fatal crashes (50.0% each).

RELATIONSHIP TO ROADWAY (LOCATION OF FIRST IMPACT)	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
On Road	1,137	78.6	4	100.0	193	72.3
Median	1	0.1	0	0.0	0	0.0
Shoulder	116	8.0	0	0.0	25	9.4
Outside of Shoulder/Curb	166	11.5	0	0.0	41	15.4
Gore	10	0.7	0	0.0	3	1.1
Other/Unknown	16	1.1	0	0.0	5	1.9
TOTAL	1,446	100.0	4	100.0	267	100.0

Other than on the road crashes, drivers age 16-20 in the Upper Peninsula have the highest proportion where the first impact is outside the shoulder/curb for all crashes (11.5%), injury crashes (15.4%). All fatal crashes occurred on the road.

ROADWAY TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Interstate Routes	56	3.9	0	0.0	8	3.0
U.S. & Michigan Roads	617	42.7	2	50.0	125	46.8
County & City Roads	773	53.5	2	50.0	134	50.2
TOTAL	1,446	100.0	4	100.0	267	100.0

## UPPER PENINSULA DRIVER AGE 16-20 (CONTINUED)

TIME OF DAY	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
12:00 AM - 02:59 AM	61	4.2	0	0.0	8	3.0
03:00 AM - 05:59 AM	42	2.9	0	0.0	12	4.5
06:00 AM - 08:59 AM	151	10.4	0	0.0	32	12.0
09:00 AM - 11:59 AM	164	11.3	1	25.0	31	11.6
12:00 PM - 02:59 PM	288	19.9	1	25.0	53	19.9
03:00 PM - 05:59 PM	359	24.8	0	0.0	60	22.5
06:00 PM - 08:59 PM	210	14.5	2	50.0	40	15.0
09:00 PM - 11:59 PM	170	11.8	0	0.0	31	11.6
Unknown	1	0.1	0	0.0	0	0.0
<b>TOTAL</b>	<b>1,446</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>267</b>	<b>100.0</b>

For drivers age 16-20 in the Upper Peninsula, the 3:00 - 5:59 PM time period has the highest proportion of all crashes (24.8%) and injury crashes (22.5%). The 6:00 - 8:59 PM time period has the highest proportion of fatal crashes (50.0%).

HAZARDOUS ACTION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES		HAZARDOUS CITATION ISSUED	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
None	557	38.5	1	25.0	70	26.2	2	0.8
Speed too fast	275	19.0	0	0.0	57	21.3	82	32.0
Speed too slow	0	0.0	0	0.0	0	0.0	0	0.0
Failed to yield	157	10.9	2	50.0	37	13.9	50	19.5
Disregard traffic control	21	1.5	0	0.0	8	3.0	17	6.6
Drove wrong way	1	0.1	0	0.0	0	0.0	1	0.4
Drove left of center	8	0.6	1	25.0	1	0.4	2	0.8
Improper passing	11	0.8	0	0.0	1	0.4	3	1.2
Improper lane use	11	0.8	0	0.0	2	0.7	0	0.0
Improper turn	10	0.7	0	0.0	0	0.0	1	0.4
Improper/no signal	10	0.7	0	0.0	2	0.7	1	0.4
Improper backing	37	2.6	0	0.0	2	0.7	2	0.8
Unable to stop in assured clear distance	212	14.7	0	0.0	42	15.7	45	17.6
Reckless driving	7	0.5	0	0.0	2	0.7	5	2.0
Careless/negligent driving	79	5.5	0	0.0	30	11.2	37	14.5
Other	38	2.6	0	0.0	11	4.1	7	2.7
Unknown	12	0.8	0	0.0	2	0.7	1	0.4
<b>TOTAL</b>	<b>1,446</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>267</b>	<b>100.0</b>	<b>256</b>	<b>100.0</b>

Other than no hazardous action, the second highest hazardous action category for drivers age 16-20 in the Upper Peninsula is speed too fast for all crashes (19.0%) and injury crashes (21.3%). For fatal crashes, the second highest category is failed to yield (50.0%).

## UPPER PENINSULA DRIVER AGE 16-20 (CONTINUED)

DAY OF WEEK	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Monday	182	12.6	0	0.0	29	10.9
Tuesday	197	13.6	0	0.0	41	15.4
Wednesday	188	13.0	0	0.0	37	13.9
Thursday	230	15.9	1	25.0	41	15.4
Friday	281	19.4	1	25.0	46	17.2
Saturday	228	15.8	2	50.0	47	17.6
Sunday	140	9.7	0	0.0	26	9.7
TOTAL	1,446	100.0	4	100.0	267	100.0

DRIVER GENDER	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Male	763	52.8	2	50.0	130	48.7
Female	683	47.2	2	50.0	137	51.3
Unknown	0	0.0	0	0.0	0	0.0
TOTAL	1,446	100.0	4	100.0	267	100.0

For drivers age 16-20 in the Upper Peninsula, there is a greater proportion of female drivers in all crashes, fatal crashes, and injury crashes than in both the 21-64 and 65 and over age groups. In this group, male drivers and female drivers both account for 50.0% in fatal crashes.

NUMBER OF OCCUPANTS	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
1 occupant	1,003	69.4	2	50.0	174	65.2
2 occupants	316	21.9	2	50.0	62	23.2
3 occupants	75	5.2	0	0.0	22	8.2
4 occupants	32	2.2	0	0.0	4	1.5
5 occupants	13	0.9	0	0.0	4	1.5
6 + occupants	2	0.1	0	0.0	1	0.4
0 occupants	5	0.3	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0
TOTAL	1,446	100.0	4	100.0	267	100.0

## UPPER PENINSULA DRIVER AGE 16-20 (CONTINUED)

VEHICLE TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Passenger Car and Station Wagon	1,136	78.6	3	75.0	201	75.3
Van and Motorhome	27	1.9	0	0.0	5	1.9
Pickup	240	16.6	0	0.0	43	16.1
Small Truck (under 10,000 lbs.)	23	1.6	0	0.0	5	1.9
Motorcycle	3	0.2	0	0.0	3	1.1
Moped	2	0.1	0	0.0	1	0.4
Go Cart	0	0.0	0	0.0	0	0.0
Snowmobile	4	0.3	0	0.0	2	0.7
Off Road Vehicle	8	0.6	0	0.0	7	2.6
Other	0	0.0	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0
CDL Truck/Bus (breakdown below)	3	0.2	1	25.0	0	0.0
<b>TOTAL NUMBER OF DRIVERS</b>	<b>1,446</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>267</b>	<b>100.0</b>

CDL TRUCK/BUS SUB-CATEGORY TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Commercial Vehicle: Group A*	1	33.3	0	0.0	0	0.0
Commercial Vehicle: Group B**	0	0.0	0	0.0	0	0.0
Commercial Vehicle: Group C***	0	0.0	0	0.0	0	0.0
Other Truck	2	66.7	1	100.0	0	0.0
Unknown Truck	0	0.0	0	0.0	0	0.0
<b>Total Number of Vehicles</b>	<b>3</b>	<b>100.0</b>	<b>1</b>	<b>100.0</b>	<b>0</b>	<b>0.0</b>

\* 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.

## UPPER PENINSULA DRIVER AGE 21-64

DRIVER ACTION PRIOR TO CRASH	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Going straight ahead	6,084	67.6	19	86.4	964	64.1
Turning left	496	5.5	1	4.5	129	8.6
Turning right	258	2.9	0	0.0	36	2.4
Stopped on roadway	524	5.8	0	0.0	111	7.4
In prior crash	4	0.0	0	0.0	1	0.1
Changing lanes	92	1.0	0	0.0	12	0.8
Backing	335	3.7	0	0.0	17	1.1
Slowing/stopping on roadway	487	5.4	0	0.0	104	6.9
Slowing/stopping other	15	0.2	0	0.0	3	0.2
Starting up on roadway	160	1.8	0	0.0	23	1.5
Starting up other	4	0.0	0	0.0	1	0.1
Entering parking	25	0.3	0	0.0	2	0.1
Leaving parking	33	0.4	0	0.0	3	0.2
Entering roadway	97	1.1	1	4.5	27	1.8
Leaving roadway	14	0.2	0	0.0	5	0.3
Making U-turn	11	0.1	0	0.0	2	0.1
Overtaking or passing	77	0.9	0	0.0	12	0.8
Avoiding object	12	0.1	0	0.0	2	0.1
Avoiding animal	64	0.7	0	0.0	8	0.5
Avoiding pedestrian	2	0.0	0	0.0	1	0.1
Avoiding vehicle (front/back)	79	0.9	1	4.5	21	1.4
Avoiding vehicle (angle)	36	0.4	0	0.0	8	0.5
Driverless moving	0	0.0	0	0.0	0	0.0
Parked	71	0.8	0	0.0	8	0.5
Crossing at intersection	1	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	0	0.0	0	0.0	0	0.0
Standing/lying in roadway	0	0.0	0	0.0	0	0.0
Pushing/working on vehicle	1	0.0	0	0.0	0	0.0
Other working in roadway	0	0.0	0	0.0	0	0.0
Playing in roadway	0	0.0	0	0.0	0	0.0
In roadway other reason	0	0.0	0	0.0	0	0.0
Not in roadway	0	0.0	0	0.0	0	0.0
Other	4	0.0	0	0.0	0	0.0
Unknown	14	0.2	0	0.0	3	0.2
TOTAL DRIVERS	9,000	100.0	22	100.0	1,503	100.0

## UPPER PENINSULA DRIVER AGE 21-64 (CONTINUED)

MOST HARMFUL EVENT IN A NONCOLLISION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Loss of control	41	0.5	0	0.0	4	0.3
Cross center/median	3	0.0	0	0.0	1	0.1
Ran off road left	30	0.3	0	0.0	6	0.4
Ran off road right	45	0.5	0	0.0	7	0.5
Re-enter road	2	0.0	0	0.0	0	0.0
Overturn	249	2.8	1	4.5	102	6.8
Separation of units	6	0.1	0	0.0	1	0.1
Fire/explosion	14	0.2	0	0.0	0	0.0
Immersion	2	0.0	0	0.0	0	0.0
Jackknife	6	0.1	0	0.0	0	0.0
Downhill runaway	0	0.0	0	0.0	0	0.0
Cargo loss/shift	15	0.2	0	0.0	0	0.0
Individual fell off	20	0.2	1	4.5	18	1.2
Other noncollision	30	0.3	0	0.0	7	0.5
SUBTOTAL	463	5.1	2	9.1	146	9.7

For drivers age 21-64 in the Upper Peninsula, an overturn is the most harmful event in a noncollision with the highest proportion of all crashes (2.8%) and injury crashes (6.8%). An overturn and when an individual fell off were the most harmful events in a noncollision (4.5% each).

MOST HARMFUL EVENT IN A COLLISION WITH A NONFIXED OBJECT	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Pedestrian	22	0.2	1	4.5	21	1.4
Bicyclist	19	0.2	0	0.0	16	1.1
Motor vehicle in transport	4,663	51.8	12	54.5	1,062	70.7
Parked motor vehicle	330	3.7	0	0.0	25	1.7
Railway train	6	0.1	1	4.5	2	0.1
Animal	2,389	26.5	0	0.0	48	3.2
Other nonfixed objects	113	1.3	0	0.0	10	0.7
SUBTOTAL	7,542	83.8	14	63.6	1,184	78.8

## UPPER PENINSULA DRIVER AGE 21-64 (CONTINUED)

MOST HARMFUL EVENT IN A COLLISION WITH A FIXED OBJECT	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Bridge/pier/abutment	5	0.1	0	0.0	1	0.1
Bridge parapet end	2	0.0	0	0.0	0	0.0
Bridge rail	6	0.1	0	0.0	0	0.0
Guardrail face	71	0.8	0	0.0	10	0.7
Guardrail end	8	0.1	0	0.0	1	0.1
Median barrier	10	0.1	0	0.0	1	0.1
Highway traffic sign post	54	0.6	0	0.0	2	0.1
Highway signal post	4	0.0	0	0.0	0	0.0
Luminaire/light support	7	0.1	0	0.0	0	0.0
Utility pole	77	0.9	0	0.0	15	1.0
Other pole	19	0.2	0	0.0	1	0.1
Culvert	8	0.1	0	0.0	5	0.3
Curb	18	0.2	0	0.0	1	0.1
Ditch	166	1.8	0	0.0	24	1.6
Embankment	126	1.4	2	9.1	19	1.3
Fence	8	0.1	0	0.0	0	0.0
Mailbox	56	0.6	0	0.0	4	0.3
Tree	203	2.3	2	9.1	58	3.9
Rail crossing signal	3	0.0	0	0.0	0	0.0
Building	18	0.2	1	4.5	6	0.4
Traffic island	1	0.0	0	0.0	0	0.0
Fire hydrant	9	0.1	0	0.0	1	0.1
Impact attenuator	0	0.0	0	0.0	0	0.0
Other fixed object	94	1.0	1	4.5	18	1.2

For drivers age 21-64 in the Upper Peninsula, a tree is the fixed object associated with the highest proportion of all crashes (2.3%) and injury crashes (3.9%). Embankment and tree crashes both account for 9.1% in fatal crashes.

	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Unknown Event	22	0.2	0	0.0	6	0.4
<b>MOST HARMFUL EVENT TOTAL</b>	<b>9,000</b>	<b>100.0</b>	<b>22</b>	<b>100.0</b>	<b>1,503</b>	<b>100.0</b>

## UPPER PENINSULA DRIVER AGE 21-64 (CONTINUED)

CRASH TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Single Vehicle	3,842	42.7	8	36.4	376	25.0
Head On	169	1.9	5	22.7	73	4.9
Head On - Left Turn	144	1.6	0	0.0	72	4.8
Angle	1,943	21.6	5	22.7	438	29.1
Rear End	1,331	14.8	2	9.1	307	20.4
Rear End - Left Turn	109	1.2	0	0.0	35	2.3
Rear End - Right Turn	94	1.0	0	0.0	12	0.8
Sideswipe - Same Direction	546	6.1	1	4.5	55	3.7
Sideswipe - Opposite Direction	316	3.5	0	0.0	50	3.3
Other/Unknown	506	5.6	1	4.5	85	5.7
TOTAL	9,000	100.0	22	100.0	1,503	100.0

Based on crash type, drivers age 21-64 in the Upper Peninsula are involved in the largest proportion of single vehicle crashes for all crashes (42.7%) and fatal crashes (36.4%). For injury crashes, the highest proportion is angle crashes (29.1%).

RELATIONSHIP TO ROADWAY (LOCATION OF FIRST IMPACT)	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
On Road	7,600	84.4	13	59.1	1,217	81.0
Median	19	0.2	0	0.0	4	0.3
Shoulder	537	6.0	4	18.2	86	5.7
Outside of Shoulder/Curb	692	7.7	4	18.2	165	11.0
Gore	31	0.3	0	0.0	3	0.2
Other/Unknown	121	1.3	1	4.5	28	1.9
TOTAL	9,000	100.0	22	100.0	1,503	100.0

Other than on the road crashes, drivers age 21-64 in the Upper Peninsula have the highest proportion where the first impact is outside the shoulder/curb for all crashes (7.7%) and injury crashes (11.0%). Shoulder crashes and outside the shoulder/curb crashes both account for 18.2% in fatal crashes.

ROADWAY TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Interstate Routes	384	4.3	0	0.0	64	4.3
U.S. & Michigan Roads	4,602	51.1	15	68.2	800	53.2
County & City Roads	4,014	44.6	7	31.8	639	42.5
TOTAL	9,000	100.0	22	100.0	1,503	100.0



## UPPER PENINSULA DRIVER AGE 21-64 (CONTINUED)

TIME OF DAY	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
12:00 AM - 02:59 AM	321	3.6	2	9.1	53	3.5
03:00 AM - 05:59 AM	359	4.0	0	0.0	34	2.3
06:00 AM - 08:59 AM	1,132	12.6	2	9.1	135	9.0
09:00 AM - 11:59 AM	1,340	14.9	3	13.6	277	18.4
12:00 PM - 02:59 PM	1,648	18.3	4	18.2	323	21.5
03:00 PM - 05:59 PM	2,056	22.8	3	13.6	384	25.5
06:00 PM - 08:59 PM	1,292	14.4	7	31.8	201	13.4
09:00 PM - 11:59 PM	839	9.3	1	4.5	96	6.4
Unknown	13	0.1	0	0.0	0	0.0
<b>TOTAL</b>	<b>9,000</b>	<b>100.0</b>	<b>22</b>	<b>100.0</b>	<b>1,503</b>	<b>100.0</b>

For drivers age 21-64 in the Upper Peninsula, the 3:00 - 5:59 PM time period has the highest proportion of all crashes (22.8%) and injury crashes (25.5%). The 6:00 - 8:59 PM time period has the highest proportion of fatal crashes (31.8%).

HAZARDOUS ACTION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES		HAZARDOUS CITATION ISSUED	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
None	5,368	59.6	10	45.5	738	49.1	12	1.3
Speed too fast	956	10.6	6	27.3	182	12.1	262	28.8
Speed too slow	10	0.1	0	0.0	1	0.1	0	0.0
Failed to yield	651	7.2	2	9.1	172	11.4	228	25.1
Disregard traffic control	101	1.1	0	0.0	33	2.2	48	5.3
Drove wrong way	2	0.0	0	0.0	0	0.0	1	0.1
Drove left of center	38	0.4	0	0.0	6	0.4	9	1.0
Improper passing	49	0.5	0	0.0	10	0.7	12	1.3
Improper lane use	117	1.3	0	0.0	11	0.7	8	0.9
Improper turn	60	0.7	0	0.0	9	0.6	8	0.9
Improper/no signal	18	0.2	0	0.0	3	0.2	3	0.3
Improper backing	251	2.8	0	0.0	4	0.3	6	0.7
Unable to stop in assured clear distance	665	7.4	0	0.0	136	9.0	110	12.1
Reckless driving	41	0.5	0	0.0	17	1.1	20	2.2
Careless/negligent driving	302	3.4	1	4.5	102	6.8	138	15.2
Other	264	2.9	1	4.5	57	3.8	42	4.6
Unknown	107	1.2	2	9.1	22	1.5	3	0.3
<b>TOTAL</b>	<b>9,000</b>	<b>100.0</b>	<b>22</b>	<b>100.0</b>	<b>1,503</b>	<b>100.0</b>	<b>910</b>	<b>100.0</b>

After no hazardous action, the second highest hazardous action category for drivers age 21-64 in the Upper Peninsula for all crashes (10.6%), fatal crashes (27.3%), and injury crashes (12.1%) occurs when the driver's speed is too fast.

## UPPER PENINSULA DRIVER AGE 21-64 (CONTINUED)

DAY OF WEEK	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Monday	1,286	14.3	3	13.6	186	12.4
Tuesday	1,299	14.4	4	18.2	215	14.3
Wednesday	1,273	14.1	3	13.6	219	14.6
Thursday	1,403	15.6	2	9.1	238	15.8
Friday	1,645	18.3	1	4.5	300	20.0
Saturday	1,170	13.0	8	36.4	191	12.7
Sunday	924	10.3	1	4.5	154	10.2
TOTAL	9,000	100.0	22	100.0	1,503	100.0

DRIVER GENDER	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Male	5,210	57.9	16	72.7	843	56.1
Female	3,789	42.1	6	27.3	660	43.9
Unknown	1	0.0	0	0.0	0	0.0
TOTAL	9,000	100.0	22	100.0	1,503	100.0

For drivers age 21-64 in the Upper Peninsula, male drivers (72.7%) account for over two and a half times that of female drivers (27.3%) in fatal crashes.

NUMBER OF OCCUPANTS	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
1 occupant	6,839	76.0	16	72.7	1,049	69.8
2 occupants	1,471	16.3	4	18.2	291	19.4
3 occupants	404	4.5	0	0.0	93	6.2
4 occupants	169	1.9	2	9.1	38	2.5
5 occupants	49	0.5	0	0.0	21	1.4
6 + occupants	39	0.4	0	0.0	10	0.7
0 occupants	27	0.3	0	0.0	1	0.1
Unknown	2	0.0	0	0.0	0	0.0
TOTAL	9,000	100.0	22	100.0	1,503	100.0

## UPPER PENINSULA DRIVER AGE 21-64 (CONTINUED)

VEHICLE TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Passenger Car and Station Wagon	5,834	64.8	7	31.8	936	62.3
Van and Motorhome	417	4.6	0	0.0	47	3.1
Pickup	2,011	22.3	6	27.3	297	19.8
Small Truck (under 10,000 lbs.)	172	1.9	0	0.0	19	1.3
Motorcycle	103	1.1	2	9.1	78	5.2
Moped	8	0.1	1	4.5	6	0.4
Go Cart	2	0.0	0	0.0	2	0.1
Snowmobile	49	0.5	1	4.5	33	2.2
Off Road Vehicle	24	0.3	0	0.0	18	1.2
Other	46	0.5	0	0.0	9	0.6
Unknown	1	0.0	0	0.0	0	0.0
CDL Truck/Bus (breakdown below)	333	3.7	5	22.7	58	3.9
<b>TOTAL NUMBER OF DRIVERS</b>	<b>9,000</b>	<b>100.0</b>	<b>22</b>	<b>100.0</b>	<b>1,503</b>	<b>100.0</b>

CDL TRUCK/BUS SUB-CATEGORY TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Commercial Vehicle: Group A*	210	63.1	2	40.0	33	56.9
Commercial Vehicle: Group B**	82	24.6	2	40.0	17	29.3
Commercial Vehicle: Group C***	15	4.5	0	0.0	1	1.7
Other Truck	22	6.6	1	20.0	6	10.3
Unknown Truck	4	1.2	0	0.0	1	1.7
<b>Total Number of Vehicles</b>	<b>333</b>	<b>100.0</b>	<b>5</b>	<b>100.0</b>	<b>58</b>	<b>100.0</b>

\* 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.

## UPPER PENINSULA DRIVER AGE 65 AND OVER

DRIVER ACTION PRIOR TO CRASH	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Going straight ahead	1,177	62.3	4	100.0	185	58.9
Turning left	134	7.1	0	0.0	42	13.4
Turning right	71	3.8	0	0.0	10	3.2
Stopped on roadway	99	5.2	0	0.0	18	5.7
In prior crash	0	0.0	0	0.0	0	0.0
Changing lanes	28	1.5	0	0.0	4	1.3
Backing	87	4.6	0	0.0	2	0.6
Slowing/stopping on roadway	86	4.6	0	0.0	13	4.1
Slowing/stopping other	6	0.3	0	0.0	3	1.0
Starting up on roadway	59	3.1	0	0.0	19	6.1
Starting up other	2	0.1	0	0.0	0	0.0
Entering parking	7	0.4	0	0.0	0	0.0
Leaving parking	10	0.5	0	0.0	0	0.0
Entering roadway	41	2.2	0	0.0	5	1.6
Leaving roadway	7	0.4	0	0.0	3	1.0
Making U-turn	4	0.2	0	0.0	1	0.3
Overtaking or passing	22	1.2	0	0.0	3	1.0
Avoiding object	2	0.1	0	0.0	0	0.0
Avoiding animal	7	0.4	0	0.0	0	0.0
Avoiding pedestrian	0	0.0	0	0.0	0	0.0
Avoiding vehicle (front/back)	11	0.6	0	0.0	2	0.6
Avoiding vehicle (angle)	5	0.3	0	0.0	0	0.0
Driverless moving	1	0.1	0	0.0	0	0.0
Parked	17	0.9	0	0.0	1	0.3
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	0	0.0	0	0.0	0	0.0
Standing/lying in roadway	0	0.0	0	0.0	0	0.0
Pushing/working on vehicle	0	0.0	0	0.0	0	0.0
Other working in roadway	0	0.0	0	0.0	0	0.0
Playing in roadway	0	0.0	0	0.0	0	0.0
In roadway other reason	0	0.0	0	0.0	0	0.0
Not in roadway	1	0.1	0	0.0	1	0.3
Other	0	0.0	0	0.0	0	0.0
Unknown	5	0.3	0	0.0	2	0.6
<b>TOTAL DRIVERS</b>	<b>1,889</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>314</b>	<b>100.0</b>

## UPPER PENINSULA DRIVER AGE 65 AND OVER (CONTINUED)

MOST HARMFUL EVENT IN A NONCOLLISION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Loss of control	7	0.4	0	0.0	4	1.3
Cross center/median	2	0.1	0	0.0	0	0.0
Ran off road left	9	0.5	0	0.0	2	0.6
Ran off road right	9	0.5	0	0.0	3	1.0
Re-enter road	0	0.0	0	0.0	0	0.0
Overtake	33	1.7	1	25.0	14	4.5
Separation of units	0	0.0	0	0.0	0	0.0
Fire/explosion	1	0.1	0	0.0	0	0.0
Immersion	1	0.1	0	0.0	0	0.0
Jackknife	1	0.1	0	0.0	0	0.0
Downhill runaway	0	0.0	0	0.0	0	0.0
Cargo loss/shift	2	0.1	0	0.0	1	0.3
Individual fell off	6	0.3	0	0.0	6	1.9
Other noncollision	8	0.4	0	0.0	0	0.0
SUBTOTAL	79	4.2	1	25.0	30	9.6

For drivers age 65 and over in the Upper Peninsula, an overturn is the most harmful event in a noncollision with the highest proportion of all crashes (1.7%), fatal crashes (25.0%), and injury crashes (4.5%).

MOST HARMFUL EVENT IN A COLLISION WITH A NONFIXED OBJECT	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Pedestrian	5	0.3	0	0.0	4	1.3
Bicyclist	6	0.3	0	0.0	5	1.6
Motor vehicle in transport	1,053	55.7	3	75.0	221	70.4
Parked motor vehicle	78	4.1	0	0.0	6	1.9
Railway train	0	0.0	0	0.0	0	0.0
Animal	456	24.1	0	0.0	11	3.5
Other nonfixed objects	32	1.7	0	0.0	0	0.0
SUBTOTAL	1,630	86.3	3	75.0	247	78.7

## UPPER PENINSULA DRIVER AGE 65 AND 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 Drivers	% of Total	Number of Drivers	% of Total
Bridge/pier/abutment	0	0.0	0	0.0	0	0.0
Bridge parapet end	0	0.0	0	0.0	0	0.0
Bridge rail	2	0.1	0	0.0	0	0.0
Guardrail face	17	0.9	0	0.0	4	1.3
Guardrail end	1	0.1	0	0.0	0	0.0
Median barrier	3	0.2	0	0.0	1	0.3
Highway traffic sign post	12	0.6	0	0.0	1	0.3
Highway signal post	2	0.1	0	0.0	0	0.0
Luminaire/light support	1	0.1	0	0.0	0	0.0
Utility pole	12	0.6	0	0.0	3	1.0
Other pole	1	0.1	0	0.0	0	0.0
Culvert	0	0.0	0	0.0	0	0.0
Curb	2	0.1	0	0.0	0	0.0
Ditch	34	1.8	0	0.0	5	1.6
Embankment	12	0.6	0	0.0	1	0.3
Fence	0	0.0	0	0.0	0	0.0
Mailbox	7	0.4	0	0.0	0	0.0
Tree	46	2.4	0	0.0	18	5.7
Rail crossing signal	0	0.0	0	0.0	0	0.0
Building	9	0.5	0	0.0	1	0.3
Traffic island	0	0.0	0	0.0	0	0.0
Fire hydrant	1	0.1	0	0.0	0	0.0
Impact attenuator	0	0.0	0	0.0	0	0.0
Other fixed object	14	0.7	0	0.0	2	0.6

For drivers age 65 and over in the Upper Peninsula, a tree is the fixed object associated with the highest proportion of all crashes (2.4%) and injury crashes (5.7%).

	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Unknown Event	4	0.2	0	0.0	1	0.3
<b>MOST HARMFUL EVENT TOTAL</b>	<b>1,889</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>314</b>	<b>100.0</b>

## UPPER PENINSULA DRIVER AGE 65 AND OVER (CONTINUED)

CRASH TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Single Vehicle	719	38.1	1	25.0	78	24.8
Head On	26	1.4	2	50.0	10	3.2
Head On - Left Turn	39	2.1	0	0.0	18	5.7
Angle	494	26.2	1	25.0	119	37.9
Rear End	252	13.3	0	0.0	53	16.9
Rear End - Left Turn	28	1.5	0	0.0	6	1.9
Rear End - Right Turn	24	1.3	0	0.0	3	1.0
Sideswipe - Same Direction	146	7.7	0	0.0	7	2.2
Sideswipe - Opposite Direction	48	2.5	0	0.0	1	0.3
Other/Unknown	113	6.0	0	0.0	19	6.1
TOTAL	1,889	100.0	4	100.0	314	100.0

Based on crash type, drivers age 65 and over in the Upper Peninsula are involved in the largest proportion of single vehicle crashes for all crashes (38.1%), head on crashes for fatal crashes (50.0%), and angle crashes for injury crashes (37.9%).

RELATIONSHIP TO ROADWAY (LOCATION OF FIRST IMPACT)	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
On Road	1,610	85.2	3	75.0	252	80.3
Median	6	0.3	0	0.0	2	0.6
Shoulder	119	6.3	1	25.0	19	6.1
Outside of Shoulder/Curb	119	6.3	0	0.0	40	12.7
Gore	7	0.4	0	0.0	0	0.0
Other/Unknown	28	1.5	0	0.0	1	0.3
TOTAL	1,889	100.0	4	100.0	314	100.0

Other than on the road crashes, drivers age 65 and over in the Upper Peninsula have the highest proportion where the first impact is on the shoulder and on the outside the shoulder/curb for all crashes (6.3% each). Shoulder crashes had the highest proportion for fatal crashes (25.0%) and outside the shoulder/curb has the highest proportion for injury crashes (12.7%).

ROADWAY TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Interstate Routes	74	3.9	0	0.0	16	5.1
U.S. & Michigan Roads	994	52.6	3	75.0	167	53.2
County & City Roads	821	43.5	1	25.0	131	41.7
TOTAL	1,889	100.0	4	100.0	314	100.0

## UPPER PENINSULA DRIVER AGE 65 AND OVER (CONTINUED)

TIME OF DAY	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
12:00 AM - 02:59 AM	29	1.5	0	0.0	2	0.6
03:00 AM - 05:59 AM	16	0.8	0	0.0	3	1.0
06:00 AM - 08:59 AM	165	8.7	1	25.0	20	6.4
09:00 AM - 11:59 AM	403	21.3	1	25.0	71	22.6
12:00 PM - 02:59 PM	515	27.3	2	50.0	109	34.7
03:00 PM - 05:59 PM	405	21.4	0	0.0	72	22.9
06:00 PM - 08:59 PM	230	12.2	0	0.0	26	8.3
09:00 PM - 11:59 PM	126	6.7	0	0.0	11	3.5
Unknown	0	0.0	0	0.0	0	0.0
<b>TOTAL</b>	<b>1,889</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>314</b>	<b>100.0</b>

For drivers age 65 and over in the Upper Peninsula, the 12:00 - 2:59 PM time period has the highest proportion of all crashes (27.3%), fatal crashes (50.0%), and injury crashes (34.7%).

HAZARDOUS ACTION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES		HAZARDOUS CITATION ISSUED	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
None	1,017	53.8	1	25.0	114	36.3	3	1.6
Speed too fast	145	7.7	0	0.0	32	10.2	24	12.9
Speed too slow	1	0.1	0	0.0	0	0.0	0	0.0
Failed to yield	278	14.7	0	0.0	76	24.2	86	46.2
Disregard traffic control	36	1.9	1	25.0	13	4.1	19	10.2
Drove wrong way	0	0.0	0	0.0	0	0.0	0	0.0
Drove left of center	9	0.5	1	25.0	3	1.0	3	1.6
Improper passing	13	0.7	0	0.0	2	0.6	2	1.1
Improper lane use	38	2.0	0	0.0	2	0.6	6	3.2
Improper turn	22	1.2	0	0.0	4	1.3	4	2.2
Improper/no signal	7	0.4	0	0.0	2	0.6	2	1.1
Improper backing	68	3.6	0	0.0	2	0.6	1	0.5
Unable to stop in assured clear distance	114	6.0	0	0.0	19	6.1	15	8.1
Reckless driving	3	0.2	0	0.0	2	0.6	2	1.1
Careless/negligent driving	51	2.7	0	0.0	16	5.1	15	8.1
Other	59	3.1	0	0.0	16	5.1	4	2.2
Unknown	28	1.5	1	25.0	11	3.5	0	0.0
<b>TOTAL</b>	<b>1,889</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>314</b>	<b>100.0</b>	<b>186</b>	<b>100.0</b>

After no hazardous action, the second highest hazardous action category for drivers age 65 and over in the Upper Peninsula for all crashes (14.7%) and injury crashes (24.2%) occurs when the driver fails to yield.



## UPPER PENINSULA DRIVER AGE 65 AND OVER (CONTINUED)

DAY OF WEEK	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Monday	280	14.8	2	50.0	42	13.4
Tuesday	293	15.5	0	0.0	51	16.2
Wednesday	304	16.1	0	0.0	45	14.3
Thursday	286	15.1	2	50.0	52	16.6
Friday	312	16.5	0	0.0	50	15.9
Saturday	215	11.4	0	0.0	36	11.5
Sunday	199	10.5	0	0.0	38	12.1
TOTAL	1,889	100.0	4	100.0	314	100.0

DRIVER GENDER	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Male	1,215	64.3	3	75.0	192	61.1
Female	672	35.6	1	25.0	122	38.9
Unknown	2	0.1	0	0.0	0	0.0
TOTAL	1,889	100.0	4	100.0	314	100.0

For drivers age 65 and over in the Upper Peninsula, there were 3 male drivers (75.0%) and 1 female driver (25.0%) in fatal crashes.

NUMBER OF OCCUPANTS	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
1 occupant	1,425	75.4	3	75.0	225	71.7
2 occupants	397	21.0	1	25.0	72	22.9
3 occupants	32	1.7	0	0.0	10	3.2
4 occupants	17	0.9	0	0.0	4	1.3
5 occupants	5	0.3	0	0.0	1	0.3
6 + occupants	3	0.2	0	0.0	0	0.0
0 occupants	9	0.5	0	0.0	1	0.3
Unknown	1	0.1	0	0.0	1	0.3
TOTAL	1,889	100.0	4	100.0	314	100.0

## UPPER PENINSULA DRIVER AGE 65 AND OVER (CONTINUED)

VEHICLE TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Passenger Car and Station Wagon	1,304	69.0	2	50.0	199	63.4
Van and Motorhome	93	4.9	1	25.0	25	8.0
Pickup	400	21.2	1	25.0	60	19.1
Small Truck (under 10,000 lbs.)	35	1.9	0	0.0	3	1.0
Motorcycle	17	0.9	0	0.0	13	4.1
Moped	0	0.0	0	0.0	0	0.0
Go Cart	0	0.0	0	0.0	0	0.0
Snowmobile	5	0.3	0	0.0	5	1.6
Off Road Vehicle	5	0.3	0	0.0	5	1.6
Other	3	0.2	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0
CDL Truck/Bus (breakdown below)	27	1.4	0	0.0	4	1.3
<b>TOTAL NUMBER OF DRIVERS</b>	<b>1,889</b>	<b>100.0</b>	<b>4</b>	<b>100.0</b>	<b>314</b>	<b>100.0</b>

CDL TRUCK/BUS SUB-CATEGORY TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Commercial Vehicle: Group A*	14	51.9	0	0.0	1	25.0
Commercial Vehicle: Group B**	10	37.0	0	0.0	3	75.0
Commercial Vehicle: Group C***	2	7.4	0	0.0	0	0.0
Other Truck	1	3.7	0	0.0	0	0.0
Unknown Truck	0	0.0	0	0.0	0	0.0
<b>Total Number of Vehicles</b>	<b>27</b>	<b>100.0</b>	<b>0</b>	<b>0.0</b>	<b>4</b>	<b>100.0</b>

\* 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.

# ALCOHOL

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

VEHICLE	SEVERITY	TOTAL	CRASHES INVOLVING DRINKING, NOT DRUGS		CRASHES INVOLVING DRUGS, NOT DRINKING		CRASHES INVOLVING DRINKING AND DRUGS		TOTAL CRASHES INVOLVING DRINKING AND/OR DRUGS	
			Operator in Crash	Operator Drinking	Operator in Crash	Operator Drugs	Operator in Crash	Operator Drinking and Drugs	Operator in Crash	Operator Drinking and/or Drugs
 <b>BICYCLISTS</b>	Total*	33	3	1	0	0	0	0	3	1
	Killed	0	0	0	0	0	0	0	0	0**
	Injured	29	3	1	0	0	0	0	3	1
 <b>DRIVERS</b>	Total*	13,287	345	278	41	30	42	33	428	341
	Killed	15	3	3	2	2	0	0	5	5**
	Injured	1,233	100	91	11	11	16	16	127	118
 <b>MOTORCYCLISTS</b>	Total*	146	14	10	2	2	2	2	18	14
	Killed	3	0	0	2	2	1	1	3	3**
	Injured	102	10	8	0	0	1	1	11	9
 <b>ORV/ ATV RIDERS</b>	Total*	50	8	7	0	0	0	0	8	7
	Killed	1	0	0	0	0	0	0	0	0**
	Injured	34	6	6	0	0	0	0	6	6
 <b>PEDESTRIANS</b>	Total*	43	6	4	0	0	0	0	6	4
	Killed	1	1	1	0	0	0	0	1	1**
	Injured	40	5	3	0	0	0	0	5	3
 <b>SNOWMOBILERS</b>	Total*	65	8	7	0	0	0	0	8	7
	Killed	1	1	1	0	0	0	0	1	1**
	Injured	37	6	5	0	0	0	0	6	5

\*Total does include property damage only crashes

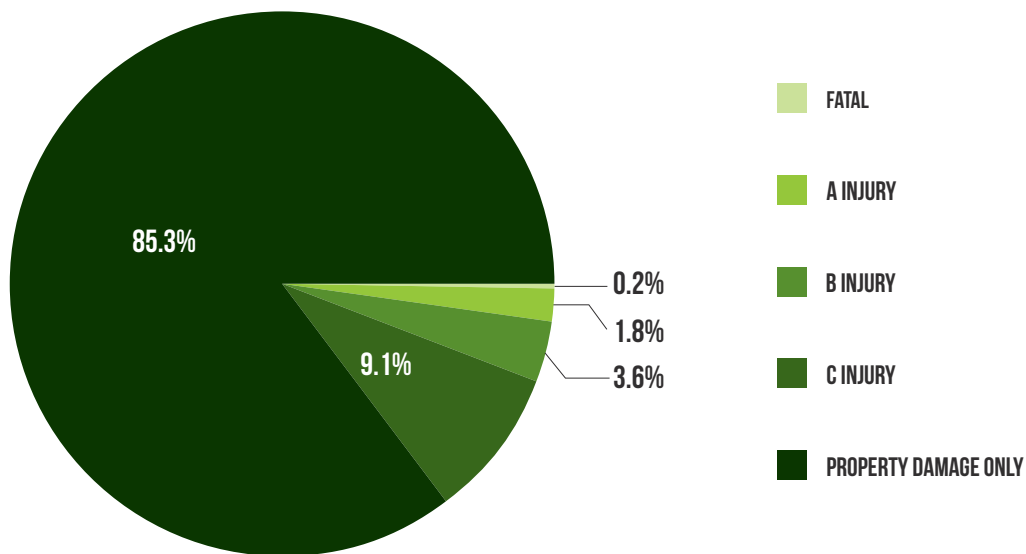
\*\*In the Upper Peninsula, there were no bicyclists, five drivers, three motorcyclists, no ORV/ATV riders, one pedestrian, and one snowmobiler who were killed and coded as drinking and/or using drugs by the police officer.

## DRIVER DRINKING AND/OR USING DRUGS AND INJURY SEVERITY IN CRASH BY AGE

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 and under	0	0	0	0	0	0	0	0	0	0	0	0
14 years	0	0	0	0	0	0	0	0	0	0	0	0
15 years	0	0	0	0	0	0	0	0	0	0	0	0
16 years	3	0	0	3	0	0	0	0	2	0	0	2
17 years	4	2	0	6	0	0	0	0	0	0	0	0
18 years	6	0	1	7	0	0	0	0	3	0	1	4
19 years	6	2	3	11	0	0	0	0	1	1	1	3
20 years	46	4	3	53	1	0	0	1	18	2	1	21
21 - 24 years	73	10	10	93	0	0	0	0	30	6	3	39
25 - 34 years	57	4	4	65	1	0	1	2	24	2	2	28
35 - 44 years	32	4	8	44	0	0	0	0	10	1	4	15
45 - 54 years	24	3	4	31	1	1	0	2	6	0	3	9
55 - 64 years	14	1	0	15	0	1	0	1	5	0	0	5
65 - 69 years	8	0	0	8	0	0	0	0	4	0	0	4
70 - 74 years	3	0	0	3	0	0	0	0	2	0	0	2
75 - 79 years	1	0	0	1	0	0	0	0	1	0	0	1
80 - 84 years	0	0	0	0	0	0	0	0	0	0	0	0
85 - 89 years	0	0	0	0	0	0	0	0	0	0	0	0
90 years and over	1	0	0	1	0	0	0	0	0	0	0	0
Unknown	278	30	33	341	3	2	1	6	106	12	15	133

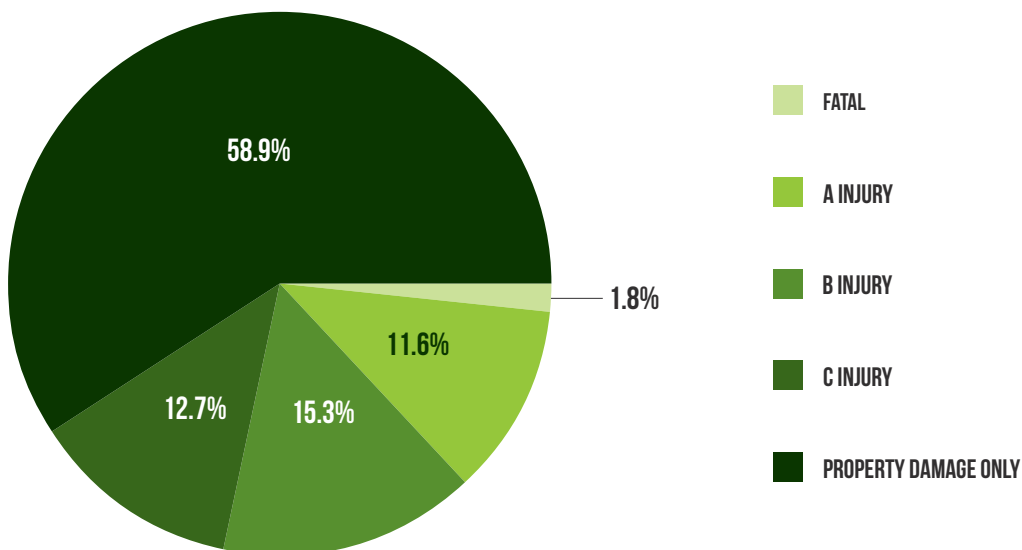
The driver age group 21 to 24 years represents the highest number of drinking and/or drug use in total crashes. The driver age groups 25 to 34 and 45 to 54 represent the highest number of drinking and/or drug use in fatal crashes.

## UPPER PENINSULA ALL CRASHES BY INJURY SEVERITY



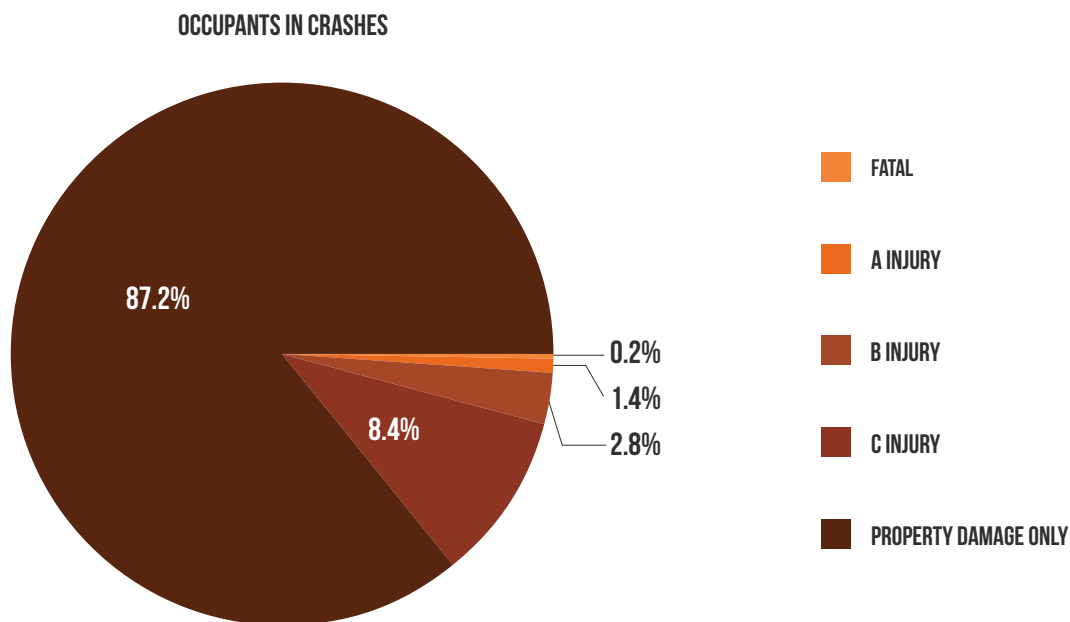
The majority of crashes do not involve injury (85.3%). Possible (C) injury crashes represent about two thirds of all injury crashes.

## UPPER PENINSULA HAD-BEEN-DRINKING CRASHES BY INJURY SEVERITY

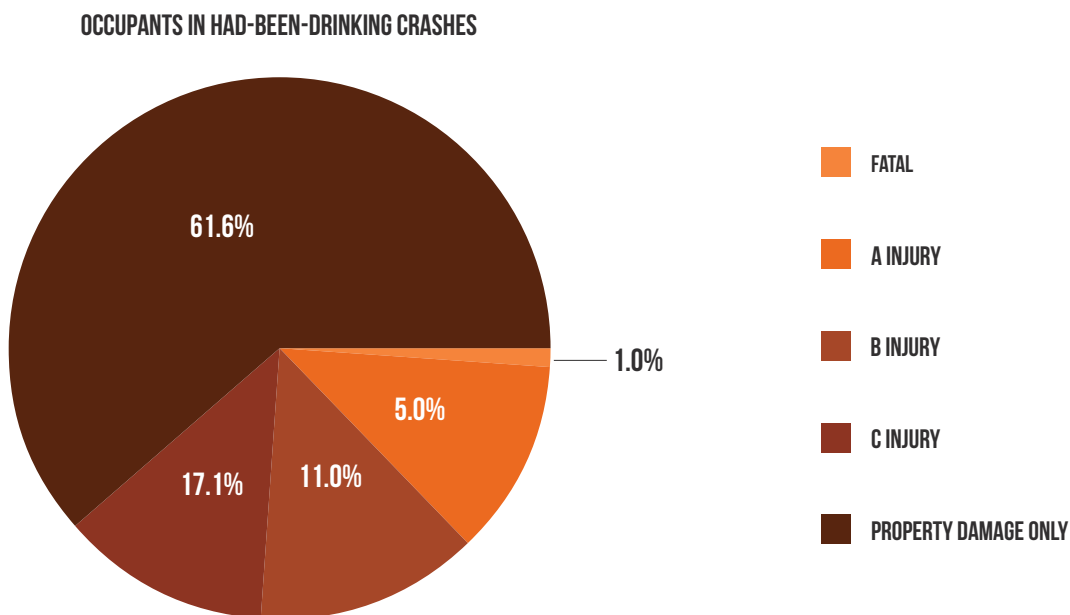


The problem of the drinking driver, pedestrian, and/or bicyclist is seen by comparing the two charts on this page. All injury levels are greater, and a fatality in the crash is nine times more likely when one of the crash-involved operators is reported as had-been-drinking (HBD).

## UPPER PENINSULA DEATH & INJURY FOR CRASH INVOLVED OCCUPANTS



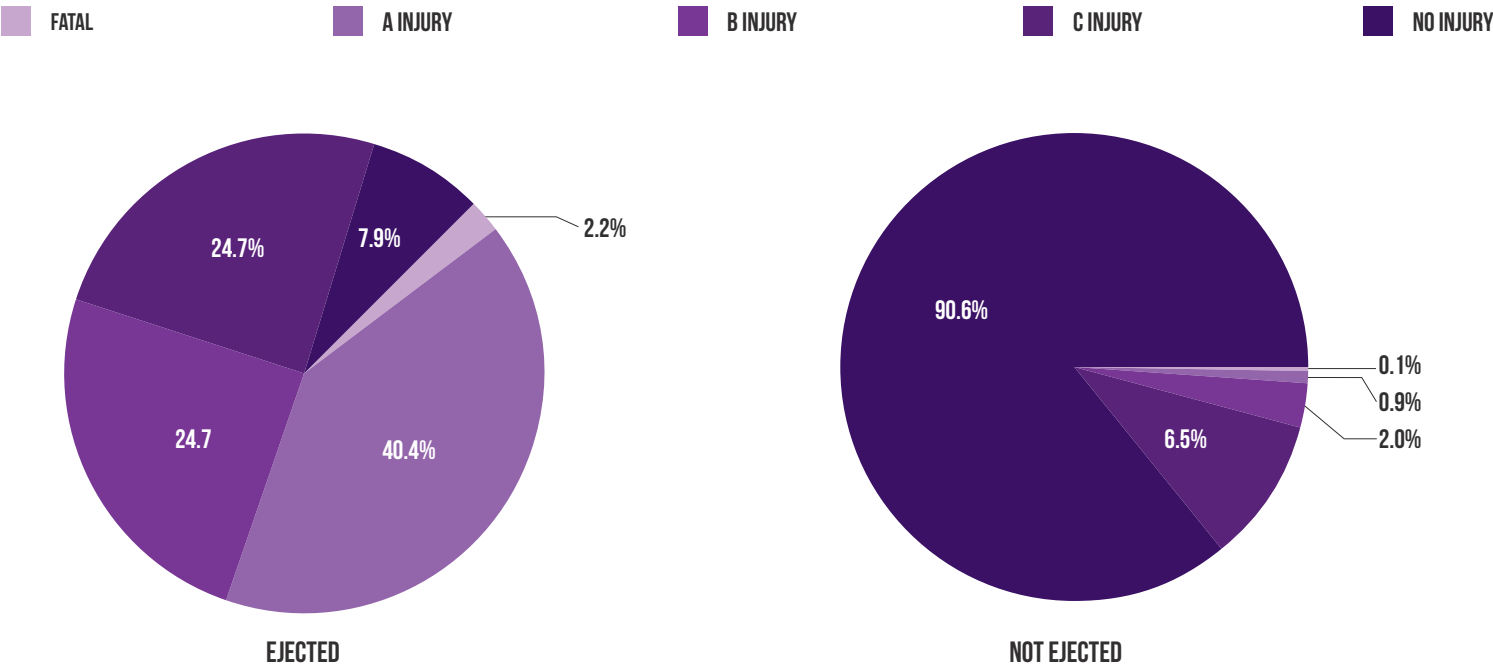
The majority of occupants involved in crashes are not injured (87.2%). About 66% of those who are injured receive only possible (C) injuries.



Crashes involving drinking tend to be more serious than non-drinking crashes. The percentage of fatalities is five times higher, and the most serious injury level (A) in had-been-drinking crashes is about three and a half times higher than in all crashes.

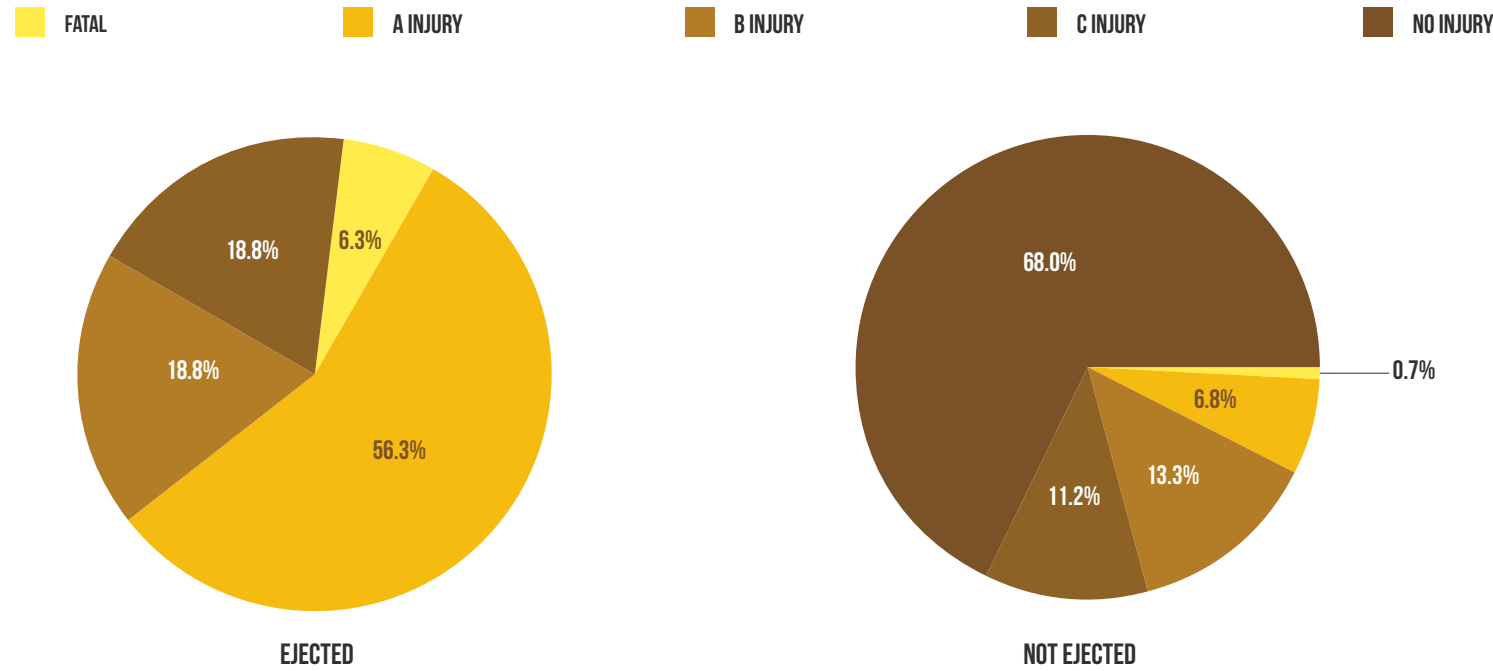


UPPER PENINSULA ALL DRIVERS INJURY SEVERITY - EJECTED VS. NOT EJECTED



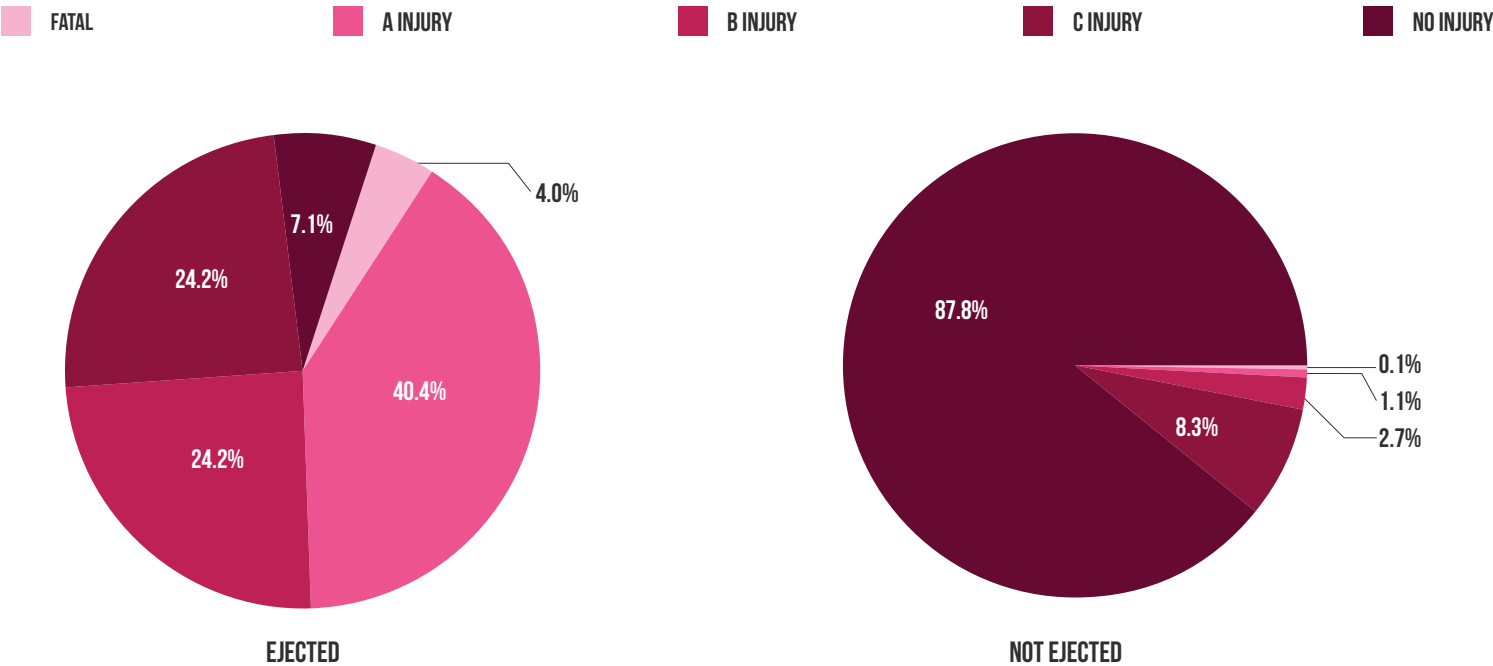
As can be seen in the two charts above, death and injury are much more likely when drivers are ejected from vehicles.

UPPER PENINSULA HAD-BEEN-DRINKING DRIVERS INJURY SEVERITY - EJECTED VS. NOT EJECTED



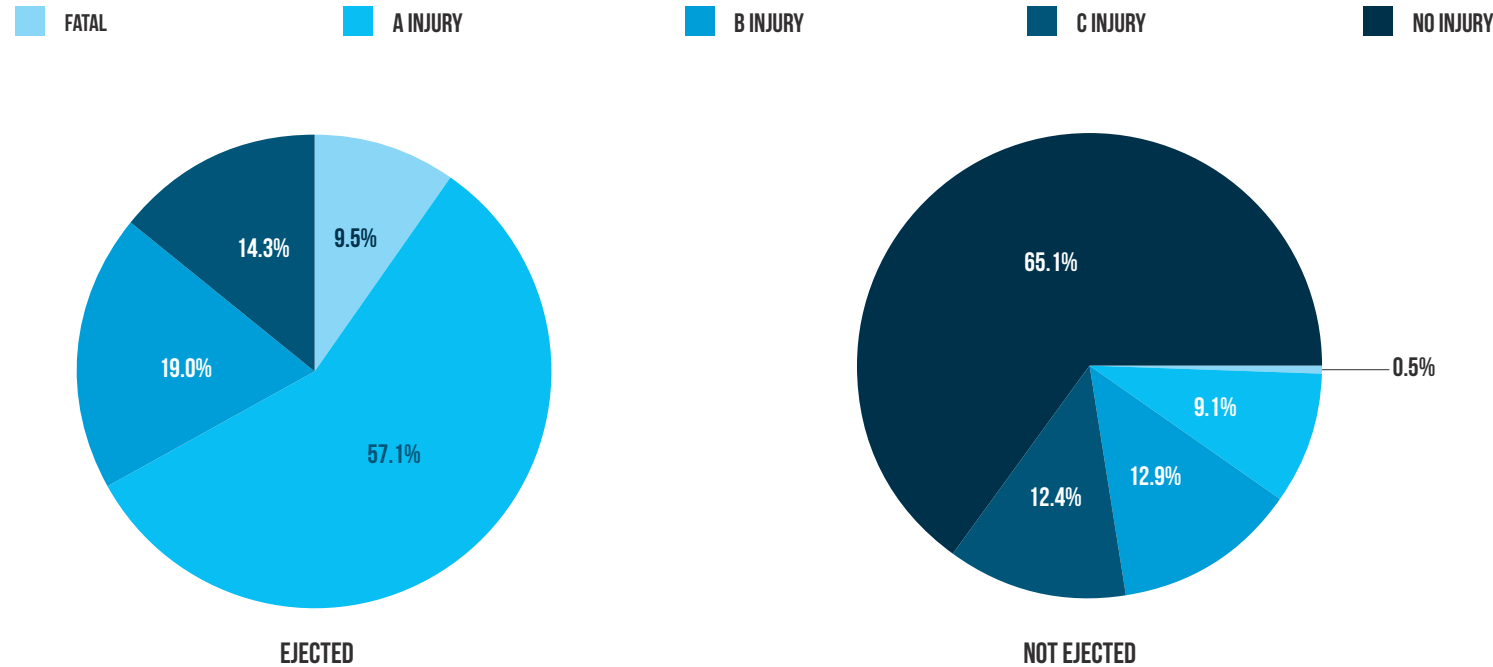
When compared to the charts above, the had-been-drinking charts demonstrate that injury severity is much worse for drivers who had been drinking in both ejected and non-ejected events.

UPPER PENINSULA ALL OCCUPANTS CRASHES INJURY SEVERITY - EJECTED VS. NOT EJECTED



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

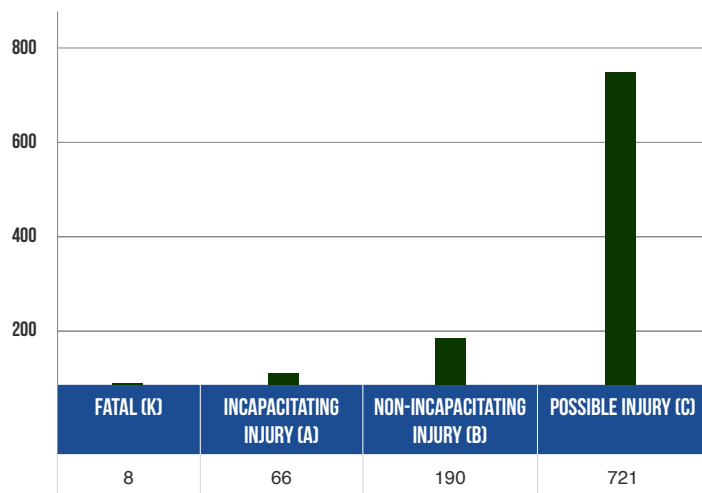
UPPER PENINSULA OCCUPANTS OF HAD-BEEN-DRINKING CRASHES INJURY SEVERITY - EJECTED VS. NOT EJECTED



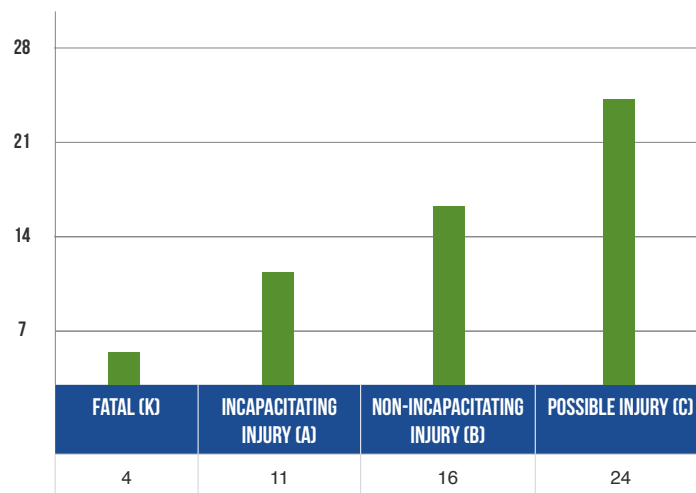
When compared to the charts above, the charts of occupants of had-been-drinking crashes demonstrate that injury severity is much worse for occupants in a crash where drinking is reported in both ejected and non-ejected events.

## UPPER PENINSULA INJURY SEVERITY & RESTRAINT USE BY DRIVER INJURY

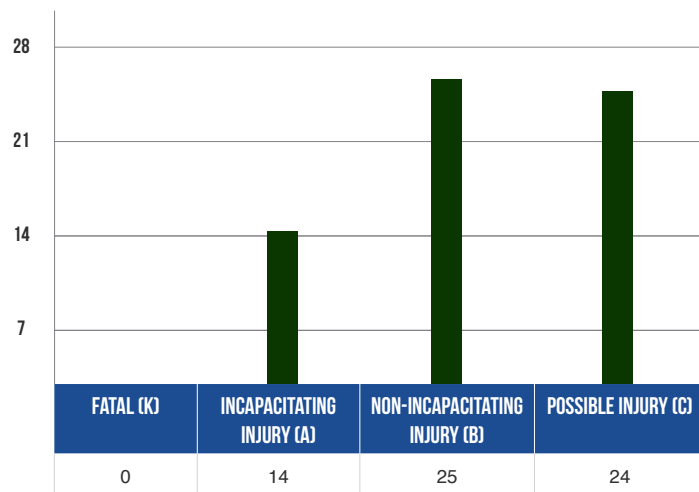
ALL CRASHES-RESTRAINTS USED



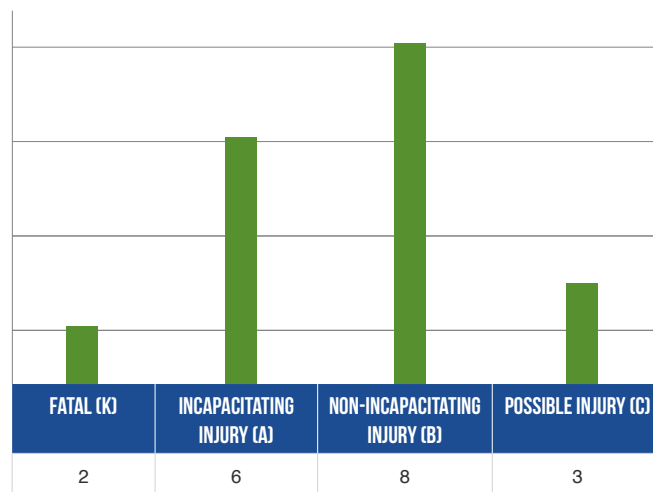
ALL CRASHES-RESTRAINTS NOT USED



HAD-BEEN DRINKING CRASHES-RESTRAINTS USED



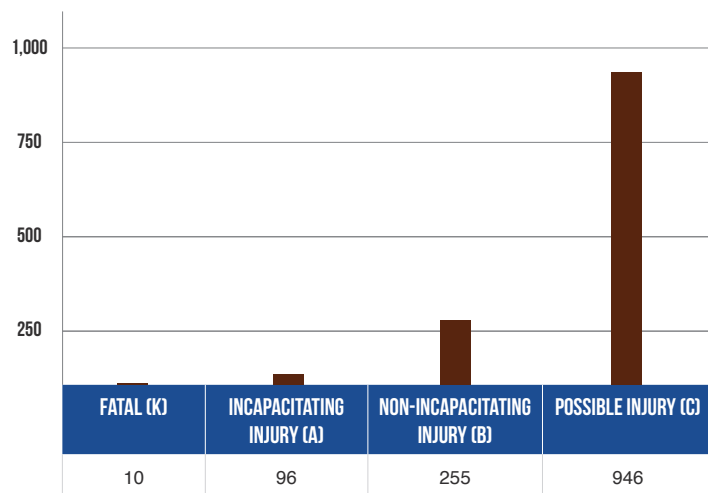
HAD-BEEN DRINKING CRASHES-RESTRAINTS NOT USED



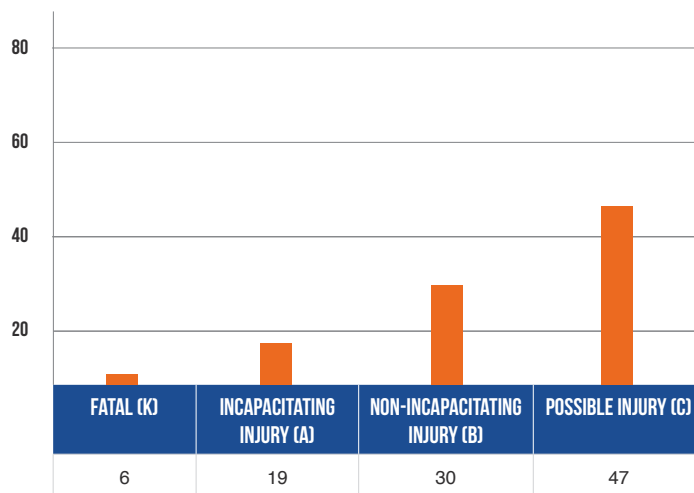
Note: Restraints used represent shoulder belts only used, lap belts only used, both lap and shoulder belts used, and restraint failure. Restraints not used represent no belts available and no belts used.

## UPPER PENINSULA INJURY SEVERITY & RESTRAINT USE BY OCCUPANT INJURY

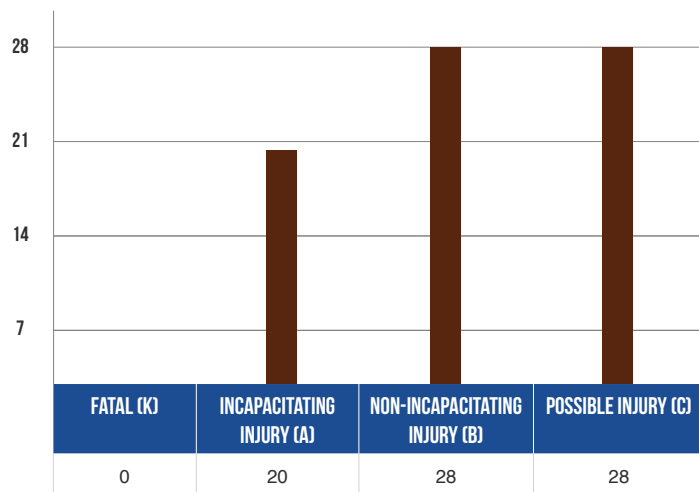
**ALL CRASHES-RESTRAINTS USED**



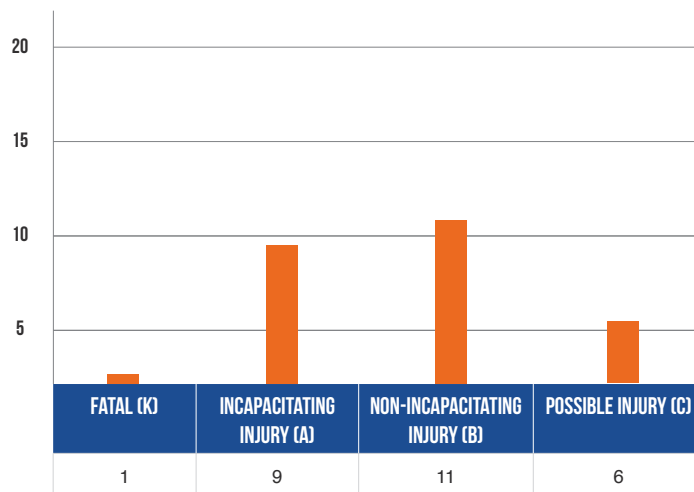
**ALL CRASHES-RESTRAINTS NOT USED**



**HAD-BEEN DRINKING CRASHES-RESTRAINTS USED**



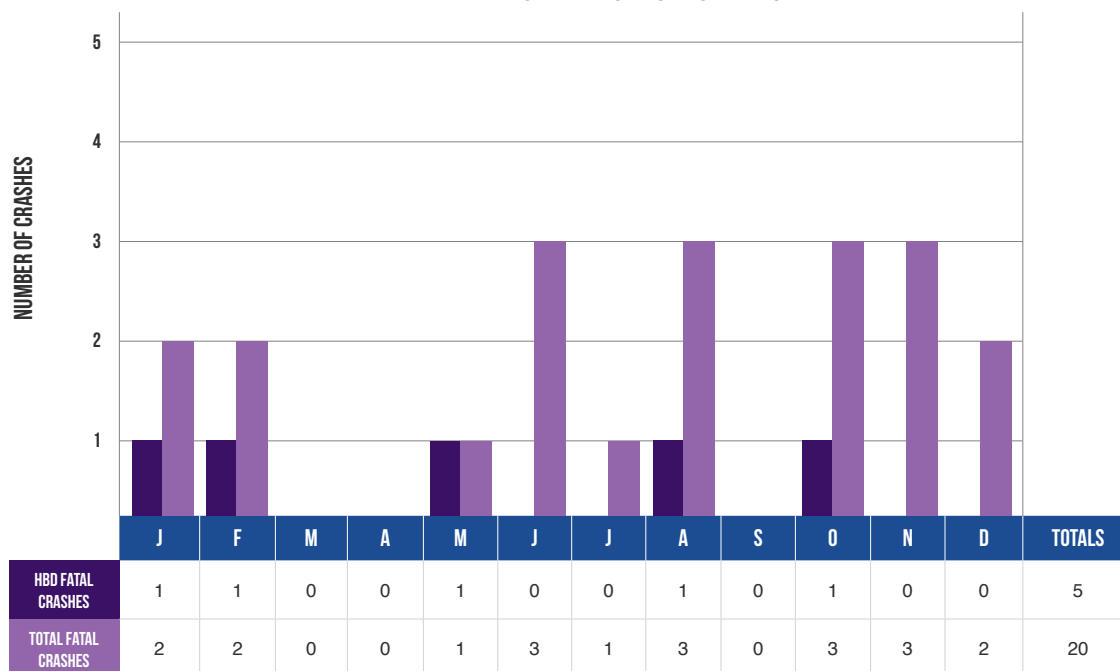
**HAD-BEEN DRINKING CRASHES-RESTRAINTS NOT USED**



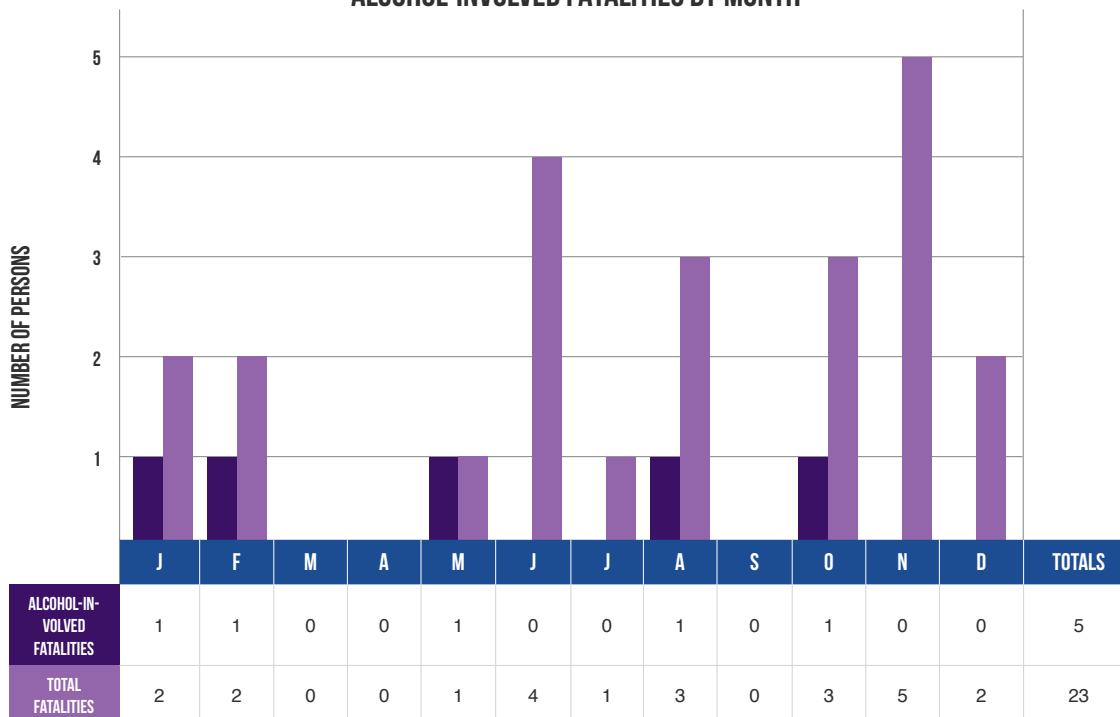
*Note: Restraints used represent shoulder belts only used, lap belts only used, both lap and shoulder belts used, child restraints used, and restraint failure. Restraints not used represent no belts available; no belts used; and child restraint not used, unavailable, or improper use.*

## UPPER PENINSULA ALCOHOL INVOLVEMENT IN FATAL CRASHES

### HAD-BEEN-DRINKING FATAL CRASHES BY MONTH



### ALCOHOL-INVOLVED FATALITIES BY MONTH

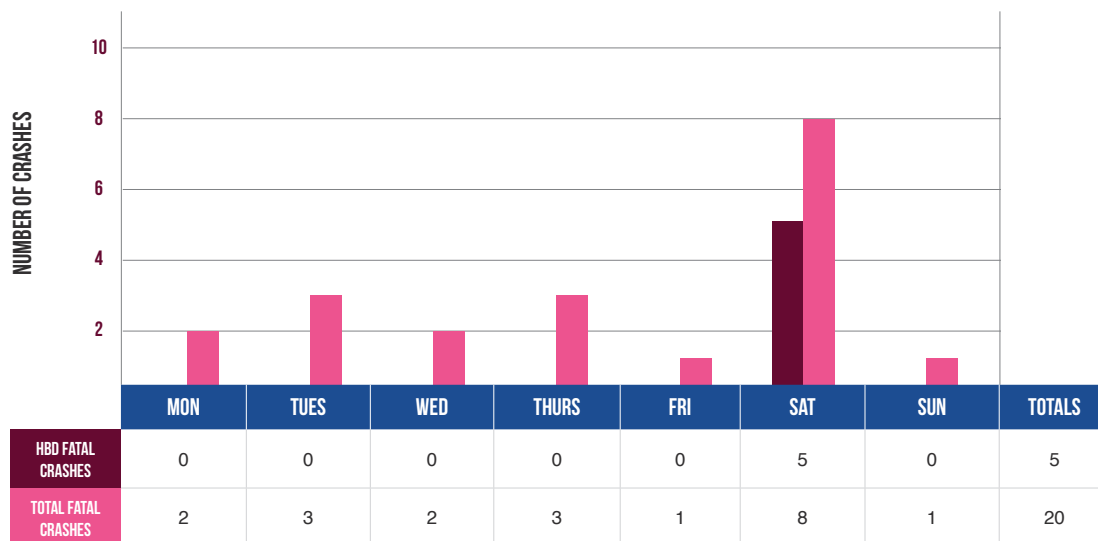


Had-been-drinking fatal crashes were highest in number during the months of January, February, May, August, and October. The number of total fatal crashes (total of non-had-been-drinking and had-been-drinking fatal crashes) reached highest levels in June, August, October, and November.

*Note: An alcohol-involved fatality is any person killed in a had-been-drinking crash.*

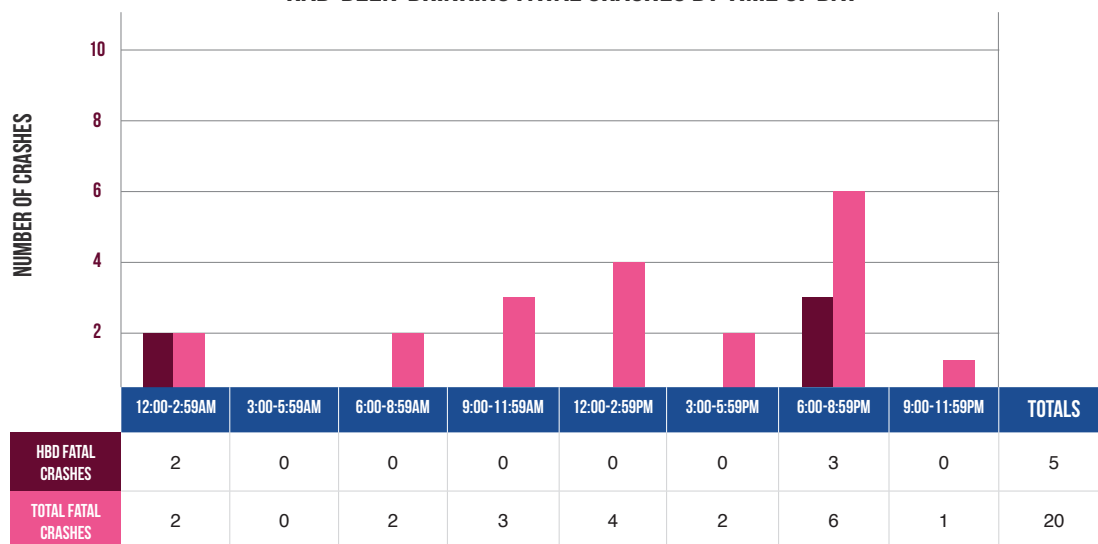
## UPPER PENINSULA ALCOHOL INVOLVEMENT IN FATAL CRASHES (CONTINUED)

### HAD-BEEN-DRINKING FATAL CRASHES BY DAY OF THE WEEK



Saturday had the highest number of fatal crashes and the highest number of drinking-related fatal crashes in 2014.

### HAD-BEEN-DRINKING FATAL CRASHES BY TIME OF DAY

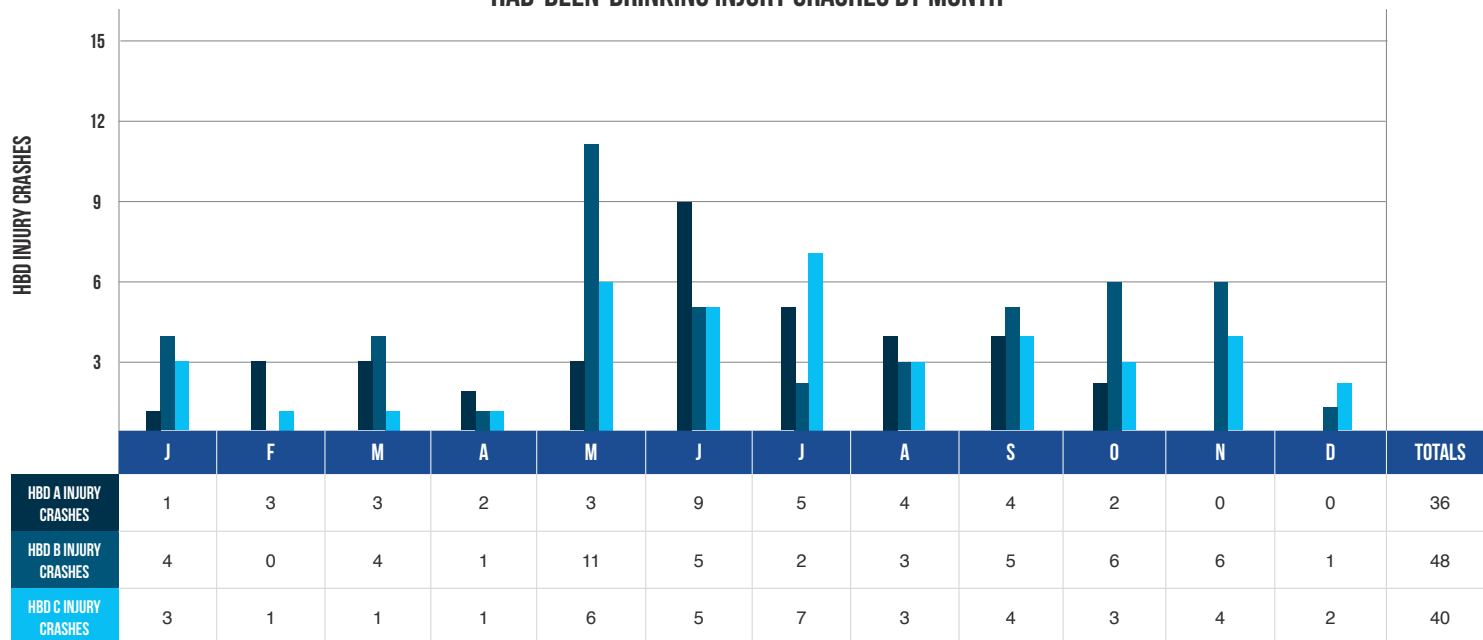


The 6:00 PM to 8:59 PM time period had the highest number of HBD fatal crashes (3) and the highest number of total fatal crashes (6).

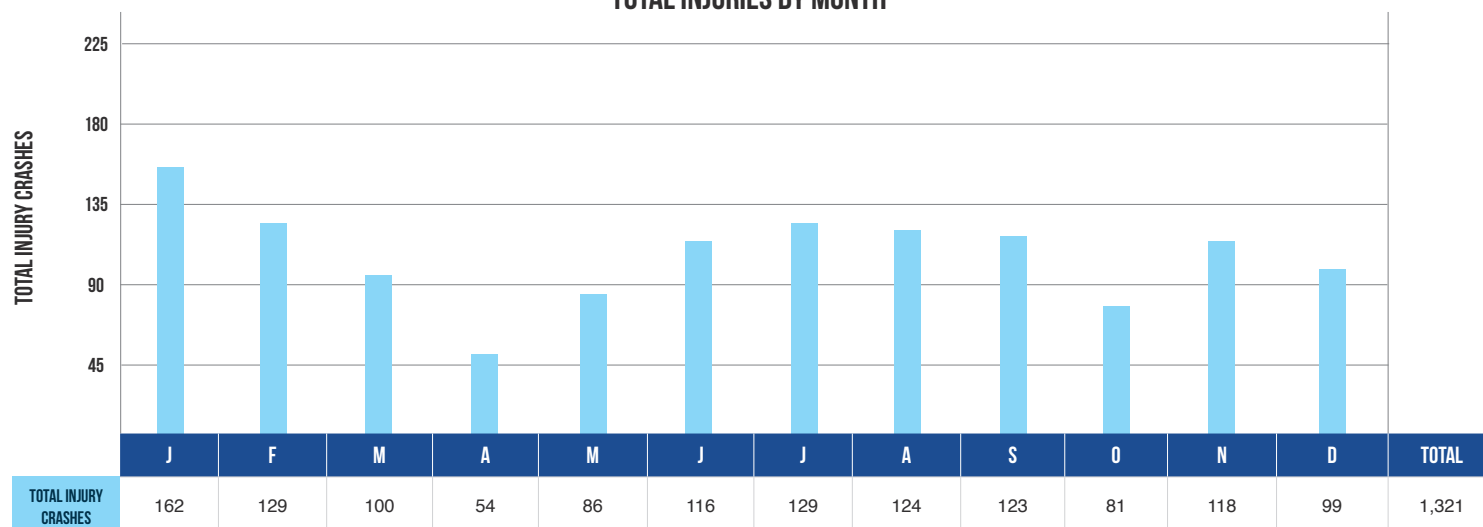
*Note: An alcohol-involved fatality is any person killed in a had-been-drinking crash.*

## UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES

### HAD-BEEN-DRINKING INJURY CRASHES BY MONTH



### TOTAL INJURIES BY MONTH

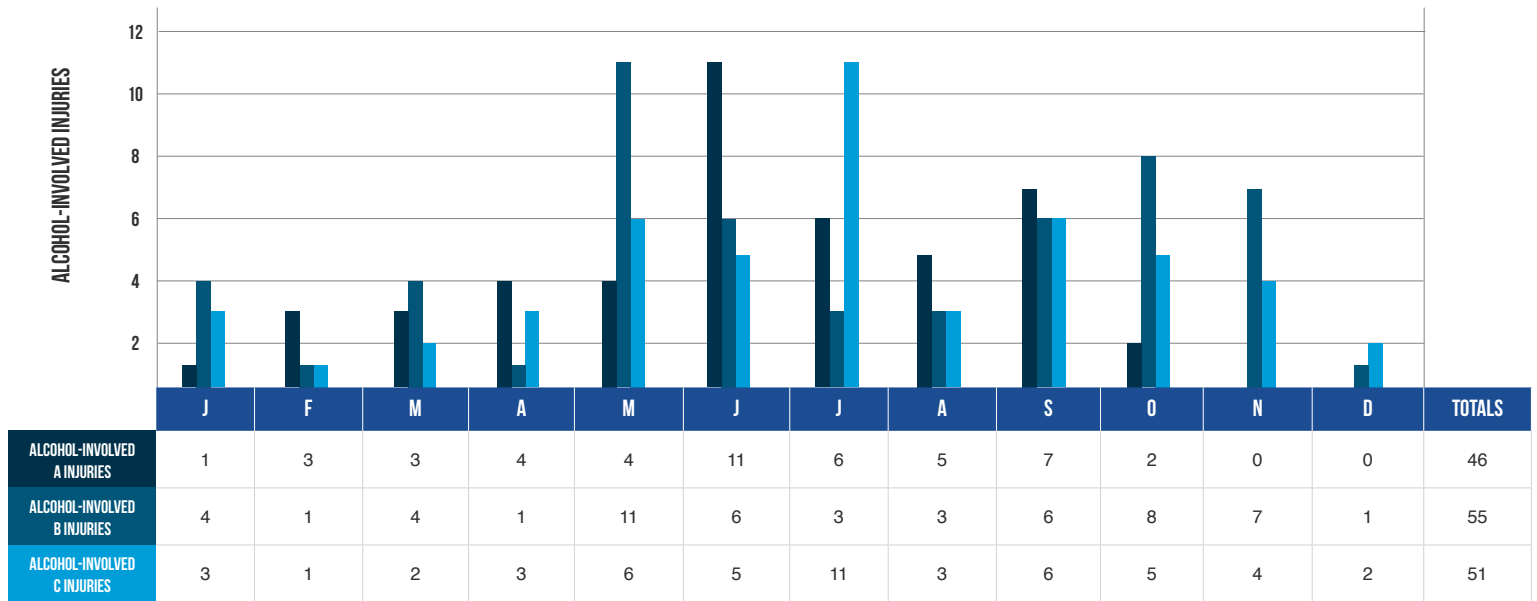


Alcohol involvement in injury crashes is an important indicator of the alcohol impaired driving problem. In 2014, the highest number of had-been-drinking injury crashes occurred in May (20).

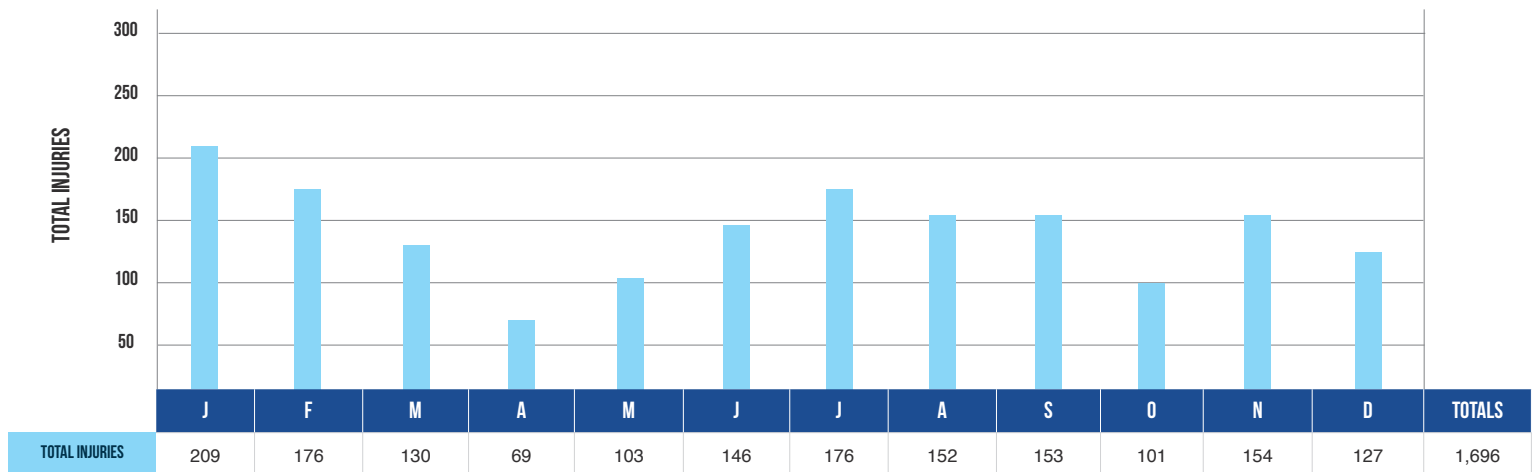
*Note: An alcohol-involved fatality is any person killed in a had-been-drinking crash.*

## UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES (CONTINUED)

ALCOHOL-INVOLVED INJURIES BY MONTH



TOTAL INJURIES BY MONTH

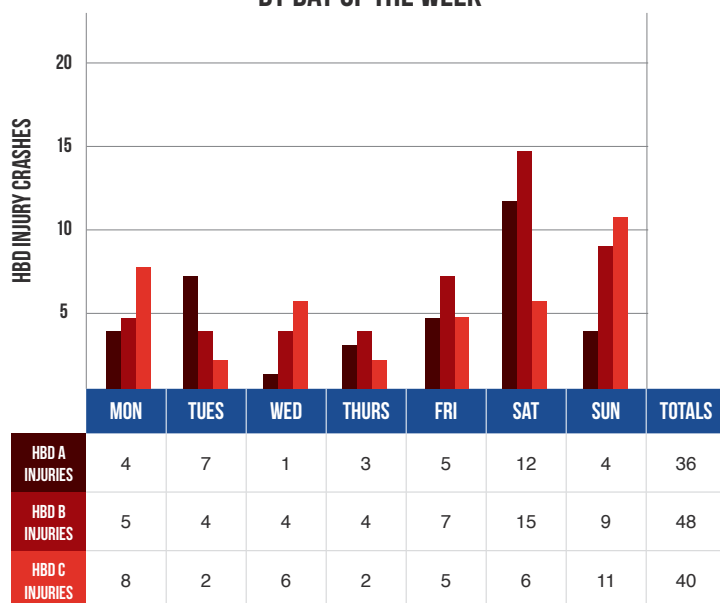


Note: An alcohol-involved fatality is any person killed in a had-been-drinking crash.

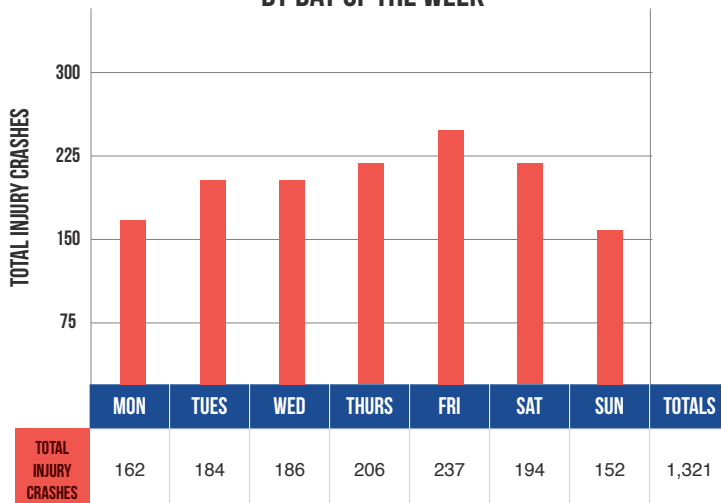


## UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES (CONTINUED)

**HAD-BEEN-DRINKING INJURY CRASHES  
BY DAY OF THE WEEK**

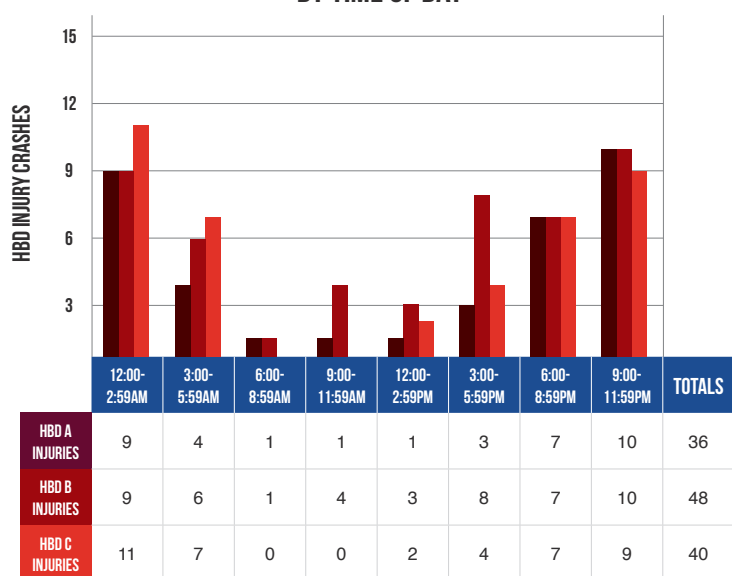


**TOTAL INJURY CRASHES  
BY DAY OF THE WEEK**

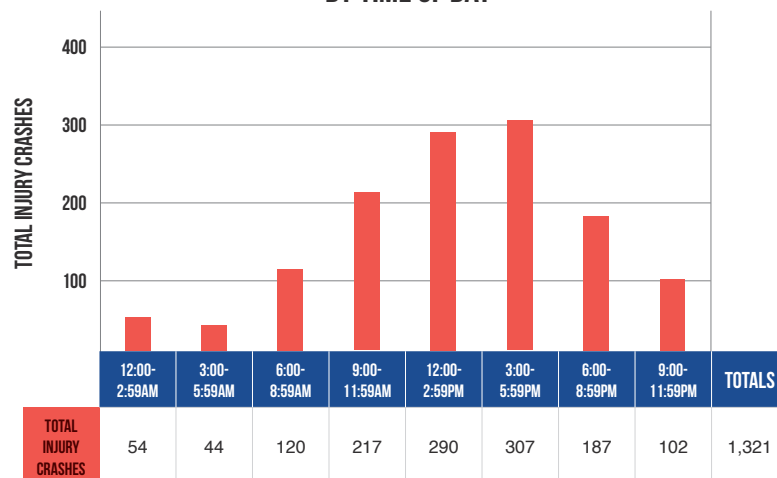


The peak day for all injury crashes is Friday. The highest proportion of had-been-drinking injury crashes to total injury crashes occurred on Saturday (17.0%).

**HAD-BEEN-DRINKING INJURY CRASHES  
BY TIME OF DAY**



**TOTAL INJURY CRASHES  
BY TIME OF DAY**



Total injury crash frequencies peak in the hours between 3:00 PM and 5:59 PM, while had-been-drinking injury crash frequencies peak between 9:00 PM and 2:59 AM. There were no had-been-drinking injury crashes where the time of day was unknown.

## UPPER PENINSULA MALE DRIVERS BY AGE & INJURY SEVERITY IN CRASH

AGE OF DRIVER IN CRASH	MALE DRIVERS		FATAL		INJURY			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
13 years and under	4	0.1	0	0.0	1	0	1	2
14 years	2	0.0	0	0.0	1	0	0	1
15 years	17	0.2	1	4.5	2	1	5	8
16 years	99	1.4	0	0.0	5	5	16	73
17 years	150	2.1	0	0.0	1	5	16	128
18 years	171	2.4	1	4.5	7	6	15	142
19 years	170	2.3	1	4.5	6	8	16	139
20 years	173	2.4	0	0.0	1	9	14	149
21 - 24 years	614	8.5	1	4.5	13	27	65	508
25 - 34 years	1,197	16.5	1	4.5	23	51	127	995
35 - 44 years	1,013	14.0	4	18.2	21	33	111	844
45 - 54 years	1,231	17.0	3	13.6	29	54	111	1,034
55 - 64 years	1,155	16.0	7	31.8	21	37	120	970
65 - 69 years	460	6.4	2	9.1	10	18	50	380
70 - 74 years	315	4.4	0	0.0	7	11	24	273
75 - 79 years	212	2.9	0	0.0	3	8	26	175
80 - 84 years	140	1.9	1	4.5	3	5	16	115
85 - 89 years	65	0.9	0	0.0	2	3	6	54
90 years and over	23	0.3	0	0.0	0	0	0	23
Unknown	24	0.3	0	0.0	0	0	4	20
Total	7,235	100.0	22	100.0	156	281	743	6,033

The male driver age group 55 to 64 years experienced the highest number of fatal crashes. The male driver age group 25 to 34 years experienced the highest number of injury crashes. The male driver age group 45 to 54 years experienced the highest number of property damage only crashes.

*Note: This table excludes 877 drivers of unknown gender.*

## UPPER PENINSULA MALE DRINKING DRIVERS BY AGE & INJURY SEVERITY IN CRASH

AGE OF DRINKING DRIVER IN CRASH	MALE DRIVERS		FATAL		INJURY			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	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	0	0.0	0	0.0	0	0	0	0
16 years	0	0.0	0	0.0	0	0	0	0
17 years	3	1.4	0	0.0	0	0	2	1
18 years	1	0.5	0	0.0	0	0	0	1
19 years	6	2.7	0	0.0	1	1	1	3
20 years	9	4.1	0	0.0	0	1	1	7
21 - 24 years	36	16.4	0	0.0	8	5	2	21
25 - 34 years	54	24.5	0	0.0	4	12	5	33
35 - 44 years	44	20.0	2	66.7	4	6	7	25
45 - 54 years	26	11.8	0	0.0	4	6	1	15
55 - 64 years	21	9.5	1	33.3	2	2	2	14
65 - 69 years	9	4.1	0	0.0	1	0	3	5
70 - 74 years	6	2.7	0	0.0	1	2	0	3
75 - 79 years	3	1.4	0	0.0	0	2	0	1
80 - 84 years	1	0.5	0	0.0	0	1	0	0
85 - 89 years	0	0.0	0	0.0	0	0	0	0
90 years and over	0	0.0	0	0.0	0	0	0	0
Unknown	1	0.5	0	0.0	0	0	0	1
Total	220	100.0	3	100.0	25	38	24	130

The male drinking driver age group 35 to 44 years experienced the highest number of fatal crashes. The male driver age group 25 to 34 years experienced the highest number of injury crashes and property damage only crashes.

*Note: This table excludes no drivers of unknown gender.*

## UPPER PENINSULA FEMALE DRIVERS BY AGE & INJURY SEVERITY IN CRASH

AGE OF DRIVER IN CRASH	FEMALE DRIVERS		FATAL		INJURY			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
13 years and under	1	0.0	0	0.0	0	0	0	1
14 years	1	0.0	0	0.0	1	0	0	0
15 years	12	0.2	0	0.0	0	4	0	8
16 years	90	1.7	0	0.0	0	9	14	67
17 years	120	2.3	0	0.0	2	4	16	98
18 years	168	3.2	0	0.0	2	8	18	140
19 years	156	3.0	2	22.2	4	9	25	116
20 years	149	2.9	0	0.0	2	4	20	123
21 - 24 years	525	10.1	1	11.1	8	19	74	423
25 - 34 years	893	17.3	0	0.0	15	29	107	742
35 - 44 years	774	15.0	3	33.3	8	36	88	639
45 - 54 years	847	16.4	1	11.1	11	24	110	701
55 - 64 years	750	14.5	1	11.1	10	22	99	618
65 - 69 years	262	5.1	0	0.0	6	8	32	216
70 - 74 years	160	3.1	0	0.0	1	8	17	134
75 - 79 years	127	2.5	0	0.0	0	6	13	108
80 - 84 years	62	1.2	0	0.0	1	6	9	46
85 - 89 years	48	0.9	1	11.1	2	6	4	35
90 years and over	13	0.3	0	0.0	0	0	3	10
Unknown	17	0.3	0	0.0	0	0	1	16
Total	5,175	100.0	9	100.0	73	202	650	4,241

The female driver age group 35 to 44 years experienced the highest number of fatal crashes. The female driver age group 25 to 34 years experienced the highest number of injury crashes and property damage only crashes.

*Note: This table excludes 877 drivers of unknown gender.*

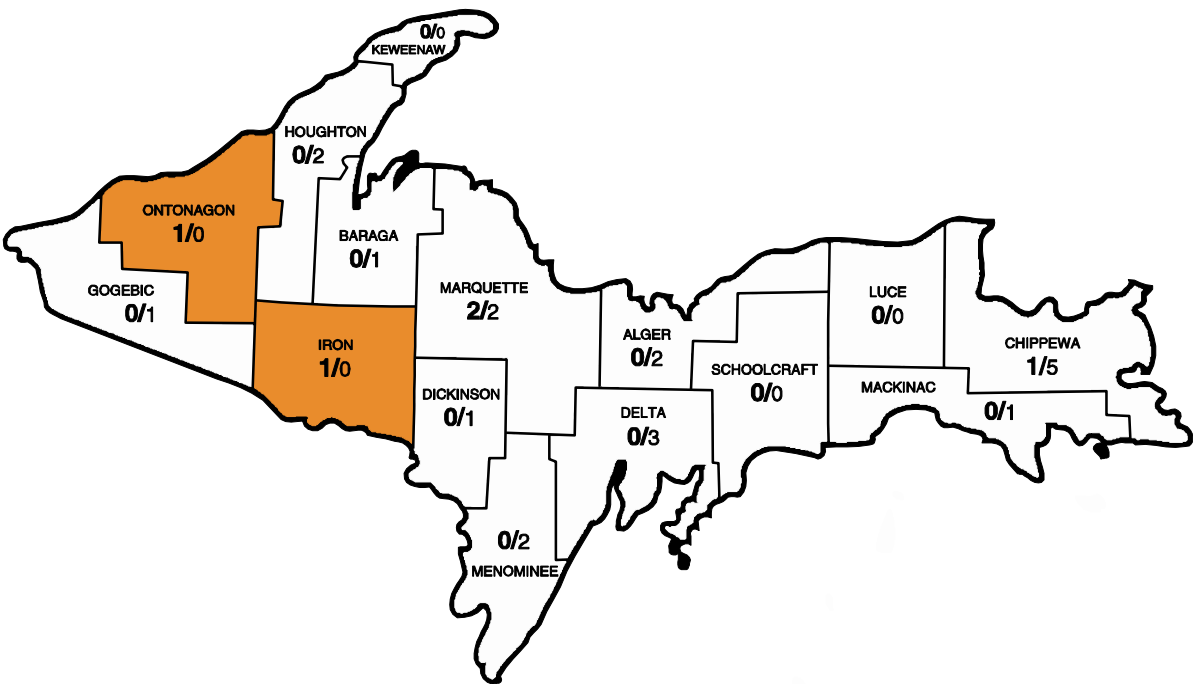
## UPPER PENINSULA FEMALE DRINKING DRIVERS BY AGE & INJURY SEVERITY IN CRASH

AGE OF DRINKING DRIVER IN CRASH	FEMALE DRIVERS		FATAL		INJURY			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	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	0	0.0	0	0.0	0	0	0	0
16 years	0	0.0	0	0.0	0	0	0	0
17 years	0	0.0	0	0.0	0	0	0	0
18 years	3	3.3	0	0.0	0	0	0	3
19 years	1	1.1	0	0.0	0	1	0	0
20 years	0	0.0	0	0.0	0	0	0	0
21 - 24 years	13	14.3	1	100.0	1	1	2	8
25 - 34 years	29	31.9	0	0.0	2	4	6	17
35 - 44 years	17	18.7	0	0.0	2	3	4	8
45 - 54 years	14	15.4	0	0.0	1	0	2	11
55 - 64 years	7	7.7	0	0.0	3	0	0	4
65 - 69 years	5	5.5	0	0.0	1	0	0	4
70 - 74 years	2	2.2	0	0.0	1	0	0	1
75 - 79 years	0	0.0	0	0.0	0	0	0	0
80 - 84 years	0	0.0	0	0.0	0	0	0	0
85 - 89 years	0	0.0	0	0.0	0	0	0	0
90 years and over	0	0.0	0	0.0	0	0	0	0
Unknown	0	0.0	0	0.0	0	0	0	0
Total	91	100.0	1	100.0	11	9	14	56

The female drinking driver age group 21 to 24 years experienced the highest number of fatal crashes. The female driver age group 25 to 34 years experienced the highest number of injury crashes and property damage only crashes.

*Note: This table excludes no drivers of unknown gender.*

# TRAFFIC FATALITIES WITH DRINKING INVOLVEMENT BY COUNTY



Where HBD  
Traffic Fatalities Occurred

A One-Year Comparison

2014 = 5 / 2013 = 20

- Same or decrease
- Increase

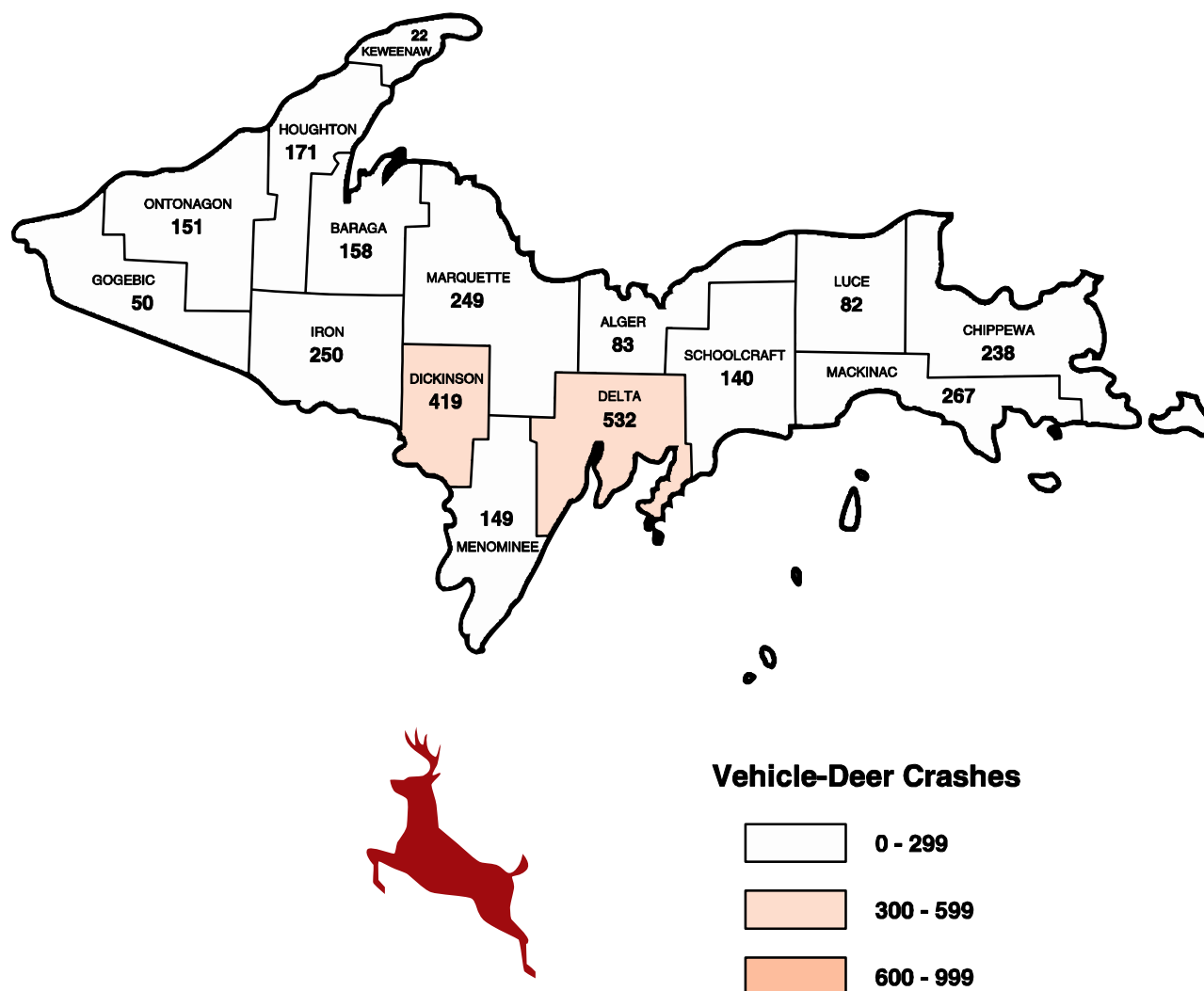


**DEER**

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## UPPER PENINSULA MICHIGAN MOTOR VEHICLE-DEER INVOLVED CRASHES

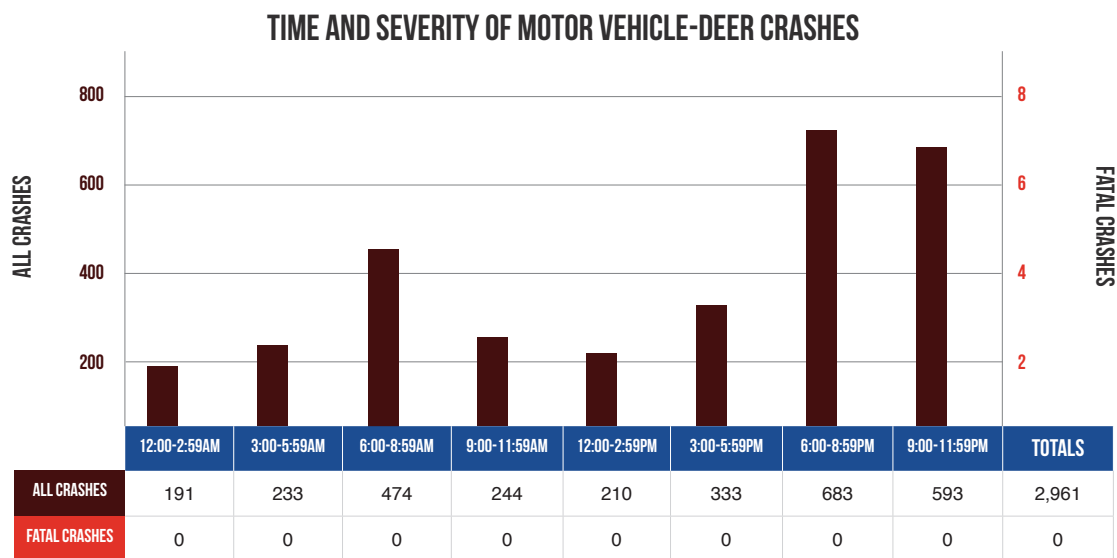


The Upper Peninsula had 2,961 reported vehicle-deer crashes during 2014. Those collisions resulted in 87 people injured and none were killed. Of the 2,969 vehicles involved, 2,097 (70.6%) were passenger cars, 624 (21.0%) were pickups, and 145 (4.9%) were minivans, vans, or motorhomes. All other vehicle types (including motorcycle, snowmobile, ORV/ATV, large truck, and moped; uncoded and errors are also included) totaled 103 (3.5%).

In the Upper Peninsula, 32.4 percent of crashes in all counties involved deer. This compares to 15.3 percent for the number of deer-involved crashes statewide. Delta County had the highest number of vehicle-deer crashes (532); translating to 38.9 percent of the total crashes in that county in 2014.

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

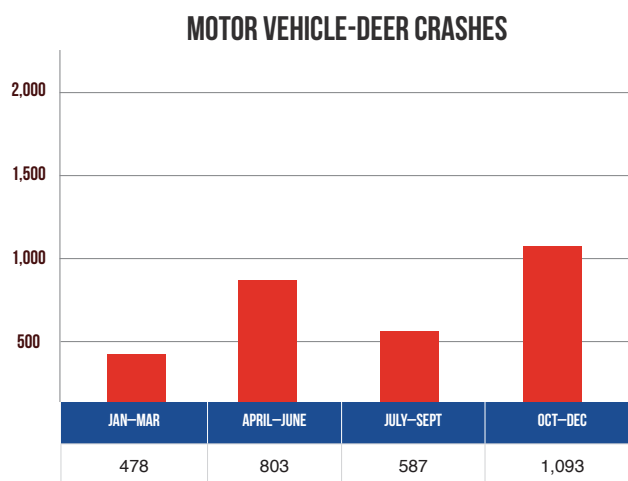
LIGHT CONDITION	ALL CRASHES		FATAL		INJURY			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Daylight	939	31.7	0	0.0	6	11	18	904
Dawn	203	6.9	0	0.0	0	1	2	200
Dusk	200	6.8	0	0.0	0	1	5	194
Dark – Lighted	97	3.3	0	0.0	0	1	2	94
Dark – Unlighted	1,482	50.1	0	0.0	5	3	21	1,453
Other/Unknown	40	1.4	0	0.0	0	0	0	40
Total	2,961	100.0	0	---	11	17	48	2,885



23.1 percent (683) of the reported vehicle-deer collisions occurred during the 6:00 PM to 8:59 PM time period.

## MONTHLY AND SEASONAL RATES FOR MOTOR VEHICLE-DEER CRASHES

MONTH	ALL CRASHES		FATAL		INJURY			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
January	191	6.5	0	0.0	0	1	2	188
February	108	3.6	0	0.0	0	0	1	107
March	179	6.0	0	0.0	0	0	2	177
April	253	8.5	0	0.0	1	2	2	248
May	239	8.1	0	0.0	0	1	2	236
June	311	10.5	0	0.0	1	0	6	304
July	220	7.4	0	0.0	3	2	5	210
August	147	5.0	0	0.0	0	5	5	137
September	220	7.4	0	0.0	4	5	9	202
October	368	12.4	0	0.0	1	1	4	362
November	366	12.4	0	0.0	1	0	6	359
December	359	12.1	0	0.0	0	0	4	355
Total	2,961	100.0	0	---	11	17	48	2,885



36.9 percent (1,093) of the reported vehicle-deer collisions occurred during the fourth quarter of the year.

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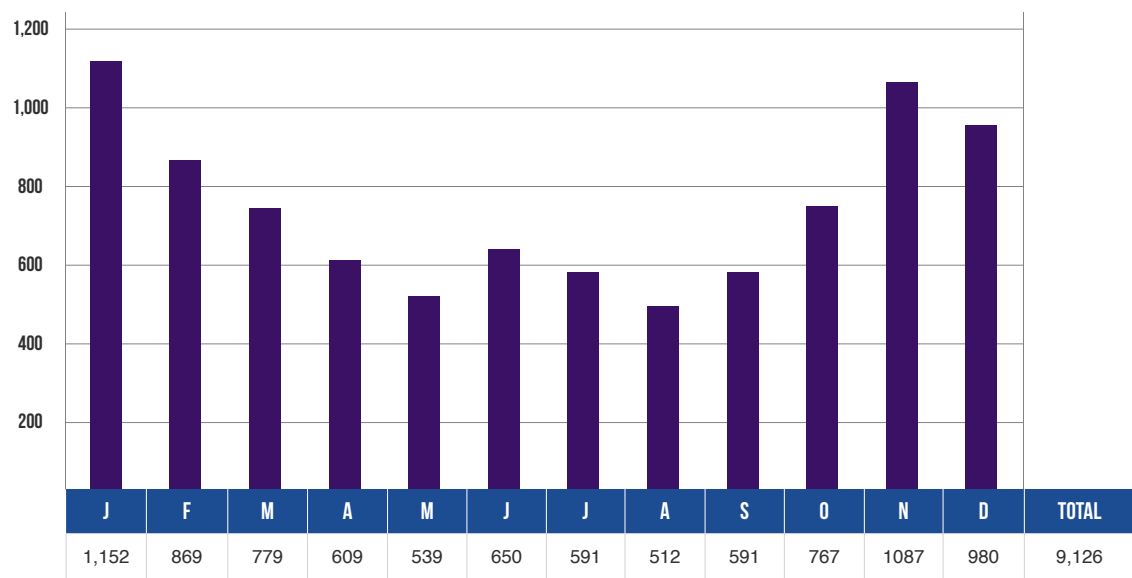
# CRASH

*(circumstances common to all traffic units in a crash)*

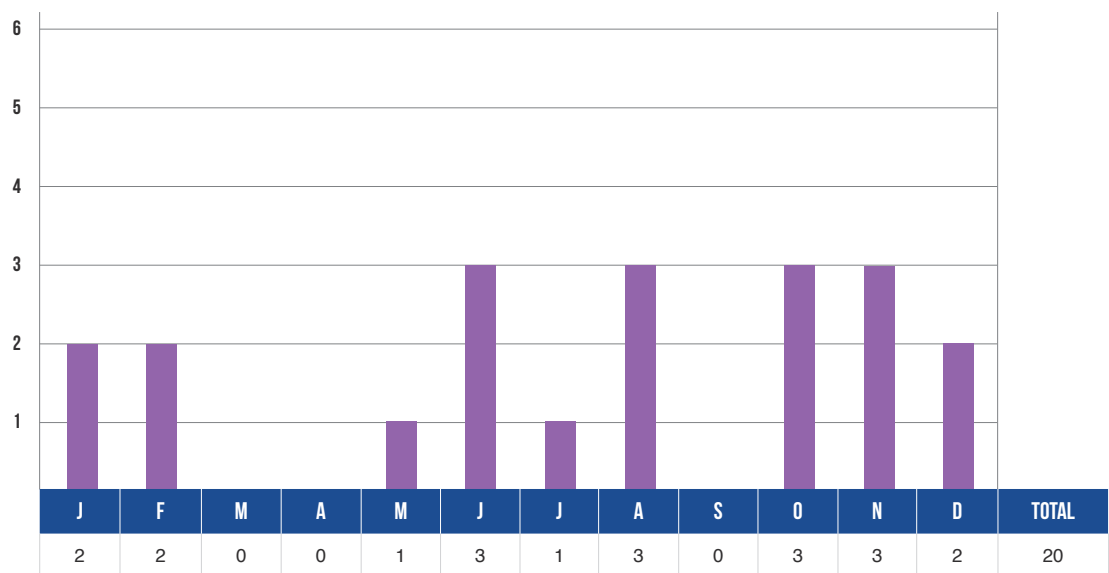
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# UPPER PENINSULA ALL CRASHES INJURY SEVERITY BY MONTH

TOTAL CRASHES

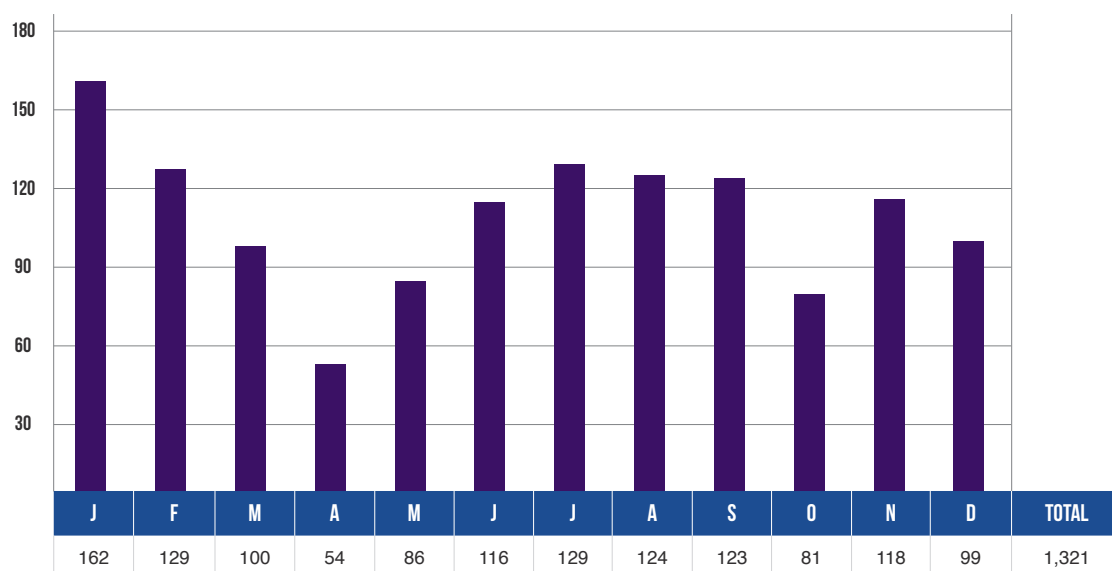


FATAL CRASHES

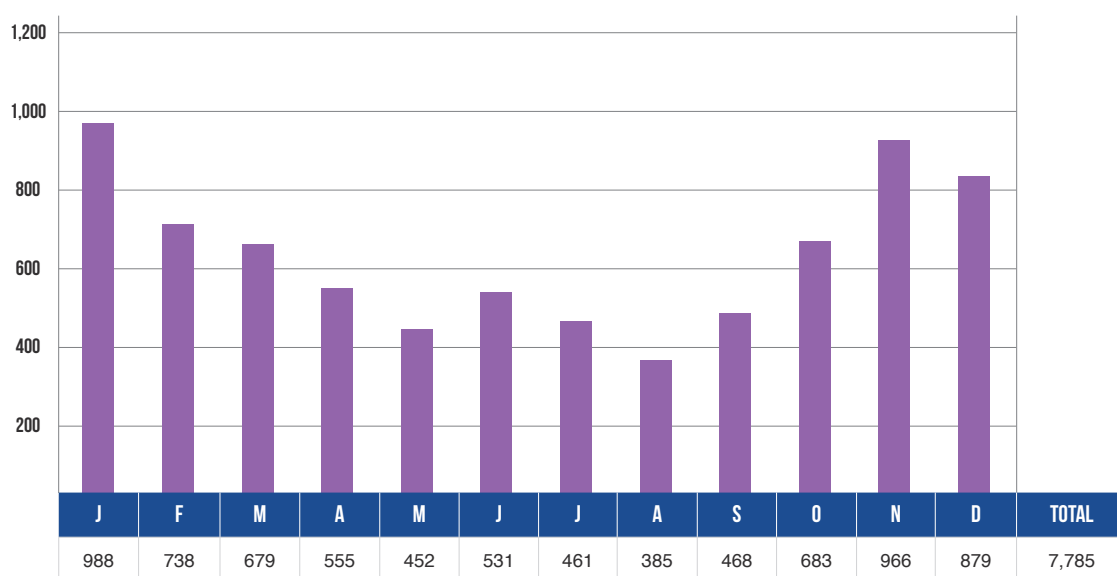


## UPPER PENINSULA ALL CRASHES INJURY SEVERITY BY MONTH (CONTINUED)

### INJURY CRASHES



### PROPERTY DAMAGE ONLY CRASHES





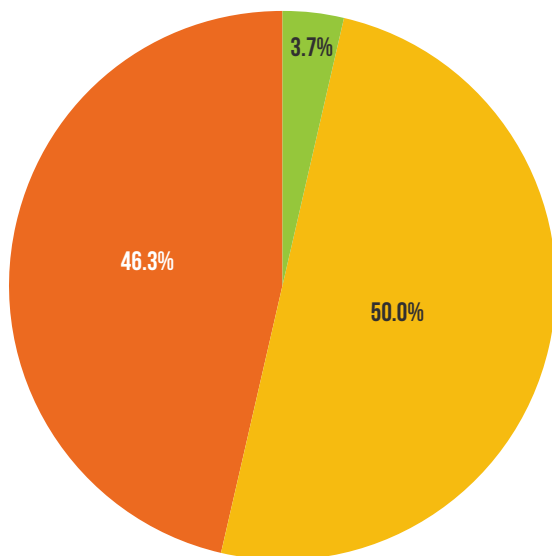
## UPPER PENINSULA CRASH EXPERIENCE BY HIGHWAY CLASS

HIGHWAY CLASS	ALL CRASHES	FATAL CRASHES	INJURY CRASHES	PROPERTY DAMAGE ONLY
Interstate Routes	337	0	49	288
U.S. & Michigan Roads	4,563	12	643	3,908
County & City Roads	4,226	8	629	3,589
TOTAL	9,126	20	1,321	7,785

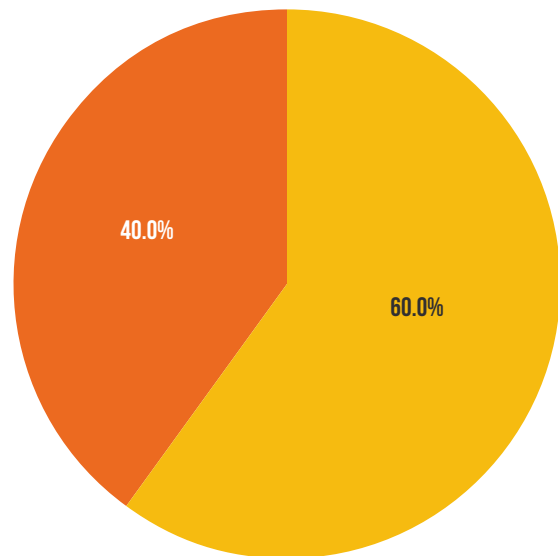
INTERSTATE ROUTES

U.S. & MICHIGAN ROADS

COUNTY & CITY ROADS



ALL CRASHES



FATAL CRASHES

The majority of all crashes (50.0%), fatal crashes (40.0%), injury crashes (48.7%), and property damage only crashes (50.2%) occur on U.S. and Michigan roads.

## UPPER PENINSULA CRASH EXPERIENCE BY CRASH TYPE

CRASH TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Single Vehicle	5,088	55.8	9	45.0	100	171	285	4,523
Head On	128	1.4	4	20.0	8	16	24	76
Head On - Left Turn	104	1.1	0	0.0	5	17	28	54
Angle	1,463	16.0	4	20.0	18	59	229	1,153
Rear End	999	10.9	1	5.0	18	30	160	790
Rear End - Left Turn	77	0.8	0	0.0	1	6	16	54
Rear End - Right Turn	71	0.8	0	0.0	0	0	8	63
Sideswipe - Same Direction	458	5.0	1	5.0	2	5	28	422
Sideswipe - Opposite Direction	224	2.5	0	0.0	3	6	18	197
Other/Unknown	514	5.6	1	5.0	10	16	34	453
TOTAL	9,126	100.0	20	100.0	165	326	830	7,785

In the Upper Peninsula, the single vehicle crash type produces the highest percentage of all crashes (55.8%), fatal crashes (45.0%), injury crashes (42.1%), and property damage only crashes (58.1%). Single vehicle crashes include rollovers, which are a particularly deadly crash type.

## RELATIONSHIP TO ROADWAY

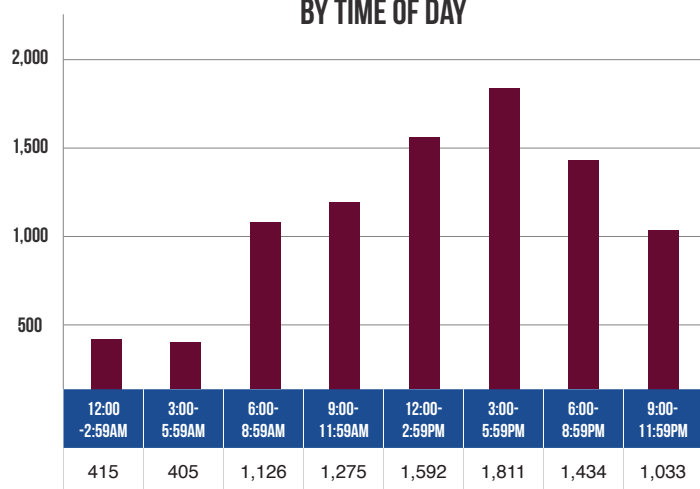
LOCATION OF FIRST IMPACT	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
On Road	7,130	78.1	11	55.0	91	203	620	6,205
Median	23	0.3	0	0.0	1	2	1	19
Shoulder	775	8.5	4	20.0	24	41	55	651
Outside of Shoulder/Curb	994	10.9	4	20.0	45	71	131	743
Gore	49	0.5	0	0.0	0	0	6	43
Other/Unknown	155	1.7	1	5.0	4	9	17	124
TOTAL	9,126	100.0	20	100.0	165	326	830	7,785

Only 8.5 percent of crashes occur on the shoulder of the road, but these crashes account for 20.0 percent of the fatal crashes.

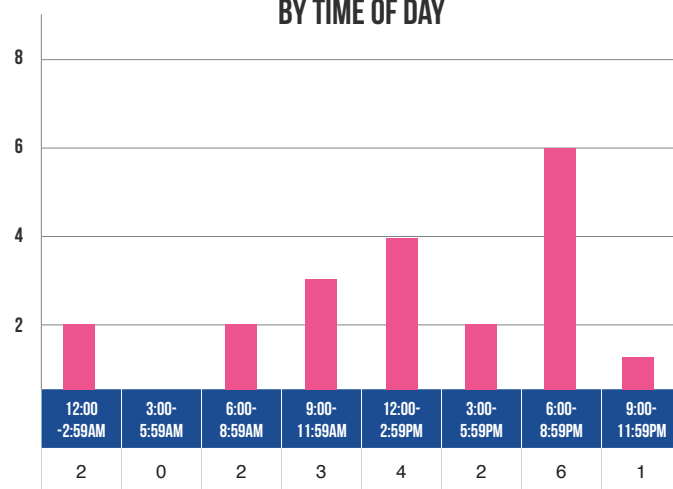
## UPPER PENINSULA TIME AND SEVERITY

TIME OF DAY	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
12:00 AM - 2:59 AM	415	4.5	2	10.0	12	16	26	359
3:00 AM - 5:59 AM	405	4.4	0	0.0	7	14	23	361
6:00 AM - 8:59 AM	1,126	12.3	2	10.0	16	23	81	1,004
9:00 AM - 11:59 AM	1,275	14.0	3	15.0	15	49	153	1,055
12:00 PM - 2:59 PM	1,592	17.4	4	20.0	31	65	194	1,298
3:00 PM - 5:59 PM	1,811	19.8	2	10.0	34	79	194	1,502
6:00 PM - 8:59 PM	1,434	15.7	6	30.0	34	54	99	1,241
9:00 PM - 11:59 PM	1,033	11.3	1	5.0	16	26	60	930
Unknown	35	0.4	0	0.0	0	0	0	35
<b>TOTAL</b>	<b>9,126</b>	<b>100.0</b>	<b>20</b>	<b>100.0</b>	<b>165</b>	<b>326</b>	<b>830</b>	<b>7,785</b>

**ALL CRASHES  
BY TIME OF DAY**



**FATAL CRASHES  
BY TIME OF DAY**

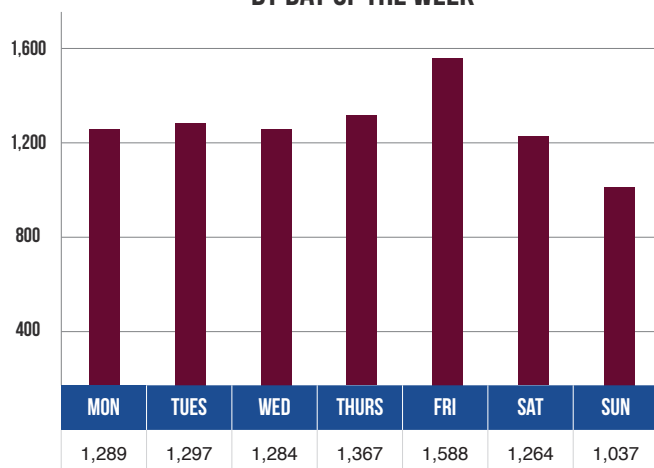


In the Upper Peninsula, crash frequencies peak in the early evening, then drop off until 6:00 AM (the morning rush hour). Fatal crash frequencies generally rise with the frequency of all crashes.

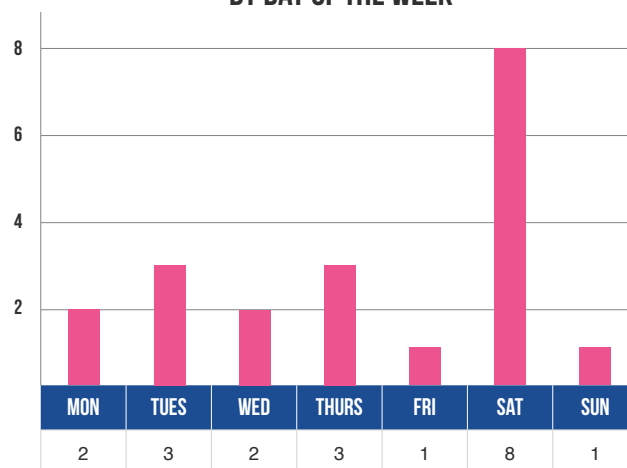
## UPPER PENINSULA DAY OF WEEK

DAY OF WEEK	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Monday	1,289	14.1	2	10.0	19	33	110	1,125
Tuesday	1,297	14.2	3	15.0	21	40	123	1,110
Wednesday	1,284	14.1	2	10.0	19	43	124	1,096
Thursday	1,367	15.0	3	15.0	20	59	127	1,158
Friday	1,588	17.4	1	5.0	33	55	149	1,350
Saturday	1,264	13.9	8	40.0	34	55	105	1,062
Sunday	1,037	11.4	1	5.0	19	41	92	884
TOTAL	9,126	100.0	20	100.0	165	326	830	7,785

**ALL CRASHES  
BY DAY OF THE WEEK**



**FATAL CRASHES  
BY DAY OF THE WEEK**

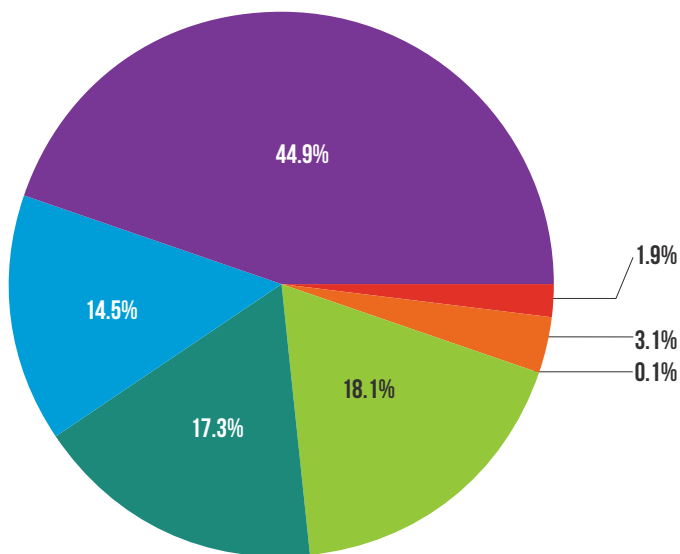


Crash frequencies are higher Monday through Friday than on the weekend. Saturday (8) has the highest number of fatal crashes.

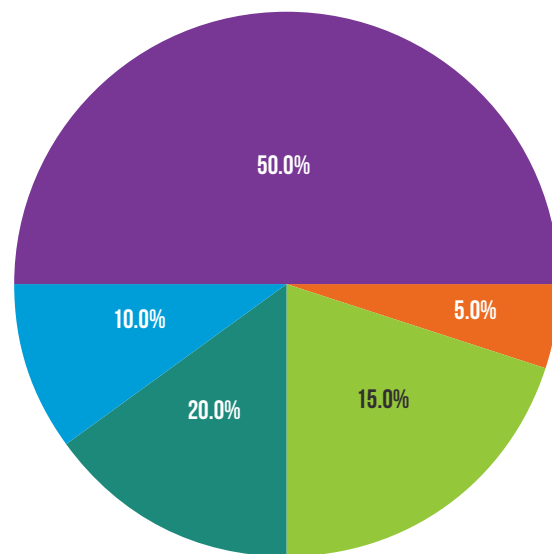
## UPPER PENINSULA ROAD CONDITION

ROAD SURFACE CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Dry	4,098	44.9	10	50.0	96	185	369	3,438
Wet	1,320	14.5	2	10.0	16	36	130	1,136
Icy	1,581	17.3	3	15.0	22	41	162	1,353
Snowy	1,654	18.1	4	20.0	24	54	126	1,446
Muddy	7	0.1	0	0.0	1	0	0	6
Slushy	287	3.1	1	5.0	4	4	34	244
Debris	4	0.0	0	0.0	0	1	0	3
Other/Unknown	175	1.9	0	0.0	2	5	9	159
TOTAL	9,126	100.0	20	100.0	165	326	830	7,785

■ DRY
 ■ WET
 ■ ICY
 ■ SNOWY
 ■ MUDDY
 ■ SLUSHY
 ■ DEBRIS
 ■ OTHER/UNKNOWN



ALL CRASHES



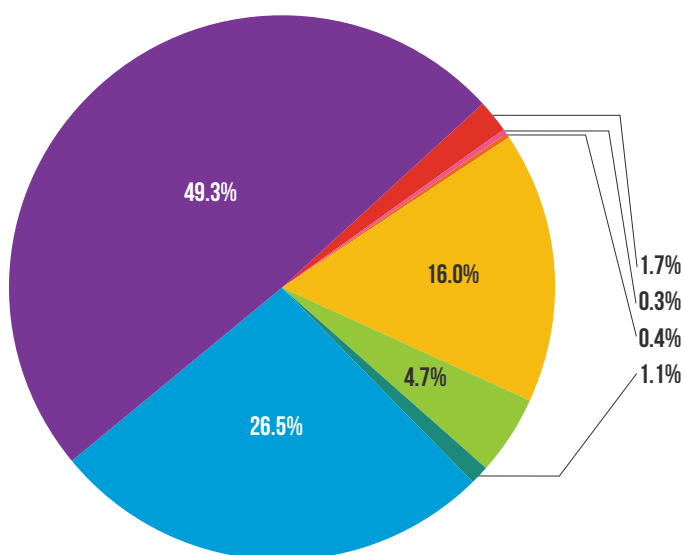
FATAL CRASHES

In the Upper Peninsula, the majority of all crashes (44.9%), fatal crashes (50.0%), injury crashes (49.2%), and property damage only crashes (44.2%) occur on dry roads.

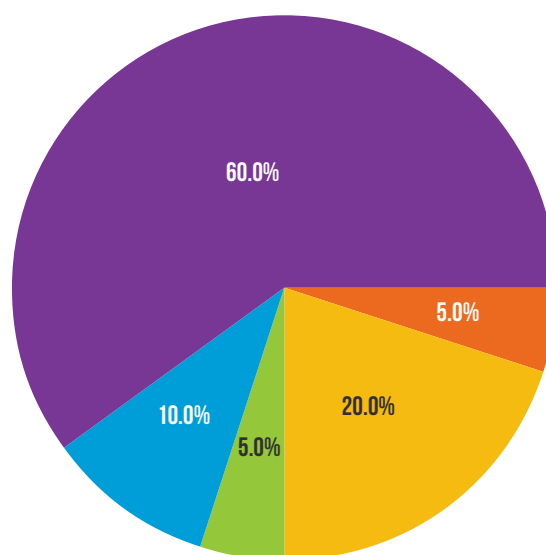
## UPPER PENINSULA WEATHER CONDITION

WEATHER CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Clear	4,501	49.3	12	60.0	89	180	416	3,804
Cloudy	2,420	26.5	2	10.0	42	76	207	2,093
Fog/Smoke	97	1.1	0	0.0	3	3	6	85
Rain	432	4.7	1	5.0	8	15	50	358
Snow/Blowing Snow	1,459	16.0	4	20.0	21	50	141	1,243
Severe Wind	37	0.4	1	5.0	1	2	2	31
Sleet/Hail	25	0.3	0	0.0	0	0	2	23
Other/Unknown	155	1.7	0	0.0	1	0	6	148
TOTAL	9,126	100.0	20	100.0	165	326	830	7,785

■ CLEAR   
 ■ CLOUDY   
 ■ FOG/SMOKE   
 ■ RAIN   
 ■ SNOW/ BLOWING SNOW   
 ■ SEVERE WIND   
 ■ SLEET/HAIL   
 ■ OTHER/UNKNOWN



ALL CRASHES



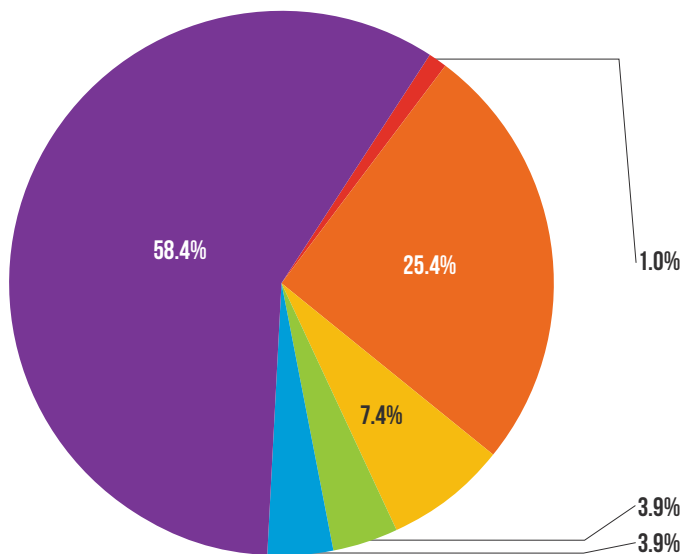
FATAL CRASHES

In the Upper Peninsula, the majority of all crashes (49.3%), fatal crashes (60.0%), injury crashes (51.9%), and property damage only crashes (48.9%) occur during clear weather conditions.

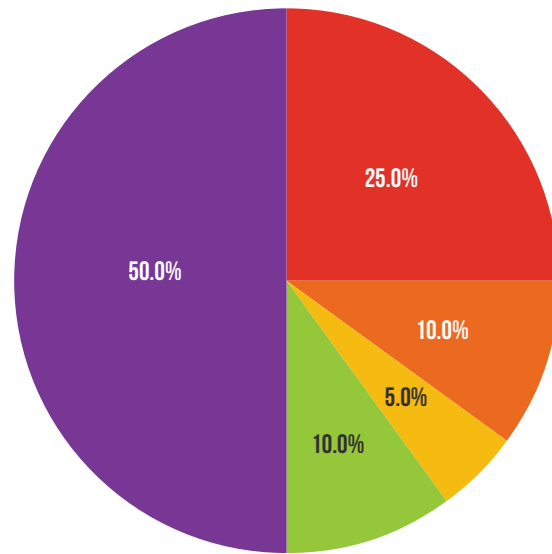
## UPPER PENINSULA LIGHT CONDITION

LIGHT CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Daylight	5,329	58.4	10	50.0	111	229	605	4,374
Dawn	355	3.9	2	10.0	1	8	13	331
Dusk	358	3.9	1	5.0	4	9	22	322
Dark – Lighted	679	7.4	2	10.0	9	25	74	569
Dark – Unlighted	2,314	25.4	5	25.0	38	55	115	2,101
Other/Unknown	91	1.0	0	0.0	2	0	1	88
TOTAL	9,126	100.0	20	100.0	165	326	830	7,785

■ DAYLIGHT
 ■ DAWN
 ■ DUSK
 ■ DARK-LIGHTED
 ■ DARK-UNLIGHTED
 ■ OTHER/UNKNOWN



ALL CRASHES



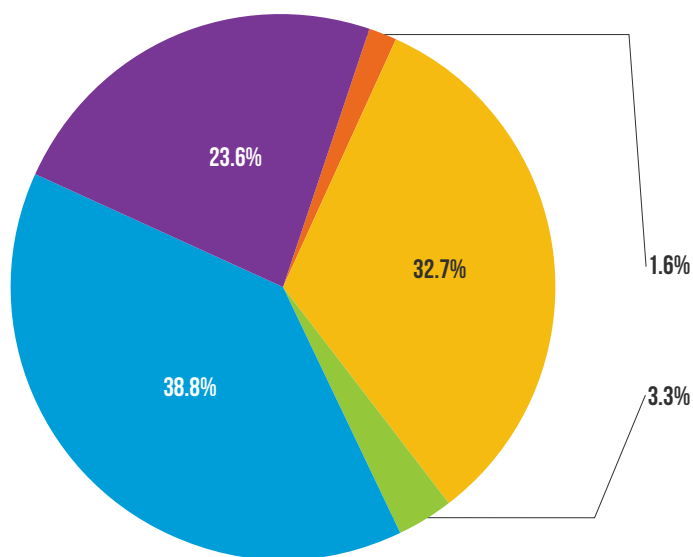
FATAL CRASHES

In the Upper Peninsula, the majority of all crashes (58.4%), fatal crashes (50.0%), injury crashes (71.5%), and property damage only crashes (56.2%) occur during daylight hours.

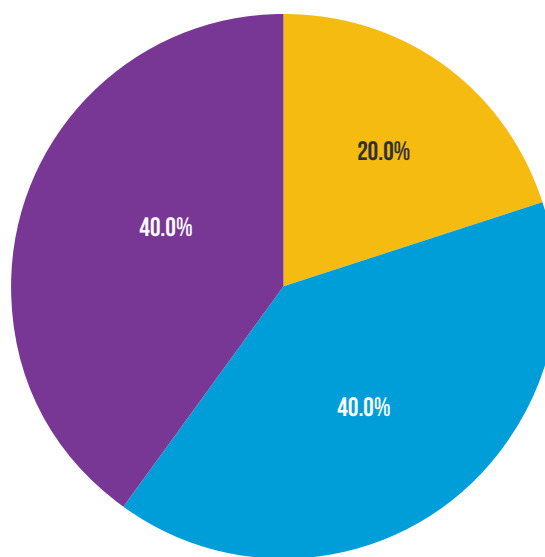
## UPPER PENINSULA INTERSECTION CRASHES BY TRAFFIC CONTROL TYPE

TRAFFIC CONTROL TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Signal	529	23.6	2	40.0	4	24	105	394
Stop Sign	870	38.8	2	40.0	9	40	136	683
Yield Sign	74	3.3	0	0.0	0	6	13	55
None of These	734	32.7	1	20.0	16	35	96	586
Unknown	37	1.6	0	0.0	0	1	5	31
TOTAL	2,244	100.0	5	100.0	29	106	355	1,749

■ SIGNAL
 ■ STOP SIGN
 ■ YIELD SIGN
 ■ NONE OF THESE
 ■ UNKNOWN



ALL CRASHES



FATAL CRASHES

Compared to other intersection crashes, Upper Peninsula intersections with stop signs have the highest percentage of all crashes (38.8%), injury crashes (37.8%), and property damage only crashes (39.1%). Both signals and stop signs share the highest number of fatal crashes (40.0% each).



## UPPER PENINSULA CONSTRUCTION ZONE CRASHES

CONSTRUCTION ZONE TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
CONSTRUCTION/MAINTENANCE	Indicates roadway construction, maintenance, or repair. The building, maintenance, or repair of the road itself and road-way-related features (e.g., overhead signs, signals).							
Activity—On Road								
Lane Closed	9	26.5	0	0.0	1	2	1	5
Lane Open	13	38.2	0	0.0	1	2	1	9
Unknown Lane Closure	0	0.0	0	0.0	0	0	0	0
Activity—Off Road								
Lane Closed	0	0.0	0	0.0	0	0	0	0
Lane Open	3	8.8	0	0.0	0	0	0	3
Unknown Lane Closure	0	0.0	0	0.0	0	0	0	0
Activity—None								
Lane Closed	1	2.9	0	0.0	0	0	0	1
Lane Open	8	23.5	0	0.0	0	1	2	5
Unknown Lane Closure	0	0.0	0	0.0	0	0	0	0
Activity—Unknown								
Lane Closed	0	0.0	0	0.0	0	0	0	0
Lane Open	0	0.0	0	0.0	0	0	0	0
Unknown Lane Closure	0	0.0	0	0.0	0	0	0	0
SUBTOTAL	34	100.0	0	0.0	2	5	4	23
UTILITY	Indicates work on facilities other than the roadway such as telephone, electrical, cable television, water, or sewer.							
Activity—On Road								
Lane Closed	0	0.0	0	0.0	0	0	0	0
Lane Open	1	100.0	0	0.0	0	0	0	1
Unknown Lane Closure	0	0.0	0	0.0	0	0	0	0
Activity—Off Road								
Lane Closed	0	0.0	0	0.0	0	0	0	0
Lane Open	0	0.0	0	0.0	0	0	0	0
Unknown Lane Closure	0	0.0	0	0.0	0	0	0	0

## UPPER PENINSULA CONSTRUCTION ZONE CRASHES (CONTINUED)

CONSTRUCTION ZONE TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Activity—None								
Lane Closed	0	0.0	0	0.0	0	0	0	0
Lane Open	0	0.0	0	0.0	0	0	0	0
Unknown Lane Closure	0	0.0	0	0.0	0	0	0	0
Activity—Unknown								
Lane Closed	0	0.0	0	0.0	0	0	0	0
Lane Open	0	0.0	0	0.0	0	0	0	0
Unknown Lane Closure	0	0.0	0	0.0	0	0	0	0
SUBTOTAL	1	100.0	0	0.0	0	0	0	1
UNKNOWN	Unknown type, unknown lane closures,activity none							
SUBTOTAL	108		0		1	4	11	92
TOTAL	143		0		3	9	15	116

# VEHICLE/DRIVER

*(characteristics specific to individual traffic units)*

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## UPPER PENINSULA VEHICLE TYPE AND CRASH INVOLVEMENT

VEHICLE TYPE	MOTOR VEHICLES		FATAL CRASH		INJURY CRASH	PROPERTY DAMAGE ONLY	FATALITY IN VEHICLE		INJURY	NO INJURY
	Number of Vehicles	% of Total	Number	% of Total			Number	% of Total		
Passenger Car and Station Wagon	8,796	66.2	12	38.7	1,375	7,409	9	47.4	926	7,861
Van and Motorhome	574	4.3	1	3.2	82	491	0	0.0	54	520
Pickup	2,806	21.1	7	22.6	424	2,375	4	21.1	225	2,577
Small Truck (under 10,000 lbs.)	242	1.8	0	0.0	27	215	0	0.0	15	227
Motorcycle	128	1.0	2	6.5	94	32	2	10.5	91	35
Moped	14	0.1	1	3.2	10	3	1	5.3	10	3
Go Cart	2	0.0	0	0.0	2	0	0	0.0	2	0
Snowmobile	63	0.5	1	3.2	41	21	1	5.3	37	25
Off-Road Vehicle/ATV	48	0.4	1	3.2	37	10	1	5.3	32	15
Other	53	0.4	0	0.0	10	43	0	0.0	3	50
Unknown	194	1.5	0	0.0	7	187	0	0.0	0	194
CDL Truck/Bus (breakdown below)	367	2.8	6	19.4	62	299	1	5.3	18	348
Total Number of Vehicles	13,287	100.0	31	100.0	2,171	11,085	19	100.0	1,413	11,855

Note: School bus cannot be broken out of CDL Truck/Bus

CDL TRUCK/BUS SUB-CATEGORY TYPE	MOTOR VEHICLES		FATAL CRASH		INJURY CRASH	PROPERTY DAMAGE ONLY	FATALITY IN VEHICLE		INJURY	NO INJURY
	Number of Vehicles	% of Total	Number	% of Total			Number	% of Total		
Commercial Vehicle: Group A*	226	61.6	2	33.3	34	190	0	0.0	9	217
Commercial Vehicle: Group B**	92	25.1	2	33.3	20	70	1	100.0	6	85
Commercial Vehicle: Group C***	17	4.6	0	0.0	1	16	0	0.0	1	16
Other Truck	27	7.4	2	33.3	6	19	0	0.0	2	25
Unknown Truck	5	1.4	0	0.0	1	4	0	0.0	0	5
Total Number of Vehicles	367	100.0	6	100.0	62	299	1	100.0	18	348

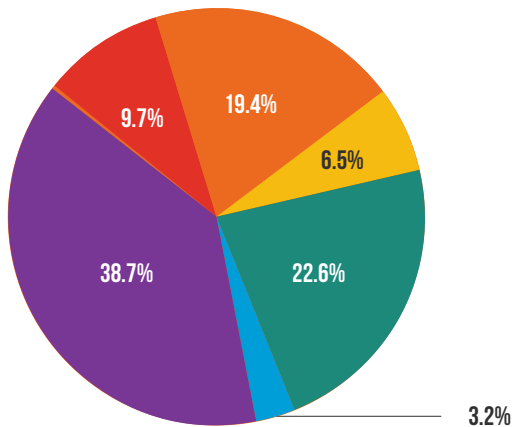
\* Group "A" is any vehicle that is towing a vehicle or trailer that has a gross vehicle weight rating (GVWR) over 10,000 lbs.

\*\* 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.

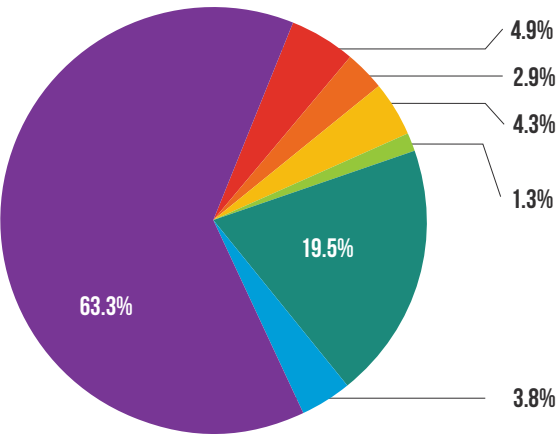
# UPPER PENINSULA VEHICLE TYPES IN CRASHES BY CRASH SEVERITY

PASSNGER CAR, STATION WAGON    VAN, MINIVAN, MOTORHOME    PICKUP    TRUCK UNDER 10,000 LBS.    MOTORCYCLE    CDL TRUCK/BUS    OTHER

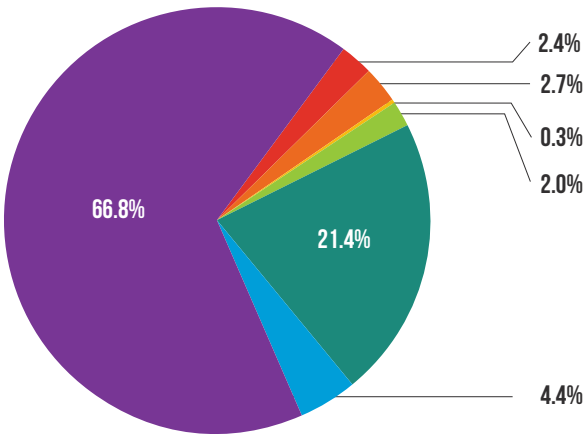


FATAL

The top chart shows that 64.5 percent of vehicles involved in fatal crashes in the Upper Peninsula are passenger vehicles (passenger cars, station wagons, vans, minivans, motorhomes, pickups, or trucks under 10000 lbs.). Motorcycles have a fatal crash involvement of 6.5 percent.



INJURY



PROPERTY DAMAGE ONLY

As with fatal crashes, injury crashes (63.3%) and property damage only (PDO) crashes (66.8%) are represented primarily by cars and pickups.

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

## UPPER PENINSULA ACTION PRIOR TO CRASH

DRIVER ACTION	VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number	% of Total		A	B	C	
Going straight ahead	8,311	62.5	25	168	316	870	6,932
Turning left	735	5.5	3	20	54	122	536
Turning right	391	2.9	0	4	15	36	336
Stopped on roadway	694	5.2	0	5	21	112	556
In prior crash	5	0.0	0	0	1	0	4
Changing lanes	150	1.1	0	0	2	16	132
Backing	491	3.7	0	1	3	18	469
Slowing/stopping on roadway	714	5.4	0	11	18	107	578
Slowing/stopping other	24	0.2	0	2	1	4	17
Starting up on roadway	247	1.9	0	3	9	33	202
Starting up other	9	0.1	0	0	0	2	7
Entering parking	36	0.3	0	0	2	0	34
Leaving parking	56	0.4	0	0	1	3	52
Entering roadway	166	1.2	2	2	9	26	127
Leaving roadway	22	0.2	0	1	3	4	14
Making U-turn	17	0.1	0	1	1	1	14
Overtaking or passing	122	0.9	0	3	2	16	101
Avoiding object	19	0.1	0	0	3	1	15
Avoiding animal	87	0.7	0	2	6	6	73
Avoiding pedestrian	2	0.0	0	1	0	0	1
Avoiding vehicle (front/back)	110	0.8	1	3	12	14	80
Avoiding vehicle (angle)	46	0.3	0	3	2	5	36
Driverless moving	12	0.1	0	2	0	2	8
Parked	695	5.2	0	2	11	40	642
Crossing at intersection	1	0.0	0	0	0	0	1
Crossing not at intersection	0	0.0	0	0	0	0	0
Getting on/off vehicle	0	0.0	0	0	0	0	0
In roadway with traffic	0	0.0	0	0	0	0	0
In roadway against traffic	0	0.0	0	0	0	0	0
Standing or lying in roadway	0	0.0	0	0	0	0	0
Pushing/working on vehicle	1	0.0	0	0	0	0	1
Other working in roadway	0	0.0	0	0	0	0	0
Playing in roadway	0	0.0	0	0	0	0	0
In roadway other reason	0	0.0	0	0	0	0	0
Not in roadway	1	0.0	0	0	1	0	0
Other	8	0.1	0	0	0	0	8
Unknown	115	0.9	0	0	2	4	109
<b>TOTAL</b>	<b>13,287</b>	<b>100.0</b>	<b>31</b>	<b>234</b>	<b>495</b>	<b>1,442</b>	<b>11,085</b>

## UPPER PENINSULA ACTION PRIOR TO CRASH (CONTINUED)

MOTORCYCLIST ACTION	MOTORCYCLES		MOTORCYCLISTS*		FATALITY	INJURY			NO INJURY
	Number of Motorcycles	% of Total	Number of Motorcyclists	% of Total		A	B	C	
Going straight ahead	82	64.1	94	64.4	3	27	27	19	18
Turning left	11	8.6	11	7.5	0	4	3	3	1
Turning right	5	3.9	6	4.1	0	1	1	1	3
Stopped on roadway	4	3.1	5	3.4	0	0	1	1	3
In prior crash	0	0.0	0	0.0	0	0	0	0	0
Changing lanes	1	0.8	1	0.7	0	0	0	0	1
Backing	1	0.8	1	0.7	0	0	0	0	0
Slowing/stopping on roadway	4	3.1	4	2.7	0	0	1	1	2
Slowing/stopping other	0	0.0	0	0.0	0	0	0	0	0
Starting up on roadway	1	0.8	1	0.7	0	0	0	1	0
Starting up other	0	0.0	0	0.0	0	0	0	0	0
Entering parking	1	0.8	2	1.4	0	0	1	1	0
Leaving parking	0	0.0	0	0.0	0	0	0	0	0
Entering roadway	0	0.0	0	0.0	0	0	0	0	0
Leaving roadway	1	0.8	1	0.7	0	1	0	0	0
Making U-turn	1	0.8	2	1.4	0	0	0	0	2
Overtaking or passing	1	0.8	1	0.7	0	1	0	0	0
Avoiding object	0	0.0	0	0.0	0	0	0	0	0
Avoiding animal	2	1.6	2	1.4	0	1	1	0	0
Avoiding pedestrian	0	0.0	0	0.0	0	0	0	0	0
Avoiding vehicle (front/back)	8	6.2	10	6.8	0	2	1	1	6
Avoiding vehicle (angle)	2	1.6	2	1.4	0	1	0	0	1
Driverless moving	0	0.0	0	0.0	0	0	0	0	0
Parked	3	2.3	3	2.1	0	0	0	0	0
Crossing at intersection	0	0.0	0	0.0	0	0	0	0	0
Crossing not at intersection	0	0.0	0	0.0	0	0	0	0	0
Getting on/off vehicle	0	0.0	0	0.0	0	0	0	0	0
In roadway with traffic	0	0.0	0	0.0	0	0	0	0	0
In roadway against traffic	0	0.0	0	0.0	0	0	0	0	0
Standing or lying in roadway	0	0.0	0	0.0	0	0	0	0	0
Pushing/working on vehicle	0	0.0	0	0.0	0	0	0	0	0
Other working in roadway	0	0.0	0	0.0	0	0	0	0	0
Playing in roadway	0	0.0	0	0.0	0	0	0	0	0
In roadway other reason	0	0.0	0	0.0	0	0	0	0	0
Not in roadway	0	0.0	0	0.0	0	0	0	0	0
Other	0	0.0	0	0.0	0	0	0	0	0
Unknown	0	0.0	0	0.0	0	0	0	0	0
<b>TOTAL</b>	<b>128</b>	<b>100.0</b>	<b>146</b>	<b>100.0</b>	<b>3</b>	<b>38</b>	<b>36</b>	<b>28</b>	<b>37</b>

\*Includes four motorcyclists (drivers and passengers) with unknown injury severity



## UPPER PENINSULA ACTION PRIOR TO CRASH (CONTINUED)

BICYCLIST ACTION	BICYCLISTS*		FATALITY	INJURY			NO INJURY
	Number of Bicyclists	% of Total		A	B	C	
Going straight ahead	20	60.6	0	3	6	7	3
Turning left	0	0.0	0	0	0	0	0
Turning right	0	0.0	0	0	0	0	0
Stopped on roadway	0	0.0	0	0	0	0	0
In prior crash	0	0.0	0	0	0	0	0
Changing lanes	1	3.0	0	0	0	1	0
Backing	0	0.0	0	0	0	0	0
Slowing/stopping on roadway	0	0.0	0	0	0	0	0
Slowing/stopping other	0	0.0	0	0	0	0	0
Starting up on roadway	0	0.0	0	0	0	0	0
Starting up other	0	0.0	0	0	0	0	0
Entering parking	0	0.0	0	0	0	0	0
Leaving parking	0	0.0	0	0	0	0	0
Entering roadway	1	3.0	0	0	0	1	0
Leaving roadway	0	0.0	0	0	0	0	0
Making U-turn	0	0.0	0	0	0	0	0
Overtaking or passing	0	0.0	0	0	0	0	0
Avoiding object	0	0.0	0	0	0	0	0
Avoiding animal	0	0.0	0	0	0	0	0
Avoiding pedestrian	0	0.0	0	0	0	0	0
Avoiding vehicle (front/back)	0	0.0	0	0	0	0	0
Avoiding vehicle (angle)	0	0.0	0	0	0	0	0
Driverless moving	0	0.0	0	0	0	0	0
Parked	0	0.0	0	0	0	0	0
Crossing at intersection	5	15.2	0	0	2	3	0
Crossing not at intersection	2	6.1	0	0	2	0	0
Getting on/off vehicle	0	0.0	0	0	0	0	0
In roadway with traffic	0	0.0	0	0	0	0	0
In roadway against traffic	1	3.0	0	0	0	1	0
Standing or lying in roadway	0	0.0	0	0	0	0	0
Pushing/working on vehicle	0	0.0	0	0	0	0	0
Other working in roadway	0	0.0	0	0	0	0	0
Playing in roadway	0	0.0	0	0	0	0	0
In roadway other reason	1	3.0	0	0	1	0	0
Not in roadway	0	0.0	0	0	0	0	0
Other	2	6.1	0	0	1	1	0
Unknown	0	0.0	0	0	0	0	0
<b>TOTAL</b>	<b>33</b>	<b>100.0</b>	<b>0</b>	<b>3</b>	<b>12</b>	<b>14</b>	<b>3</b>

\*Includes one bicyclist with unknown injury severity

## UPPER PENINSULA ACTION PRIOR TO CRASH (CONTINUED)

PEDESTRIAN ACTION	PEDESTRIANS*		FATALITY	INJURY			NO INJURY
	Number of Pedestrians	% of Total		A	B	C	
Going straight ahead	1	2.3	0	0	0	1	0
Turning left	0	0.0	0	0	0	0	0
Turning right	0	0.0	0	0	0	0	0
Stopped on roadway	0	0.0	0	0	0	0	0
In prior crash	0	0.0	0	0	0	0	0
Changing lanes	0	0.0	0	0	0	0	0
Backing	0	0.0	0	0	0	0	0
Slowing/stopping on roadway	0	0.0	0	0	0	0	0
Slowing/stopping other	0	0.0	0	0	0	0	0
Starting up on roadway	0	0.0	0	0	0	0	0
Starting up other	0	0.0	0	0	0	0	0
Entering parking	0	0.0	0	0	0	0	0
Leaving parking	0	0.0	0	0	0	0	0
Entering roadway	0	0.0	0	0	0	0	0
Leaving roadway	0	0.0	0	0	0	0	0
Making U-turn	0	0.0	0	0	0	0	0
Overtaking or passing	0	0.0	0	0	0	0	0
Avoiding object	0	0.0	0	0	0	0	0
Avoiding animal	0	0.0	0	0	0	0	0
Avoiding pedestrian	0	0.0	0	0	0	0	0
Avoiding vehicle (front/back)	0	0.0	0	0	0	0	0
Avoiding vehicle (angle)	0	0.0	0	0	0	0	0
Driverless moving	0	0.0	0	0	0	0	0
Parked	0	0.0	0	0	0	0	0
Crossing at intersection	8	18.6	0	0	3	4	1
Crossing not at intersection	8	18.6	1	1	3	3	0
Getting on/off vehicle	1	2.3	0	0	1	0	0
In roadway with traffic	3	7.0	0	2	1	0	0
In roadway against traffic	0	0.0	0	0	0	0	0
Standing or lying in roadway	8	18.6	0	1	4	2	1
Pushing/working on vehicle	2	4.7	0	0	0	2	0
Other working in roadway	2	4.7	0	1	0	1	0
Playing in roadway	0	0.0	0	0	0	0	0
In roadway other reason	4	9.3	0	1	2	1	0
Not in roadway	3	7.0	0	2	1	0	0
Other	3	7.0	0	1	1	1	0
Unknown	0	0.0	0	0	0	0	0
<b>TOTAL</b>	<b>43</b>	<b>100.0</b>	<b>1</b>	<b>9</b>	<b>16</b>	<b>15</b>	<b>2</b>

\* Includes no pedestrian with unknown injury severity

## UPPER PENINSULA MOST HARMFUL EVENT

NONCOLLISION	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Loss of control	54	0.4	0	0	2	7	45
Cross center/median	8	0.1	0	1	0	0	7
Ran off road left	44	0.3	0	2	3	4	35
Ran off road right	59	0.4	0	0	3	8	48
Re-enter road	2	0.0	0	0	0	0	2
Overturn	363	2.7	2	29	43	75	214
Separation of units	6	0.0	0	1	0	0	5
Fire/explosion	17	0.1	0	0	1	0	16
Immersion	3	0.0	0	0	0	0	3
Jackknife	9	0.1	0	0	1	0	8
Downhill runaway	0	0.0	0	0	0	0	0
Cargo loss/shift	19	0.1	0	0	0	1	18
Individual fell off	31	0.2	1	15	8	6	1
Other noncollision	53	0.4	0	1	1	7	44
<b>SUBTOTAL</b>	<b>668</b>	<b>5.0</b>	<b>3</b>	<b>49</b>	<b>62</b>	<b>108</b>	<b>446</b>

COLLISION WITH A NONFIXED OBJECT	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Pedestrian	36	0.3	1	9	13	12	1
Bicycle / Pedalcycle	29	0.2	0	2	9	14	4
Motor vehicle in transport	7,302	55.0	20	122	304	1,088	5,768
Parked motor vehicle	639	4.8	0	2	5	34	598
Railway train	8	0.1	1	1	2	0	4
Animal	3,005	22.6	0	8	12	42	2,943
Other nonfixed objects	163	1.2	0	1	6	7	149
<b>SUBTOTAL</b>	<b>11,182</b>	<b>84.2</b>	<b>22</b>	<b>145</b>	<b>351</b>	<b>1,197</b>	<b>9,467</b>

## UPPER PENINSULA MOST HARMFUL EVENT (CONTINUED)

HAD A COLLISION WITH FIXED OBJECT	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Bridge/pier/abutment	5	0.0	0	0	0	1	4
Bridge parapet end	2	0.0	0	0	0	0	2
Bridge rail	8	0.1	0	0	0	0	8
Guardrail face	105	0.8	0	3	6	8	88
Guardrail end	13	0.1	0	0	1	1	11
Median barrier	15	0.1	0	0	1	1	13
Highway traffic sign post	83	0.6	0	0	2	1	80
Highway signal post	7	0.1	0	0	0	0	7
Luminaire/light support	10	0.1	0	0	0	0	10
Utility pole	104	0.8	0	3	4	15	82
Other pole	24	0.2	0	0	1	0	23
Culvert	12	0.1	0	1	1	5	5
Curb	23	0.2	0	0	1	1	21
Ditch	249	1.9	0	9	7	20	213
Embankment	161	1.2	2	4	6	12	137
Fence	14	0.1	0	0	0	0	14
Mailbox	80	0.6	0	0	1	4	75
Tree	307	2.3	2	18	31	51	205
Rail crossing signal	3	0.0	0	0	0	0	3
Building	32	0.2	1	0	4	3	24
Traffic island	1	0.0	0	0	0	0	1
Fire hydrant	12	0.1	0	0	0	1	11
Impact attenuator	0	0.0	0	0	0	0	0
Other fixed object	129	1.0	1	2	12	10	104
<b>SUBTOTAL</b>	<b>1,399</b>	<b>10.5</b>	<b>6</b>	<b>40</b>	<b>78</b>	<b>134</b>	<b>1,141</b>

	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Unknown Event	38	0.3	0	0	4	3	31
<b>MOST HARMFUL EVENT TOTAL</b>	<b>13,287</b>	<b>100.0</b>	<b>31</b>	<b>234</b>	<b>495</b>	<b>1,442</b>	<b>11,085</b>

## UPPER PENINSULA VEHICLE DEFECTS IN CRASH INVOLVEMENT

VEHICLE DEFECTS	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Brakes	20	0.2	0	1	1	7	11
Lights/reflectors	4	0.0	0	0	0	2	2
Steering	4	0.0	0	2	0	0	2
Tires/wheels	17	0.1	0	0	0	1	16
Windows	0	0.0	0	0	0	0	0
Other	10	0.1	0	2	0	0	8
None or Unknown	13,232	99.6	31	229	494	1,432	11,046
<b>TOTAL</b>	<b>13,287</b>	<b>100.0</b>	<b>31</b>	<b>234</b>	<b>495</b>	<b>1,442</b>	<b>11,085</b>

## UPPER PENINSULA DRIVER HAZARDOUS ACTION

HAZARDOUS ACTION	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
None	7,622	57.4	12	90	213	672	6,635
Speed too fast	1,393	10.5	6	50	63	165	1,109
Speed too slow	14	0.1	0	1	0	0	13
Failed to yield	1,104	8.3	5	24	72	195	808
Disregard traffic control	166	1.2	1	2	9	45	109
Drove wrong way	4	0.0	0	0	0	0	4
Drove left of center	59	0.4	2	1	2	7	47
Improper passing	73	0.5	0	2	1	10	60
Improper lane use	176	1.3	0	0	3	13	160
Improper turn	98	0.7	0	2	2	10	84
Improper/no signal	35	0.3	0	0	3	4	28
Improper backing	358	2.7	0	0	0	8	350
Unable to stop in assured clear distance	1,004	7.6	0	13	26	161	804
Reckless driving	57	0.4	0	5	11	6	35
Careless/negligent driving	450	3.4	1	27	49	73	300
Other	392	3.0	1	9	30	49	303
Unknown	282	2.1	3	8	11	24	236
<b>TOTAL</b>	<b>13,287</b>	<b>100.0</b>	<b>31</b>	<b>234</b>	<b>495</b>	<b>1,442</b>	<b>11,085</b>

## UPPER PENINSULA BICYCLE CRASHES

### 2014 BICYCLIST FATALITIES AND INJURIES



In 2014 in the Upper Peninsula, there were 33 bicyclists involved in motor vehicles crashes, with 0 bicyclists killed and 29 injured.

### BICYCLE HELMET USE AND INJURY SEVERITY

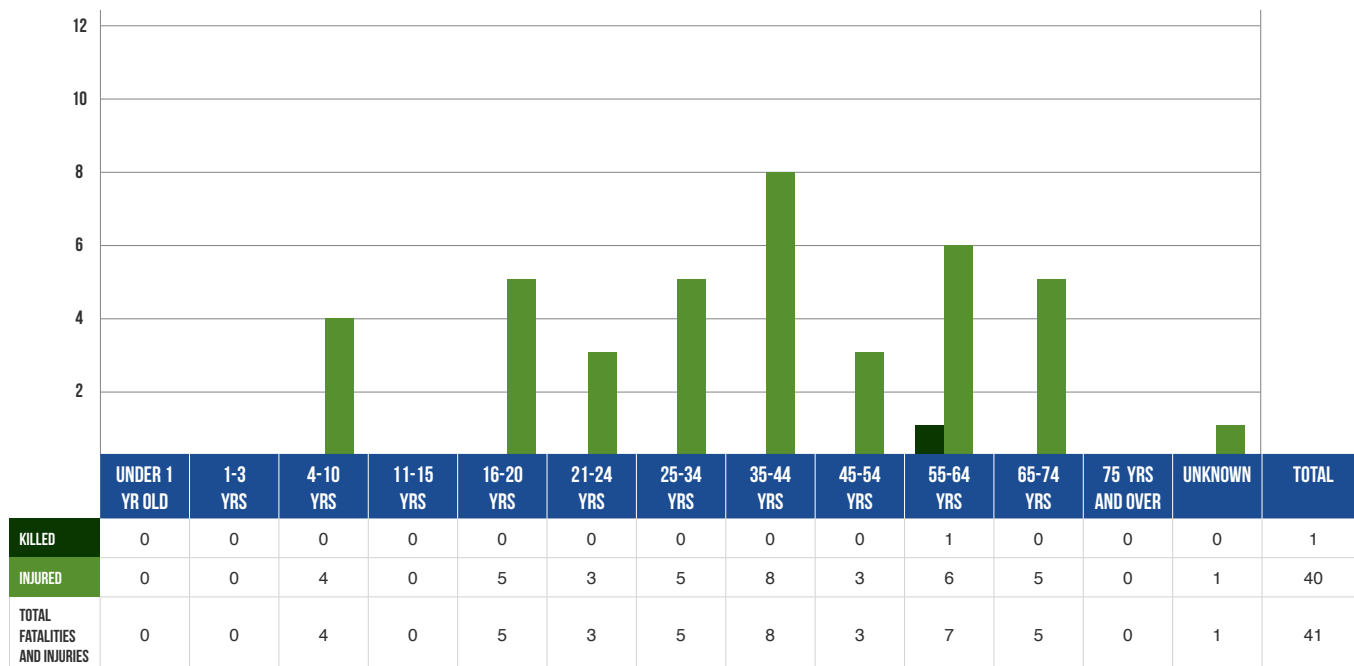
HELMET USE	FATALITY	INJURY			NO INJURY
		A	B	C	
Worn	0	0	1	1	0
Not Worn	0	3	7	7	1
Unknown	0	0	4	6	2
Total	0	3	12	14	3

*Note: One bicyclist had an unknown degree of injury and was not represented in this table.*

The National Center for Statistics and Analysis of the National Highway Traffic Safety Administration cites a study by the Centers for Disease Control [12]: "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."

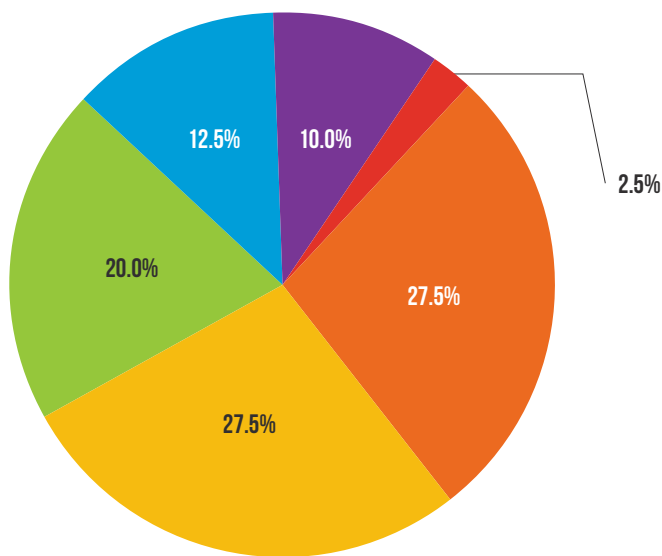
## UPPER PENINSULA PEDESTRIAN CRASHES

### 2014 PEDESTRIAN FATALITIES AND INJURIES



In 2014 in the Upper Peninsula, there were 43 pedestrians involved in motor vehicles crashes, with 1 pedestrian killed and 40 injured.

■ 0–10 YEARS    
 ■ 11–20 YEARS    
 ■ 21–34 YEARS    
 ■ 35–54 YEARS    
 ■ 55 AND OVER    
 ■ UNKNOWN



PEDESTRIANS INJURED

## UPPER PENINSULA SNOWMOBILE CRASHES ON PUBLIC ROADWAYS - MOST HARMFUL EVENT

NONCOLLISION	SNOWMOBILES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Snowmobiles	% of Total		A	B	C	
Loss of control	2	3.2	0	0	0	1	1
Cross center/median	0	0.0	0	0	0	0	0
Ran off road left	0	0.0	0	0	0	0	0
Ran off road right	1	1.6	0	0	1	0	0
Re-enter road	0	0.0	0	0	0	0	0
Overturn	1	1.6	0	0	0	1	0
Separation of units	0	0.0	0	0	0	0	0
Fire/explosion	2	3.2	0	0	0	0	2
Immersion	0	0.0	0	0	0	0	0
Jackknife	0	0.0	0	0	0	0	0
Downhill runaway	0	0.0	0	0	0	0	0
Cargo loss/shift	0	0.0	0	0	0	0	0
Individual fell off	3	4.8	0	2	0	1	0
Other noncollision	0	0.0	0	0	0	0	0
<b>SUBTOTAL</b>	<b>9</b>	<b>14.3</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>3</b>

COLLISION WITH A NONFIXED OBJECT	SNOWMOBILES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Snowmobiles	% of Total		A	B	C	
Pedestrian	0	0.0	0	0	0	0	0
Bicycle / pedalcycle	0	0.0	0	0	0	0	0
Motor vehicle in transport	30	47.6	0	4	4	10	12
Parked motor vehicle	2	3.2	0	0	0	1	1
Railway train	0	0.0	0	0	0	0	0
Animal	0	0.0	0	0	0	0	0
Other nonfixed objects	2	3.2	0	1	0	1	0
<b>SUBTOTAL</b>	<b>34</b>	<b>54.0</b>	<b>0</b>	<b>5</b>	<b>4</b>	<b>12</b>	<b>13</b>



## UPPER PENINSULA SNOWMOBILE CRASHES ON PUBLIC ROADWAYS - MOST HARMFUL EVENT (CONTINUED)

COLLISION WITH A FIXED OBJECT	SNOWMOBILES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Snowmobiles	% of Total		A	B	C	
Bridge/pier/abutment	1	1.6	0	0	0	1	0
Bridge parapet end	0	0.0	0	0	0	0	0
Bridge rail	0	0.0	0	0	0	0	0
Guardrail face	0	0.0	0	0	0	0	0
Guardrail end	0	0.0	0	0	0	0	0
Median barrier	0	0.0	0	0	0	0	0
Highway traffic sign post	0	0.0	0	0	0	0	0
Highway signal post	0	0.0	0	0	0	0	0
Luminaire/light support	0	0.0	0	0	0	0	0
Utility pole	0	0.0	0	0	0	0	0
Other pole	0	0.0	0	0	0	0	0
Culvert	0	0.0	0	0	0	0	0
Curb	0	0.0	0	0	0	0	0
Ditch	1	1.6	0	0	1	0	0
Embankment	3	4.8	0	2	1	0	0
Fence	0	0.0	0	0	0	0	0
Mailbox	0	0.0	0	0	0	0	0
Tree	12	19.0	1	3	2	2	4
Rail crossing signal	0	0.0	0	0	0	0	0
Building	0	0.0	0	0	0	0	0
Traffic island	0	0.0	0	0	0	0	0
Fire hydrant	0	0.0	0	0	0	0	0
Impact attenuator	0	0.0	0	0	0	0	0
Other fixed object	3	4.8	0	1	0	1	1
<b>SUBTOTAL</b>	<b>20</b>	<b>31.7</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>5</b>

	SNOWMOBILES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Snowmobiles	% of Total		A	B	C	
Unknown Event	0	0.0	0	0	0	0	0
<b>MOST HARMFUL EVENT TOTAL</b>	<b>63</b>	<b>100.0</b>	<b>1</b>	<b>13</b>	<b>9</b>	<b>19</b>	<b>21</b>

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

A total of 63 snowmobiles were reported in crashes on Upper Peninsula public roadways during 2014, resulting in one fatal crash. An additional 41 snowmobiles were involved in injury crashes.

## UPPER PENINSULA ORV/ATV CRASHES ON PUBLIC ROADWAYS - MOST HARMFUL EVENT

NONCOLLISION	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ATVs	% of Total		A	B	C	
Loss of control	1	2.1	0	0	0	1	0
Cross center/median	0	0.0	0	0	0	0	0
Ran off road left	1	2.1	0	1	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	7	14.6	0	2	2	2	1
Separation of units	0	0.0	0	0	0	0	0
Fire/explosion	0	0.0	0	0	0	0	0
Immersion	0	0.0	0	0	0	0	0
Jackknife	0	0.0	0	0	0	0	0
Downhill runaway	0	0.0	0	0	0	0	0
Cargo loss/shift	0	0.0	0	0	0	0	0
Individual fell off	8	16.7	0	3	3	2	0
Other noncollision	1	2.1	0	0	0	1	0
<b>SUBTOTAL</b>	<b>18</b>	<b>37.5</b>	<b>0</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>1</b>

COLLISION WITH A NONFIXED OBJECT	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ATVs	% of Total		A	B	C	
Pedestrian	0	0.0	0	0	0	0	0
Bicycle / pedalcycle	0	0.0	0	0	0	0	0
Motor vehicle in transport	18	37.5	1	5	2	3	7
Parked motor vehicle	0	0.0	0	0	0	0	0
Railway train	1	2.1	0	0	1	0	0
Animal	2	4.2	0	1	0	0	1
Other nonfixed objects	1	2.1	0	0	1	0	0
<b>SUBTOTAL</b>	<b>22</b>	<b>45.8</b>	<b>1</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>8</b>

## UPPER PENINSULA ORV/ATV CRASHES ON PUBLIC ROADWAYS - MOST HARMFUL EVENT (CONTINUED)

COLLISION WITH A FIXED OBJECT	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ATVs	% of Total		A	B	C	
Bridge/pier/abutment	0	0.0	0	0	0	0	0
Bridge parapet end	0	0.0	0	0	0	0	0
Bridge rail	0	0.0	0	0	0	0	0
Guardrail face	0	0.0	0	0	0	0	0
Guardrail end	0	0.0	0	0	0	0	0
Median barrier	0	0.0	0	0	0	0	0
Highway traffic sign post	0	0.0	0	0	0	0	0
Highway signal post	0	0.0	0	0	0	0	0
Luminaire/light support	0	0.0	0	0	0	0	0
Utility pole	0	0.0	0	0	0	0	0
Other pole	0	0.0	0	0	0	0	0
Culvert	0	0.0	0	0	0	0	0
Curb	0	0.0	0	0	0	0	0
Ditch	0	0.0	0	0	0	0	0
Embankment	0	0.0	0	0	0	0	0
Fence	0	0.0	0	0	0	0	0
Mailbox	0	0.0	0	0	0	0	0
Tree	3	6.2	0	1	1	0	1
Rail crossing signal	0	0.0	0	0	0	0	0
Building	0	0.0	0	0	0	0	0
Traffic island	0	0.0	0	0	0	0	0
Fire hydrant	0	0.0	0	0	0	0	0
Impact attenuator	0	0.0	0	0	0	0	0
Other fixed object	4	8.3	0	0	3	1	0
<b>SUBTOTAL</b>	<b>7</b>	<b>14.6</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>1</b>

	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ATVs	% of Total		A	B	C	
Unknown Event	1	2.1	0	0	1	0	0
<b>MOST HARMFUL EVENT TOTAL</b>	<b>48</b>	<b>100.0</b>	<b>1</b>	<b>13</b>	<b>14</b>	<b>10</b>	<b>10</b>

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

A total of 48 off-road/all-terrain vehicles were reported in crashes on Upper Peninsula public roadways during 2014, resulting in one fatal crash. An additional 37 ORV/ATVs were involved in injury crashes.

## UPPER PENINSULA SNOWMOBILE CRASHES ON PUBLIC ROADWAYS

DRIVER HAZARDOUS ACTION	SNOWMOBILES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Snowmobiles	% of Total		A	B	C	
None	18	28.6	0	2	5	3	8
Speed too fast	15	23.8	1	7	2	5	0
Speed too slow	0	0.0	0	0	0	0	0
Failed to yield	13	20.6	0	1	1	5	6
Disregard traffic control	3	4.8	0	0	0	2	1
Drove wrong way	0	0.0	0	0	0	0	0
Drove left of center	0	0.0	0	0	0	0	0
Improper passing	0	0.0	0	0	0	0	0
Improper lane use	1	1.6	0	0	0	1	0
Improper turn	0	0.0	0	0	0	0	0
Improper/no signal	0	0.0	0	0	0	0	0
Improper backing	0	0.0	0	0	0	0	0
Unable to stop in assured clear distance	3	4.8	0	1	0	0	2
Reckless driving	0	0.0	0	0	0	0	0
Careless/negligent driving	3	4.8	0	1	0	0	2
Other	4	6.3	0	0	1	2	1
Unknown	3	4.8	0	1	0	1	1
<b>TOTAL</b>	<b>63</b>	<b>100.0</b>	<b>1</b>	<b>13</b>	<b>9</b>	<b>19</b>	<b>21</b>

## UPPER PENINSULA ORV/ATV CRASHES ON PUBLIC ROADWAYS

DRIVER HAZARDOUS ACTION	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ATVs	% of Total		A	B	C	
None	12	25.0	0	6	3	1	2
Speed too fast	15	31.2	0	4	3	5	3
Speed too slow	0	0.0	0	0	0	0	0
Failed to yield	8	16.7	1	1	1	2	3
Disregard traffic control	0	0.0	0	0	0	0	0
Drove wrong way	0	0.0	0	0	0	0	0
Drove left of center	0	0.0	0	0	0	0	0
Improper passing	0	0.0	0	0	0	0	0
Improper lane use	0	0.0	0	0	0	0	0
Improper turn	1	2.1	0	0	0	1	0
Improper/no signal	1	2.1	0	0	1	0	0
Improper backing	0	0.0	0	0	0	0	0
Unable to stop in assured clear distance	4	8.3	0	2	2	0	0
Reckless driving	1	2.1	0	0	1	0	0
Careless/negligent driving	2	4.2	0	0	1	0	1
Other	1	2.1	0	0	0	0	1
Unknown	3	6.2	0	0	2	1	0
<b>TOTAL</b>	<b>48</b>	<b>100.0</b>	<b>1</b>	<b>13</b>	<b>14</b>	<b>10</b>	<b>10</b>

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

## UPPER PENINSULA FARM EQUIPMENT CRASHES

FARM EQUIPMENT CRASHES	2013	2014	% CHANGE
Crashes	4	6	50.0%
Fatalities	0	0	---
Injuries	2	0	-100.0%

Six crashes involving farm equipment and one passenger car, four pickups, and an unknown vehicle type was reported on Upper Peninsula roadways during 2014. None of those crashes involved a fatality.

## UPPER PENINSULA VEHICLE-TRAIN CRASHES

VEHICLE-TRAIN CRASHES	2013	2014	% CHANGE
Crashes	4	8	100.0%
Fatalities	0	1	---
Injuries	6	6	0.0%

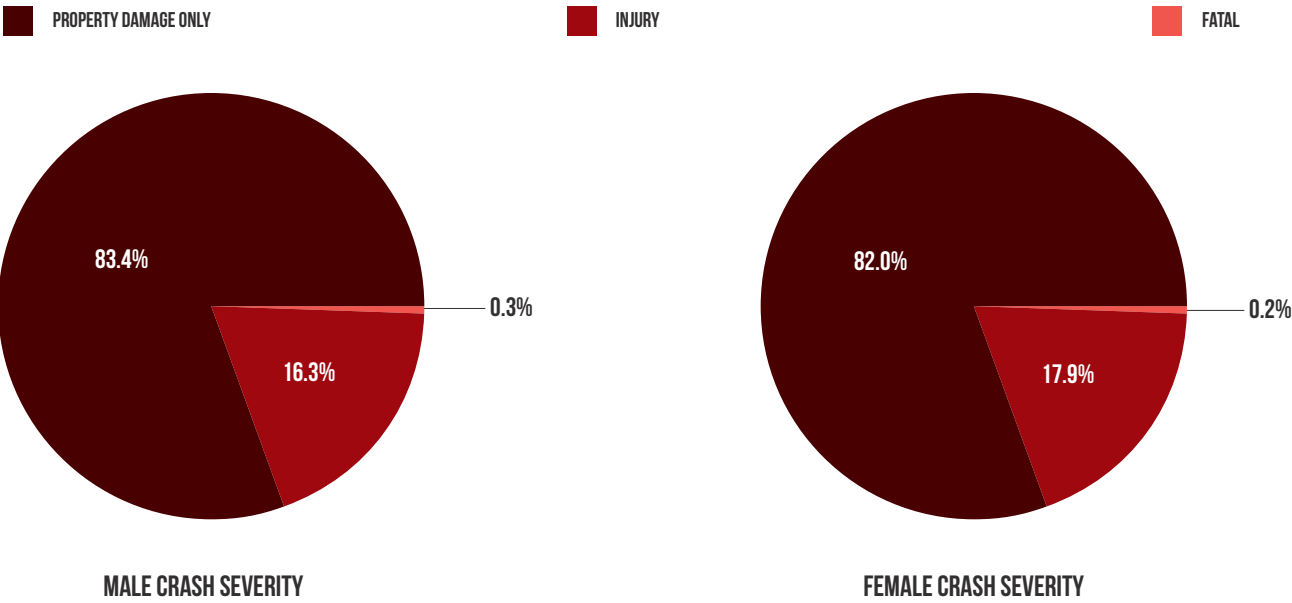
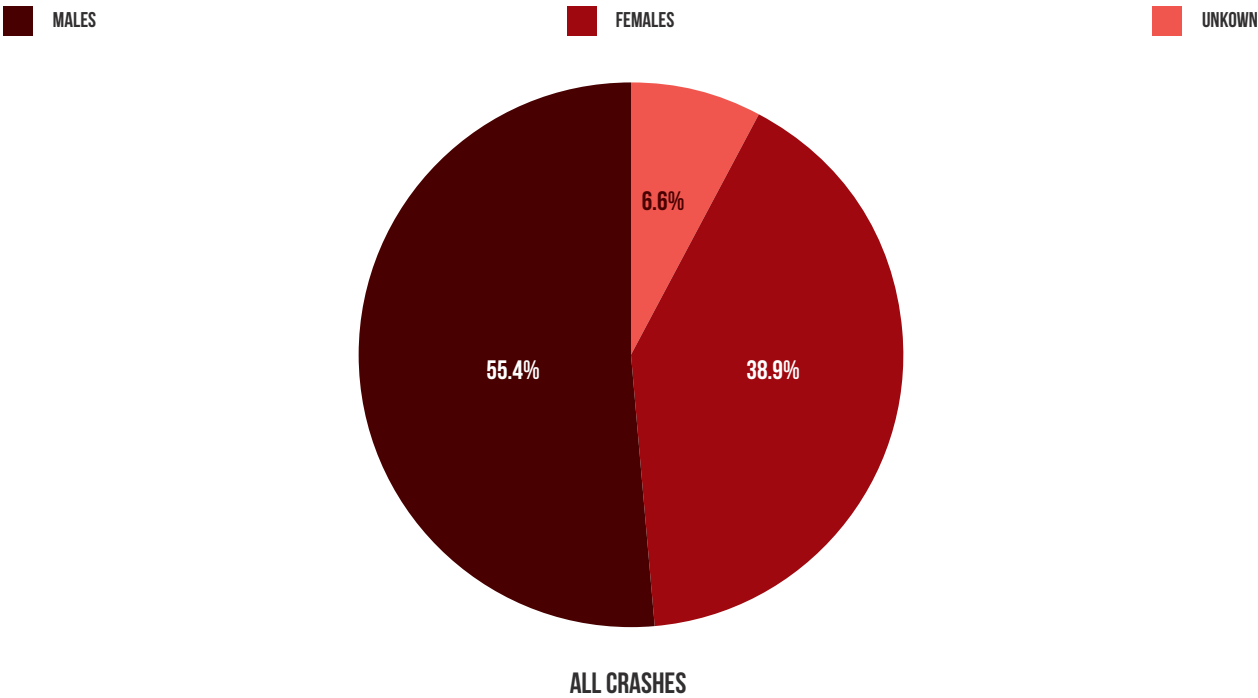
Eight crashes involving a train and three passenger cars, two pickups, two trucks over 10,000 lbs and one unknown vehicle type was reported on the Upper Peninsula during 2014. None of those crashes involved a fatality.

## UPPER PENINSULA MOTORCYCLE CRASHES

MOTORCYCLE DATA	2013	2014	% CHANGE
Motorcycle Registrations	9,758	9,312	-4.6
Motorcycles in Crashes	105	128	21.9
Motorcyclist Deaths	2	3	50.0
Motorcyclists Injured	82	102	24.4
Death Rate based on 10,000 motorcycle registrations	2.5	3.2	57.2
Estimated Mileage based on 3,000 miles per motorcycle	29,274,000	27,936,000	-4.6
Death Rate based on deaths per 100 million vehicle miles traveled	6.8	10.7	57.2

Motorcycles were involved in 1.3 percent of all traffic crashes in the Upper Peninsula in 2014. Injuries were proportionately more severe to motorcyclists than to persons in motor vehicles.

# UPPER PENINSULA DRIVER GENDER INFORMATION



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 (0.3% vs. 0.2%).

## UPPER PENINSULA PERSON AGE - DEMOGRAPHICS AND CRASH INVOLVEMENTS

AGE	LICENSED DRIVERS	MICHIGAN POPULATION	TOTAL DRIVERS IN CRASHES	DRIVERS IN FATAL CRASHES	OCCUPANTS KILLED	OCCUPANTS INJURED	TOTAL BICYCLISTS IN CRASHES	BICYCLISTS IN FATAL CRASHES	TOTAL PEDESTRIANS IN CRASHES	PEDESTRIANS IN FATAL CRASHES
0-15	1,572	---	37	1	4	99	7	0	4	0
16	2,350	---	189	0	0	39	2	0	2	0
17	2,743	---	270	0	0	44	0	0	2	0
18	2,603	---	339	1	1	55	0	0	1	0
19	2,890	---	326	3	1	50	3	0	0	0
20	3,090	---	322	0	0	34	0	0	0	0
21-24	13,153	---	1,139	2	1	159	5	0	3	0
25-29	15,242	---	1,106	0	0	128	4	0	3	0
30-34	14,782	---	984	1	1	117	0	0	3	0
35-39	14,133	---	869	2	0	96	0	0	5	0
40-44	14,676	---	918	5	1	114	1	0	3	0
45-49	16,379	---	953	3	2	109	1	0	0	0
50-54	20,384	---	1,126	1	2	134	3	0	3	0
55-59	22,653	---	1,050	3	2	125	2	0	4	1
60-64	22,533	---	855	5	4	95	3	0	3	0
65-69	18,880	---	723	2	1	73	0	0	4	0
70-74	13,810	---	475	0	0	57	0	0	2	0
75-79	10,094	---	340	0	0	40	0	0	0	0
80-84	6,651	---	202	1	1	31	0	0	0	0
85+	5,292	---	149	1	1	22	1	0	0	0
Unknown	---	---	915	0	0	6	1	0	1	0
<b>TOTAL</b>	<b>223,910</b>	<b>307,987</b>	<b>13,287</b>	<b>31</b>	<b>22</b>	<b>1,627</b>	<b>33</b>	<b>0</b>	<b>43</b>	<b>1</b>

## UPPER PENINSULA CRASH RATE PER LICENSED DRIVER BY AGE OF DRIVER IN ALL CRASHES

AGE	LICENSED DRIVERS	TOTAL DRIVERS IN CRASHES*	CRASH RATE
0-15	1,572	37	0.024
16	2,350	189	0.080
17	2,743	270	0.098
18	2,603	339	0.130
19	2,890	326	0.113
20	3,090	322	0.104
21-24	3,024	1,139	0.377
25-29	3,237	1,106	0.342
30-34	3,353	984	0.293
35-39	3,539	869	0.246
40-44	15,242	918	0.060
45-49	14,782	953	0.064
50-54	14,133	1,126	0.080
55-59	14,676	1,050	0.072
60-64	16,379	855	0.052
65-69	20,384	723	0.035
70-74	22,653	475	0.021
75-79	22,533	340	0.015
80-84	18,880	202	0.011
85-89	13,810	113	0.008
90-94	10,094	32	0.003
95-99	6,651	4	0.001
100+	3,825	0	0.000
Total	190	12,372	---

*Note: Data entry errors resulted in an over-representation of age "100+" drivers.*

\* Excludes 915 drivers with unknown age

Licensed drivers age 21-24 have the highest crash rate at 0.377 (total crashes in age group divided by total number of licensed drivers in age group). The lower crash rates of the older groups (per licensed driver) may reflect reduced driving and exposure to the risk of a crash.



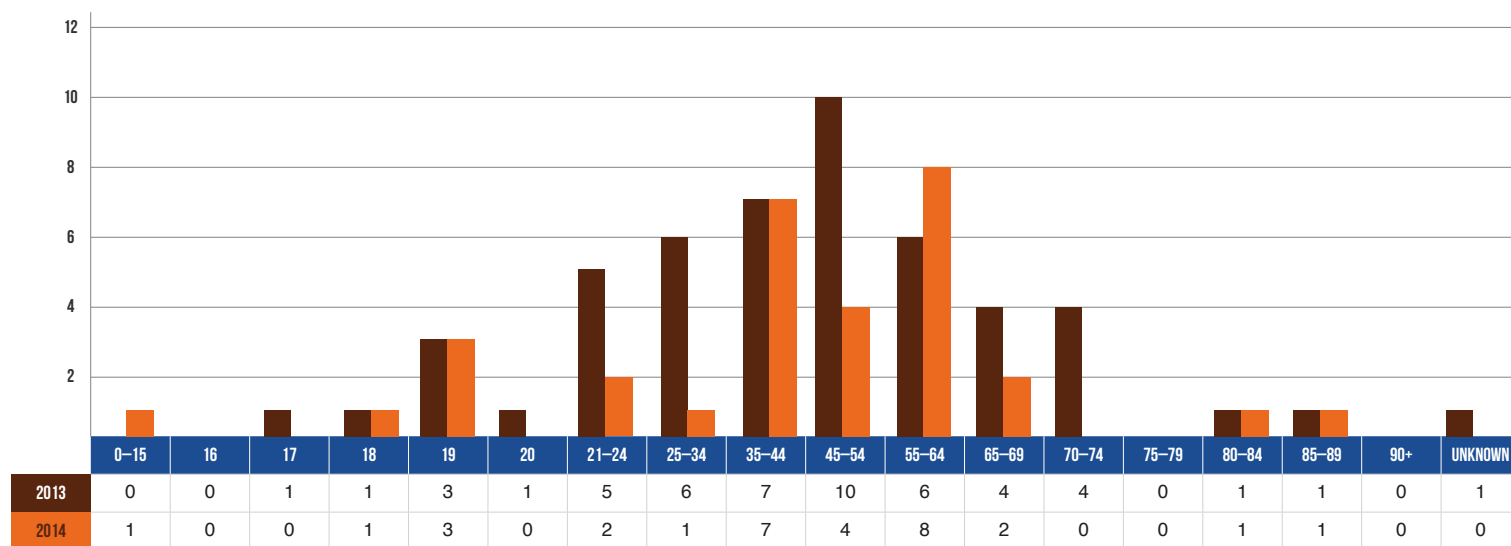
## UPPER PENINSULA DRIVER AGE

AGE OF DRIVERS IN FATAL CRASHES	2013	2014	PERCENT CHANGE	PERCENT 2014 FATAL CRASH INVOLVEMENT	PERCENT ACTIVE DRIVING POPULATION*
15 years and under	0	1	0.0	3.2	0.7
16 years	0	0	†	0.0	1.0
17 years	1	0	†	0.0	1.2
18 years	1	1	0.0	3.2	1.2
19 years	3	3	0.0	9.7	1.3
20 years	1	0	†	0.0	1.4
21 - 24 years	5	2	-60.0	6.5	5.9
25 - 34 years	6	1	-83.3	3.2	13.4
35 - 44 years	7	7	0.0	22.6	12.9
45 - 54 years	10	4	-60.0	12.9	16.4
55 - 64 years	6	8	33.3	25.8	20.2
65 - 69 years	4	2	-50.0	6.5	8.4
70 - 74 years	4	0	†	0.0	6.2
75 - 79 years	0	0	†	0.0	4.5
80 - 84 years	1	1	0.0	3.2	3.0
85 - 89 years	1	1	0.0	3.2	1.7
90 years and over	0	0	†	0.0	0.7
Unknown	1	0	†	0.0	---
<b>TOTAL</b>	<b>51</b>	<b>31</b>	<b>-39.2</b>	<b>100.0</b>	<b>100.0</b>

\*Figures courtesy of the Michigan Department of State [5]

† Not calculable

### DRIVER AGE IN FATAL CRASHES



## UPPER PENINSULA DRIVER CONDITION

POSSIBLE CONDITIONS OF DRIVER	CONDITIONS (Coded by Police)	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
Appeared Normal	11,154	17	170	394	1,258	9,315
Had Been Drinking	293	4	31	43	40	175
Illegal Drug Use	26	0	3	4	6	13
Sick	21	0	2	2	4	13
Fatigue	14	0	0	2	3	9
Asleep	33	0	1	4	7	21
Medication	16	0	1	2	3	10
Driver Distracted	63	0	2	10	21	30
Using Cellular Phone	8	0	0	0	4	4
Unknown	824	10	19	24	51	720

Note: Drivers may have more than one 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 underreporting.

## UPPER PENINSULA DRIVER INJURY SEVERITY BY RESTRAINT, ALCOHOL, AND DRUG USE

RESTRAINT USAGE	DRIVERS		FATALITY		INJURY			NO INJURY	UNKNOWN
	Number	% of Total	Number	% of Total	A	B	C		
ALL DRIVERS									
Restraint Used*	11,832	89.0	9	60.0	105	238	764	10,711	5
Restraint Not Used	231	1.7	6	40.0	25	22	30	146	2
Unknown	1,224	9.2	0	0.0	12	11	26	332	843
TOTAL	13,287	100.0	15	100.0	142	271	820	11,189	850
DRINKING DRIVERS ONLY									
Restraint Used*	197	70.9	1	33.3	12	23	21	140	0
Restraint Not Used	28	10.1	2	66.7	10	6	4	6	0
Unknown	53	19.1	0	0.0	3	5	7	37	1
TOTAL	278	100.0	3	100.0	25	34	32	183	1
DRUGGED DRIVERS ONLY									
Restraint Used*	23	76.7	1	50.0	1	2	5	14	0
Restraint Not Used	3	10.0	1	50.0	0	0	1	1	0
Unknown	4	13.3	0	0.0	0	2	0	2	0
TOTAL	30	100.0	2	100.0	1	4	6	17	0
DRINKING AND DRUGGED DRIVERS ONLY									
Restraint Used*	21	63.6	0	28.6	3	5	2	11	0
Restraint Not Used	6	18.2	0	57.1	1	2	0	3	0
Unknown	6	18.2	0	14.3	0	1	2	3	0
TOTAL	33	100.0	0	100.0	4	8	4	17	0

\*"Restraint Used" includes shoulder belt only, lap belt only, both lap and shoulder belts, restraint failed, and helmet worn

## UPPER PENINSULA RED-LIGHT-RUNNING CRASHES

INTERSECTION CRASH TYPE	CRASHES	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
1. Related to intersection	2,244	5	29	106	355	1,749
2. In intersection	1,215	3	12	68	221	911
3. With traffic control signal	294	1	4	16	67	206
4. With hazardous action*	70	0	0	3	21	46

1. "Related to intersection" captures crashes that were related to or within 150 feet of an intersection.

2. "In intersection" captures crashes within all types of intersections.

3. "With traffic control signal" captures crashes within the intersection and with a traffic control signal present.

4. "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 70 crashes.

## UPPER PENINSULA RED-LIGHT-RUNNING MOST SEVERE OUTCOME IN CRASH

SPEED LIMIT*	CRASHES	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
5 miles per hour	0	0	0	0	0	0
10 miles per hour	0	0	0	0	0	0
15 miles per hour	0	0	0	0	0	0
20 miles per hour	0	0	0	0	0	0
25 miles per hour	23	0	0	0	6	17
30 miles per hour	3	0	0	0	1	2
35 miles per hour	19	0	0	1	7	11
40 miles per hour	1	0	0	0	0	1
45 miles per hour	22	0	0	1	6	15
50 miles per hour	0	0	0	0	0	0
55 miles per hour	2	0	0	1	1	0
60 miles per hour	0	0	0	0	0	0
65 miles per hour	0	0	0	0	0	0
70 miles per hour	0	0	0	0	0	0
75 miles per hour	0	0	0	0	0	0
Unknown	0	0	0	0	0	0
<b>TOTAL</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>21</b>	<b>46</b>

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

CRASH TYPE	CRASHES	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
Single Vehicle	1	0	0	0	0	1
Head on	0	0	0	0	0	0
Head on left turn	4	0	0	1	2	1
Angle	63	0	0	2	19	42
Rear end	0	0	0	0	0	0
Rear end left turn	0	0	0	0	0	0
Rear end right turn	0	0	0	0	0	0
Sideswipe same direction	1	0	0	0	0	1
Sideswipe opposite direction	1	0	0	0	0	1
Other/ Unknown	0	0	0	0	0	0
<b>TOTAL</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>21</b>	<b>46</b>

## UPPER PENINSULA RED-LIGHT-RUNNING MOST SEVERE OUTCOME IN CRASH (CONTINUED)

SPECIAL CIRCUMSTANCES*	CRASHES	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
School Bus Involved/Associated	0	0	0	0	0	0
Drinking Involved	1	0	0	0	0	1
Drug Use Involved	1	0	0	0	0	1
Pedestrian Involved	1	0	0	0	0	1
Bicyclist Involved	0	0	0	0	0	0
Snowmobile Involved	0	0	0	0	0	0
Motorcycle Involved	0	0	0	0	0	0
Train Involved	0	0	0	0	0	0
Truck/Bus Involved	3	0	0	0	1	2
Emergency Vehicle Involved	0	0	0	0	0	0
Driver Hazardous Citation	39	0	0	2	16	21

\*Crashes may involve more than one special circumstance

POSSIBLE CONDITIONS OF PERSONS IN CRASH*	CONDITIONS (Cod- ed by Police)	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
Appeared Normal	68	0	0	3	20	45
Had Been Drinking	0	0	0	0	0	0
Illegal Drug Use	1	0	0	0	0	1
Sick	0	0	0	0	0	0
Fatigue	0	0	0	0	0	0
Asleep	0	0	0	0	0	0
Medication	0	0	0	0	0	0
Driver Distracted	2	0	0	0	2	0
Using Cellular Phone	0	0	0	0	0	0
Unknown	1	0	0	0	0	1

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

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## UPPER PENINSULA HEAVY TRUCK/BUS INVOLVED CRASHES

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These crashes 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 avoiding vehicle as the Truck/Bus Driver Action Prior to Crash.
- More fire/explosion, cargo loss/shift, jackknife, and “other non-collisions” as the Most Harmful Event.
- Fewer single-vehicle crashes, but more sideswipe, rear-end, and angle crashes.
- Fewer truck/bus drivers indicated to be speeding or careless/negligent driving, but more truck/bus drivers indicated to be making backing and turning errors.
- More median crashes, but less shoulder crashes.
- More crashes between the hours of 6:00 AM and 5:59 PM, but fewer crashes between 6:00 PM and 5:59 AM.
- More crashes most weekdays but a drop in weekend crashes.

## UPPER PENINSULA HEAVY TRUCK/BUS INVOLVED CRASHES

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	220	59.9	5	83.3	44	71.0
Turning left	31	8.4	1	16.7	4	6.5
Turning right	24	6.5	0	0.0	4	6.5
Stopped on roadway	15	4.1	0	0.0	2	3.2
In prior crash	0	0.0	0	0.0	0	0.0
Changing lanes	8	2.2	0	0.0	0	0.0
Backing	20	5.4	0	0.0	0	0.0
Slowing/stopping on roadway	19	5.2	0	0.0	4	6.5
Slowing/stopping other	2	0.5	0	0.0	0	0.0
Starting up on roadway	5	1.4	0	0.0	0	0.0
Starting up other	0	0.0	0	0.0	0	0.0
Entering parking	2	0.5	0	0.0	0	0.0
Leaving parking	1	0.3	0	0.0	0	0.0
Entering roadway	3	0.8	0	0.0	0	0.0
Leaving roadway	0	0.0	0	0.0	0	0.0
Making U-turn	1	0.3	0	0.0	0	0.0
Overtaking or passing	2	0.5	0	0.0	0	0.0
Avoiding object	1	0.3	0	0.0	0	0.0
Avoiding animal	0	0.0	0	0.0	0	0.0
Avoiding pedestrian	0	0.0	0	0.0	0	0.0
Avoiding vehicle (front/back)	5	1.4	0	0.0	2	3.2
Avoiding vehicle (angle)	1	0.3	0	0.0	1	1.6
Driverless moving	0	0.0	0	0.0	0	0.0
Parked	6	1.6	0	0.0	1	1.6
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	0	0.0	0	0.0	0	0.0
Standing/lying in roadway	0	0.0	0	0.0	0	0.0
Pushing/working on vehicle	0	0.0	0	0.0	0	0.0
Other working in roadway	0	0.0	0	0.0	0	0.0
Playing in roadway	0	0.0	0	0.0	0	0.0
In roadway other reason	0	0.0	0	0.0	0	0.0
Not in roadway	0	0.0	0	0.0	0	0.0
Other	1	0.3	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0
TOTAL	367	100.0	6	100.0	62	100.0



## UPPER PENINSULA 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	1	0.3	0	0.0	0	0.0
Cross center/median	1	0.3	0	0.0	0	0.0
Ran off road left	1	0.3	0	0.0	1	1.6
Ran off road right	2	0.5	0	0.0	0	0.0
Re-enter road	0	0.0	0	0.0	0	0.0
Overturn	11	3.0	0	0.0	3	4.8
Separation of units	1	0.3	0	0.0	0	0.0
Fire/explosion	3	0.8	0	0.0	0	0.0
Immersion	0	0.0	0	0.0	0	0.0
Jackknife	3	0.8	0	0.0	0	0.0
Downhill runaway	0	0.0	0	0.0	0	0.0
Cargo loss/shift	5	1.4	0	0.0	0	0.0
Individual fell off	1	0.3	0	0.0	0	0.0
Other noncollision	3	0.8	0	0.0	1	1.6
<b>SUBTOTAL</b>	<b>32</b>	<b>8.7</b>	<b>0</b>	<b>0.0</b>	<b>5</b>	<b>8.1</b>

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	2	0.5	0	0.0	2	3.2
Bicyclist	0	0.0	0	0.0	0	0.0
Motor vehicle in transport	241	65.7	5	83.3	47	75.8
Parked motor vehicle	22	6.0	0	0.0	3	4.8
Railway train	2	0.5	1	16.7	0	0.0
Animal	19	5.2	0	0.0	0	0.0
Other nonfixed objects	5	1.4	0	0.0	2	3.2
<b>SUBTOTAL</b>	<b>291</b>	<b>79.3</b>	<b>6</b>	<b>100.0</b>	<b>54</b>	<b>87.1</b>

In the Upper Peninsula, the majority of heavy trucks/buses are involved in crashes with a motor vehicle in transport for all crashes (65.7%), fatal crashes (83.3%), and injury crashes (75.8%) for most harmful event in the crash.

## UPPER PENINSULA 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	3	0.8	0	0.0	0	0.0
Bridge parapet end	0	0.0	0	0.0	0	0.0
Bridge rail	1	0.3	0	0.0	0	0.0
Guardrail face	1	0.3	0	0.0	0	0.0
Guardrail end	0	0.0	0	0.0	0	0.0
Median barrier	0	0.0	0	0.0	0	0.0
Highway traffic sign post	1	0.3	0	0.0	0	0.0
Highway signal post	0	0.0	0	0.0	0	0.0
Luminaire/light support	1	0.3	0	0.0	0	0.0
Utility pole	3	0.8	0	0.0	1	1.6
Other pole	2	0.5	0	0.0	0	0.0
Culvert	0	0.0	0	0.0	0	0.0
Curb	1	0.3	0	0.0	0	0.0
Ditch	7	1.9	0	0.0	2	3.2
Embankment	1	0.3	0	0.0	0	0.0
Fence	1	0.3	0	0.0	0	0.0
Mailbox	5	1.4	0	0.0	0	0.0
Tree	5	1.4	0	0.0	0	0.0
Rail crossing signal	2	0.5	0	0.0	0	0.0
Building	0	0.0	0	0.0	0	0.0
Traffic island	0	0.0	0	0.0	0	0.0
Fire hydrant	0	0.0	0	0.0	0	0.0
Impact attenuator	0	0.0	0	0.0	0	0.0
Other fixed object	9	2.5	0	0.0	0	0.0
<b>SUBTOTAL</b>	<b>43</b>	<b>11.7</b>	<b>0</b>	<b>0.0</b>	<b>3</b>	<b>4.8</b>

	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	0.3	0	0.0	0	0.0
<b>MOST HARMFUL EVENT TOTAL</b>	<b>367</b>	<b>100.0</b>	<b>6</b>	<b>100.0</b>	<b>62</b>	<b>100.0</b>

## UPPER PENINSULA 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 Total	Number of Heavy Trucks	% of Total
Single Vehicle	88	24.0	0	0.0	9	14.5
Head On	7	1.9	2	33.3	2	3.2
Head On - Left Turn	1	0.3	0	0.0	1	1.6
Angle	74	20.2	2	33.3	15	24.2
Rear End	71	19.3	0	0.0	17	27.4
Rear End - Left Turn	7	1.9	0	0.0	2	3.2
Rear End - Right Turn	5	1.4	0	0.0	2	3.2
Sideswipe - Same Direction	52	14.2	1	16.7	4	6.5
Sideswipe - Opposite Direction	25	6.8	0	0.0	4	6.5
Other/Unknown	37	10.1	1	16.7	6	9.7
TOTAL	367	100.0	6	100.0	62	100.0

The majority of heavy trucks/buses are involved in single vehicle crashes for all crashes (24.0%), head on and angle crashes for fatal crashes (33.3% each), and rear end crashes for injury crashes (27.4%).

HAZARDOUS ACTION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES		HAZARDOUS CITATION ISSUED	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
None	207	56.4	4	66.7	36	58.1	1	3.3
Speed too fast	24	6.5	0	0.0	5	8.1	10	33.3
Speed too slow	0	0.0	0	0.0	0	0.0	0	0.0
Failed to yield	20	5.4	2	33.3	5	8.1	3	10.0
Disregard traffic control	6	1.6	0	0.0	1	1.6	0	0.0
Drove wrong way	0	0.0	0	0.0	0	0.0	0	0.0
Drove left of center	2	0.5	0	0.0	0	0.0	0	0.0
Improper passing	3	0.8	0	0.0	0	0.0	0	0.0
Improper lane use	14	3.8	0	0.0	1	1.6	1	3.3
Improper turn	8	2.2	0	0.0	0	0.0	0	0.0
Improper/no signal	1	0.3	0	0.0	0	0.0	1	3.3
Improper backing	18	4.9	0	0.0	0	0.0	1	3.3
Unable to stop in assured clear distance	26	7.1	0	0.0	8	12.9	7	23.3
Reckless driving	0	0.0	0	0.0	0	0.0	0	0.0
Careless/negligent driving	10	2.7	0	0.0	3	4.8	6	20.0
Other	21	5.7	0	0.0	2	3.2	0	0.0
Unknown	7	1.9	0	0.0	1	1.6	0	0.0
TOTAL	367	100.0	6	100.0	62	100.0	30	100.0

After no hazardous action, in the Upper Peninsula the majority of heavy trucks/buses are unable to stop in an assured clear distance for all crashes (7.1%) and injury crashes (12.9%). The most common hazardous action for heavy trucks/buses involved in fatal crashes after no hazardous action is failed to yield (33.3%).

## UPPER PENINSULA HEAVY TRUCK/BUS INVOLVED CRASHES (CONTINUED)

RELATIONSHIP TO ROADWAY (LOCATION OF FIRST IMPACT)	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
On Road	305	83.1	5	83.3	50	80.6
Median	3	0.8	0	0.0	1	1.6
Shoulder	27	7.4	1	16.7	5	8.1
Outside of Shoulder/Curb	28	7.6	0	0.0	5	8.1
Gore	1	0.3	0	0.0	0	0.0
Other/Unknown	3	0.8	0	0.0	1	1.6
TOTAL	367	100.0	6	100.0	62	100.0

TIME OF DAY	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
12:00 AM - 02:59 AM	13	3.5	0	0.0	7	11.3
03:00 AM - 05:59 AM	9	2.5	0	0.0	2	3.2
06:00 AM - 08:59 AM	60	16.3	1	16.7	5	8.1
09:00 AM - 11:59 AM	95	25.9	1	16.7	17	27.4
12:00 PM - 02:59 PM	83	22.6	2	33.3	12	19.4
03:00 PM - 05:59 PM	70	19.1	1	16.7	14	22.6
06:00 PM - 08:59 PM	26	7.1	1	16.7	4	6.5
09:00 PM - 11:59 PM	11	3.0	0	0.0	1	1.6
Unknown	0	0.0	0	0.0	0	0.0
TOTAL	367	100.0	6	100.0	62	100.0

In the Upper Peninsula, heavy truck/bus frequencies in crashes peak in the late morning, then drop off steadily until 12:00 AM. The majority of heavy trucks/buses are involved in fatal crashes from 12:00 to 2:59 PM (33.3%) and injury crashes from 9:00 to 11:59 AM (27.4%).

ROADWAY TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Interstate Routes	18	4.9	0	0.0	3	4.8
U.S. & Michigan Roads	225	61.3	5	83.3	48	77.4
County & City Roads	124	33.8	1	16.7	11	17.7
TOTAL	367	100.0	6	100.0	62	100.0

In the Upper Peninsula, the majority of heavy trucks/buses are involved in crashes on U.S. and Michigan roads for all crashes (61.3%), fatal crashes (83.3%), and injury crashes (77.4%).

## UPPER PENINSULA HEAVY TRUCK/BUS INVOLVED CRASHES (CONTINUED)

DAY OF WEEK	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Monday	54	14.7	1	16.7	7	11.3
Tuesday	66	18.0	1	16.7	10	16.1
Wednesday	61	16.6	1	16.7	8	12.9
Thursday	69	18.8	1	16.7	16	25.8
Friday	74	20.2	1	16.7	18	29.0
Saturday	26	7.1	0	0.0	3	4.8
Sunday	17	4.6	1	16.7	0	0.0
TOTAL	367	100.0	6	100.0	62	100.0

In the Upper Peninsula, the majority of heavy trucks/buses are involved in all crashes (20.2%) and injury crashes (29.0%) on Friday. One heavy truck/bus was involved in a fatal crash each day of the week except for Saturday (16.7% each).

DRIVER GENDER	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Male	337	91.8	6	100.0	59	95.2
Female	27	7.4	0	0.0	3	4.8
Unknown	3	0.8	0	0.0	0	0.0
TOTAL	367	100.0	6	100.0	62	100.0

In the Upper Peninsula, the majority of heavy truck/bus drivers are male in all crashes (91.8%), fatal crashes (100.0%), and injury crashes (95.2%).

NUMBER OF OCCUPANTS	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
1 occupant	313	85.3	6	100.0	52	83.9
2 occupants	28	7.6	0	0.0	5	8.1
3 occupants	2	0.5	0	0.0	0	0.0
4 occupants	5	1.4	0	0.0	0	0.0
5 occupants	0	0.0	0	0.0	0	0.0
6 + occupants	14	3.8	0	0.0	4	6.5
0 occupants	3	0.8	0	0.0	0	0.0
Unknown	2	0.5	0	0.0	1	1.6
TOTAL	367	100.0	6	100.0	62	100.0

## UPPER PENINSULA 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 Total	Number of Vehicles	% of Total	Number of Vehicles	% of Total
Passenger Car and Station Wagon	170	60.3	3	50.0	41	57.7
Van and Motorhome	10	3.5	0	0.0	4	5.6
Pickup	84	29.8	0	0.0	19	26.8
Small Truck (under 10,000 lbs.)	7	2.5	0	0.0	2	2.8
Motorcycle	1	0.4	1	16.7	0	0.0
Moped	0	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	0.4	1	16.7	0	0.0
Other	3	1.1	1	16.7	0	0.0
Unknown	6	2.1	0	0.0	5	7.0
<b>SUBTOTAL</b>	<b>282</b>	<b>100.0</b>	<b>6</b>	<b>100.0</b>	<b>71</b>	<b>100.0</b>

HEAVY TRUCK/BUS VEHICLE TYPES	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Commercial Vehicle: Group A*	226	61.6	2	33.3	34	54.8
Commercial Vehicle: Group B**	92	25.1	2	33.3	20	32.3
Commercial Vehicle: Group C***	17	4.6	0	0.0	1	1.6
Other Truck	27	7.4	2	33.3	6	9.7
Unknown Truck	5	1.4	0	0.0	1	1.6
<b>SUBTOTAL</b>	<b>367</b>	<b>100.0</b>	<b>6</b>	<b>100.0</b>	<b>62</b>	<b>100.0</b>

\* 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.

	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
<b>Total Vehicle Types in Heavy Truck/Bus Crashes</b>	<b>649</b>	<b>---</b>	<b>12</b>	<b>---</b>	<b>133</b>	<b>---</b>

## UPPER PENINSULA HEAVY TRUCK/BUS INVOLVED CRASHES (CONTINUED)

HEAVY TRUCK/BUS DRIVER ACTION PRIOR TO CRASH HAZARDOUS CITATION ISSUED	HEAVY TRUCK/BUS INVOLVED CRASH						PASSENGER VEHICLE ONLY INVOLVED CRASH			
	Single Vehicle Crash		Multi-Vehicle Crash				Single Vehicle Crash		Multi-Vehicle Crash	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Passenger Vehicles	% of Total	Number of Passenger Vehicles	% of Total	Number of Passenger Vehicles	% of Total
None	0	0.0	1	5.3	0	0.0	6	1.4	11	1.3
Speed too fast	7	63.6	3	15.8	15	35.7	220	50.9	124	14.5
Speed too slow	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Failed to yield	0	0.0	3	15.8	8	19.0	5	1.2	349	40.7
Disregard traffic control	0	0.0	0	0.0	2	4.8	3	0.7	79	9.2
Drove wrong way	0	0.0	0	0.0	0	0.0	0	0.0	2	0.2
Drove left of center	0	0.0	0	0.0	1	2.4	1	0.2	12	1.4
Improper passing	0	0.0	0	0.0	1	2.4	0	0.0	16	1.9
Improper lane use	0	0.0	1	5.3	0	0.0	0	0.0	13	1.5
Improper turn	0	0.0	0	0.0	0	0.0	0	0.0	14	1.6
Improper/no signal	0	0.0	1	5.3	0	0.0	0	0.0	5	0.6
Improper backing	0	0.0	1	5.3	0	0.0	0	0.0	8	0.9
Unable to stop in assured clear distance	0	0.0	7	36.8	6	14.3	14	3.2	143	16.7
Reckless driving	0	0.0	0	0.0	0	0.0	21	4.9	7	0.8
Careless/Negligent driving	4	36.4	2	10.5	6	14.3	127	29.4	54	6.3
Other	0	0.0	0	0.0	3	7.1	32	7.4	19	2.2
Unknown	0	0.0	0	0.0	0	0.0	3	0.7	1	0.1
CITED VEHICLES SUBTOTAL	11	100.0	19	100.0	42	100.0	432	100.0	857	100.0

	HEAVY TRUCK/BUS INVOLVED CRASH						PASSENGER VEHICLE ONLY INVOLVED CRASH			
	Single Vehicle Crash		Multi-Vehicle Crash				Single Vehicle Crash		Multi-Vehicle Crash	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Passenger Vehicles	% of Total	Number of Passenger Vehicles	% of Total	Number of Passenger Vehicles	% of Total
Cited Vehiclces	11	12.2	19	6.9	42	16.0	432	8.5	857	11.6
Vehicles with No Citation Issued	79	87.8	257	93.1	221	84.0	4,637	91.5	6,531	88.4
TOTAL VEHICLES INVOLVED	90	100.0	276	100.0	263	100.0	5,069	100.0	7,388	100.0

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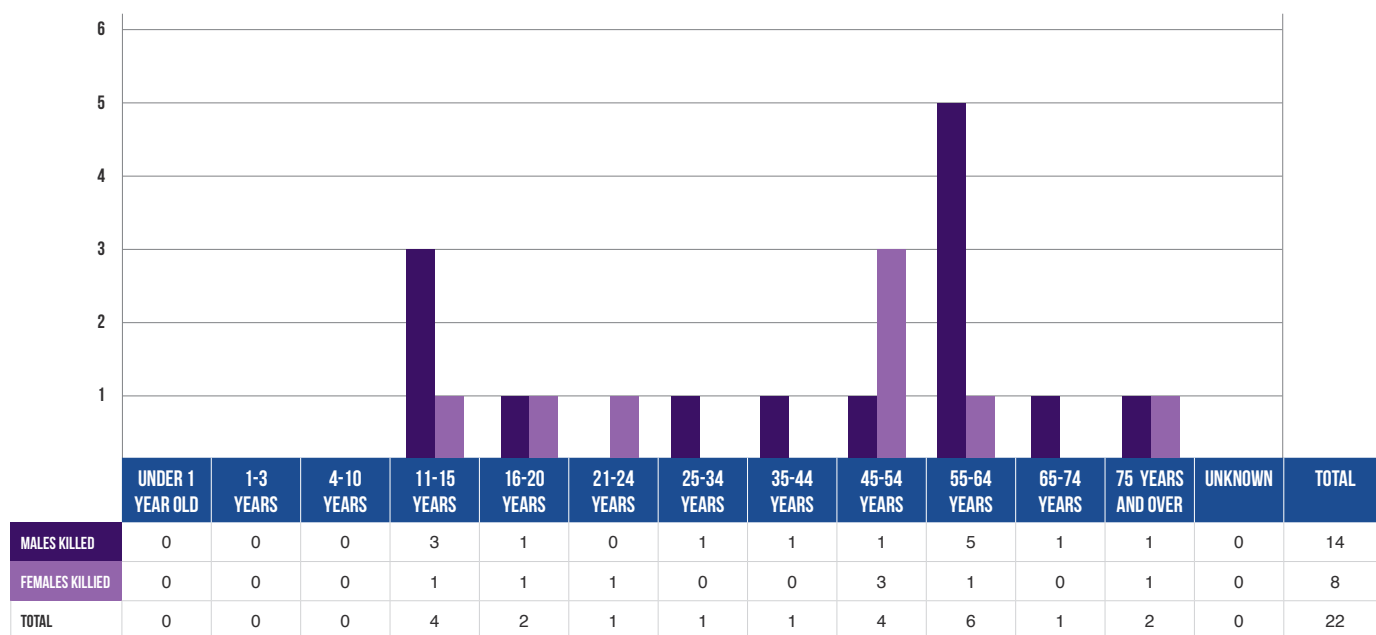
# OCCUPANT/PERSON

*(specific information on each driver and injured person in a crash)*

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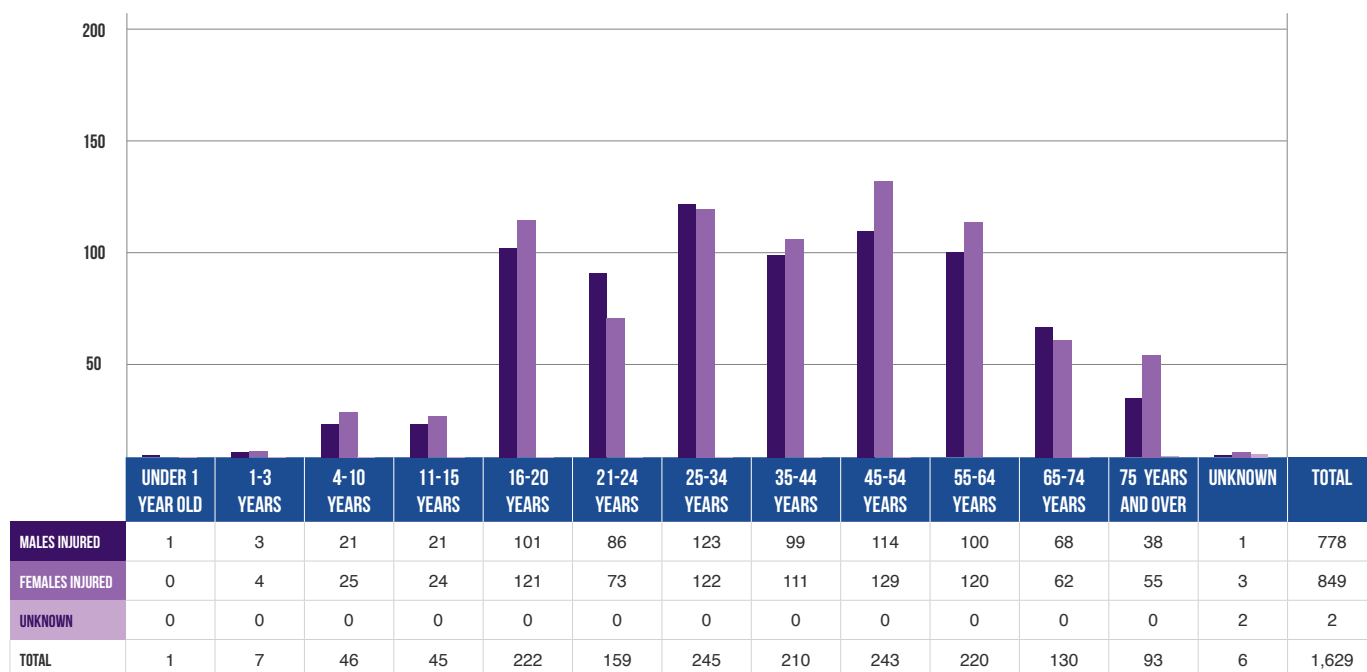
## UPPER PENINSULA AGE AND GENDER OF OCCUPANTS KILLED OR INJURED IN MOTOR VEHICLE CRASHES

### OCCUPANTS KILLED



The majority (63.6%) of occupants killed in traffic crashes in 2014 were male.

### OCCUPANTS INJURED

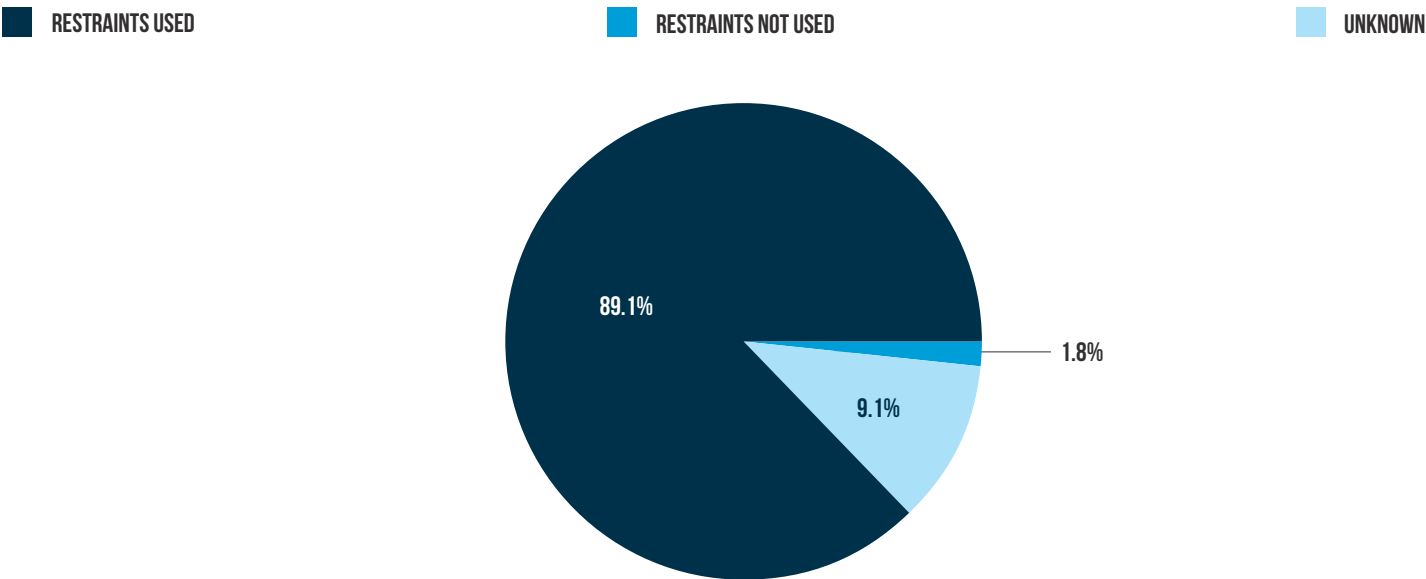


The majority (52.2%) of occupants injured in traffic crashes in 2014 were female.

*Note: An occupant is any injured or killed person in or on a motor vehicle, including all drivers.*

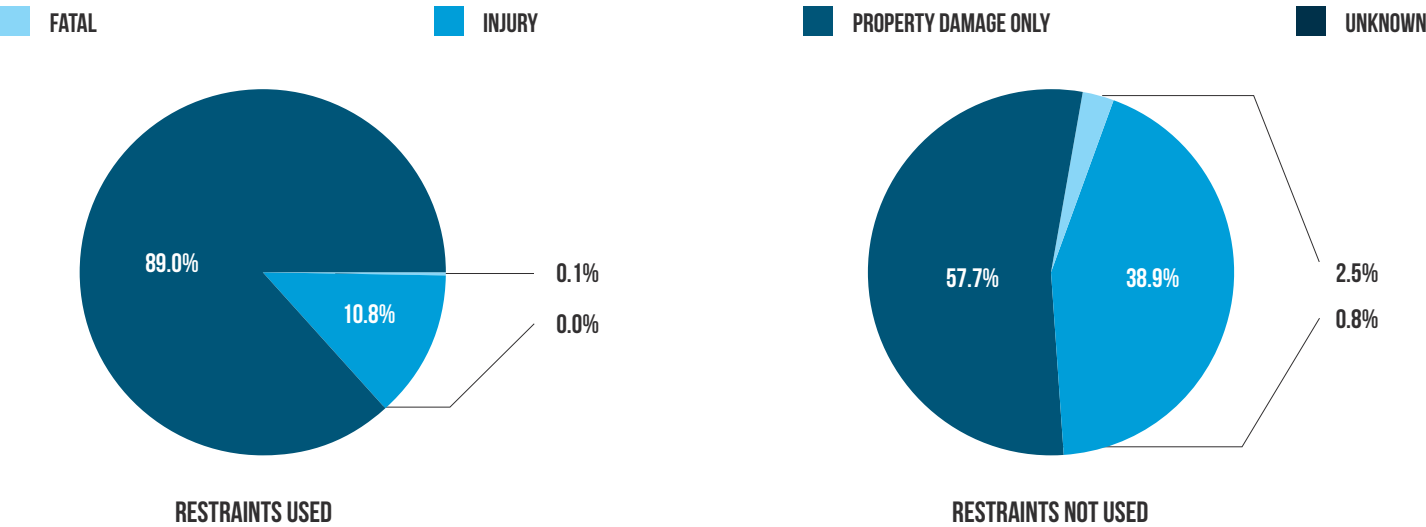
# UPPER PENINSULA REPORTED OCCUPANT RESTRAINT USAGE FOR ALL DRIVERS AND INJURED PASSENGERS

## REPORTED OCCUPANT RESTRAINT USAGE



Of the 13,425 drivers and injured passengers involved in crashes in the Upper Peninsula, 11,960 (89.1%) were REPORTED to be using occupant restraints.

## INJURY SEVERITY



Occupants in crashes were 25 times more likely to be killed if they were not wearing their restraints.

*Note: These charts do not include helmet usage.*

## UPPER PENINSULA 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	11,618	97.4	8	66	190	723	10,631
Center Front	7	0.1	0	0	1	3	3
Right Front	227	1.9	2	21	37	161	6
Left Rear	24	0.2	0	2	5	17	0
Center Rear	9	0.1	0	1	3	5	0
Right Rear	28	0.2	0	3	9	16	0
Left Rear Third Seat	5	0.0	0	0	2	3	0
Center Rear Third Seat	0	0.0	0	0	0	0	0
Right Rear Third Seat	7	0.1	0	0	3	4	0
Unknown	4	0.0	0	0	0	1	3
<b>TOTAL</b>	<b>11,929†</b>	<b>100.0</b>	<b>10</b>	<b>93</b>	<b>250</b>	<b>933</b>	<b>10,643</b>

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

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

SEATING POSITION	BELTS NOT USED*		FATAL	INJURY			NO INJURY
	Number	% of Total		A	B	C	
Left Front	183	78.2	4	10	15	23	131
Center Front	0	0.0	0	0	0	0	0
Right Front	19	8.1	0	4	7	8	0
Left Rear	7	3.0	1	1	2	3	0
Center Rear	4	1.7	0	0	0	4	0
Right Rear	8	3.4	1	2	2	3	0
Left Rear Third Seat	2	0.9	0	0	1	1	0
Center Rear Third Seat	0	0.0	0	0	0	0	0
Right Rear Third Seat	0	0.0	0	0	0	0	0
Unknown	11	4.7	0	0	0	4	7
<b>TOTAL</b>	<b>234†</b>	<b>100.0</b>	<b>6</b>	<b>17</b>	<b>27</b>	<b>46</b>	<b>138</b>

\* No belts were available or no belts were used. Children who were coded as using or not using a child restraint device appear in separate tables on the next two pages.

† This total does not include two occupant with unknown injury severity

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

## UPPER PENINSULA REPORTED RESTRAINT USE - CHILDREN

On July 1, 2008, Michigan law was amended. (<http://legislature.mi.gov/doc.aspx?mcl-257-710e>)

Any child under four years of age must be in an approved Child Safety Seat (CSS)/Child Restraint Device (CRD), and riding in the rear seat. All children less than 8 years of age AND who are less than 4'9" in height, must be properly restrained in a child restraint system. All children ages 8 through 15 must wear a properly adjusted and fastened seat belt when riding in either the front or back seat of a vehicle.

RESTRAINT USAGE	CHILDREN		FATAL	INJURY		
	Number	% of Total		A	B	C
AGE 0						
Belts Used	0	0.0	0	0	0	0
No Belts Used	0	0.0	0	0	0	0
Child Restraint Used	1	100.0	0	0	0	1
Child Restraint Not Used	0	0.0	0	0	0	0
Restraint Failed	0	0.0	0	0	0	0
Unknown	0	0.0	0	0	0	0
TOTAL	1	100.0	0	0	0	1
AGE 1						
Belts Used	0	0.0	0	0	0	0
No Belts Used	0	0.0	0	0	0	0
Child Restraint Used	2	100.0	0	0	2	0
Child Restraint Not Used	0	0.0	0	0	0	0
Restraint Failed	0	0.0	0	0	0	0
Unknown	0	0.0	0	0	0	0
TOTAL	2	100.0	0	0	2	0
AGE 2						
Belts Used	0	0.0	0	0	0	0
No Belts Used	0	0.0	0	0	0	0
Child Restraint Used	3	100.0	0	0	1	2
Child Restraint Not Used	0	0.0	0	0	0	0
Restraint Failed	0	0.0	0	0	0	0
Unknown	0	0.0	0	0	0	0
TOTAL	3	100.0	0	0	1	2

## UPPER PENINSULA REPORTED RESTRAINT USE - CHILDREN (CONTINUED)

RESTRAINT USAGE	CHILDREN		FATAL	INJURY		
	Number	% of Total		A	B	C
AGE 3						
Belts Used	0	0.0	0	0	0	0
No Belts Used	0	0.0	0	0	0	0
Child Restraint Used	2	100.0	0	0	1	1
Child Restraint Not Used	0	0.0	0	0	0	0
Restraint Failed	0	0.0	0	0	0	0
Unknown	0	0.0	0	0	0	0
TOTAL	2	100.0	0	0	1	1
AGE 4-7						
Belts Used	13	43.3	0	1	3	9
No Belts Used	0	0.0	0	0	0	0
Child Restraint Used	13	43.3	0	3	1	9
Child Restraint Not Used	3	10.0	0	1	2	0
Restraint Failed	0	0.0	0	0	0	0
Unknown	1	3.3	0	0	1	0
TOTAL	30	100.0	0	5	7	18
AGE 8-15						
Belts Used	43	89.6	1	1	7	34
No Belts Used	5	10.4	2	0	1	2
Child Restraint Used	0	0.0	0	0	0	0
Child Restraint Not Used	0	0.0	0	0	0	0
Restraint Failed	0	0.0	0	0	0	0
Unknown	0	0.0	0	0	0	0
TOTAL	48	100.0	3	1	8	36

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

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

## UPPER PENINSULA MOTOR VEHICLE OCCUPANT INJURY SEVERITY BY KNOWN AIRBAG DEPLOYMENT

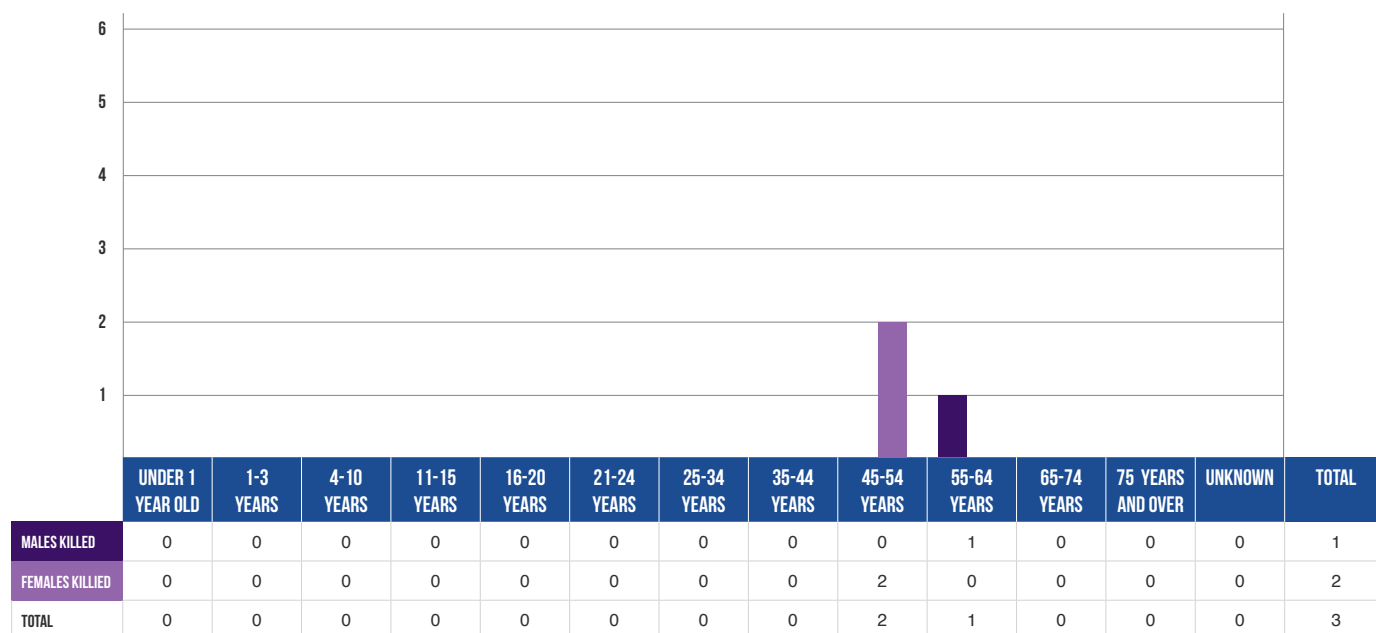
MOTOR VEHICLE OCCUPANT AIRBAG DEPLOYMENT	OCCUPANTS		FATAL	OCCUPANT INJURY SEVERITY			NO INJURY
	Number	% of Total		A	B	C	
Deployed	948	6.9	11	56	122	267	488
Not deployed	11,301	82.6	2	55	149	673	10,270
Not equipped	678	5.0	9	69	88	130	372
Unknown	761	5.6	0	6	3	9	59
<b>TOTAL</b>	<b>*13,688</b>	<b>100.0</b>	<b>22</b>	<b>186</b>	<b>362</b>	<b>1,079</b>	<b>11,189</b>

\* Includes 850 occupants (drivers and passengers) with unknown injury severity.



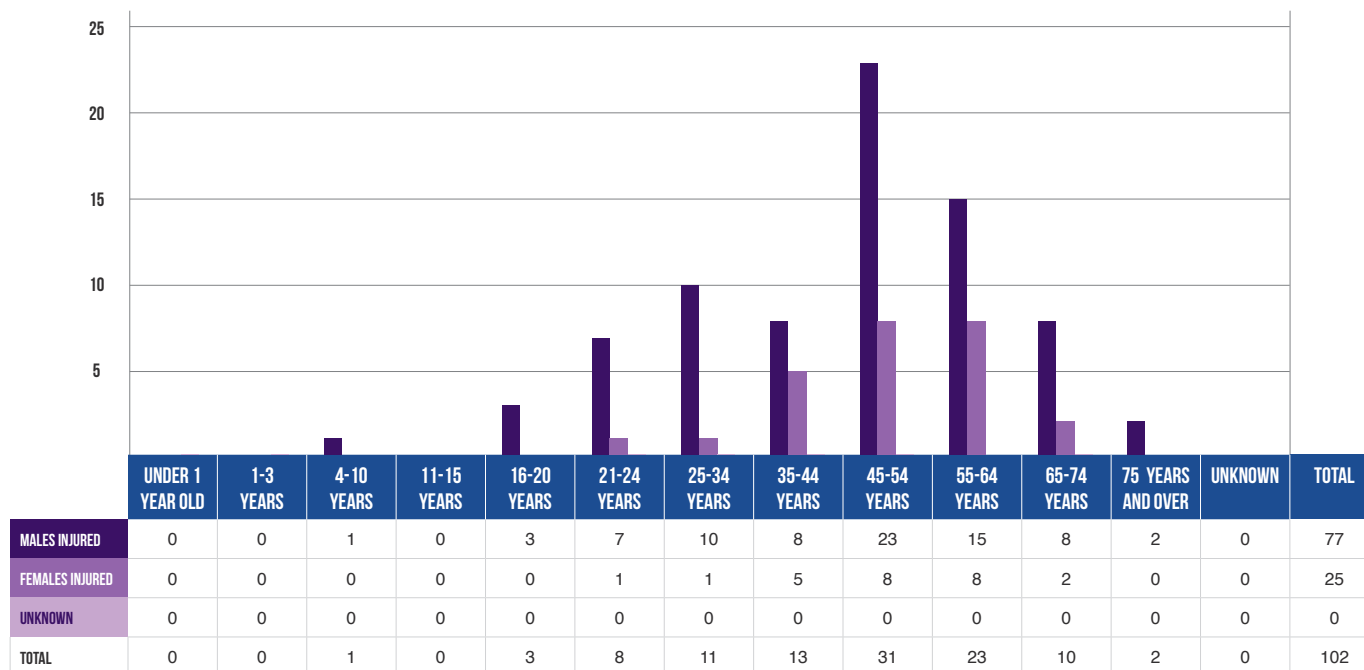
## UPPER PENINSULA AGE AND GENDER OF MOTORCYCLISTS KILLED OR INJURED IN MOTOR VEHICLE CRASHES

### MOTORCYCLISTS KILLED



Of the three motorcyclists killed in traffic crashes in the Upper Peninsula in 2014, one was male and two were female.

### MOTORCYCLISTS INJURED



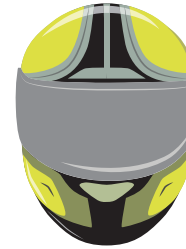
Of the 102 motorcyclists injured in traffic crashes in the Upper Peninsula in 2014, 75.5 percent were male.

## UPPER PENINSULA MOTORCYCLE HELMET USAGE AND INJURY SEVERITY

AGE OF MOTORCYCLIST	FATALITIES	INJURY			NO INJURY
		A	B	C	
HELMET WORN					
3 years and under	0	0	0	0	0
4 - 10 years	0	0	1	0	0
11 - 15 years	0	0	0	0	1
16 - 20 years	0	0	3	0	0
21 - 24 years	0	2	1	1	0
25 - 34 years	0	2	3	3	1
35 - 44 years	0	4	2	2	4
45 - 54 years	0	10	8	3	7
55 - 64 years	0	4	4	10	9
65 - 74 years	0	3	3	2	6
75 years and over	0	0	0	0	0
Unknown	0	0	0	0	0
Subtotal	0	25	25	21	28
HELMET NOT WORN					
3 years and under	0	0	0	0	0
4 - 10 years	0	0	0	0	0
11 - 15 years	0	0	0	0	0
16 - 20 years	0	0	0	0	0
21 - 24 years	0	1	2	1	0
25 - 34 years	0	2	0	0	1
35 - 44 years	0	1	2	1	1
45 - 54 years	2	4	2	2	1
55 - 64 years	1	3	2	0	2
65 - 74 years	0	1	1	0	1
75 years and over	0	0	1	1	0
Unknown	0	0	0	0	0
Subtotal	3	12	10	5	6
HELMET USE UNKNOWN					
3 years and under	0	0	0	0	0
4 - 10 years	0	0	0	0	0
11 - 15 years	0	0	0	0	0
16 - 20 years	0	0	0	0	0
21 - 24 years	0	0	0	0	0
25 - 34 years	0	0	0	1	0
35 - 44 years	0	0	1	0	1
45 - 54 years	0	1	0	1	0
55 - 64 years	0	0	0	0	2
65 - 74 years	0	0	0	0	0
75 years and over	0	0	0	0	0
Unknown	0	0	0	0	0
Subtotal	0	1	1	2	3
TOTAL	3	38	36	28	37

2011 Michigan motor vehicle crash data represents the last full year of data that was collected during Michigan's universal helmet law, enacted in 1969: Michigan Vehicle Code Public Act 300 of 1949, Section 257.658, requiring all motorcycle riders to wear a helmet. On April 13, 2012, Michigan changed their helmet law from a universal to a partial helmet law. The partial law allows some certified Michigan riders, who are over 21 and carry additional insurance, to ride without a helmet.

### HELMET WORN



DRIVERS KILLED: 0  
PASSENGERS KILLED: 0

### HELMET NOT WORN



DRIVERS KILLED: 1  
PASSENGERS KILLED: 2

### HELMET USE UNKNOWN



DRIVERS KILLED: 0  
PASSENGERS KILLED: 0

## UPPER PENINSULA OCCUPANT INJURY OUTCOME BY VEHICLE TYPE

VEHICLE	KILLED	INJURY			TOTAL KABC	% OF ALL CRASH INVOLVED KABC OCCUPANTS
		A	B	C		
Passenger Car and Station Wagon	11	87	227	755	1,080	65.5
Van (Minivan) and Motorhome	0	9	11	48	68	4.1
Pickup	4	24	49	186	263	15.9
Small Truck (under 10,000 lbs.)	0	4	4	14	22	1.3
Motorcycle	3	38	36	28	105	6.4
Moped	1	0	8	2	11	0.7
Go Cart	0	2	1	1	4	0.2
Snowmobile	1	11	8	18	38	2.3
Off Road Vehicle	1	10	14	10	35	2.1
Other	0	0	1	2	3	0.2
Unknown	0	0	0	0	0	0.0
CDL Truck/Bus (breakdown below)	1	1	3	15	20	1.2
Total Number of Occupants	22	186	362	1,079	1,649	100.0

CDL TRUCK/BUS SUB-CATEGORY TYPE	KILLED	INJURY			TOTAL KABC	% OF ALL CRASH INVOLVED KABC OCCUPANTS
		A	B	C		
Commercial Vehicle: Group B**	1	1	2	4	8	40.0
Commercial Vehicle: Group C***	0	0	0	1	1	5.0
Other Truck	0	0	0	2	2	10.0
Unknown Truck	0	0	0	0	0	0.0
Total Number of Occupants	1	1	3	15	20	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.

Note:

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 roadway and result in injury, death, or at least \$1,000 in property damage.

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# REFERENCES

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## REFERENCES AND REPORTING AGENCIES

- [1] Annual Estimates of the Resident Population for Counties of Michigan: 2010-2013. Population Division, U.S. Census Bureau. Release Date: March 2014.  
<http://www.census.gov/popest/data/counties/asrh/2014/PEPSR6H.html>
- [2] Number of Deaths by Underlying Cause of Death Michigan Residents, 2012. Michigan Department of Community Health, Vital Records and Health Statistics Section, Lansing, MI.  
<http://www.mdch.state.mi.us/PHA/OSR/chi/deaths/frame.asp?Topic=7&Mode=1>
- [3] Statistics Department, National Safety Council, 1121 Spring Lake Drive, Itasca, Illinois 60143-3201.  
[http://www.nsc.org/news\\_resources/injury\\_and\\_death\\_statistics/Documents/InjuryFactsHighlights.pdf](http://www.nsc.org/news_resources/injury_and_death_statistics/Documents/InjuryFactsHighlights.pdf)
- [4] Traffic Safety Facts Laws - Bicycle Helmet Laws - January 2008. National Center for Statistics & Analysis, Research & Development, 400 Seventh Street, S.W., Washington, D.C. 20590. (Source: Robert Thompson, A Case Control Study of the Effectiveness of Bicycle Safety Helmets. Centers for Disease Control.)  
<http://www.nhtsa.gov/people/injury/TSFLaws/PDFs/810886.pdf>
- [5] Michigan Department of State, Office of Policy and Planning, Research Section, Lansing, MI 48918.

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