MTCF

Michigan Traffic Crash Facts

UPPER PENINSULA

2020

MISSION STATEMENT

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 2020

MichiganTrafficCrashFacts.org

PRODUCED BY:

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

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

University of Michigan Transportation Research Institute
umtri.umich.edu

This page left intentionally blank

ACKNOWLEDGEMENTS

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

Criminal Justice Information Center

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.

This page left intentionally blank

FOREWORD

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 for easy access to crash data from 1952-2020.

Special Note:

The Michigan Office of Highway Safety Planning and the University of Michigan Transportation Research Institute would like to acknowledge the differences in traffic and commuting patterns in 2020 due to the COVID-19 pandemic. Travel restrictions from the "Stay Home, Stay Safe" Executive Order (EO 2020-21) were initially in place starting on March 24, 2020. That order was then extended through additional executive orders. The stay-at-home order was officially lifted June 1, 2020.

DATA ELEMENTS WITH CHANGES FOR 2016 DATA

CDL Restriction 28 (2004-2015) – This variable is no longer active starting with 2016 data and all counts have been coded to “Uncoded & errors.” “CDL Restriction” and “Non-truck, no data” will display counts of 0 when selected.

CDL Restriction 29 (2004-2015) – See **CDL Restriction 28 (2004-2015)**.

CDL Restriction 30 (2004-2015) – See **CDL Restriction 28 (2004-2015)**.

CDL Restriction 35 (2004-2015) – See **CDL Restriction 28 (2004-2015)**.

CDL Restriction 36 (2004-2015) – See **CDL Restriction 28 (2004-2015)**.

Commercial Motor Vehicle Configuration (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to “Uncoded & errors.”

Complaint Status (2004-2015) – This variable is no longer active starting with 2016 data and all counts have been coded to “Uncoded & errors.” “Open” and “Closed” will display counts of 0 when selected.

Construction Activity (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to “Uncoded & errors.”

Construction Crash Location (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to “Uncoded & errors.”

Construction Lane Closed (2004-2015) – This variable is no longer active starting with 2016 data and all counts have been coded to “Uncoded & errors.” “Lane open” and “Lane closed” will display counts of 0 when selected.

Construction Workers Present (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to “Uncoded & errors.”

Contributing Circumstances Road 1 (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to “Uncoded & errors.”

Contributing Circumstances Road 2 (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to “Uncoded & errors.”

DATA ELEMENTS WITH CHANGES FOR 2016 DATA (CONTINUED)

Crash: Animal Type Involved/Associated (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

Crash: Driver Distracted (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

Drivable After Crash (2004-2015) – This variable is no longer active starting with 2016 data and all counts have been coded to "Uncoded & errors." "Not drivable after crash" and "Drivable after crash" will display counts of 0 when selected.

Driver Airbag Deployed (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors." See **Driver Airbag Deployed** for driver airbag data for all years with less airbag deployment detail.

Driver Condition Emotional (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

Driver Condition Fatigue (2004-2015) – This variable is no longer active starting with 2016 data and all counts have been coded to "Uncoded & errors." "No, driver was not fatigued" and "Yes, driver was fatigued" will display counts of 0 when selected. See **Driver Condition Fatigued or Asleep (2016+)** for driver fatigue data starting in 2016.

Driver Condition Fatigued or Asleep (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors." See **Driver Condition Fatigue (2004-2015)** or **Driver Condition Asleep (2004-2014)** for driver fatigue or driver asleep data prior to 2016.

Driver Condition Other (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

Driver Condition Physically Disabled (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

Driver Contributing Factor – Alcohol Use (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

Driver Contributing Factor – Drug Use (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

DATA ELEMENTS WITH CHANGES FOR 2016 DATA (CONTINUED)

Driver Distraction (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors." See **Driver Condition Distracted (2004-2014)** for driver distraction data prior to 2016.

Driver Restraint (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors." See Driver Restraint for driver restraint data for all years with less child restraint detail.

Field Sobriety Test – Drug (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

Gross Vehicle Weight Rating Code – This variable is new starting with 2016 data. All counts for years prior to 2016 have also been added.

Inter/Intra State (2004-2015) – This variable is no longer active starting with 2016 data and all counts have been coded to "Uncoded & errors." "Interstate only," "Intrastate," and "Nontruck, no data" will display counts of 0 when selected.

Person Airbag Deployed (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors." See **Person Airbag Deployed** for driver airbag data for all years with less airbag deployment detail.

Person Restraint (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors." See **Person Restraint** for driver restraint data for all years with less child restraint detail.

Refusal Information - Drug (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

Source of Carrier Information (2004-2015) – This variable is no longer active starting with 2016 data and all counts have been coded to "Uncoded & errors."

Test Offered – Drug (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

Test Result Pending – Alcohol (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

DATA ELEMENTS WITH CHANGES FOR 2016 DATA (CONTINUED)

Test Result Pending – Drug (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

Total Non-Motor Vehicles (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors."

Weather Conditions (2004-2015) – This variable is no longer active starting with 2016 data and all counts have been coded to "Uncoded & errors." See **Weather Conditions** (2016+) for weather condition data starting with 2016 data.

Weather Conditions (2016+) – This variable is new for 2016 data. All counts for years prior to 2016 have been coded to "Uncoded & errors." See **Weather Conditions** (2004-2015) for weather condition data prior to 2016 data.

For questions regarding specific changes to the crash codes, please contact Criminal Justice Information Center, Traffic Crash Reporting Unit (CrashTCRS@michigan.gov, 517-241-1699).

This page left intentionally blank

UD-10 (FRONT)

MSP UD - 10 (Rev. 01/2016)
Authority: 1949 PA 300, Sec. 257.622
Compliance: Required
Penalty: $100 and/or 90 days

Revised September16, 2015

State of Michigan Traffic Crash Report

Page ____ of ____
Incident #
File Class
Investigated at Scene ◯ Yes ◯ No

ORI MI | Department Name | Investigator(s) | Badge # | Photos ◯ Yes ◯ No | Reviewer

Crash Date M M D D Y Y Y Y | Crash Time (Milt.) H H M M | No. of Units

Crash Type ◯ Single Motor Vehicle ◯ Head On ◯ Head On-Left Turn ◯ Angle ◯ Backing ◯ Rear End ◯ Rear End-Left Turn ◯ Rear End-Right Turn ◯ Sideswipe-Same ◯ Sideswipe-Opposite ◯ Other ◯ Unknown

Special Circumstances ◯ None ◯ Hit and Run ◯ School Bus ◯ Fleeing Police ◯ Unknown Animal

Special Checks ◯ Fatal ◯ Corrected Copy ◯ Replace ◯ Delete ◯ Non-Traffic ◯ ORV/Snowmobile

Weather | Light | Road Surface Condition | Total Lanes

County | City/Twp | Area | Traffic Control | Relation to Roadway

Work Zone-Type ◯ Const. / Maint. ◯ Utility | Work Zone-Workers Present ◯ Yes ◯ No | Work Zone-Activity | Work Zone-Location

Contributing Circumstances 1st | 2nd

Location

Prefix | Primary Road Name | Road Type | Suffix | Divided Roadway ◯ N ◯ S ◯ E ◯ W

Distance ◯ Feet ◯ Miles | Direction ◯ North ◯ South ◯ East ◯ West ◯ Beginning of Ramp ◯ End of Ramp | Trafficway ◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5 ◯ 6 | Speed Limit | Posted ◯ Yes ◯ No

Prefix | Intersecting Road Name | Road Type | Suffix | Divided Roadway ◯ N ◯ S ◯ E ◯ W

Unit / Driver

Unit Number | Driver's License State / Number | Date of Birth M M / D D / Y Y Y Y | Unit Type ◯ MV ◯ B ◯ P ◯ E (Train) | Sex ◯ M ◯ F

Name | ◯ Driver is Owner | License Type ◯ O ◯ C ◯ M

Street Address | Endorsements ◯ CY ◯ F ◯ R

City | State | ZIP | Phone | Injury ◯ K ◯ A ◯ B ◯ C ◯ O

Position | Restraint | Airbag | Ejected ◯ | Trapped ◯ | Condition at Time of Crash 1st | 2nd | Driver Distracted By | Total Occupants | Hospital Code | Ambulance Code

Citation Issued ◯ Hazardous ◯ Other | Hazardous Action | Action Prior | Sequence of Events (M = Most Harmful Event) 1st (M) | 2nd (M) | 3rd (M) | 4th (M)

Alcohol Suspected ◯ Yes ◯ No | Contributing Factor ◯ Yes ◯ No | Test Type ◯ Breath ◯ Blood ◯ Urine ◯ Field ◯ PBT ◯ Refused ◯ Not Offered | Test Results ● | ◯ Results Pending | Interlock Device ◯ Yes ◯ No

Drug Suspected ◯ Yes ◯ No | Contributing Factor ◯ Yes ◯ No | Test Type ◯ Blood ◯ Urine ◯ Field ◯ Refused ◯ Not Offered | Test Results | ◯ Results Pending

Vehicle

Vehicle Registration | State | Insurance Company | Policy Number | Towed By | Towed To

VIN | Year | Make | Model | Color | Special Vehicles | Vehicle Use

Vehicle Type | Location of Greatest Damage | 1st Impact | Extent of Damage | Vehicle Direction | Private Trailer Type | Vehicle Defect

Passengers

Name | Ejected ◯
Street Address | Sex ◯ M ◯ F | Trapped ◯
City | State | ZIP | Phone | Injury ◯ K ◯ A ◯ B ◯ C ◯ O
Date of Birth M M D D Y Y Y Y | Position | Restraint | Airbag | Hospital Code | Ambulance Code

Name | Ejected ◯
Street Address | Sex ◯ M ◯ F | Trapped ◯
City | State | ZIP | Phone | Injury ◯ K ◯ A ◯ B ◯ C ◯ O
Date of Birth M M D D Y Y Y Y | Position | Restraint | Airbag | Hospital Code | Ambulance Code

◯ Owner ◯ Uninjured Passenger ◯ Witness | Name | Address
Phone | Age | Pos. | Rest.

◯ Owner ◯ Uninjured Passenger ◯ Witness | Name | Address
Phone | Age | Pos. | Rest.

Reported Date | Reported Time | Damaged Property

UD-10 SERIAL NUMBER | Serial Override Number | Owner & Phone ____ / ____ Public ◯ Yes ◯ No

UD-10 (BACK)

Unit / Driver

Unit Number | Driver's License State/ Number | Date of Birth (M M / D D / Y Y Y Y) | Unit Type (MV, B, P, E (Train)) | Sex (M, F)

Name | Driver is Owner | License Type (O, C, M)

Street Address | Endorsements (CY, F, R)

City | State | Zip | Phone Number | Injury (K, A, B, C, O)

Position | Restraint | Airbag | Ejected | Trapped | Condition at Time of Crash (1st, 2nd) | Driver Distracted By | Total Occupants | Hospital Code | Ambulance Code

Citation Issued (Hazardous, Other) | Hazardous Action | Action Prior | Sequence of Events (M = Most Harmful Event) (1st, 2nd, 3rd, 4th)

Alcohol Suspected (Yes, No) | Contributing Factor (Yes, No) | Test Type (Breath, Blood, Urine, Field, PBT, Refused, Not Offered) | Test Results | Results Pending | Interlock Device (Yes, No)

Drug Suspected (Yes, No) | Contributing Factor (Yes, No) | Test Type (Blood, Urine, Field, Refused, Not Offered) | Test Results | Results Pending

Vehicle

Vehicle Registration | State | Insurance Company | Policy Number

Towed By | Towed To

VIN | Year | Make | Model | Color | Special Vehicles | Vehicle Use

Vehicle Type | Location of Greatest Damage | 1st Impact | Extent of Damage | Vehicle Direction | Private Trailer Type | Vehicle Defect

Passengers

Name | Ejected

Street Address | Sex (M, F) | Trapped

City | State | ZIP | Phone | Injury (K, A, B, C, O)

Date of Birth (M M D D Y Y Y Y) | Position | Restraint | Airbag | Hospital Code | Ambulance Code

Name | Ejected

Street Address | Sex (M, F) | Trapped

City | State | ZIP | Phone | Injury (K, A, B, C, O)

Date of Birth (M M D D Y Y Y Y) | Position | Restraint | Airbag | Hospital Code | Ambulance Code

(Owner, Uninjured Passenger, Witness) | Name | Phone | Age | Pos. | Rest. | Address

(Owner, Uninjured Passenger, Witness) | Name | Phone | Age | Pos. | Rest. | Address

Truck / Bus

Unit # | Carrier Name

Address

City | State | ZIP

GVWR / GCWR (10,000 LBS or Less, 10,001 - 26,000 LBS, 26,001 LBS or More)

Vehicle Configuration | Cargo Body Type | HAZMAT (Placard, Cargo Spill) | HAZMAT ID | HAZMAT Class

USDOT | MC | MPSC

CDL Type (A, B, C, None) | Endorsements (H, P, T, N, S, X)

Medical Card (Yes, No) | Exempt (Farm, Other) | Remarks / Narrative

UD -10 Serial Number

Crash Diagram

North

MICHIGAN VEHICLE CODE

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.

This page left intentionally blank

ABBREVIATIONS & ACRONYMS

- **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 - Suspected Serious
  - B - Suspected Minor
  - 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)

- **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

GLOSSARY

- **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.

- **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 ¼
Monday	6:00 PM FRI	23:59 PM MON	3 ¼
Tuesday	6:00 PM FRI	23:59 PM TUE	4 ¼
Wednesday	6:00 PM TUE	23:59 PM WED	1 ¼
Thursday	6:00 PM WED	23:59 PM SUN	3 ¼
Friday	6:00 PM THU	23:59 PM SUN	3 ¼
Saturday	6:00 PM THU	23:59 PM SUN	3 ¼

- **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 (Suspected Serious 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 (Suspected Minor 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.

- **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 noncollision crashes include explosion or fire in vehicle, rollover, immersion, etc.
- **Occupant -** Any injured or killed person in or on a motor vehicle, including all drivers.
- **Passenger -** Any 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)

- **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 twoway 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.

TABLE OF CONTENTS

QUICK FACTS AND FIGURES

HISTORICAL INFORMATION

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

DEER

CRASH - CIRCUMSTANCES COMMON TO ALL TRAFFIC UNITS IN A CRASH

VEHICLE/DRIVER - CHARACTERISTICS SPECIFIC TO INDIVIDUAL TRAFFIC UNITS

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

QUICK FACTS AND FIGURES

This page left intentionally blank

UPPER PENINSULA 2020 QUICK FACTS

- Some exposure factor comparisons between 2020 and 2019 show motor vehicle registrations decreased by a count of 11,926 (4.3%), the number of licensed drivers on Upper Peninsula roads decreased 1.4 percent, and vehicle mileage decreased 11.1 percent.

- The 2020 fatality rate of 1.16 deaths per 100 million miles of travel is a decrease from the 2019 fatality rate of 1.17 but is higher than the 10-year average of 1.05 (2011-2020).

- There were 35 people killed and 1,397 people injured in 7,378 reported motor vehicle traffic crashes in the Upper Peninsula during 2020. Compared with the 2019 experience, the number of deaths decreased 12.5 percent, people injured decreased 9.8 percent, and total reported crashes decreased 19.3 percent.

- There were 7,378 reported crashes, of which 32 were fatal, 1,050 were personal injury, and 6,296 were property damage only crashes.

- Of all fatal crashes, 28.1 percent occurred at intersections.

- Of all fatal crashes, 37.5 percent involved at least one drinking operator, bicyclist, or pedestrian, 28.1 percent involved drinking but no drugs, 18.8 percent involved drugs but no drinking, and 9.4 percent involved both drinking and drugs.

- Excessive speed was indicated as the hazardous action for 18.0 percent of the drivers involved in fatal crashes.

- Of the 7,378 total crashes in 2020, 4,797 (65.0%) involved one vehicle only. This is a decrease of 11.3 percent from last year's count of 5,406 single-vehicle crashes.

- Of the 32 fatal crashes, 17 (53.1%) involved one vehicle.

- Of the 12 alcohol-involved fatal crashes, six (50.0%) involved one vehicle.

- Of the 50 drivers involved in fatal crashes, one (2.0%) were under 21 years of age and five (10.0%) were under 25 years of age.

- Of the 296,181 people living in the Upper Peninsula [1. References and Reporting Agencies] one out of every 8,462 was killed in a traffic crash and one out of every 212 was injured.

- For each person killed, 40 were injured.

- There was one pedestrian death in the Upper Peninsula in 2020. Twenty-six pedestrians were injured.

- There were two bicyclist fatalities and ten bicyclists were injured.

- Of the 9,302 drivers and injured passengers involved in crashes where restraint use was known, 9,068 or 97.5 percent were reported to have been using occupant restraints. Restraint usage among fatal victims, where usage was known, was reported to be 46.4 percent in 2020.

- The comprehensive costs in the Upper Peninsula traffic crashes amounted to $1,302,312,200.


ONE BICYCLIST WAS INJURED EVERY 36 DAYS 14 HOURS 24 MINUTES
ONE PEDESTRIAN WAS INJURED EVERY 14 DAYS 1 HOUR 51 MINUTES
ONE MOTORCYCLIST WAS INJURED EVERY 3 DAYS 11 HOURS 39 MINUTES
ONE DRIVER UNDER 21 WAS IN A FATAL CRASH EVERY 366 DAYS
ONE PERSON WAS KILLED IN AN ALCOHOL-INVOLVED CRASH EVERY 28 DAYS 3 HOURS 42 MINUTES
ONE PERSON WAS KILLED EVERY 10 DAYS 10 HOURS 58 MINUTES
ONE PERSON WAS INJURED EVERY 6 HOURS 17 MINUTES
EVERY 1 HOUR 11 MINUTES A TRAFFIC CRASH OCCURRED

HISTORICAL INFORMATION

This page left intentionally blank

UPPER PENINSULA 2019-2020 SUMMARY TRENDS: 1 YEAR TRENDS

	2019	2020	PERCENT OF CHANGE
NUMBER OF CRASHES			
Fatal Crashes	37	32	-13.5
Personal Injury Crashes	1,130	1,050	-7.1
Property Damage Crashes	7,973	6,296	-21.0
TOTAL	9,140	7,378	-19.3
ALCOHOL-INVOLVED CRASHES			
Fatal Crashes	15	12	-20.0
Personal Injury Crashes	133	151	13.5
Property Damage Crashes	165	181	9.7
TOTAL	313	344	9.9
FATAL CRASHES			
Had Been Drinking	15 (40.5%)	12 (37.5%)	-20.0
Had Not Been Drinking / Not Known If Drinking	22 (59.5%)	20 (62.5%)	-9.1
PERSONS IN CRASHES			
Killed	40	35	-12.5
Injured	1,548	1,397	-9.8
Not Injured	13,033	9,855	-24.4
Unknown Injury	778	522	-32.9
TOTAL	15,399	11,809	-23.3
PERSONS IN ALCOHOL-INVOLVED CRASHES			
Killed	15	13	-13.3
Injured	180	184	2.2
Not Injured	291	297	2.1
Unknown Injury	24	44	83.3
TOTAL	510	538	5.5
PERSONS INJURED BY GENDER			
Male	784	737	-6.0
Female	764	660	-13.6
Unknown Gender	0	0	0.0
TOTAL	1,548	1,397	-9.8
PERSONS INJURED BY SEVERITY			
A Injury	244	249	2.0
B Injury	414	402	-2.9
C Injury	890	746	-16.2
TOTAL	1,548	1,397	-9.8

The Upper Peninsula experienced a 19.3 percent decrease in crashes, a 12.5 percent decrease in traffic fatalities, and a 9.8 percent decrease in injuries. Persons sustaining A level injuries (the most serious) increased 2.0 percent.

UPPER PENINSULA 2019-2020 SUMMARY TRENDS: 1 YEAR TRENDS (CONTINUED)

	2019	2020	PERCENT OF CHANGE
PERSONS KILLED BY GENDER			
Male	33	26	-21.2
Female	7	9	28.6
TOTAL	40	35	-12.5
PERSONS KILLED			
Motor Vehicle Driver	31	25	-19.4
Passenger	6	7	16.7
Bicyclist	0	2	---
Pedestrian	3	1	-66.7
Train Engineer	0	0	0.0
TOTAL	40	35	-12.5
BELT RESTRAINT USE BY DRIVER			
Reported Restrained – Killed	11	8	-27.3
Reported Not Restrained – Killed	6	10	66.7
Reported Restrained – Injured	862	760	-11.8
Reported Not Restrained – Injured	33	49	48.5
BELT AND CHILD RESTRAINT USE BY INJURED PASSENGER			
Reported Restrained – Killed	3	2	-33.3
Reported Not Restrained – Killed	3	2	-33.3
Reported Restrained – Injured	323	262	-18.9
Reported Not Restrained – Injured	37	36	-2.7
DRIVER AGE 16-20 INVOLVED			
Fatal Crashes	5	1	-80.0
Personal Injury Crashes	219	178	-18.7
Property Damage Crashes	1,095	862	-21.3
TOTAL ALL CRASHES	1,319	1,041	-21.1
Persons Killed	7	1	-85.7
Persons Injured	314	246	-21.7
DRIVER AGE 65 & OVER INVOLVED			
Fatal Crashes	9	11	22.2
Personal Injury Crashes	285	232	-18.6
Property Damage Crashes	1,642	1,140	-30.6
TOTAL ALL CRASHES	1,936	1,383	-28.6
Persons Killed	9	12	33.3
Persons Injured	394	339	-14.0

Deaths among vehicle occupants (drivers and passengers only) decreased 13.5 percent.

UPPER PENINSULA 2019-2020 SUMMARY TRENDS: 1 YEAR TRENDS (CONTINUED)

	2019	2020	PERCENT OF CHANGE
CRASH FACTS			
Licensed Drivers	220,289	217,175	-1.4
Registered Vehicles	278,643	266,717	-4.3
Population	298,851	296,181	-0.9
Drivers Involved in Crashes	13,024	10,010	-23.1
Occupants* Involved in Crashes	15,324	11,760	-23.3
Estimated Vehicle Miles Traveled (thousands)	3,406,208	3,027,865	-11.1
Death Rate Per 100 Million Vehicle Miles	1.2	1.2	-1.6
Fatal Crash Rate Per 100 Million Vehicle Miles	1.1	1.1	-2.7

**Occupants include all drivers and passengers in or on a motor vehicle.*

UPPER PENINSULA 2020 COST OF CRASHES IN MICHIGAN

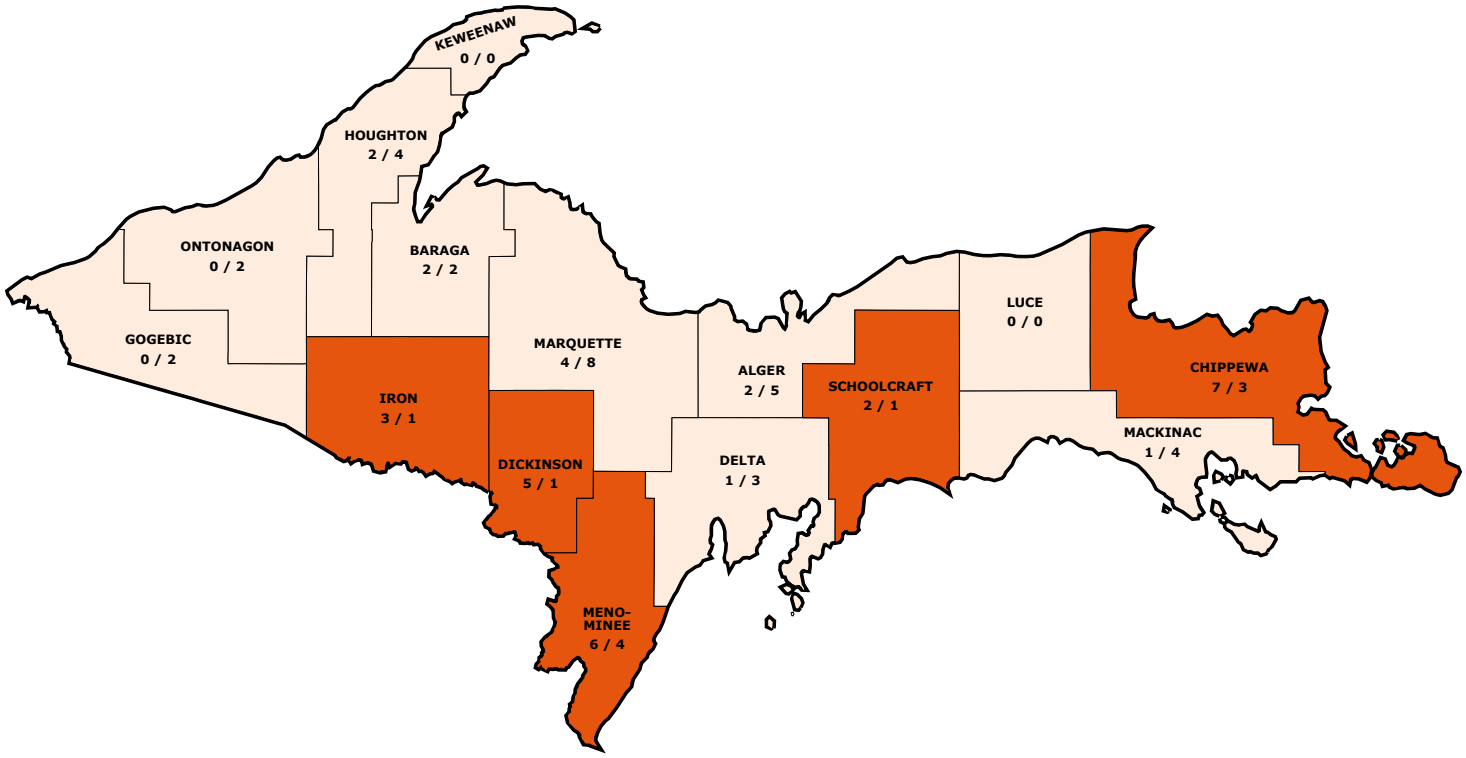
The cost estimate for Upper Peninsula crashes in 2020 was **$1,302,312,200**. This estimate is based on the National Safety Council's cost estimating procedures. Average comprehensive costs are based on the following national figures:

COMPREHENSIVE COSTS, 2020

Death	$11,449,000
Suspected Serious Injury	$1,252,000
Suspected Minor Injury	$345,000
Possible Injury	$160,000
No Injury	$52,700

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.

UPPER PENINSULA WHERE TRAFFIC FATALITIES OCCURRED



Where Traffic Fatalities Occurred - A One-Year Comparison
2020 = 35 / 2019 = 40

Same or decrease

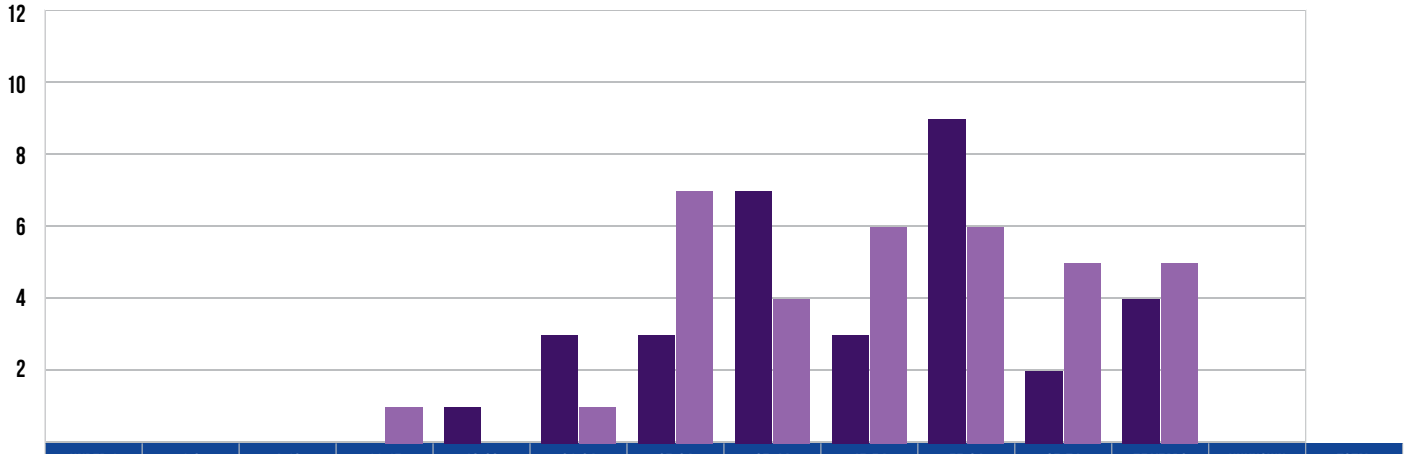
Increase

5 YEAR TRENDS - UPPER PENINSULA FATALITIES

FATALITIES BY AGE	2016	2017	2018	2019	2020
Under 1 year old	0	0	0	0	0
1 - 3 years	0	0	0	0	0
4 - 10 years	0	1	0	0	0
11 - 15 years	0	1	0	1	1
16 - 20 years	1	2	4	3	0*
21 - 24 years	3	2	6	2	1*
25 - 34 years	3	5	4	4	7
35 - 44 years	7	1	3	6	4
45 - 54 years	3	10	4	4	6
55 - 64 years	9	6	5	12	6
65 - 74 years	2	3	5	1	5
75 years and over	4	8	4	7	5
Unknown	0	0	0	0	0
TOTAL	32	39	35	40	35

*Indicates that the most recent year is the lowest number of fatalities in the 5-year period in that age group

FATALITIES BY AGE



	UNDER 1 YEAR OLD	1-3 YEARS	4-10 YEARS	11-15 YEARS	16-20 YEARS	21-24 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55-64 YEARS	65-74 YEARS	75 YEARS AND OVER	UNKNOWN	TOTAL
2016	0	0	0	0	1	3	3	7	3	9	2	4	0	32
2020	0	0	0	1	0	1	7	4	6	6	5	5	0	35

5 YEAR TRENDS - UPPER PENINSULA DRIVERS IN FATAL CRASHES

DRIVER AGE	2016	2017	2018	2019	2020
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	0
16 years	1	0	0	0	1
17 years	1	2	0	0	0
18 years	1	1	1	3	0
19 years	0	1	2	2	0
20 years	1	0	2	0	0
21 - 24 years	3	4	9	5	4
25 - 34 years	4	4	7	4	10
35 - 44 years	8	5	9	7	6
45 - 54 years	5	14	9	6	7
55 - 64 years	13	8	8	16	6
65 - 69 years	0	4	4	3	4
70 - 74 years	1	2	2	0	2
75 - 79 years	0	1	0	4	2
80 - 84 years	4	2	1	2	3
85 - 89 years	0	2	3	0	0
90 years and over	0	0	1	0	1
Unknown	0	2	1	0	4
Totals	42	53	59	52	50
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	0	0	0	0
16 years	0	0	0	0	0
17 years	0	0	0	0	0
18 years	0	0	0	2	0
19 years	0	0	1	1	0
20 years	1	0	1	0	0
21 - 24 years	1	0	3	1	1
25 - 34 years	3	3	1	1	5
35 - 44 years	4	2	1	2	3
45 - 54 years	3	7	2	3	3
55 - 64 years	4	4	1	9	2
65 - 69 years	0	1	0	2	0
70 - 74 years	0	0	0	0	1
75 - 79 years	0	0	0	2	1
80 - 84 years	1	0	0	0	0
85 - 89 years	0	1	0	0	0
90 years and over	0	0	0	0	0
Unknown	0	0	1	0	1
Totals	17	18	11	23	17

5 YEAR TRENDS - UPPER PENINSULA BICYCLIST AND PEDESTRIAN FATALITIES

FATALITIES BY AGE	2016	2017	2018	2019	2020
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	1
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	1	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	1
75 years and over	0	0	0	0	0
Unknown	0	0	0	0	0
Totals	1	0	0	0	2
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	0	0	0	0
21 - 24 years	0	0	0	0	0
25 - 34 years	0	0	1	1	0
35 - 44 years	1	0	0	2	0
45 - 54 years	0	0	0	0	0
55 - 64 years	0	0	0	0	1
65 - 74 years	1	0	0	0	0
75 years and over	0	0	0	0	0
Unknown	0	0	0	0	0
Totals	2	0	1	3	1

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

HOLIDAY PERIOD	FATAL CRASHES	PERSONS KILLED
MEMORIAL DAY		
2020 (3) MON	0 [0]	0 [0]
2019 (3) MON	1 [1]	1 [1]
2018 (3) MON	1 [0]	1 [0]
2017 (3) MON	0 [0]	0 [0]
2016 (3) MON	0 [0]	0 [0]
FOURTH OF JULY		
2020 (3) SAT	0 [0]	0 [0]
2019 (4) THU	0 [0]	0 [0]
2018 (1) WED	0 [0]	0 [0]
2017 (4) TUE	1 [1]	1 [1]
2016 (3) MON	0 [0]	0 [0]
LABOR DAY		
2020 (3) MON	0 [0]	0 [0]
2019 (3) MON	0 [0]	0 [0]
2018 (3) MON	2 [1]	2 [1]
2017 (3) MON	0 [0]	0 [0]
2016 (3) MON	0 [0]	0 [0]
THANKSGIVING		
2020 (4) THU	2 [0]	2 [0]
2019 (4) THU	0 [0]	0 [0]
2018 (4) THU	0 [0]	0 [0]
2017 (4) THU	0 [0]	0 [0]
2016 (4) THU	0 [0]	0 [0]
CHRISTMAS		
2020 (3) FRI	1 [0]	1 [0]
2019 (1) WED	0 [0]	0 [0]
2018 (4) TUE	0 [0]	0 [0]
2017 (3) MON	0 [0]	0 [0]
2016 (3) SUN	0 [0]	0 [0]
NEW YEAR'S		
2020 (3) FRI	0 [0]	0 [0]
2019 (1) WED	0 [0]	0 [0]
2018 (4) TUE	1 [1]	1 [1]
2017 (3) MON	2 [0]	3 [0]
2016 (3) SUN	0 [0]	0 [0]

SUMMARY 2020

This table shows traffic death tolls in Michigan for the past five years for the major holiday periods as defined by the National Safety Council.

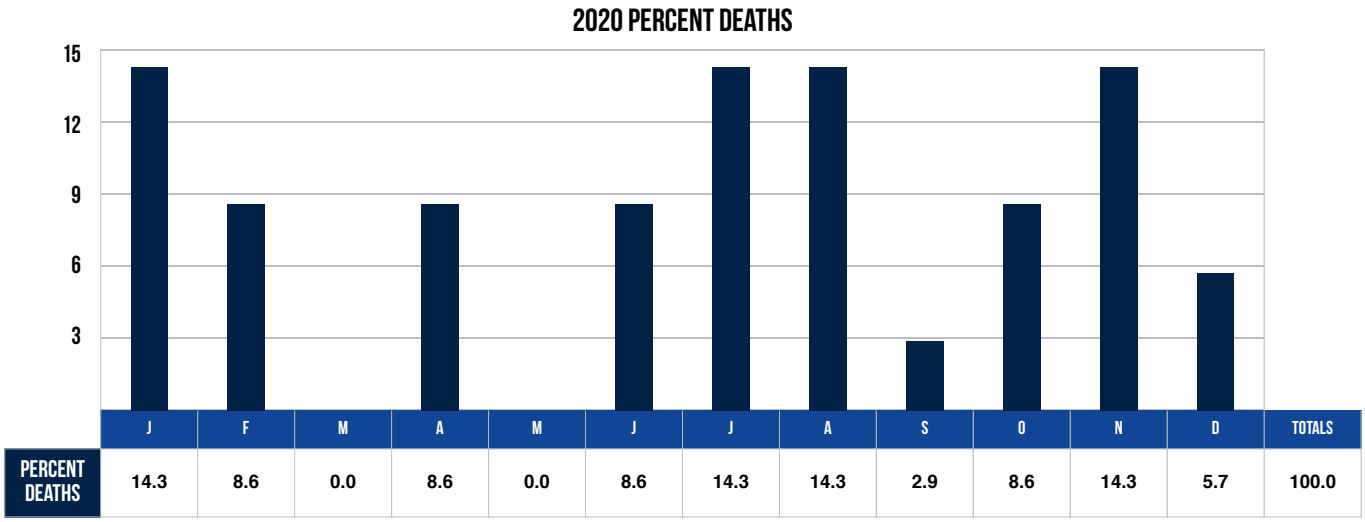
Based on the total 2020 Upper Peninsula experience, deaths averaged 0.10 per day. Alcohol-related deaths averaged 0.04 per day.

Based on the total 2020 Upper Peninsula holiday period experience, deaths averaged 0.16 per day. Alcohol-related deaths averaged 0.00 per day.

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 BY MONTH

MONTH	TRAFFIC DEATHS					2020 PERCENTAGES
	2016	2017	2018	2019	2020	Percent Deaths
January	6	2	3	7	5	14.3
February	4	3	2	2	3	8.6
March	2	4	4	4	0	0.0
April	0	5	1	1	3	8.6
May	1	3	2	5	0	0.0
June	8	5	2	4	3	8.6
July	3	4	5	4	5	14.3
August	1	1	3	2	5	14.3
September	1	2	5	6	1	2.9
October	1	1	1	4	3	8.6
November	2	2	3	1	5	14.3
December	3	7	4	0	2	5.7
Totals	32	39	35	40	35	100.0

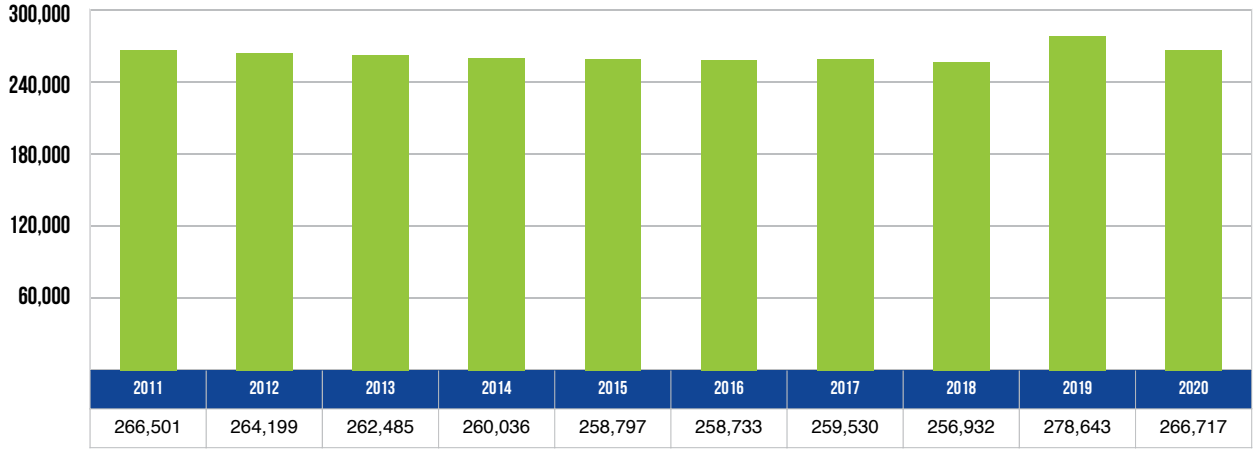


Note: Data for percent miles driven is not available for the Upper Peninsula.

This page left intentionally blank

10 YEAR TRENDS-UPPER PENINSULA

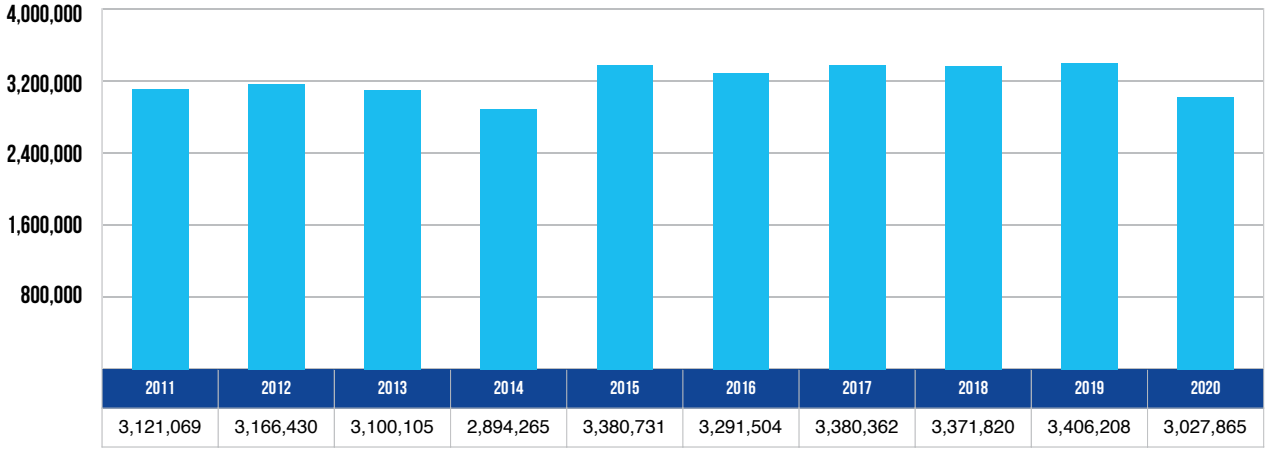
UPPER PENINSULA VEHICLE REGISTRATIONS



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
266,501	264,199	262,485	260,036	258,797	258,733	259,530	256,932	278,643	266,717

Vehicle registrations in the Upper Peninsula increased 0.1 percent over the 10-year period.

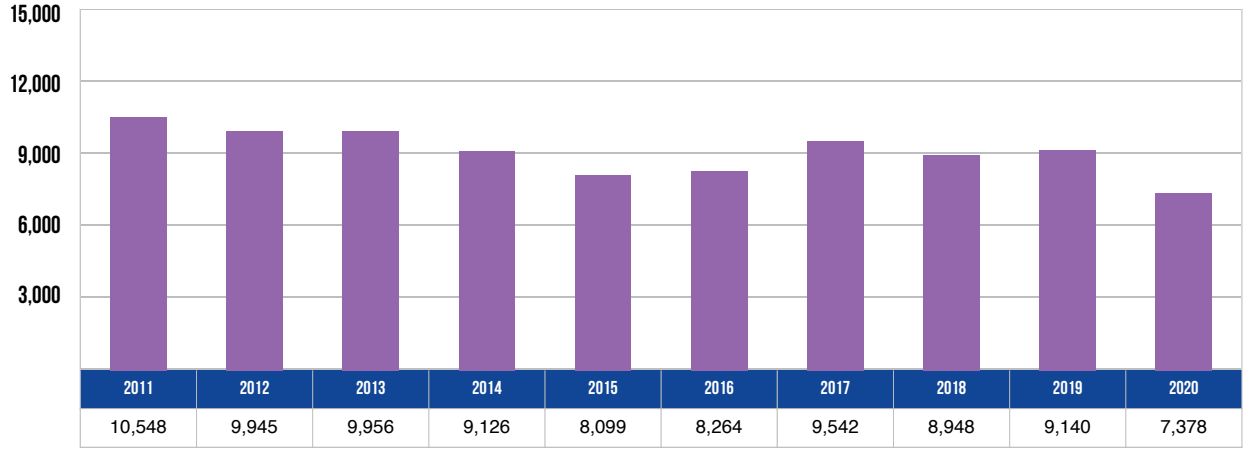
UPPER PENINSULA VEHICLE MILES TRAVELED (THOUSANDS)



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
3,121,069	3,166,430	3,100,105	2,894,265	3,380,731	3,291,504	3,380,362	3,371,820	3,406,208	3,027,865

Vehicle miles traveled in the Upper Peninsula decreased 3.0 percent over the 10-year period.

UPPER PENINSULA CRASHES

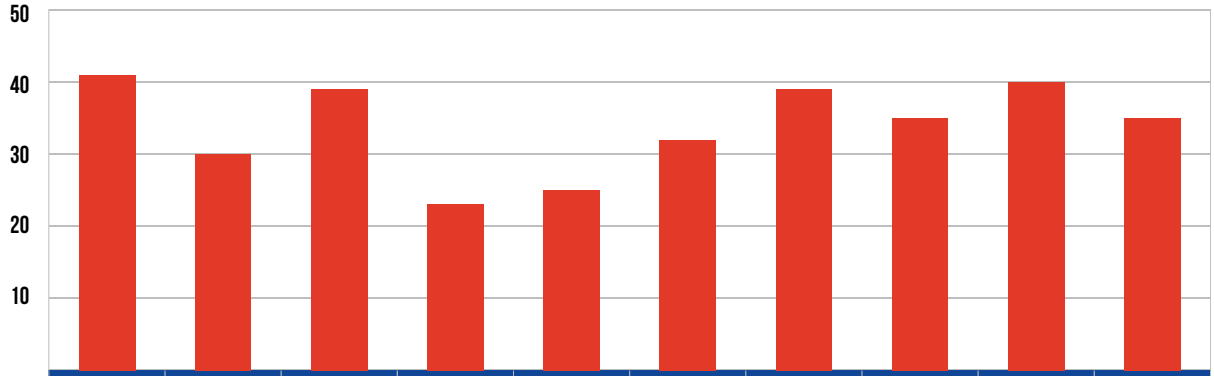


2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
10,548	9,945	9,956	9,126	8,099	8,264	9,542	8,948	9,140	7,378

There were 7,378 Upper Peninsula crashes in 2020--a 30.1 percent decrease from 2011.

10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

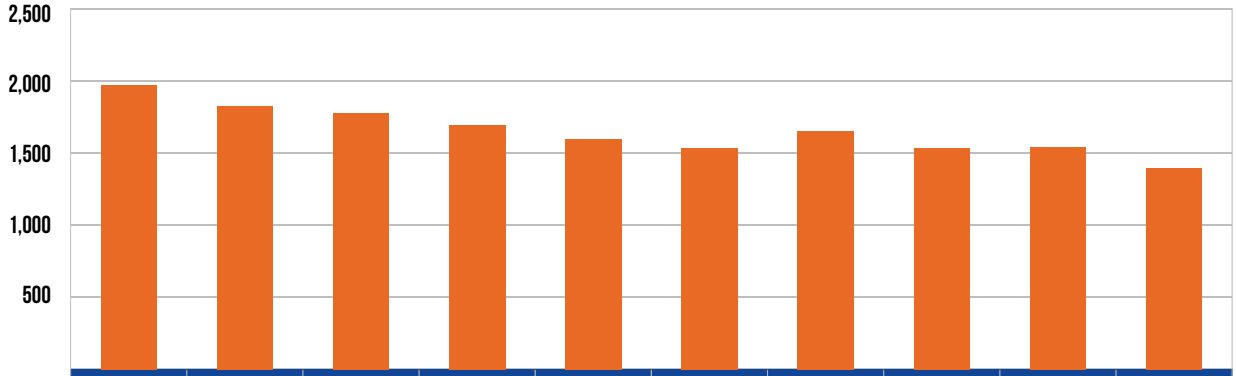
UPPER PENINSULA DEATHS



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
41	30	39	23	25	32	39	35	40	35

In 2020, 35 people died in motor vehicle crashes in the Upper Peninsula--a decrease of 14.6 percent from 2011.

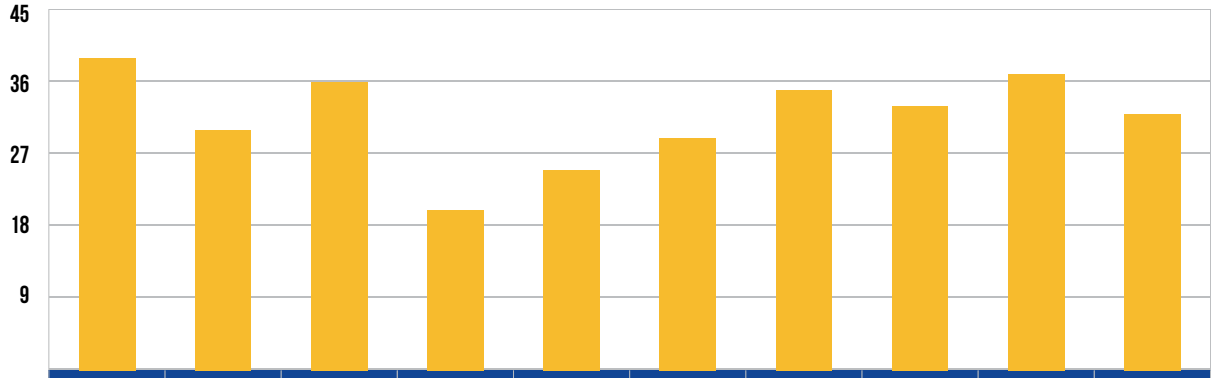
UPPER PENINSULA INJURIES



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1,974	1,827	1,778	1,696	1,603	1,541	1,654	1,538	1,548	1,397

In 2020, 1,397 people received injuries in motor vehicle crashes in the Upper Peninsula--down 29.2 percent from 1,974 in 2011.

UPPER PENINSULA FATAL CRASHES

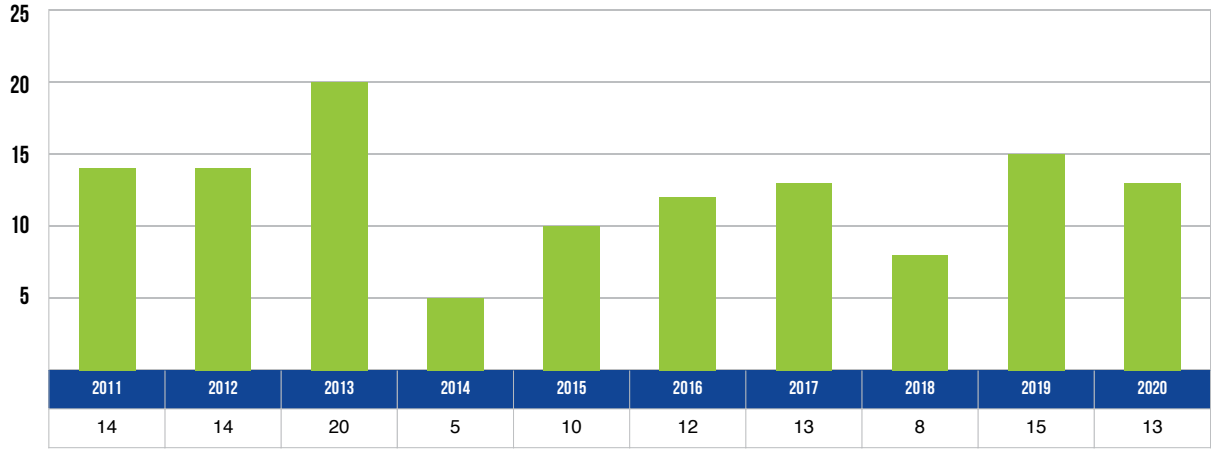


2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
39	30	36	20	25	29	35	33	37	32

In 2020, there were 32 fatal crashes in the Upper Peninsula--down 17.9 percent from 39 in 2011.

10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

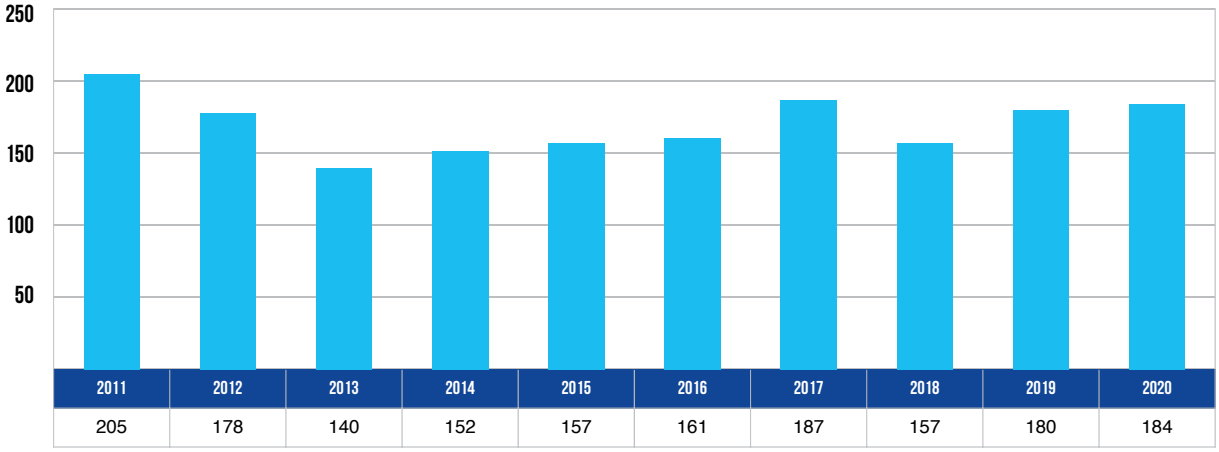
UPPER PENINSULA ALCOHOL-INVOLVED DEATHS



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
14	14	20	5	10	12	13	8	15	13

There were 13 deaths in alcohol-involved crashes in the Upper Peninsula in 2020, one less than the 2011 total.

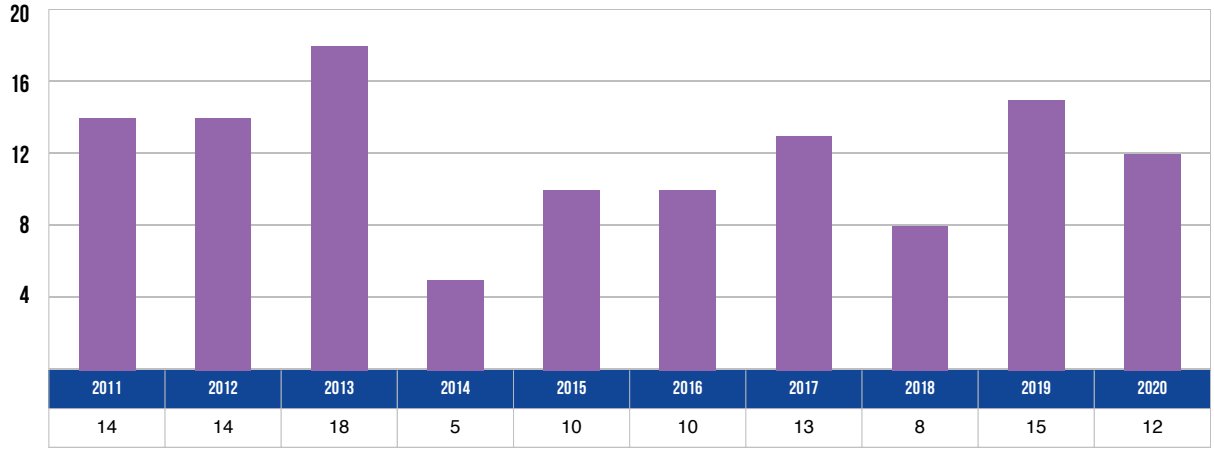
UPPER PENINSULA ALCOHOL-INVOLVED INJURIES



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
205	178	140	152	157	161	187	157	180	184

There were 184 alcohol-involved injuries in the Upper Peninsula in 2020--down 10.2 percent from 2011.

UPPER PENINSULA ALCOHOL-INVOLVED FATAL CRASHES

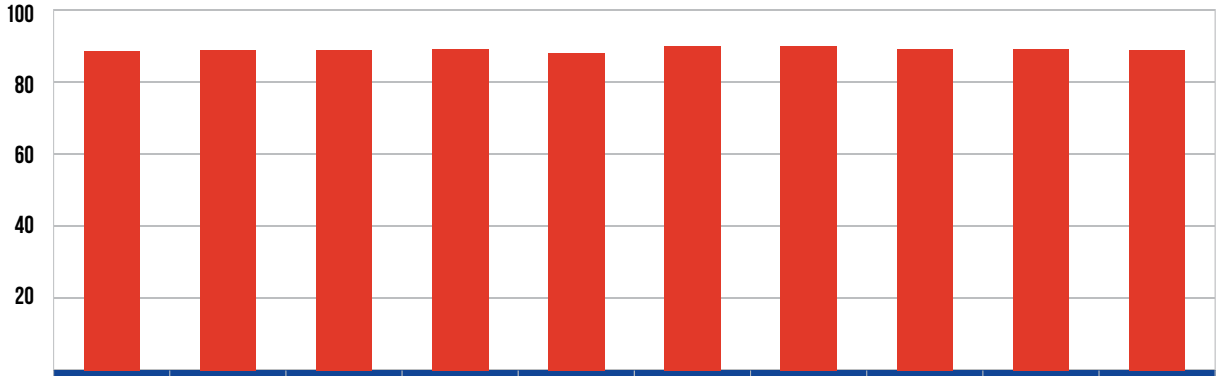


2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
14	14	18	5	10	10	13	8	15	12

There were 12 alcohol-involved fatal crashes in the Upper Peninsula in 2020, two less than the 14 alcohol-involved fatal crashes in 2011.

10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

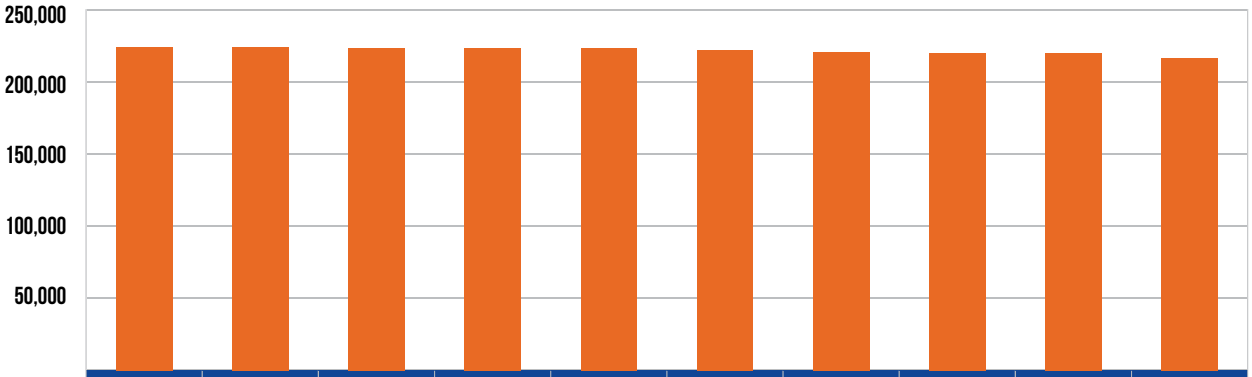
UPPER PENINSULA RESTRAINT USAGE IN CRASHES



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
88.6	88.8	89.0	89.1	88.2	89.9	90.1	89.2	89.1	88.9

The percentage of motor vehicle occupants using restraints as reported by police in traffic crashes was 88.9 percent in 2020, up 0.3 percent from 2011.

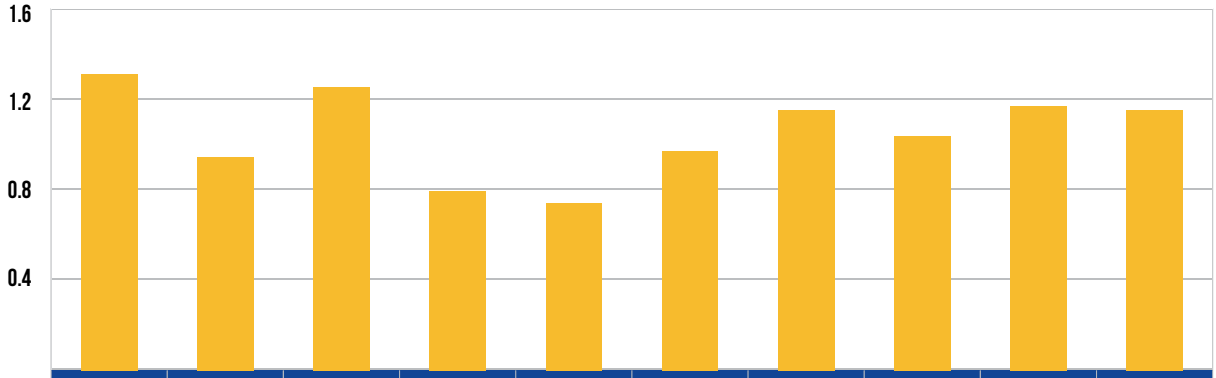
UPPER PENINSULA DRIVERS



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
224,845	224,933	223,975	223,910	223,640	222,220	221,126	220,395	220,289	217,175

There were 217,175 licensed drivers on Upper Peninsula roadways in 2020--a decrease of 3.4 percent from 2011.

UPPER PENINSULA FATALITIES PER 100 MILLION VMT

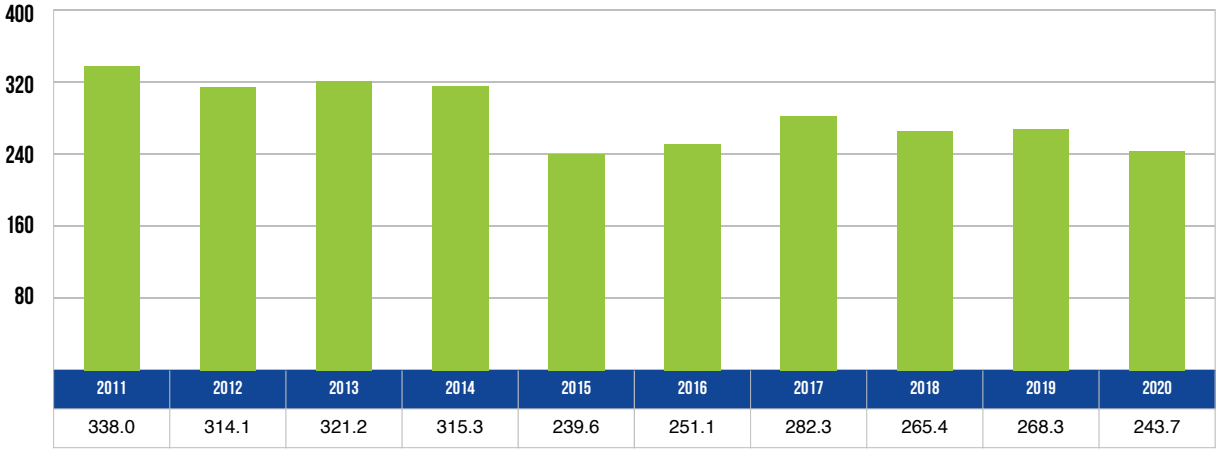


2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1.3	0.9	1.3	0.8	0.7	1.0	1.2	1.0	1.2	1.2

The 1.2 death rate for the Upper Peninsula in 2020 was a 12.0 percent decrease from 1.3 in 2011.

10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

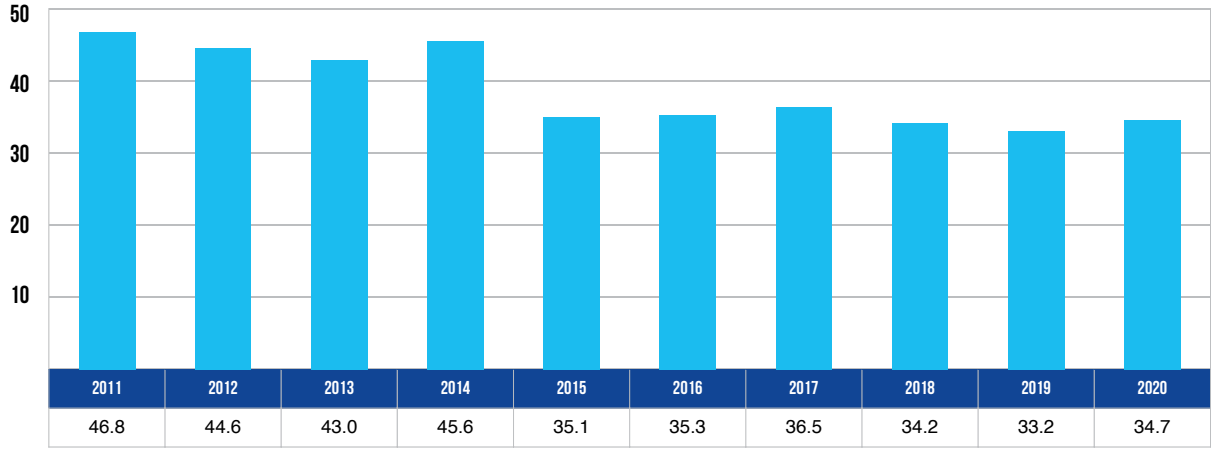
UPPER PENINSULA TOTAL CRASHES PER 100 MILLION VMT



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
338.0	314.1	321.2	315.3	239.6	251.1	282.3	265.4	268.3	243.7

The total crash rate of 243.7 in the Upper Peninsula in 2020 was a 27.9 percent decrease from 2011.

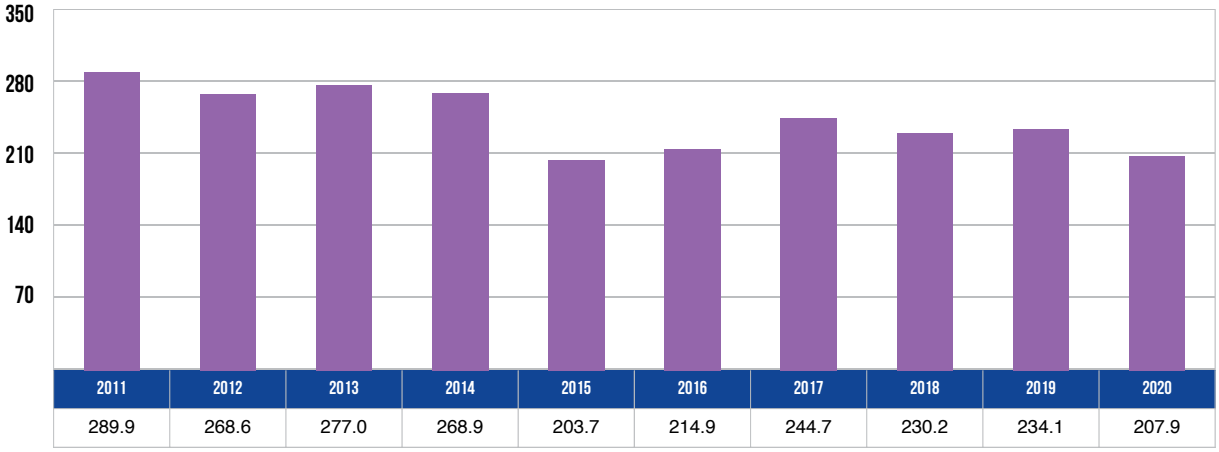
UPPER PENINSULA INJURY CRASHES PER 100 MILLION VMT



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
46.8	44.6	43.0	45.6	35.1	35.3	36.5	34.2	33.2	34.7

The injury crash rate of 34.7 in the Upper Peninsula in 2020 was a 25.9 percent decrease from 2011.

UPPER PENINSULA PROPERTY DAMAGE CRASHES PER 100 MILLION VMT

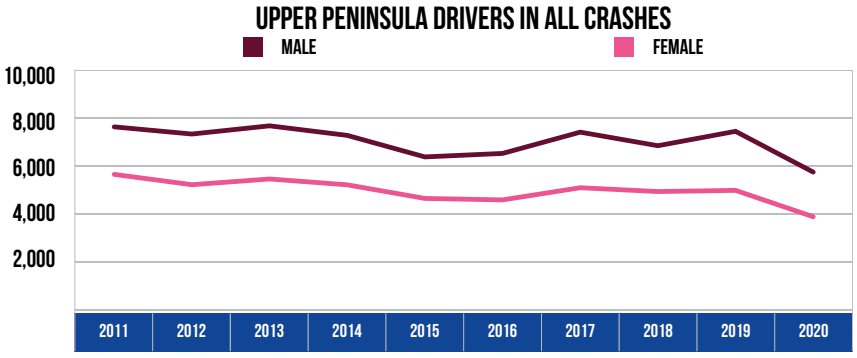


2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
289.9	268.6	277.0	268.9	203.7	214.9	244.7	230.2	234.1	207.9

The property damage crash rate of 207.9 in the Upper Peninsula in 2020 was a 28.3 percent decrease from 2011.

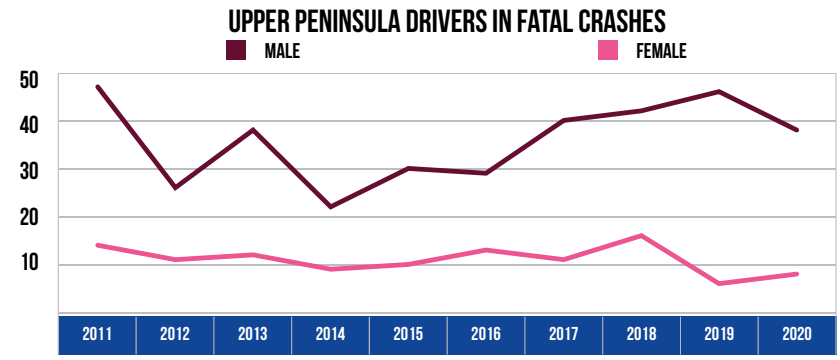
10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

UPPER PENINSULA DRIVERS IN ALL CRASHES		
Year	Male	Female
2011	7,590	5,610
2012	7,291	5,180
2013	7,633	5,418
2014	7,235	5,175
2015	6,338	4,608
2016	6,483	4,547
2017	7,370	5,054
2018	6,804	4,895
2019	7,404	4,944
2020	5,706	3,845



Male drivers accounted for 59.7 percent of all drivers in crashes in the Upper Peninsula during 2020, slightly higher than the 57.5 percent figure in 2011. Female drivers accounted for 40.3 percent of all drivers in crashes during 2020, slightly lower than the 42.5 percent figure in 2011.

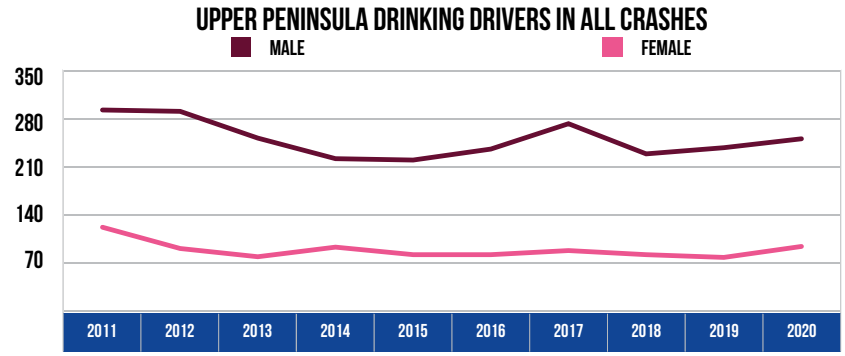
UPPER PENINSULA DRIVERS IN FATAL CRASHES		
Year	Male	Female
2011	47	14
2012	26	11
2013	38	12
2014	22	9
2015	30	10
2016	29	13
2017	40	11
2018	42	16
2019	46	6
2020	38	8



Male drivers made up 82.6 percent of all drivers in fatal crashes in the Upper Peninsula in 2020, which was up from 77.0 percent in 2011. Female drivers made up 17.4 percent of all drivers in fatal crashes in 2020, which was down from 23.0 percent in 2011.

UPPER PENINSULA DRINKING DRIVERS IN ALL CRASHES		
Year	Male	Female
2011	291	120
2012	289	89
2013	250	77
2014	220	91
2015	218	80
2016	234	80
2017	271	86
2018	227	80
2019	236	76
2020	249	92

Note: 459 drivers in all crashes were coded as unknown gender in the Upper Peninsula in 2020 and are not included in the tables.

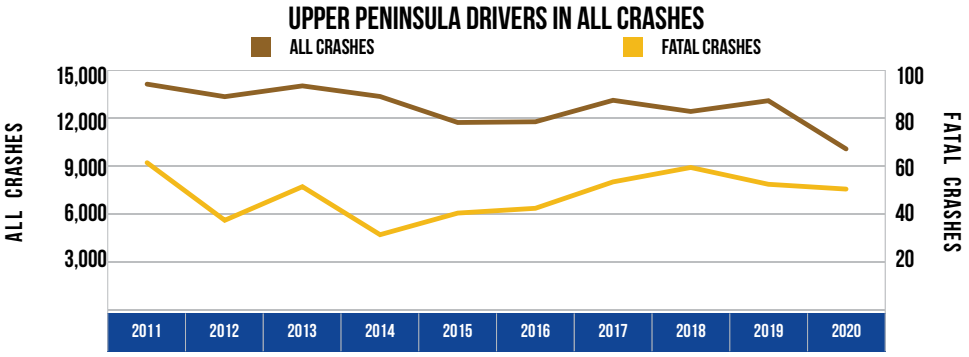


In 2020, males represented 73.0 percent of all drinking drivers in the Upper Peninsula, which was up slightly from 70.8 percent in 2011. Females represented 27.0 percent of all drinking drivers, which was down slightly from 29.2 percent in 2011.

10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

UPPER PENINSULA DRIVERS IN ALL CRASHES

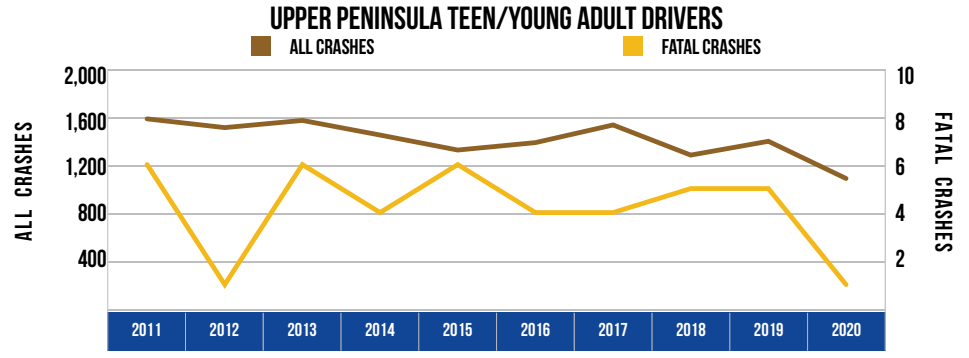
Year	All Crashes	Fatal Crashes
2011	14,059	61
2012	13,276	37
2013	13,950	51
2014	13,287	31
2015	11,662	40
2016	11,707	42
2017	13,050	53
2018	12,351	59
2019	13,024	52
2020	10,010	50



The number of drivers involved in all crashes in the Upper Peninsula decreased 28.8 percent over the 10-year period. The number of drivers involved in fatal crashes in the Upper Peninsula decreased 18.0 percent over the 10-year period.

UPPER PENINSULA TEEN/YOUNG ADULT DRIVERS (AGE 16-20)

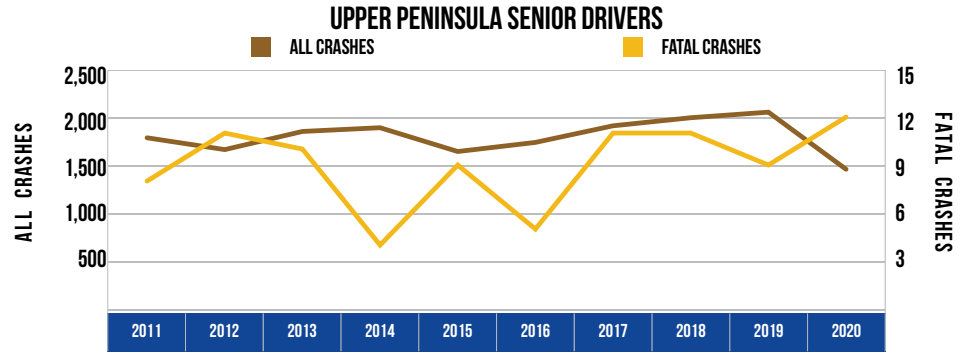
Year	All Crashes	Fatal Crashes
2011	1,581	6
2012	1,508	1
2013	1,568	6
2014	1,446	4
2015	1,321	6
2016	1,383	4
2017	1,530	4
2018	1,279	5
2019	1,394	5
2020	1,084	1



Teen/young adult drivers (age 16-20) in all crashes in the Upper Peninsula has decreased by 31.4 percent since 2011. The number of teen/young adult drivers in fatal crashes in the Upper Peninsula has decreased by 83.3 percent since 2011.

UPPER PENINSULA SENIOR DRIVERS (AGE 65 & OVER)

Year	All Crashes	Fatal Crashes
2011	1,784	8
2012	1,661	11
2013	1,850	10
2014	1,889	4
2015	1,641	9
2016	1,736	5
2017	1,909	11
2018	1,993	11
2019	2,051	9
2020	1,456	12

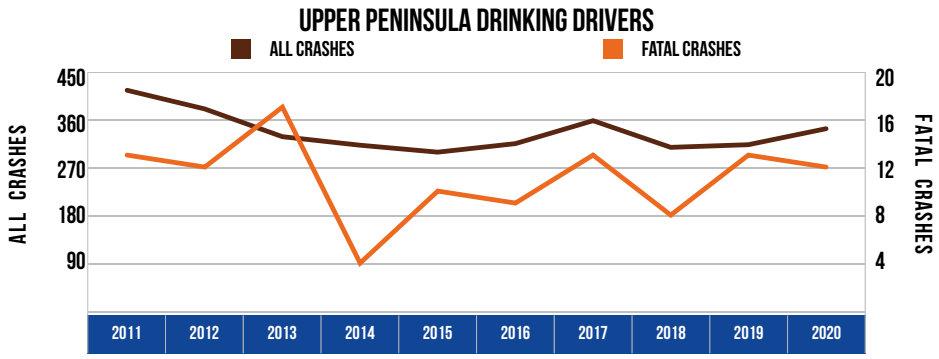


The number of drivers age 65 and over in all crashes in the Upper Peninsula has decreased 18.4 percent since 2011. Their involvement in fatal crashes increased 50.0 percent since 2011.

10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

UPPER PENINSULA DRINKING DRIVERS

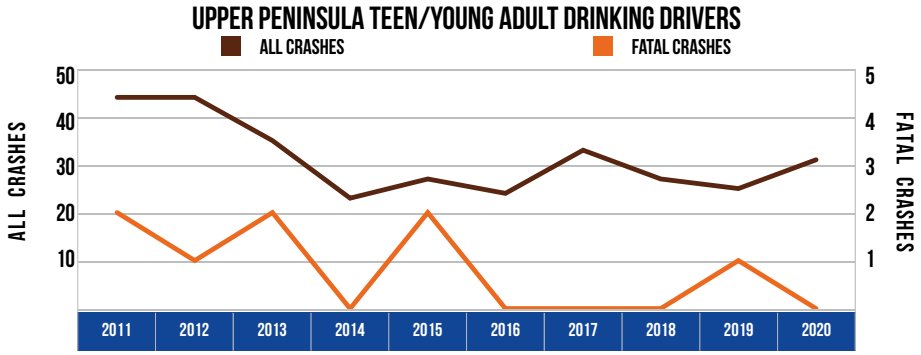
Year	All Crashes	Fatal Crashes
2011	414	13
2012	379	12
2013	327	17
2014	311	4
2015	298	10
2016	314	9
2017	357	13
2018	307	8
2019	312	13
2020	342	12



Drinking driver involvement in all crashes in the Upper Peninsula decreased by 17.4 percent from 2011. Drinking driver involvement in fatal crashes in the Upper Peninsula decreased by 7.7 percent from 2011.

UPPER PENINSULA TEEN/YOUNG ADULT DRINKING DRIVERS (AGE 16-20)

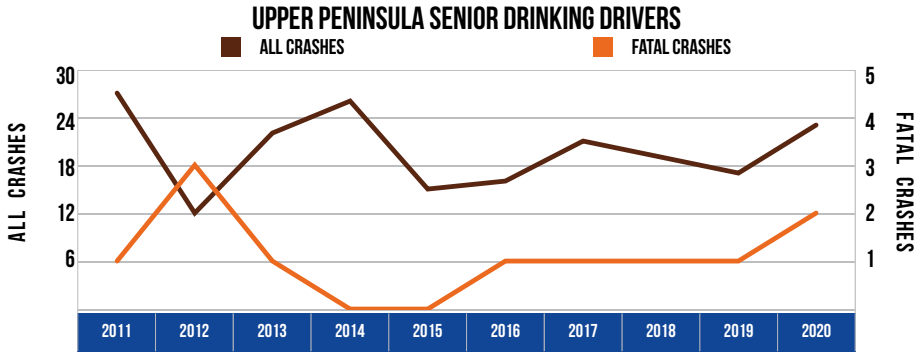
Year	All Crashes	Fatal Crashes
2011	44	2
2012	44	1
2013	35	2
2014	23	0
2015	27	2
2016	24	0
2017	33	0
2018	27	0
2019	25	1
2020	31	0



The number of teen/young adult drinking drivers (age 16-20) in all crashes in the Upper Peninsula decreased by 29.5 percent. No teen/young adult drinking drivers were involved in a fatal crash in the Upper Peninsula in 2020.

UPPER PENINSULA SENIOR DRINKING DRIVERS (AGE 65 & OVER)

Year	All Crashes	Fatal Crashes
2011	27	1
2012	12	3
2013	22	1
2014	26	0
2015	15	0
2016	16	1
2017	21	1
2018	19	1
2019	17	1
2020	23	2

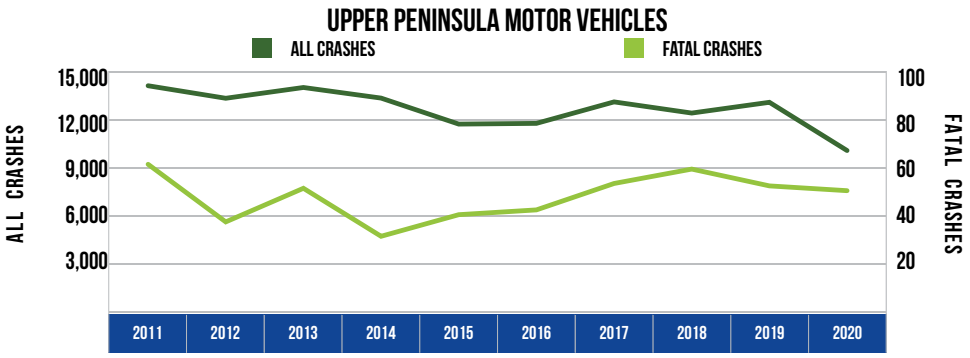


The number of senior drinking drivers (age 65 and over) in all crashes in the Upper Peninsula has decreased 14.8 percent over the 10-year period. Their involvement in fatal crashes increased to 2 from 1 in 2011.

10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

UPPER PENINSULA MOTOR VEHICLES

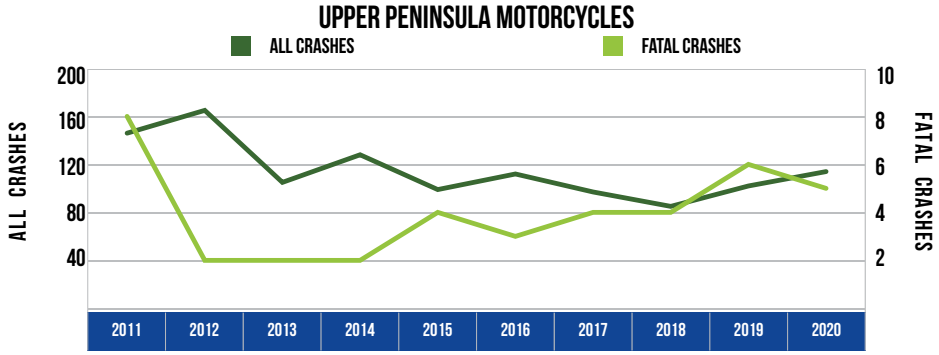
Year	All Crashes	Fatal Crashes
2011	14,059	61
2012	13,276	37
2013	13,950	51
2014	13,287	31
2015	11,662	40
2016	11,707	42
2017	13,050	53
2018	12,351	59
2019	13,024	52
2020	10,010	50



There were 10,010 motor vehicles involved in all Upper Peninsula crashes in 2020, down 28.8 percent from 2011. There were 50 motor vehicles involved in fatal crashes in 2020, down 18.0 percent from 2011.

UPPER PENINSULA MOTORCYCLES

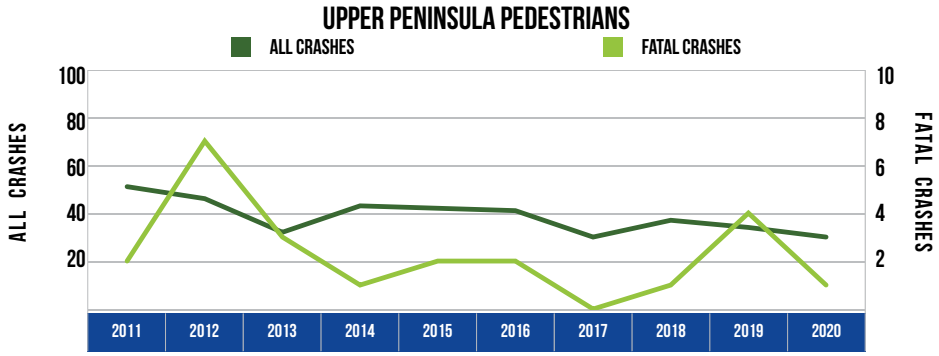
Year	All Crashes	Fatal Crashes
2011	146	8
2012	165	2
2013	105	2
2014	128	2
2015	99	4
2016	112	3
2017	97	4
2018	85	4
2019	102	6
2020	114	5



There were 114 motorcycles involved in crashes in the Upper Peninsula in 2020, a 21.9 percent decrease from 2011. There were five motorcycles involved in fatal crashes in 2020, down from eight in 2011.

UPPER PENINSULA PEDESTRIANS

Year	All Crashes	Fatal Crashes
2011	51	2
2012	46	7
2013	32	3
2014	43	1
2015	42	2
2016	41	2
2017	30	0
2018	37	1
2019	34	4
2020	30	1

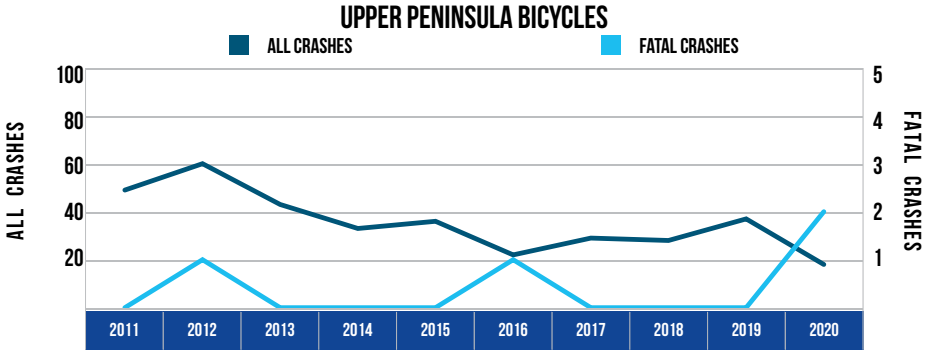


There were 30 pedestrians involved in crashes in the Upper Peninsula in 2020, down 41.2 percent from 2011. One pedestrian was involved in a fatal crash in 2020, down from two in 2011.

10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

UPPER PENINSULA BICYCLES

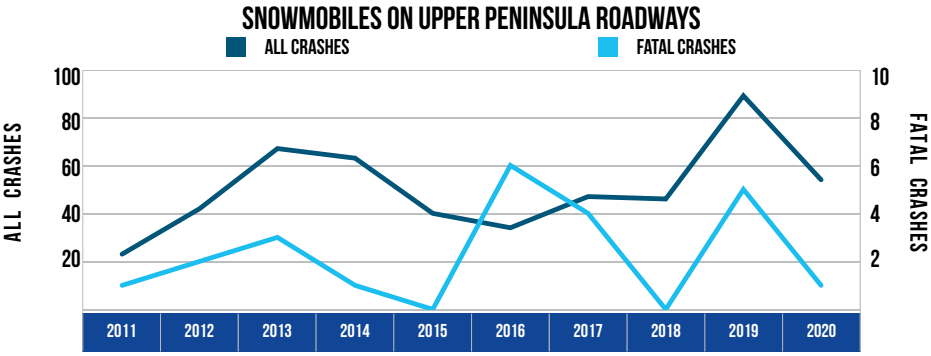
Year	All Crashes	Fatal Crashes
2011	49	0
2012	60	1
2013	43	0
2014	33	0
2015	36	0
2016	22	1
2017	29	0
2018	28	0
2019	37	0
2020	18	2



There were 18 bicycles involved in Upper Peninsula crashes in 2020, down 63.3 percent from 2011. There were two bicycles involved in fatal crashes in 2020, up from no bicycles in 2011.

SNOWMOBILES ON UPPER PENINSULA ROADWAYS

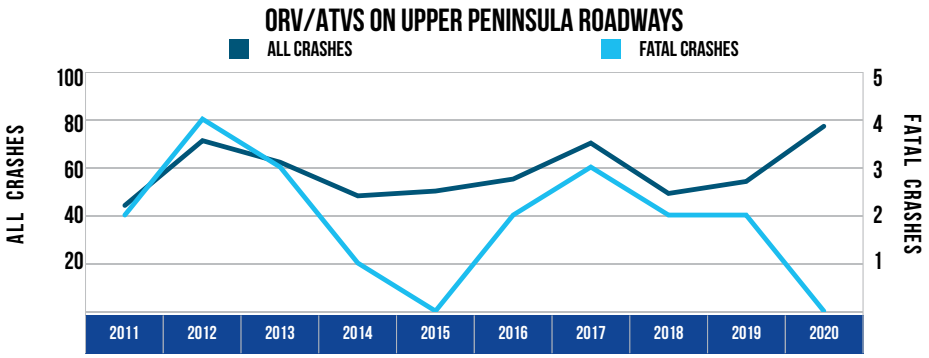
Year	All Crashes	Fatal Crashes
2011	23	1
2012	42	2
2013	67	3
2014	63	1
2015	40	0
2016	34	6
2017	47	4
2018	46	0
2019	89	5
2020	54	1



There were 54 snowmobiles in crashes on roadways in the Upper Peninsula in 2020, up 134.8 percent from 2011. There was one snowmobile involved in a fatal crash in 2011 and in 2020.

ORV/ATVS ON UPPER PENINSULA ROADWAYS

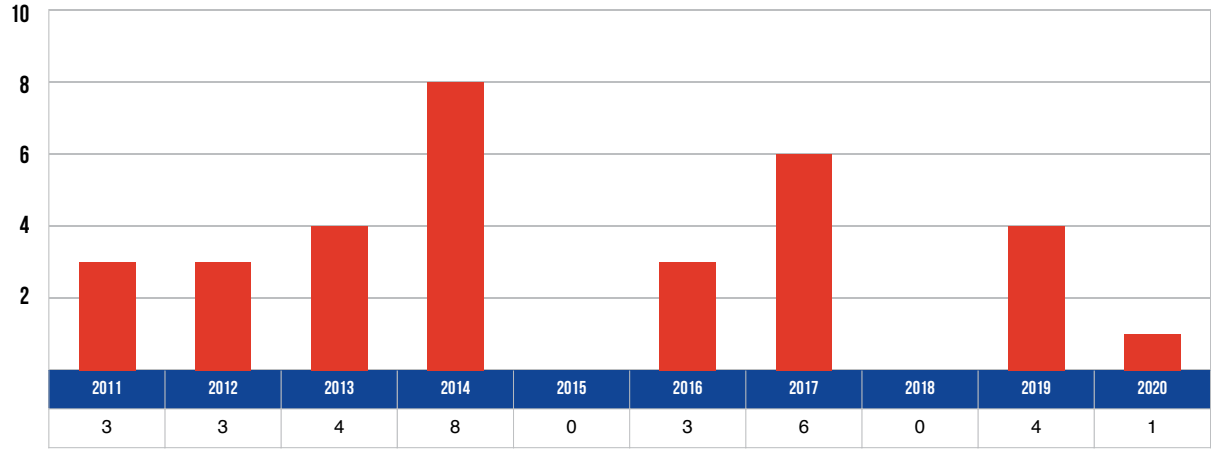
Year	All Crashes	Fatal Crashes
2011	44	2
2012	71	4
2013	62	3
2014	48	1
2015	50	0
2016	55	2
2017	70	3
2018	49	2
2019	54	2
2020	77	0



There were 77 ORV/ATVs in crashes on roadways in the Upper Peninsula in 2020, up 75.0 percent from 2011. There were no ORV/ATVs in fatal crashes in 2020, compared with two in 2011.

10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

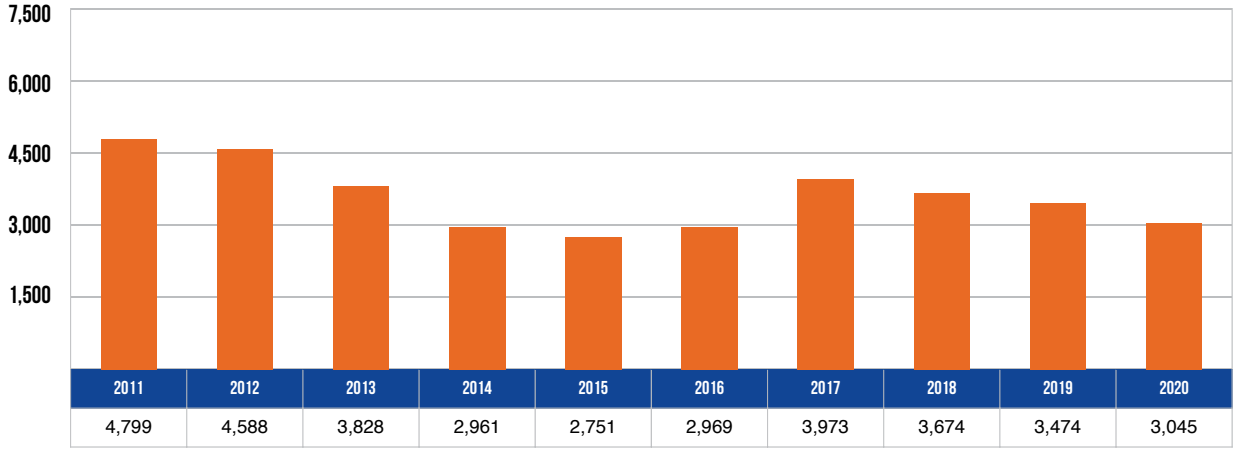
UPPER PENINSULA VEHICLE-TRAIN CRASHES



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
3	3	4	8	0	3	6	0	4	1

There was one vehicle-train crash in the Upper Peninsula in 2020, compared with three in 2011.

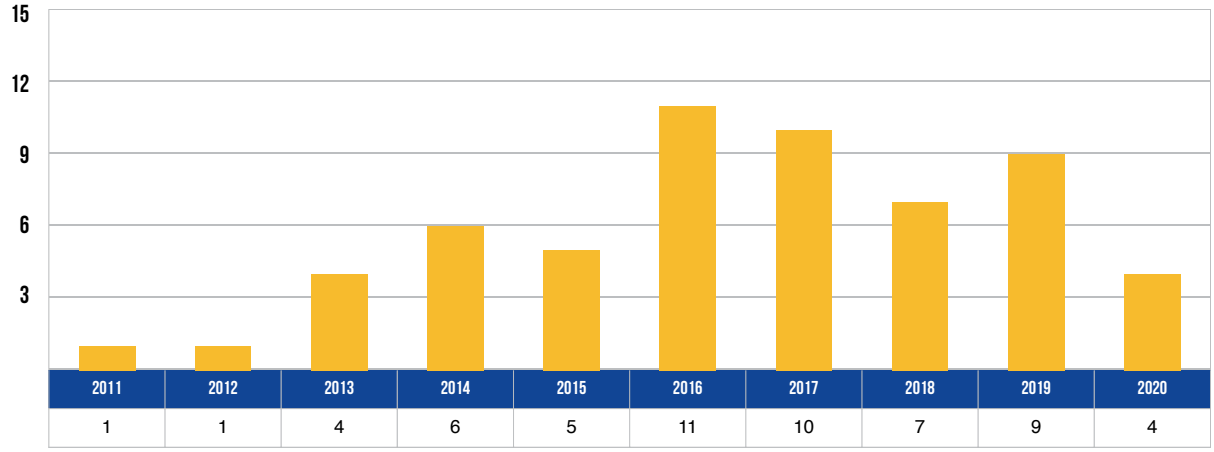
UPPER PENINSULA VEHICLE-DEER CRASHES



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
4,799	4,588	3,828	2,961	2,751	2,969	3,973	3,674	3,474	3,045

The number of vehicle-deer crashes in the Upper Peninsula decreased 36.5 percent in the 10-year period to 3,045 in 2020.

UPPER PENINSULA FARM EQUIPMENT CRASHES

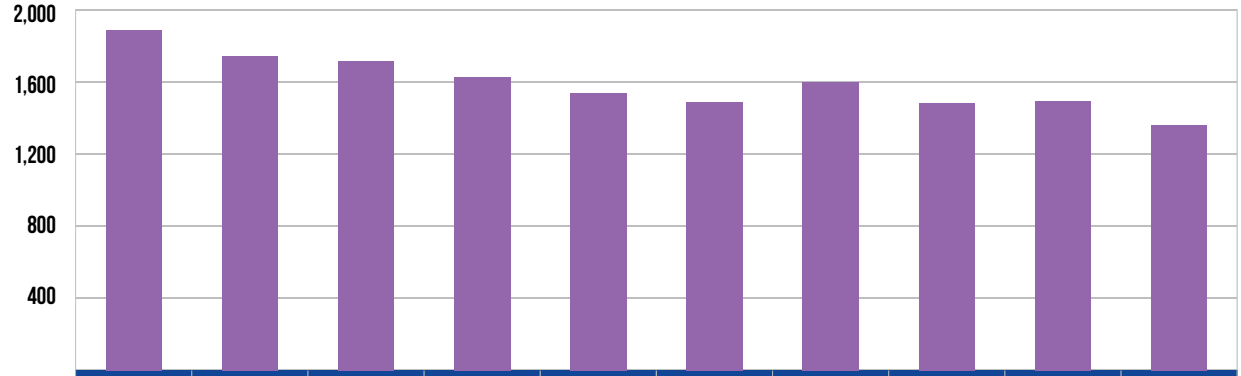


2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1	1	4	6	5	11	10	7	9	4

There were four farm equipment crashes in the Upper Peninsula in 2020, three more than in 2011.

10 YEAR TRENDS-UPPER PENINSULA (CONTINUED)

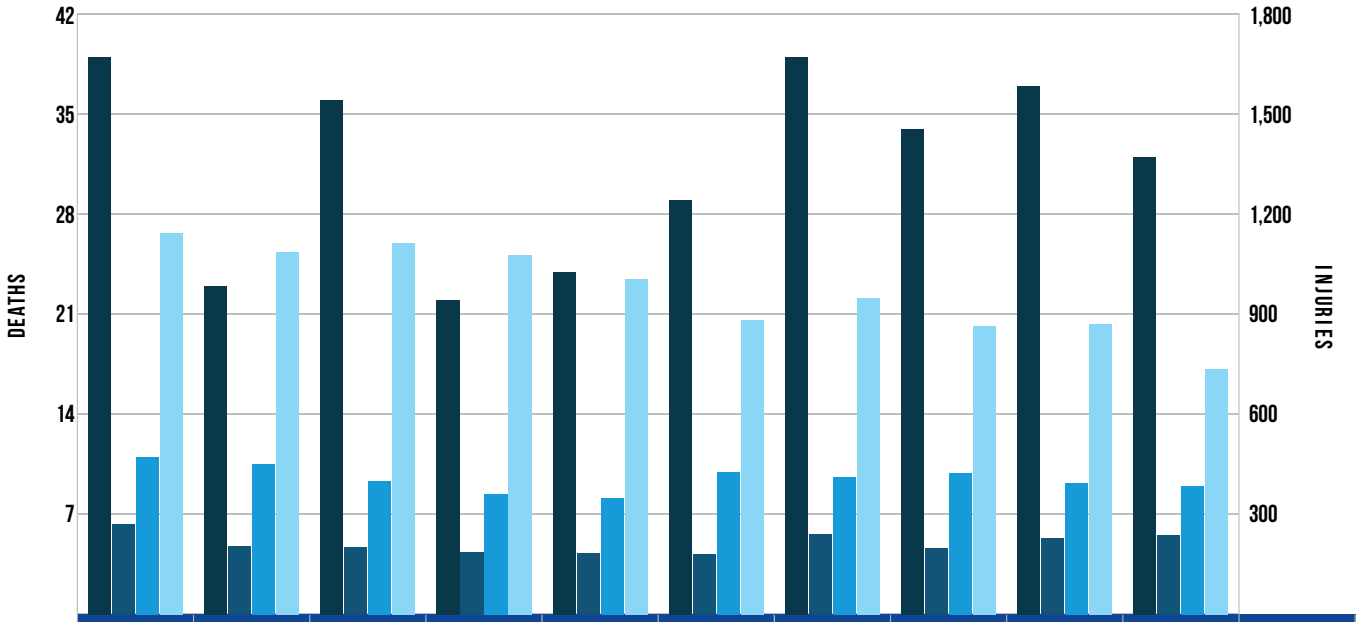
UPPER PENINSULA INJURED OCCUPANTS IN CRASHES



2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1,887	1,745	1,715	1,627	1,538	1,491	1,602	1,486	1,494	1,361

There were 1,361 occupants injured in the Upper Peninsula in 2020--a decrease of 27.9 percent from 2011.

UPPER PENINSULA DEATH AND INJURY FOR CRASH-INVOLVED OCCUPANTS



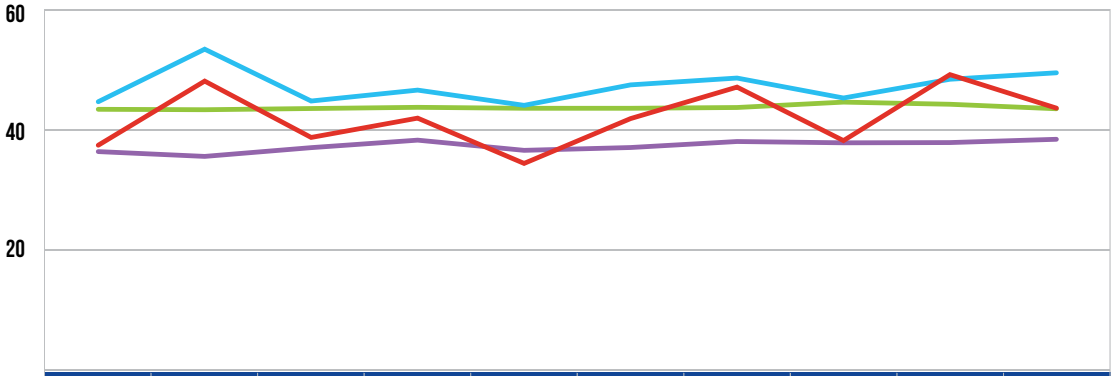
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	TOTALS
KILLED	39	23	36	22	24	29	39	34	37	32	315
A INJURY	271	206	202	186	183	181	242	199	230	239	2,139
B INJURY	472	451	399	362	348	426	411	423	394	386	4,072
C INJURY	1,144	1,088	1,114	1,079	1,007	884	949	864	870	736	9,735

Over the period from 2011 to 2020 in the Upper Peninsula, occupant deaths decreased 17.9 percent, A injuries decreased 11.8 percent, B injuries decreased 18.2 percent, and C injuries decreased 35.7 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)

UPPER PENINSULA AVERAGE AGE OF DRIVERS IN CRASHES 2011 - 2020



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
DRIVERS IN ALL CRASHES	43.22	43.15	43.35	43.55	43.39	43.39	43.52	44.42	44.06	43.31
DRIVERS IN FATAL CRASHES	44.48	53.24	44.60	46.42	43.88	47.29	48.43	45.10	48.23	49.30
DRINKING DRIVERS	36.17	35.37	36.83	38.08	36.38	36.85	37.85	37.64	37.68	38.22
DRINKING DRIVERS IN FATAL CRASHES	37.23	47.92	38.53	41.75	34.20	41.67	46.92	38.00	49.00	43.42

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 0.2 percent. The average age of drivers involved in fatal crashes has increased 10.8 percent. The average age of drinking drivers in crashes has increased 5.7 percent. The average age of drinking drivers in fatal crashes has increased 16.6 percent since 2011.

UPPER PENINSULA MOTOR VEHICLE TRAFFIC DEATHS IN MICHIGAN 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
2015	2	0	0	2	1	1	6	4	1	4	2	2	25
2016	6	4	2	0	1	8	3	1	1	1	2	3	32
2017	2	3	4	5	3	5	4	1	2	1	2	7	39
2018	3	2	4	1	2	2	5	3	5	1	3	4	35
2019	7	2	4	1	5	4	4	2	6	4	1	0	40
2020	5	3	0	3	0	3	5	5	1	3	5	2	35

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 (THOUSANDS)	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
2015	25	1,603	8,099	3,380,731	258,797	0.7
2016	32	1,541	8,264	3,291,504	258,733	1.0
2017	39	1,654	9,542	3,380,362	259,530	1.2
2018	35	1,538	8,948	3,371,820	256,932	1.0
2019	40	1,548	9,140	3,406,208	278,643	1.2
2020	35	1,397	7,378	3,027,865	266,717	1.2

*Excludes trailers and trailer coaches, and includes mopeds

This page left intentionally blank

AGE

This page left intentionally blank

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	0	0	0	3	0	3	1	0	1	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	1	0	0	4	0	4	0	0	0	0	0	0	0	0	0
4	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
5	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0
6	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0
7	0	0	0	6	0	6	0	0	0	1	0	1	0	0	0
8	1	0	1	4	0	4	1	0	1	0	0	0	0	0	0
9	0	0	0	8	0	8	0	0	0	1	0	0	0	0	0
10	1	0	1	5	0	5	0	0	0	0	0	0	0	0	0
11	1	0	0	5	0	5	0	0	0	1	1	0	0	0	0
12	1	0	1	3	0	3	0	0	0	0	0	0	0	0	0
13	7	0	6	2	0	2	0	0	0	2	0	2	0	0	0
14	6	0	1	4	0	4	0	0	0	0	0	0	2	0	2
15	19	0	5	10	0	10	2	0	2	1	0	0	0	0	0
16	162	0	17	15	0	15	0	0	0	1	0	0	0	0	0
17	200	0	20	10	0	10	2	0	2	1	0	1	1	0	1
18	235	0	28	9	0	9	0	0	0	1	0	1	1	0	1
19	268	0	28	7	0	7	1	0	1	0	0	0	1	0	1
20	219	0	18	2	0	2	0	0	0	1	0	1	3	0	3
21	252	0	33	10	0	10	2	0	2	0	0	0	2	0	1
22	202	0	29	8	1	7	1	0	1	0	0	0	1	0	1
23	215	0	26	9	0	9	3	0	3	0	0	0	1	0	1
24	191	0	27	5	0	5	3	0	1	1	0	1	2	0	2
25	192	0	20	12	1	11	3	0	3	0	0	0	1	0	1
26	153	0	15	2	0	2	2	0	2	0	0	0	1	0	1
27	171	1	21	8	0	8	1	0	1	1	0	1	0	0	0
28	183	0	22	10	0	10	3	0	3	0	0	0	0	0	0
29	174	1	10	2	0	2	2	0	2	0	0	0	0	0	0
30	176	0	21	3	0	3	4	0	2	0	0	0	0	0	0
31	190	1	16	5	0	5	4	1	3	0	0	0	1	0	1
32	165	1	26	6	0	6	3	0	3	0	0	0	0	0	0
33	173	1	15	4	0	4	0	0	0	0	0	0	0	0	0
34	176	1	14	3	0	3	4	0	3	0	0	0	1	0	1
35	159	0	16	3	0	3	2	0	2	0	0	0	1	0	1
36	145	0	15	4	0	4	3	0	3	0	0	0	1	0	1
37	169	0	17	4	0	4	0	0	0	1	0	0	0	0	0

*Driver age is calculated from birth date, and invalid date of birth can 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	141	0	12	6	0	6	2	0	2	0	0	0	0	0	0
39	164	0	15	1	0	1	2	0	1	0	0	0	1	0	1
40	140	0	16	2	0	2	6	0	5	0	0	0	0	0	0
41	142	0	14	2	1	1	3	1	2	0	0	0	1	0	1
42	139	2	12	4	0	4	1	0	1	0	0	0	0	0	0
43	132	1	20	5	0	5	3	1	2	0	0	0	0	0	0
44	119	0	9	1	0	1	0	0	0	0	0	0	0	0	0
45	132	0	17	4	0	4	2	0	1	0	0	0	1	0	1
46	116	0	10	4	1	3	1	0	0	0	0	0	0	0	0
47	143	0	19	2	0	2	2	0	2	0	0	0	0	0	0
48	152	0	11	3	0	3	2	0	1	0	0	0	0	0	0
49	156	1	19	2	0	2	5	0	5	0	0	0	0	0	0
50	141	1	19	3	0	3	6	0	5	0	0	0	1	0	1
51	157	0	11	2	0	2	2	0	1	0	0	0	0	0	0
52	135	1	21	4	0	4	3	1	1	0	0	0	0	0	0
53	135	0	11	1	0	1	3	0	2	0	0	0	0	0	0
54	134	1	13	4	1	3	3	0	2	0	0	0	0	0	0
55	141	0	11	5	0	5	1	0	1	0	0	0	0	0	0
56	146	1	15	4	0	4	4	0	1	0	0	0	1	0	1
57	141	1	17	5	0	5	1	0	1	0	0	0	0	0	0
58	176	0	13	4	0	4	3	0	2	0	0	0	1	0	1
59	143	0	16	7	1	6	4	0	3	0	0	0	0	0	0
60	160	1	12	6	0	6	2	0	2	0	0	0	1	1	0
61	152	0	14	4	0	4	2	0	2	1	0	0	0	0	0
62	138	0	16	4	0	4	3	0	1	1	0	0	0	0	0
63	146	0	13	6	0	6	4	0	4	0	0	0	0	0	0
64	139	1	18	2	0	2	3	0	2	0	0	0	1	0	0
65	114	0	16	6	0	6	3	0	3	0	0	0	0	0	0
66	107	0	4	0	0	0	0	0	0	1	0	1	0	0	0
67	100	0	9	1	0	1	2	0	2	1	0	1	0	0	0
68	83	1	10	5	0	5	2	0	1	0	0	0	0	0	0
69	112	0	15	2	0	2	1	0	1	1	1	0	0	0	0
70	81	0	5	2	0	2	0	0	0	0	0	0	0	0	0
71	77	1	6	5	0	5	2	1	0	0	0	0	0	0	0
72	94	1	12	3	1	2	1	0	1	0	0	0	0	0	0
73	96	0	7	2	0	2	2	0	2	0	0	0	0	0	0
74	76	0	7	1	0	1	1	0	0	0	0	0	0	0	0
75	57	0	7	0	0	0	0	0	0	0	0	0	0	0	0
76	52	0	5	4	0	4	1	0	1	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	51	0	5	0	0	0	0	0	0	0	0	0	1	0	1
78	47	2	4	0	0	0	1	0	1	0	0	0	0	0	0
79	44	0	7	1	0	1	0	0	0	0	0	0	0	0	0
80	37	1	3	0	0	0	0	0	0	0	0	0	0	0	0
81	27	0	4	0	0	0	0	0	0	0	0	0	0	0	0
82	37	0	7	3	0	3	0	0	0	0	0	0	0	0	0
83	28	0	5	0	0	0	0	0	0	0	0	0	0	0	0
84	21	1	5	0	0	0	0	0	0	0	0	0	0	0	0
85	24	0	7	1	0	1	0	0	0	0	0	0	0	0	0
86	23	0	4	0	0	0	0	0	0	0	0	0	0	0	0
87	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	15	0	2	1	0	1	0	0	0	0	0	0	0	0	0
89	16	0	1	1	0	1	0	0	0	0	0	0	0	0	0
90	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0
91	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0
92	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0
93	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	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	1	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	487	0	0	0	0	0	1	0	0	0	0	0	1	0	0
TOTAL	10,010	25	1,022	346	7	339	137	5	105	18	2	10	30	1	26
	*Includes 520 drivers with unknown injury severity and 8,443 with no injury						*Includes 1 motorcyclist with unknown injury severity and 26 with no injury			*Includes 0 bicyclists with unknown injury severity and 6 with no injury			*Includes 2 pedestrians with unknown injury severity and 1 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	728	67.2	1	100.0	117	63.2
Turning left	82	7.6	0	0.0	21	11.4
Turning right	26	2.4	0	0.0	1	0.5
Stopped on roadway	30	2.8	0	0.0	7	3.8
In prior crash	0	0.0	0	0.0	0	0.0
Changing lanes	12	1.1	0	0.0	1	0.5
Backing	34	3.1	0	0.0	0	0.0
Slowing/stopping on roadway	51	4.7	0	0.0	7	3.8
Slowing/stopping other	3	0.3	0	0.0	1	0.5
Starting up on roadway	14	1.3	0	0.0	6	3.2
Starting up other	0	0.0	0	0.0	0	0.0
Entering parking	0	0.0	0	0.0	0	0.0
Leaving parking	6	0.6	0	0.0	2	1.1
Entering roadway	23	2.1	0	0.0	3	1.6
Leaving roadway	2	0.2	0	0.0	0	0.0
Making U-turn	1	0.1	0	0.0	0	0.0
Overtaking or passing	5	0.5	0	0.0	1	0.5
Avoiding object	2	0.2	0	0.0	0	0.0
Avoiding pedestrian	2	0.2	0	0.0	1	0.5
Avoiding vehicle (front/back)	9	0.8	0	0.0	3	1.6
Avoiding vehicle (angle)	3	0.3	0	0.0	2	1.1
Driverless moving	0	0.0	0	0.0	0	0.0
Parked	7	0.6	0	0.0	1	0.5
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	3	0.3	0	0.0	1	0.5
Unknown	1	0.1	0	0.0	0	0.0
Avoiding animal	7	0.6	0	0.0	2	1.1
Negotiating a curve	33	3.0	0	0.0	8	4.3
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	1,084	100.0	1	100.0	185	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	24	2.2	0	0.0	2	1.1
Ran off roadway left	18	1.7	0	0.0	5	2.7
Ran off roadway right	18	1.7	0	0.0	3	1.6
Re-enter roadway	0	0.0	0	0.0	0	0.0
Overturn	65	6.0	0	0.0	20	10.8
Separation of units	0	0.0	0	0.0	0	0.0
Fire/explosion	4	0.4	0	0.0	0	0.0
Immersion	0	0.0	0	0.0	0	0.0
Jackknife	0	0.0	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 from vehicle	0	0.0	0	0.0	0	0.0
Other noncollision	1	0.1	0	0.0	0	0.0
Equipment failure (blown tire, brake failure, etc.)	1	0.1	0	0.0	0	0.0
Cross centerline	4	0.4	0	0.0	1	0.5
Cross median	0	0.0	0	0.0	0	0.0
SUBTOTAL	135	12.5	0	0.0	31	16.8

For drivers age 16-20 in the Upper Peninsula, an overturn is the most common harmful event in a noncollision with the highest proportion of all crashes (6.0%) and injury crashes (10.8%).

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	3	0.3	0	0.0	3	1.6
Bicyclist	0	0.0	0	0.0	0	0.0
Motor vehicle in transport	535	49.4	1	100.0	107	57.8
Parked motor vehicle	39	3.6	0	0.0	6	3.2
Railroad train	0	0.0	0	0.0	0	0.0
Animal	208	19.2	0	0.0	3	1.6
Other nonfixed object	10	0.9	0	0.0	2	1.1
Work zone/maintenance equipment	0	0.0	0	0.0	0	0.0
Cargo falling/shifting/anything set in motion by a motor vehicle	1	0.1	0	0.0	0	0.0
SUBTOTAL	796	73.4	1	100.0	121	65.4

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/support	0	0.0	0	0.0	0	0.0
Bridge rail	0	0.0	0	0.0	0	0.0
Guardrail face	9	0.8	0	0.0	0	0.0
Guardrail end	3	0.3	0	0.0	1	0.5
Other post/pole/support	0	0.0	0	0.0	0	0.0
Culvert	2	0.2	0	0.0	0	0.0
Curb	2	0.2	0	0.0	1	0.5
Ditch	30	2.8	0	0.0	4	2.2
Embankment	9	0.8	0	0.0	1	0.5
Fence	4	0.4	0	0.0	1	0.5
Mailbox	10	0.9	0	0.0	2	1.1
Tree	43	4.0	0	0.0	14	7.6
Railroad crossing signal	1	0.1	0	0.0	1	0.5
Building	4	0.4	0	0.0	2	1.1
Traffic island	1	0.1	0	0.0	0	0.0
Fire hydrant	1	0.1	0	0.0	1	0.5
Impact attenuator	0	0.0	0	0.0	0	0.0
Other fixed object	5	0.5	0	0.0	0	0.0
Bridge overhead structure	0	0.0	0	0.0	0	0.0
Cable barrier	0	0.0	0	0.0	0	0.0
Concrete barrier	0	0.0	0	0.0	0	0.0
Traffic sign/post	12	1.1	0	0.0	1	0.5
Traffic signal equipment	1	0.1	0	0.0	0	0.0
Utility pole/light support	16	1.5	0	0.0	4	2.2
SUBTOTAL	153	14.1	0	0.0	33	17.8

For drivers age 16-20 in the Upper Peninsula, a tree is the fixed object associated with the highest proportion of all crashes (4.0%) and injury crashes (7.6%).

	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Unknown Event	0	0.0	0	0.0	0	0.0
MOST HARMFUL EVENT TOTAL	1,084	100.0	1	100.0	185	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	44.2	0	0.0	65	35.1
Head On	12	1.1	0	0.0	8	4.3
Head On - Left Turn	37	3.4	0	0.0	13	7.0
Angle	204	18.8	1	100.0	45	24.3
Rear End	158	14.6	0	0.0	31	16.8
Rear End - Left Turn	22	2.0	0	0.0	5	2.7
Rear End - Right Turn	1	0.1	0	0.0	1	0.5
Sideswipe - Same Direction	71	6.5	0	0.0	5	2.7
Sideswipe - Opposite Directions	27	2.5	0	0.0	4	2.2
Backing	32	3.0	0	0.0	1	0.5
Other	38	3.5	0	0.0	7	3.8
Unknown	3	0.3	0	0.0	0	0.0
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	1,084	100.0	1	100.0	185	100.0

Single-vehicle crashes are the most common type of crash that drivers age 16-20 in the Upper Peninsula are involved in for all crashes (44.2%) and injury crashes (35.1%).

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	879	81.1	1	100.0	136	73.5
Median	7	0.6	0	0.0	1	0.5
Shoulder	58	5.4	0	0.0	11	5.9
Outside of Shoulder/Curb	117	10.8	0	0.0	32	17.3
Gore	6	0.6	0	0.0	2	1.1
On-Street Parking	15	1.4	0	0.0	2	1.1
Off the Roadway	0	0.0	0	0.0	0	0.0
On the Sidewalk	0	0.0	0	0.0	0	0.0
In the Bicycle Lane	0	0.0	0	0.0	0	0.0
Other/Unknown	2	0.2	0	0.0	1	0.5
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	1,084	100.0	1	100.0	185	100.0

Other than on the road crashes, drivers age 16-20 in the Upper Peninsula are most commonly involved in crashes where the first impact is outside the shoulder/curb for all crashes (10.8%) and injury crashes (17.3%).

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	27	2.5	0	0.0	2	1.1
U.S. & Michigan Roads	548	50.6	0	0.0	93	50.3
County & City Roads	504	46.5	1	100.0	88	47.6
Uncoded & Errors	5	0.5	0	0.0	2	1.1
TOTAL	1,084	100.0	1	100.0	185	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 - 2:59 AM	46	4.2	0	0.0	5	2.7
3:00 AM - 5:59 AM	34	3.1	0	0.0	10	5.4
6:00 AM - 8:59 AM	106	9.8	0	0.0	22	11.9
9:00 AM - 11:59 AM	126	11.6	0	0.0	23	12.4
12:00 PM - 2:59 PM	207	19.1	0	0.0	32	17.3
3:00 PM - 5:59 PM	243	22.4	0	0.0	41	22.2
6:00 PM - 8:59 PM	191	17.6	1	100.0	28	15.1
9:00 PM - 11:59 PM	131	12.1	0	0.0	24	13.0
Unknown	0	0.0	0	0.0	0	0.0
TOTAL	1,084	100.0	1	100.0	185	100.0

For drivers age 16-20 in the Upper Peninsula, the 3:00 - 5:59 PM time period has the highest proportion of all crashes (22.4%) and injury crashes (22.2%).

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	467	43.1	1	100.0	59	31.9	2	1.0
Speed too fast	174	16.1	0	0.0	32	17.3	55	27.2
Speed too slow	0	0.0	0	0.0	0	0.0	0	0.0
Failed to yield	110	10.1	0	0.0	26	14.1	39	19.3
Disregard traffic control	20	1.8	0	0.0	6	3.2	11	5.4
Drove wrong way	0	0.0	0	0.0	0	0.0	0	0.0
Drove left of center	4	0.4	0	0.0	0	0.0	2	1.0
Improper passing	4	0.4	0	0.0	0	0.0	1	0.5
Improper lane use	16	1.5	0	0.0	0	0.0	4	2.0
Improper turn	8	0.7	0	0.0	2	1.1	2	1.0
Improper/no signal	3	0.3	0	0.0	0	0.0	1	0.5
Improper backing	19	1.8	0	0.0	0	0.0	1	0.5
Unable to stop in assured clear distance	113	10.4	0	0.0	16	8.6	27	13.4
Other	38	3.5	0	0.0	10	5.4	15	7.4
Unknown	25	2.3	0	0.0	4	2.2	2	1.0
Reckless driving	5	0.5	0	0.0	3	1.6	1	0.5
Careless/negligent driving	78	7.2	0	0.0	27	14.6	39	19.3
Uncoded & Errors	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL	1,084	100.0	1	100.0	185	100.0	202	100.0

Other than no hazardous action, the second highest known hazardous action category for drivers age 16-20 in the Upper Peninsula is speed too fast for all crashes (16.1%) and injury crashes (27.2%).

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	151	13.9	0	0.0	23	12.4
Tuesday	128	11.8	0	0.0	24	13.0
Wednesday	139	12.8	0	0.0	20	10.8
Thursday	167	15.4	0	0.0	32	17.3
Friday	180	16.6	1	100.0	33	17.8
Saturday	155	14.3	0	0.0	27	14.6
Sunday	164	15.1	0	0.0	26	14.1
TOTAL	1,084	100.0	1	100.0	185	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	582	53.7	1	100.0	84	45.4
Female	502	46.3	0	0.0	101	54.6
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	1,084	100.0	1	100.0	185	100.0

Male drivers make up 53.7 percent of drivers in all crashes in the Upper Peninsula and 45.4 percent of drivers in injury 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	795	73.3	0	0.0	111	60.0
2 occupants	195	18.0	0	0.0	45	24.3
3 occupants	60	5.5	1	100.0	22	11.9
4 occupants	27	2.5	0	0.0	5	2.7
5 occupants	2	0.2	0	0.0	1	0.5
6+ occupants	2	0.2	0	0.0	1	0.5
0 occupants	3	0.3	0	0.0	0	0.0
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	1,084	100.0	1	100.0	185	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, SUV, van	843	77.8	0	0.0	143	77.3
Motor home	0	0.0	0	0.0	0	0.0
Pickup truck	207	19.1	1	100.0	28	15.1
Small Truck under 10,000 lbs. GVWR	9	0.8	0	0.0	2	1.1
Motorcycle	2	0.2	0	0.0	2	1.1
Moped/goped	2	0.2	0	0.0	1	0.5
Go-cart/golf cart	0	0.0	0	0.0	0	0.0
Snowmobile	4	0.4	0	0.0	3	1.6
Off-Road Vehicle - ORV/All-Terrain Vehicle - ATV	10	0.9	0	0.0	5	2.7
Other	1	0.1	0	0.0	1	0.5
Uncoded & Errors	0	0.0	0	0.0	0	0.0
CDL Truck/Bus (breakdown below)	6	0.6	0	0.0	0	0.0
TOTAL	1,084	100.0	1	100.0	185	100.0

HEAVY TRUCK/BUS GROSS VEHICLE WEIGHT RATING	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
10,000 lbs. or less	0	0.0	0	0.0	0	0.0
10,001 - 26,000 lbs.	5	83.3	0	0.0	0	0.0
Greater than 26,000 lbs.	1	16.7	0	0.0	0	0.0
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	6	100.0	0	0.0	0	0.0

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	5,010	72.1	26	78.8	749	68.2
Turning left	335	4.8	1	3.0	75	6.8
Turning right	180	2.6	1	3.0	19	1.7
Stopped on roadway	288	4.1	0	0.0	64	5.8
In prior crash	1	0.0	0	0.0	1	0.1
Changing lanes	50	0.7	0	0.0	5	0.5
Backing	211	3.0	0	0.0	4	0.4
Slowing/stopping on roadway	278	4.0	0	0.0	61	5.6
Slowing/stopping other	5	0.1	0	0.0	0	0.0
Starting up on roadway	86	1.2	0	0.0	15	1.4
Starting up other	0	0.0	0	0.0	0	0.0
Entering parking	10	0.1	0	0.0	1	0.1
Leaving parking	19	0.3	0	0.0	2	0.2
Entering roadway	69	1.0	0	0.0	13	1.2
Leaving roadway	14	0.2	0	0.0	7	0.6
Making U-turn	15	0.2	1	3.0	3	0.3
Overtaking or passing	33	0.5	1	3.0	5	0.5
Avoiding object	3	0.0	0	0.0	0	0.0
Avoiding pedestrian	0	0.0	0	0.0	0	0.0
Avoiding vehicle (front/back)	45	0.6	0	0.0	10	0.9
Avoiding vehicle (angle)	12	0.2	0	0.0	1	0.1
Driverless moving	1	0.0	0	0.0	0	0.0
Parked	70	1.0	1	3.0	5	0.5
Crossing at intersection	4	0.1	0	0.0	1	0.1
Crossing not at intersection	1	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	1	0.0	0	0.0	0	0.0
Standing/lying in roadway	0	0.0	0	0.0	0	0.0
Pushing/working on vehicle	0	0.0	0	0.0	0	0.0
Other working in roadway	1	0.0	0	0.0	0	0.0
Playing in roadway	0	0.0	0	0.0	0	0.0
In roadway other reason	1	0.0	0	0.0	0	0.0
Not in roadway	0	0.0	0	0.0	0	0.0
Other	17	0.2	0	0.0	3	0.3
Unknown	7	0.1	0	0.0	0	0.0
Avoiding animal	31	0.4	0	0.0	5	0.5
Negotiating a curve	148	2.1	2	6.1	50	4.5
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	6,946	100.0	33	100.0	1,099	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	99	1.4	2	6.1	27	2.5
Ran off roadway left	41	0.6	0	0.0	9	0.8
Ran off roadway right	80	1.2	0	0.0	24	2.2
Re-enter roadway	7	0.1	0	0.0	1	0.1
Overturn	245	3.5	3	9.1	113	10.3
Separation of units	12	0.2	0	0.0	1	0.1
Fire/explosion	11	0.2	0	0.0	0	0.0
Immersion	1	0.0	0	0.0	0	0.0
Jackknife	9	0.1	0	0.0	1	0.1
Downhill runaway	1	0.0	0	0.0	0	0.0
Cargo loss/shift	13	0.2	0	0.0	1	0.1
Individual fell from vehicle	26	0.4	0	0.0	26	2.4
Other noncollision	23	0.3	0	0.0	6	0.5
Equipment failure (blown tire, brake failure, etc.)	24	0.3	0	0.0	6	0.5
Cross centerline	28	0.4	0	0.0	6	0.5
Cross median	1	0.0	0	0.0	0	0.0
SUBTOTAL	621	8.9	5	15.2	221	20.1

For drivers age 21-64 in the Upper Peninsula, an overturn is the most common harmful event in a noncollision with the highest proportion of all crashes (3.5%) and injury crashes (10.3%).

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	14	0.2	0	0.0	13	1.2
Bicyclist	13	0.2	2	6.1	7	0.6
Motor vehicle in transport	2,845	41.0	15	45.5	602	54.8
Parked motor vehicle	219	3.2	2	6.1	22	2.0
Railroad train	1	0.0	0	0.0	0	0.0
Animal	2,438	35.1	0	0.0	53	4.8
Other nonfixed object	76	1.1	0	0.0	16	1.5
Work zone/maintenance equipment	3	0.0	0	0.0	0	0.0
Cargo falling/shifting/anything set in motion by a motor vehicle	16	0.2	0	0.0	3	0.3
SUBTOTAL	5,625	81.0	19	57.6	716	65.2

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/support	1	0.0	0	0.0	0	0.0
Bridge rail	6	0.1	0	0.0	2	0.2
Guardrail face	47	0.7	0	0.0	5	0.5
Guardrail end	10	0.1	0	0.0	2	0.2
Other post/pole/support	14	0.2	0	0.0	2	0.2
Culvert	13	0.2	1	3.0	4	0.4
Curb	7	0.1	0	0.0	1	0.1
Ditch	151	2.2	0	0.0	26	2.4
Embankment	51	0.7	0	0.0	13	1.2
Fence	4	0.1	0	0.0	1	0.1
Mailbox	19	0.3	0	0.0	0	0.0
Tree	201	2.9	8	24.2	74	6.7
Railroad crossing signal	0	0.0	0	0.0	0	0.0
Building	8	0.1	0	0.0	0	0.0
Traffic island	0	0.0	0	0.0	0	0.0
Fire hydrant	7	0.1	0	0.0	2	0.2
Impact attenuator	3	0.0	0	0.0	0	0.0
Other fixed object	39	0.6	0	0.0	9	0.8
Bridge overhead structure	0	0.0	0	0.0	0	0.0
Cable barrier	5	0.1	0	0.0	0	0.0
Concrete barrier	5	0.1	0	0.0	0	0.0
Traffic sign/post	45	0.6	0	0.0	3	0.3
Traffic signal equipment	1	0.0	0	0.0	0	0.0
Utility pole/light support	63	0.9	0	0.0	18	1.6
SUBTOTAL	700	10.1	9	27.3	162	14.7

For drivers age 21-64 in the Upper Peninsula, a tree is the fixed object associated with the highest proportion of all crashes (2.9%), fatal crashes (24.2%), and injury crashes (6.7%).

	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Unknown Event	0	0.0	0	0.0	0	0.0
MOST HARMFUL EVENT TOTAL	6,946	100.0	33	100.0	1,099	100.0

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	3,619	52.1	14	42.4	411	37.4
Head On	123	1.8	9	27.3	57	5.2
Head On - Left Turn	138	2.0	1	3.0	50	4.5
Angle	1,012	14.6	7	21.2	230	20.9
Rear End	826	11.9	2	6.1	185	16.8
Rear End - Left Turn	64	0.9	0	0.0	24	2.2
Rear End - Right Turn	63	0.9	0	0.0	7	0.6
Sideswipe - Same Direction	427	6.1	0	0.0	40	3.6
Sideswipe - Opposite Directions	179	2.6	0	0.0	35	3.2
Backing	194	2.8	0	0.0	4	0.4
Other	273	3.9	0	0.0	54	4.9
Unknown	28	0.4	0	0.0	2	0.2
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	6,946	100.0	33	100.0	1,099	100.0

Single-vehicle crashes are the most common type of crash that drivers age 21-64 in the Upper Peninsula are involved in for all crashes (52.1%), fatal crashes (42.4%), and injury crashes (37.4%).

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	6,037	86.9	23	69.7	869	79.1
Median	9	0.1	0	0.0	1	0.1
Shoulder	326	4.7	3	9.1	83	7.6
Outside of Shoulder/Curb	424	6.1	7	21.2	121	11.0
Gore	15	0.2	0	0.0	7	0.6
On-Street Parking	80	1.2	0	0.0	6	0.5
Off the Roadway	0	0.0	0	0.0	0	0.0
On the Sidewalk	7	0.1	0	0.0	3	0.3
In the Bicycle Lane	0	0.0	0	0.0	0	0.0
Other/Unknown	48	0.7	0	0.0	9	0.8
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	6,946	100.0	33	100.0	1,099	100.0

Other than on the road crashes, drivers age 21-64 in the Upper Peninsula are most commonly involved in crashes where the first impact is outside the shoulder/curb for all crashes (6.1%), fatal crashes (21.2%), and injury crashes (11.0%).

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	268	3.9	0	0.0	38	3.5
U.S. & Michigan Roads	3,901	56.2	19	57.6	593	54.0
County & City Roads	2,732	39.3	14	42.4	456	41.5
Uncoded & Errors	45	0.6	0	0.0	12	1.1
TOTAL	6,946	100.0	33	100.0	1,099	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 - 2:59 AM	255	3.7	2	6.1	37	3.4
3:00 AM - 5:59 AM	290	4.2	3	9.1	34	3.1
6:00 AM - 8:59 AM	913	13.1	3	9.1	115	10.5
9:00 AM - 11:59 AM	941	13.5	1	3.0	164	14.9
12:00 PM - 2:59 PM	1,204	17.3	9	27.3	236	21.5
3:00 PM - 5:59 PM	1,471	21.2	6	18.2	270	24.6
6:00 PM - 8:59 PM	1,167	16.8	5	15.2	150	13.6
9:00 PM - 11:59 PM	701	10.1	4	12.1	92	8.4
Unknown	4	0.1	0	0.0	1	0.1
TOTAL	6,946	100.0	33	100.0	1,099	100.0

For drivers age 21-64 in the Upper Peninsula, the 3:00 - 5:59 PM time period has the highest proportion of all crashes (21.2%) and injury crashes (24.6%). The 12:00 - 2:59 PM time period has the highest proportion of fatal crashes (27.3%).

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	4,400	63.3	12	36.4	486	44.2	4	0.5
Speed too fast	604	8.7	8	24.2	149	13.6	185	25.1
Speed too slow	3	0.0	0	0.0	2	0.2	1	0.1
Failed to yield	422	6.1	1	3.0	91	8.3	138	18.8
Disregard traffic control	72	1.0	0	0.0	20	1.8	33	4.5
Drove wrong way	0	0.0	0	0.0	0	0.0	0	0.0
Drove left of center	40	0.6	0	0.0	10	0.9	12	1.6
Improper passing	22	0.3	1	3.0	2	0.2	5	0.7
Improper lane use	71	1.0	1	3.0	7	0.6	22	3.0
Improper turn	53	0.8	1	3.0	11	1.0	14	1.9
Improper/no signal	5	0.1	0	0.0	1	0.1	0	0.0
Improper backing	137	2.0	0	0.0	3	0.3	4	0.5
Unable to stop in assured clear distance	365	5.3	0	0.0	77	7.0	95	12.9
Other	256	3.7	2	6.1	82	7.5	52	7.1
Unknown	179	2.6	6	18.2	37	3.4	7	1.0
Reckless driving	42	0.6	1	3.0	22	2.0	15	2.0
Careless/negligent driving	275	4.0	0	0.0	99	9.0	149	20.2
Uncoded & Errors	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL	6,946	100.0	33	100.0	1,099	100.0	736	100.0

After no hazardous action, the second highest known hazardous action category for drivers age 21-64 in the Upper Peninsula is speed too fast for all crashes (8.7%), fatal crashes (24.2%), and injury crashes (13.6%).

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	1,065	15.3	0	0.0	176	16.0
Tuesday	886	12.8	2	6.1	134	12.2
Wednesday	986	14.2	4	12.1	147	13.4
Thursday	1,187	17.1	7	21.2	174	15.8
Friday	1,147	16.5	7	21.2	168	15.3
Saturday	868	12.5	9	27.3	160	14.6
Sunday	807	11.6	4	12.1	140	12.7
TOTAL	6,946	100.0	33	100.0	1,099	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	4,135	59.5	28	84.8	676	61.5
Female	2,810	40.5	5	15.2	423	38.5
Uncoded & Errors	1	0.0	0	0.0	0	0.0
TOTAL	6,946	100.0	33	100.0	1,099	100.0

For drivers age 21-64 in the Upper Peninsula, male drivers (84.8%) account for 5.6 times that of female drivers (15.2%) 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	5,466	78.7	20	60.6	778	70.8
2 occupants	1,030	14.8	6	18.2	226	20.6
3 occupants	246	3.5	3	9.1	58	5.3
4 occupants	105	1.5	2	6.1	20	1.8
5 occupants	42	0.6	1	3.0	13	1.2
6+ occupants	17	0.2	0	0.0	2	0.2
0 occupants	40	0.6	1	3.0	2	0.2
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	6,946	100.0	33	100.0	1,099	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, SUV, van	4,695	67.6	15	45.5	642	58.4
Motor home	13	0.2	0	0.0	3	0.3
Pickup truck	1,693	24.4	10	30.3	250	22.7
Small Truck under 10,000 lbs. GVWR	32	0.5	0	0.0	7	0.6
Motorcycle	93	1.3	4	12.1	73	6.6
Moped/goped	11	0.2	1	3.0	8	0.7
Go-cart/golf cart	1	0.0	0	0.0	1	0.1
Snowmobile	43	0.6	0	0.0	28	2.5
Off-Road Vehicle - ORV/All-Terrain Vehicle - ATV	48	0.7	0	0.0	41	3.7
Other	33	0.5	0	0.0	5	0.5
Uncoded & Errors	1	0.0	0	0.0	0	0.0
CDL Truck/Bus (breakdown below)	283	4.1	3	9.1	41	3.7
TOTAL	6,946	100.0	33	100.0	1,099	100.0

HEAVY TRUCK/BUS GROSS VEHICLE WEIGHT RATING	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
10,000 lbs. or less	3	1.1	0	0.0	0	0.0
10,001 - 26,000 lbs.	107	37.8	1	33.3	10	24.4
Greater than 26,000 lbs.	173	61.1	2	66.7	31	75.6
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	283	100.0	3	100.0	41	100.0

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	979	67.2	8	66.7	160	63.7
Turning left	106	7.3	0	0.0	29	11.6
Turning right	58	4.0	0	0.0	9	3.6
Stopped on roadway	57	3.9	0	0.0	11	4.4
In prior crash	2	0.1	0	0.0	1	0.4
Changing lanes	19	1.3	0	0.0	3	1.2
Backing	50	3.4	0	0.0	0	0.0
Slowing/stopping on roadway	39	2.7	0	0.0	8	3.2
Slowing/stopping other	1	0.1	0	0.0	1	0.4
Starting up on roadway	31	2.1	0	0.0	5	2.0
Starting up other	1	0.1	0	0.0	0	0.0
Entering parking	7	0.5	0	0.0	0	0.0
Leaving parking	3	0.2	0	0.0	0	0.0
Entering roadway	26	1.8	1	8.3	5	2.0
Leaving roadway	4	0.3	0	0.0	1	0.4
Making U-turn	11	0.8	1	8.3	6	2.4
Overtaking or passing	13	0.9	0	0.0	2	0.8
Avoiding object	0	0.0	0	0.0	0	0.0
Avoiding pedestrian	0	0.0	0	0.0	0	0.0
Avoiding vehicle (front/back)	3	0.2	0	0.0	2	0.8
Avoiding vehicle (angle)	2	0.1	0	0.0	0	0.0
Driverless moving	0	0.0	0	0.0	0	0.0
Parked	12	0.8	1	8.3	1	0.4
Crossing at intersection	3	0.2	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	3	0.2	1	8.3	1	0.4
Unknown	2	0.1	0	0.0	2	0.8
Avoiding animal	5	0.3	0	0.0	0	0.0
Negotiating a curve	19	1.3	0	0.0	4	1.6
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	1,456	100.0	12	100.0	251	100.0

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	18	1.2	0	0.0	1	0.4
Ran off roadway left	3	0.2	0	0.0	0	0.0
Ran off roadway right	11	0.8	0	0.0	4	1.6
Re-enter roadway	2	0.1	0	0.0	0	0.0
Overturn	25	1.7	0	0.0	12	4.8
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	1	0.4
Jackknife	0	0.0	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	0	0.0
Individual fell from vehicle	5	0.3	0	0.0	5	2.0
Other noncollision	5	0.3	0	0.0	2	0.8
Equipment failure (blown tire, brake failure, etc.)	2	0.1	0	0.0	0	0.0
Cross centerline	10	0.7	0	0.0	1	0.4
Cross median	1	0.1	0	0.0	0	0.0
SUBTOTAL	86	5.9	0	0.0	26	10.4

For drivers age 65 and over in the Upper Peninsula, overturn is the most common harmful event in a noncollision for all crashes (1.7%) and injury crashes (4.8%).

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	4	0.3	0	0.0	3	1.2
Bicyclist	3	0.2	0	0.0	2	0.8
Motor vehicle in transport	694	47.7	9	75.0	171	68.1
Parked motor vehicle	52	3.6	1	8.3	4	1.6
Railroad train	0	0.0	0	0.0	0	0.0
Animal	492	33.8	0	0.0	6	2.4
Other nonfixed object	20	1.4	0	0.0	6	2.4
Work zone/maintenance equipment	0	0.0	0	0.0	0	0.0
Cargo falling/shifting/anything set in motion by a motor vehicle	2	0.1	0	0.0	1	0.4
SUBTOTAL	1,267	87.0	10	83.3	193	76.9

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/support	0	0.0	0	0.0	0	0.0
Bridge rail	0	0.0	0	0.0	0	0.0
Guardrail face	0	0.0	0	0.0	0	0.0
Guardrail end	2	0.1	0	0.0	1	0.4
Other post/pole/support	2	0.1	0	0.0	1	0.4
Culvert	3	0.2	0	0.0	1	0.4
Curb	2	0.1	0	0.0	1	0.4
Ditch	18	1.2	0	0.0	6	2.4
Embankment	4	0.3	0	0.0	1	0.4
Fence	0	0.0	0	0.0	0	0.0
Mailbox	2	0.1	0	0.0	0	0.0
Tree	37	2.5	2	16.7	14	5.6
Railroad crossing signal	1	0.1	0	0.0	0	0.0
Building	4	0.3	0	0.0	2	0.8
Traffic island	0	0.0	0	0.0	0	0.0
Fire hydrant	0	0.0	0	0.0	0	0.0
Impact attenuator	1	0.1	0	0.0	0	0.0
Other fixed object	3	0.2	0	0.0	0	0.0
Bridge overhead structure	0	0.0	0	0.0	0	0.0
Cable barrier	0	0.0	0	0.0	0	0.0
Concrete barrier	2	0.1	0	0.0	0	0.0
Traffic sign/post	13	0.9	0	0.0	3	1.2
Traffic signal equipment	1	0.1	0	0.0	0	0.0
Utility pole/light support	8	0.5	0	0.0	2	0.8
SUBTOTAL	103	7.1	2	16.7	32	12.7

For drivers age 65 and over in the Upper Peninsula, a tree is the fixed object associated with the highest proportion of all crashes (2.5%) and injury crashes (5.6%).

	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
Unknown Event	0	0.0	0	0.0	0	0.0
MOST HARMFUL EVENT TOTAL	1,456	100.0	12	100.0	251	100.0

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	655	45.0	2	16.7	63	25.1
Head On	17	1.2	3	25.0	8	3.2
Head On - Left Turn	41	2.8	1	8.3	18	7.2
Angle	275	18.9	4	33.3	82	32.7
Rear End	155	10.6	1	8.3	30	12.0
Rear End - Left Turn	13	0.9	0	0.0	2	0.8
Rear End - Right Turn	9	0.6	0	0.0	4	1.6
Sideswipe - Same Direction	122	8.4	0	0.0	10	4.0
Sideswipe - Opposite Directions	45	3.1	0	0.0	11	4.4
Backing	54	3.7	0	0.0	1	0.4
Other	67	4.6	1	8.3	22	8.8
Unknown	3	0.2	0	0.0	0	0.0
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	1,456	100.0	12	100.0	251	100.0

Single-vehicle crashes are the most common type of crash that drivers age 65 and over in the Upper Peninsula are involved in for all crashes (45.0%). Angle crashes are the most common crash type for these drivers to be involved in among injury (32.7%) crashes.

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	1,307	89.8	10	83.3	218	86.9
Median	6	0.4	0	0.0	2	0.8
Shoulder	40	2.7	0	0.0	9	3.6
Outside of Shoulder/Curb	63	4.3	2	16.7	21	8.4
Gore	2	0.1	0	0.0	1	0.4
On-Street Parking	21	1.4	0	0.0	0	0.0
Off the Roadway	0	0.0	0	0.0	0	0.0
On the Sidewalk	1	0.1	0	0.0	0	0.0
In the Bicycle Lane	0	0.0	0	0.0	0	0.0
Other/Unknown	16	1.1	0	0.0	0	0.0
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	1,456	100.0	12	100.0	251	100.0

Other than on the road crashes, drivers age 65 and over in the Upper Peninsula are most commonly involved in crashes where the first impact is outside the shoulder/curb for all crashes (4.3%) and injury crashes (8.4%).

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	50	3.4	0	0.0	4	1.6
U.S. & Michigan Roads	870	59.8	7	58.3	151	60.2
County & City Roads	527	36.2	5	41.7	93	37.1
Uncoded & Errors	9	0.6	0	0.0	3	1.2
TOTAL	1,456	100.0	12	100.0	251	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 - 2:59 AM	16	1.1	1	8.3	0	0.0
3:00 AM - 5:59 AM	21	1.4	0	0.0	0	0.0
6:00 AM - 8:59 AM	114	7.8	0	0.0	15	6.0
9:00 AM - 11:59 AM	299	20.5	0	0.0	57	22.7
12:00 PM - 2:59 PM	346	23.8	4	33.3	78	31.1
3:00 PM - 5:59 PM	347	23.8	3	25.0	79	31.5
6:00 PM - 8:59 PM	213	14.6	4	33.3	16	6.4
9:00 PM - 11:59 PM	100	6.9	0	0.0	6	2.4
Unknown	0	0.0	0	0.0	0	0.0
TOTAL	1,456	100.0	12	100.0	251	100.0

For drivers age 65 and over in the Upper Peninsula, the 3:00 - 5:59 PM time period has the highest proportion of all crashes (23.8%) and injury crashes (31.5%).

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	874	60.0	4	33.3	104	41.4	0	0.0
Speed too fast	64	4.4	1	8.3	17	6.8	18	11.5
Speed too slow	0	0.0	0	0.0	0	0.0	0	0.0
Failed to yield	173	11.9	2	16.7	51	20.3	62	39.7
Disregard traffic control	33	2.3	0	0.0	11	4.4	17	10.9
Drove wrong way	2	0.1	0	0.0	1	0.4	0	0.0
Drove left of center	16	1.1	1	8.3	7	2.8	3	1.9
Improper passing	5	0.3	0	0.0	0	0.0	2	1.3
Improper lane use	19	1.3	0	0.0	1	0.4	3	1.9
Improper turn	31	2.1	0	0.0	4	1.6	6	3.8
Improper/no signal	0	0.0	0	0.0	0	0.0	0	0.0
Improper backing	39	2.7	0	0.0	0	0.0	1	0.6
Unable to stop in assured clear distance	64	4.4	0	0.0	11	4.4	16	10.3
Other	43	3.0	0	0.0	17	6.8	7	4.5
Unknown	29	2.0	2	16.7	2	0.8	0	0.0
Reckless driving	3	0.2	0	0.0	3	1.2	0	0.0
Careless/negligent driving	61	4.2	2	16.7	22	8.8	21	13.5
Uncoded & Errors	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL	1,456	100.0	12	100.0	251	100.0	156	100.0

After no hazardous action, the second highest hazardous action category for drivers age 65 and over in the Upper Peninsula for all crashes (11.9%) and injury crashes (20.3%) 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	240	16.5	1	8.3	42	16.7
Tuesday	202	13.9	1	8.3	42	16.7
Wednesday	235	16.1	1	8.3	33	13.1
Thursday	222	15.2	3	25.0	41	16.3
Friday	259	17.8	3	25.0	55	21.9
Saturday	155	10.6	0	0.0	22	8.8
Sunday	143	9.8	3	25.0	16	6.4
TOTAL	1,456	100.0	12	100.0	251	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	941	64.6	9	75.0	158	62.9
Female	515	35.4	3	25.0	93	37.1
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	1,456	100.0	12	100.0	251	100.0

For drivers age 65 and over in the Upper Peninsula, male drivers (75.0%) account for 3.0 times that of female drivers (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	1,134	77.9	9	75.0	178	70.9
2 occupants	281	19.3	2	16.7	66	26.3
3 occupants	22	1.5	0	0.0	4	1.6
4 occupants	7	0.5	0	0.0	2	0.8
5 occupants	4	0.3	0	0.0	1	0.4
6+ occupants	3	0.2	0	0.0	0	0.0
0 occupants	5	0.3	1	8.3	0	0.0
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	1,456	100.0	12	100.0	251	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, SUV, van	1,066	73.2	6	50.0	179	71.3
Motor home	8	0.5	0	0.0	1	0.4
Pickup truck	325	22.3	3	25.0	43	17.1
Small Truck under 10,000 lbs. GVWR	5	0.3	0	0.0	2	0.8
Motorcycle	15	1.0	1	8.3	12	4.8
Moped/goped	3	0.2	0	0.0	2	0.8
Go-cart/golf cart	0	0.0	0	0.0	0	0.0
Snowmobile	4	0.3	1	8.3	2	0.8
Off-Road Vehicle - ORV/All-Terrain Vehicle - ATV	3	0.2	0	0.0	3	1.2
Other	3	0.2	0	0.0	2	0.8
Uncoded & Errors	1	0.1	1	8.3	0	0.0
CDL Truck/Bus (breakdown below)	23	1.6	0	0.0	5	2.0
TOTAL	1,456	100.0	12	100.0	251	100.0

HEAVY TRUCK/BUS GROSS VEHICLE WEIGHT RATING	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Drivers	% of Total	Number of Drivers	% of Total	Number of Drivers	% of Total
10,000 lbs. or less	0	0.0	0	0.0	0	0.0
10,001 - 26,000 lbs.	9	39.1	0	0.0	2	40.0
Greater than 26,000 lbs.	14	60.9	0	0.0	3	60.0
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	23	100.0	0	0.0	5	100.0

ALCOHOL

This page left intentionally blank

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
BICYCLISTS	Total*	18	0	0	0	0	0	0	0	0
	Killed	2	0	0	0	0	0	0	0	0**
	Injured	10	0	0	0	0	0	0	0	0
DRIVERS	Total*	10,010	358	277	79	53	89	65	526	395
	Killed	25	6	6	6	5	3	3	15	14**
	Injured	1,022	111	99	26	22	39	35	176	156
MOTORCYCLISTS	Total*	137	12	12	3	3	0	0	15	15
	Killed	5	2	2	1	1	0	0	3	3**
	Injured	105	8	8	2	2	0	0	10	10
ORV/ATV RIDERS	Total*	110	25	25	1	1	0	0	26	26
	Killed	0	0	0	0	0	0	0	0	0**
	Injured	70	17	17	1	1	0	0	18	18
PEDESTRIANS	Total*	30	4	4	1	1	1	0	6	5
	Killed	1	0	0	0	0	0	0	0	0**
	Injured	26	4	4	1	1	1	0	6	5
SNOWMOBILERS	Total*	55	6	5	0	0	0	0	6	5
	Killed	1	1	1	0	0	0	0	1	1**
	Injured	29	4	4	0	0	0	0	4	4

Total does include property damage only crashes

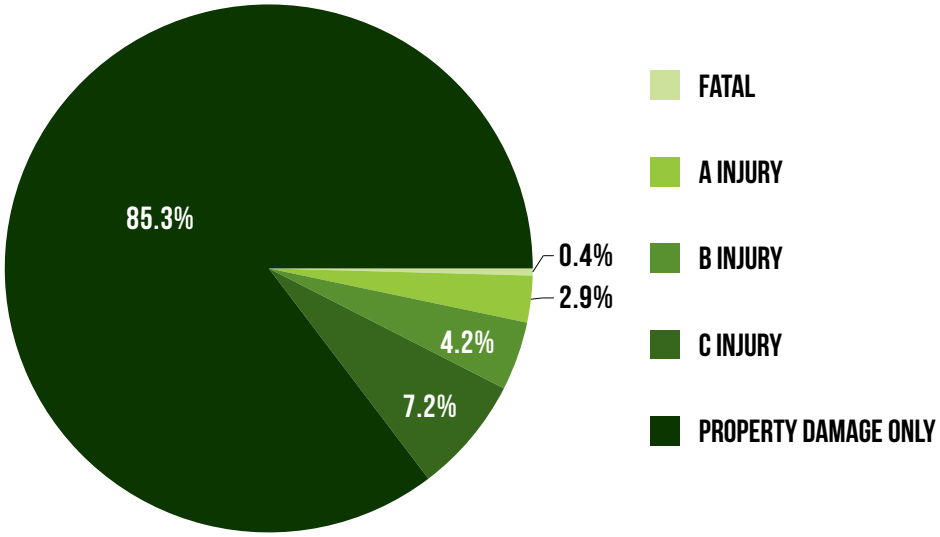
**In the Upper Peninsula, there were no bicyclists, 14 drivers, three motorcyclists, no ORV/ATV riders, no pedestrians, and one snowmobiler who were killed and coded as drinking and/or using drugs by the police officer.

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

AGE OF DRIVER IN CRASH	ALL CRASHES				FATAL				INJURY			
	Drinking Only	Drugs Only	Both	Total	Drinking Only	Drugs Only	Both	Total	Drinking Only	Drugs 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	1	0	0	1	0	0	0	0	0	0	0	0
16 years	0	0	1	1	0	0	0	0	0	0	1	1
17 years	0	2	0	2	0	0	0	0	0	1	0	1
18 years	6	0	1	7	0	0	0	0	1	0	1	2
19 years	12	2	2	16	0	0	0	0	5	1	1	7
20 years	8	0	1	9	0	0	0	0	3	0	1	4
21 - 24 years	27	10	8	45	1	0	0	1	15	7	5	27
25 - 34 years	70	18	14	102	2	2	2	6	26	9	7	42
35 - 44 years	67	11	25	103	1	2	1	4	27	1	11	39
45 - 54 years	38	6	6	50	3	1	0	4	12	1	6	19
55 - 64 years	26	4	5	35	0	1	0	1	11	1	3	15
65 - 69 years	14	0	0	14	1	0	0	1	7	0	0	7
70 - 74 years	4	0	1	5	0	0	0	0	4	0	1	5
75 - 79 years	3	0	0	3	1	0	0	1	1	0	0	1
80 - 84 years	0	0	0	0	0	0	0	0	0	0	0	0
85 - 89 years	1	0	0	1	0	0	0	0	0	0	0	0
90 years and over	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	1	1	0	0	0	0	0	0	0	0
Total	277	53	65	395	9	6	3	18	112	21	37	170

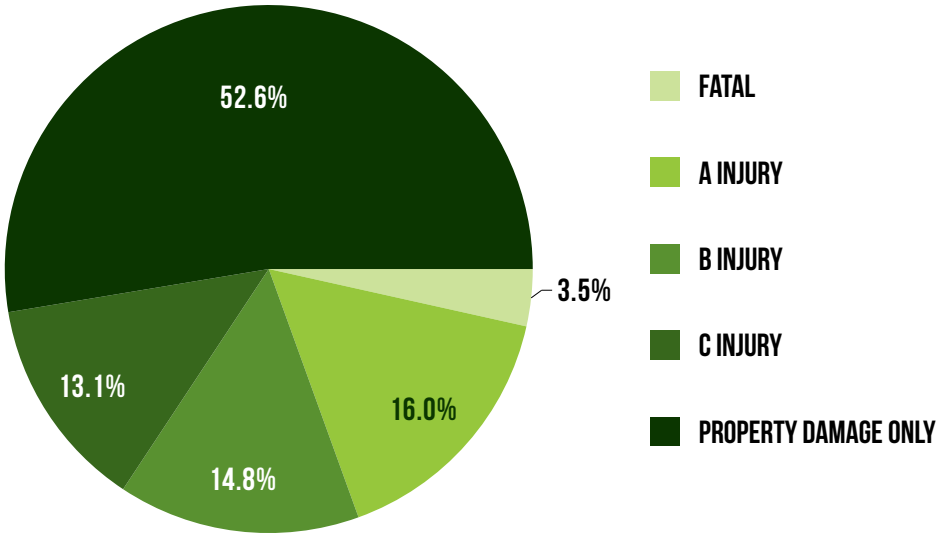
The driver age group 35 to 44 years represents the highest number of drinking and/or drug use in total crashes. The 25 to 34 years age group represents the highest number of drinking and/or drug use in injury crashes.

UPPER PENINSULA ALL CRASHES BY INJURY SEVERITY



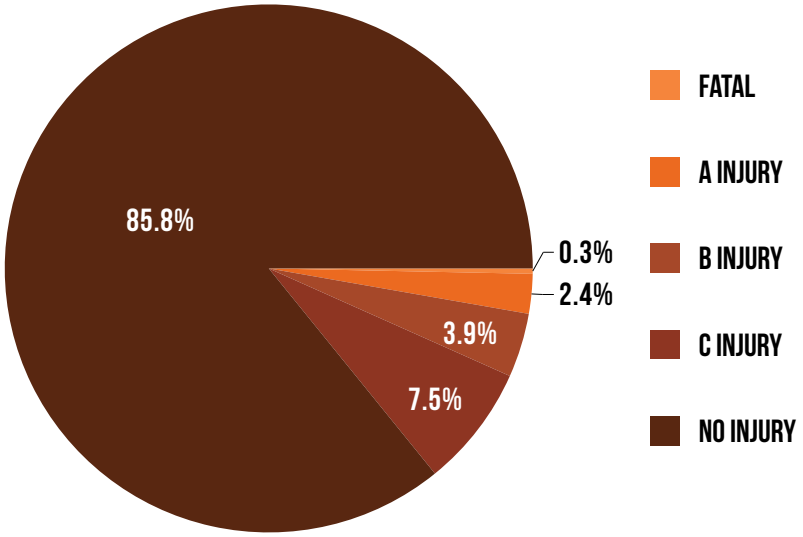
The majority of crashes do not involve injury (85.3%). Possible (C) injury crashes represent about 49% of all injury crashes.

UPPER PENINSULA HAD-BEEN-DRINKING CRASHES BY INJURY SEVERITY



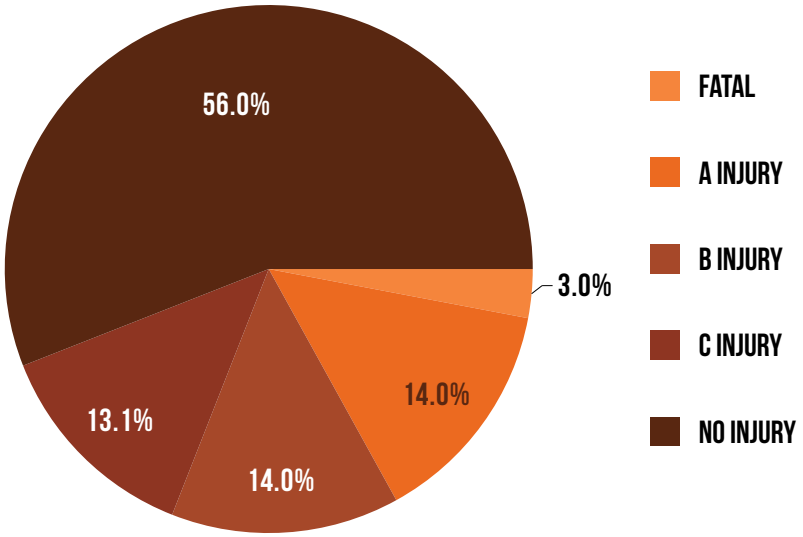
The problem of the drinking driver, pedestrian, and/or bicyclist is seen by comparing the two charts on this page. All injury levels are greater, and a fatal crash is about nine times more likely when one of the crash-involved operators is reported as had-been-drinking (HBD).

UPPER PENINSULA DEATH & INJURY FOR CRASH INVOLVED OCCUPANTS



The majority of occupants involved in crashes are not injured (85.8%). About 52% of those who are injured receive only possible (C) injuries.

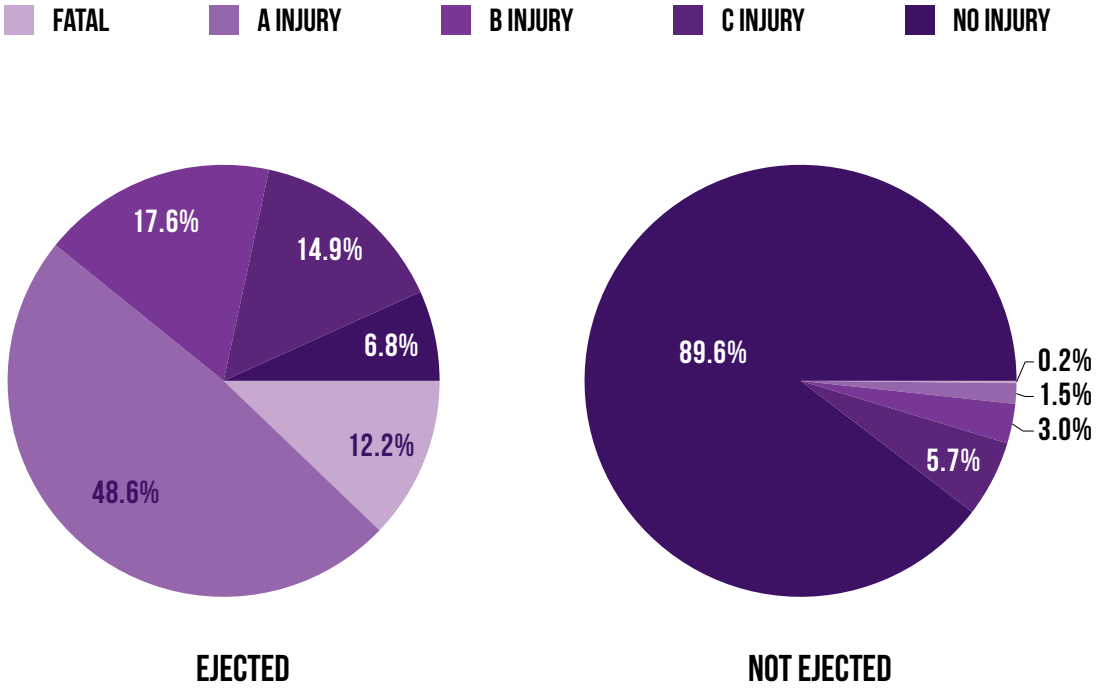
UPPER PENINSULA OCCUPANTS IN HAD-BEEN-DRINKING CRASHES



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

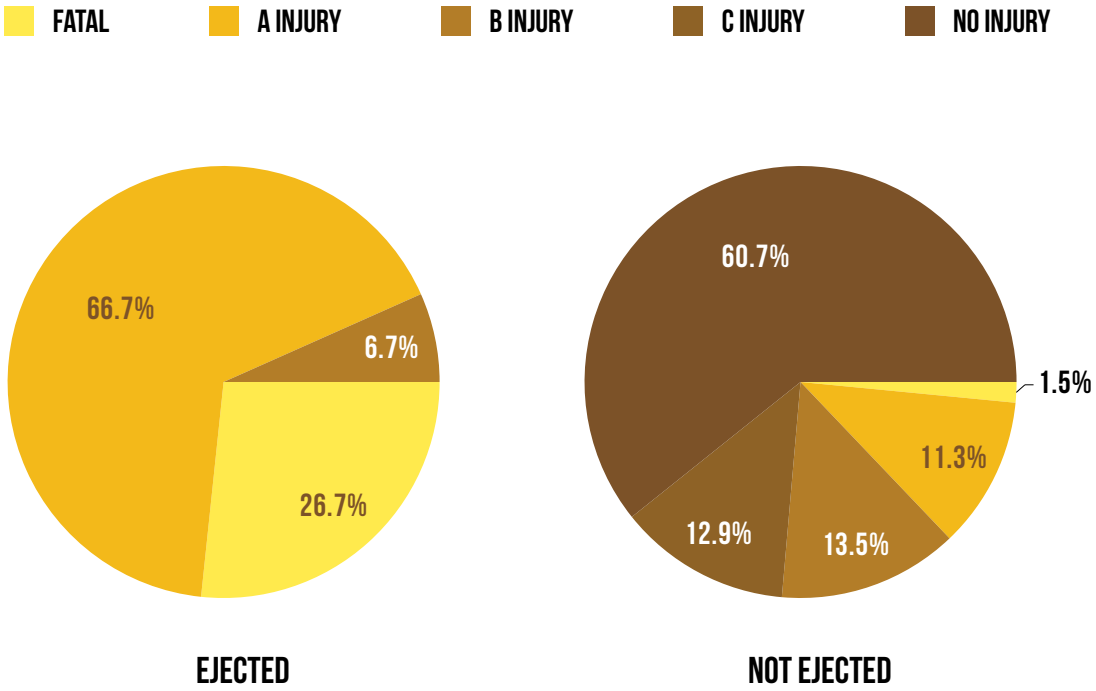
Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.

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



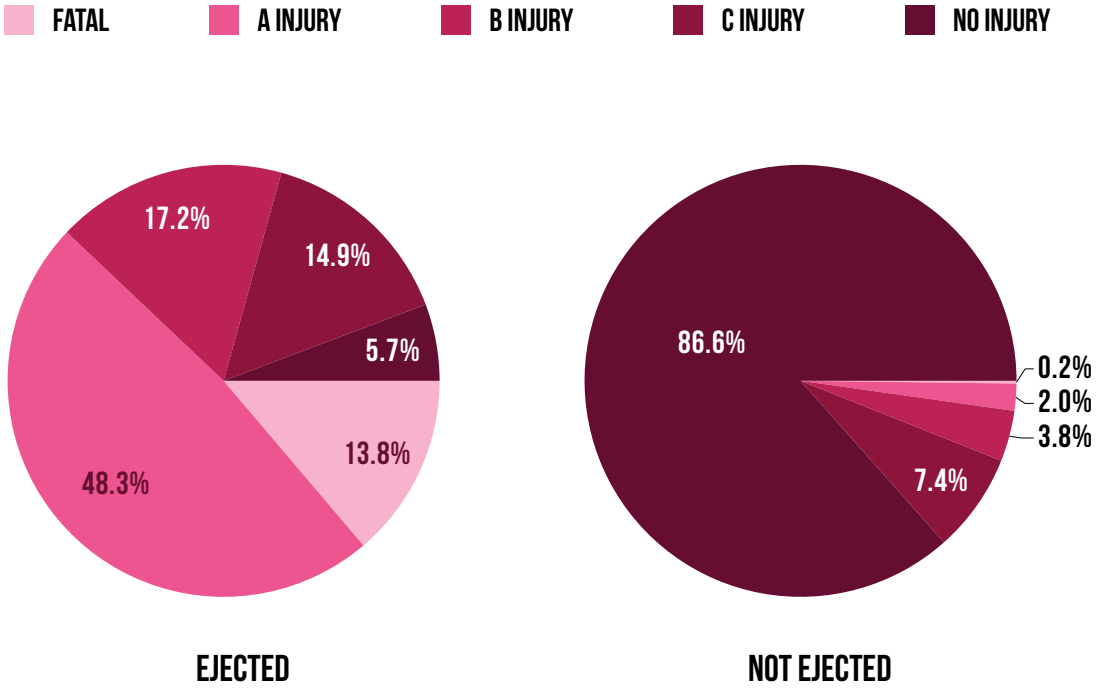
As shown by the two charts above, death and injury are much more likely when drivers are ejected from vehicles.

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



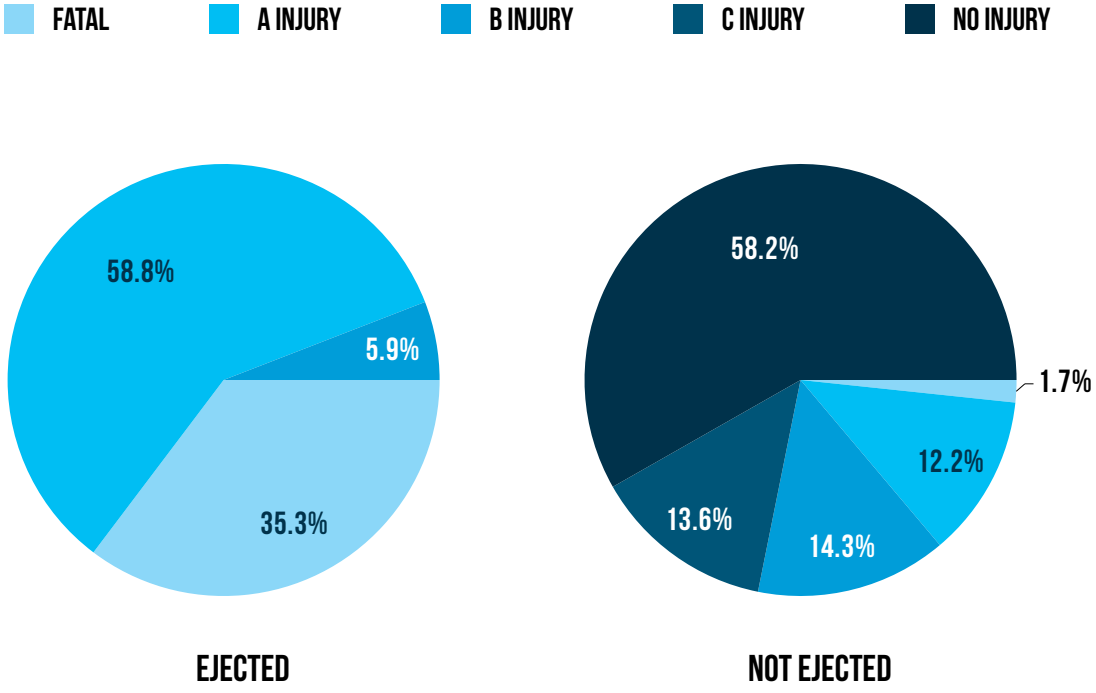
When compared to the charts above, the had-been-drinking charts demonstrate that injury severity is much worse for drivers reported to be drinking in both ejected and non-ejected events.

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



As shown by the two charts above, death and injury are much more likely when occupants are ejected from vehicles.

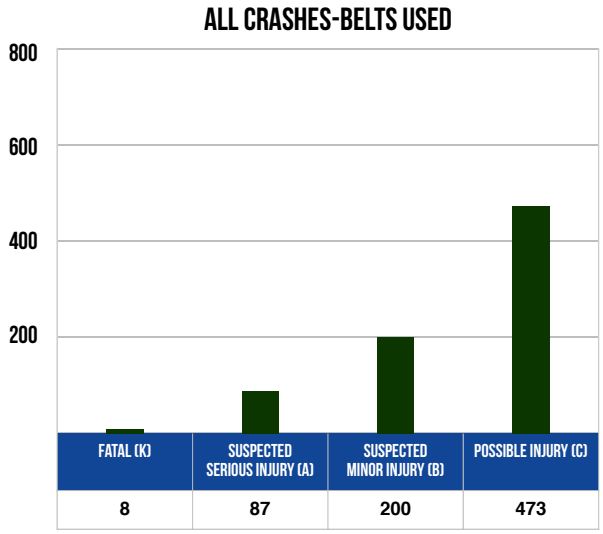
UPPER PENINSULA OCCUPANTS OF HAD-BEEN-DRINKING CRASHES INJURY SEVERITY - EJECTED VS. NOT EJECTED

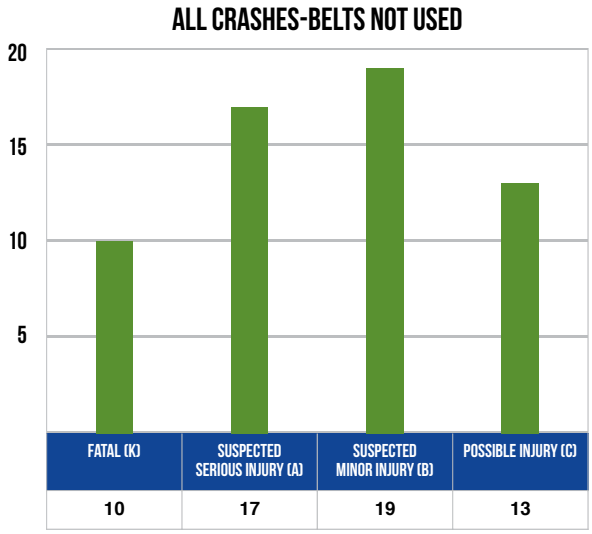


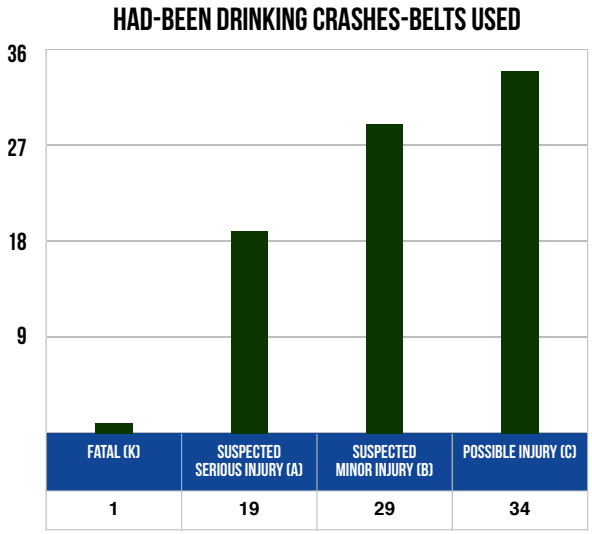
When compared to the charts above, the charts of occupants of had-been-drinking crashes demonstrate that injury severity is much worse for occupants in a crash where drinking is reported in both ejected and non-ejected events.

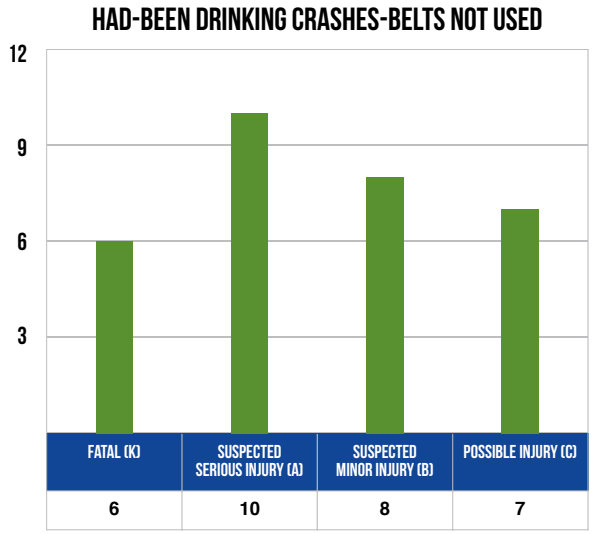
Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.

UPPER PENINSULA INJURY SEVERITY & BELT USE BY DRIVER INJURY





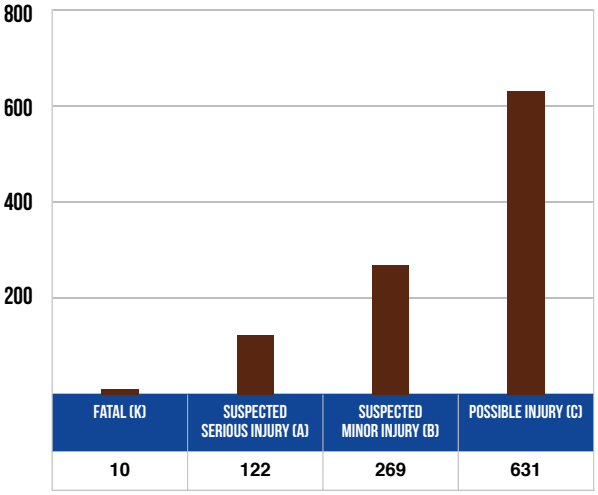




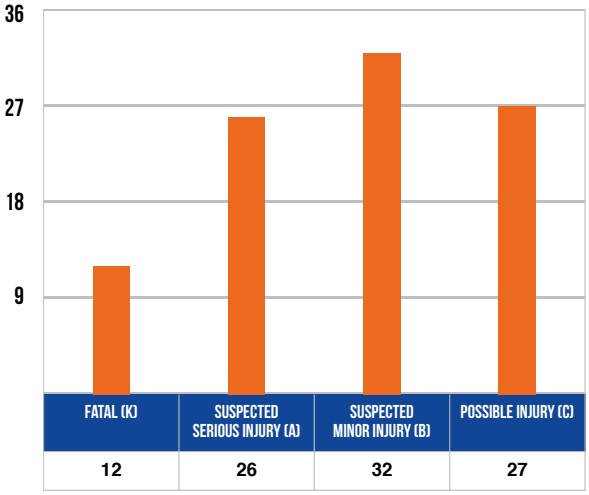
Note: "Belts Used" represents shoulder belts only used, lap belts only used, both lap and shoulder belts used, and restraint failure. "Belts Not Used" represents no belts available and no belts used.

UPPER PENINSULA INJURY SEVERITY & RESTRAINT USE BY OCCUPANT INJURY

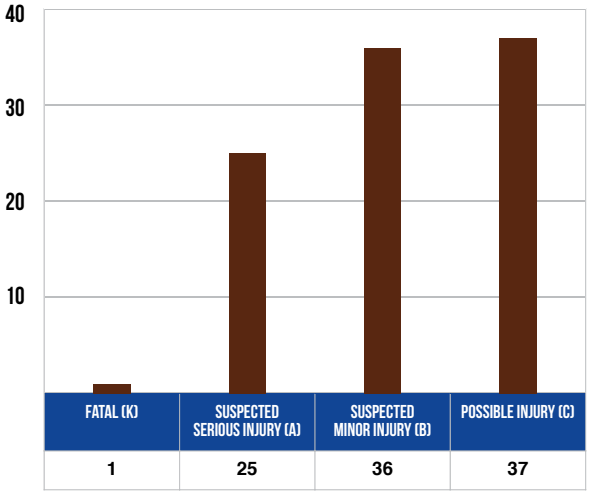
ALL CRASHES - RESTRAINTS USED



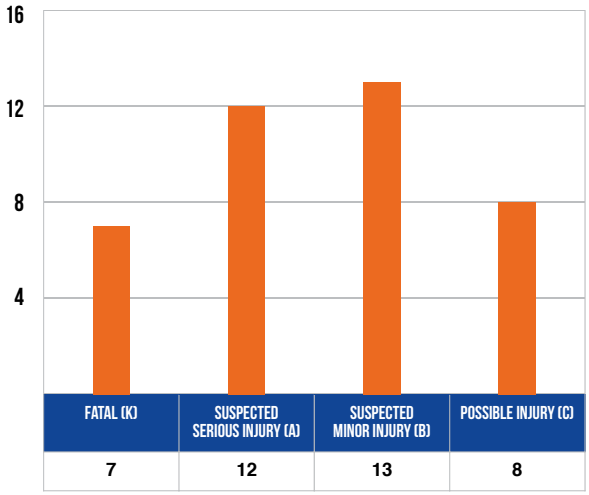
ALL CRASHES - RESTRAINTS NOT USED



HAD-BEEN-DRINKING CRASHES - RESTRAINTS USED



HAD-BEEN-DRINKING CRASHES - RESTRAINTS NOT USED

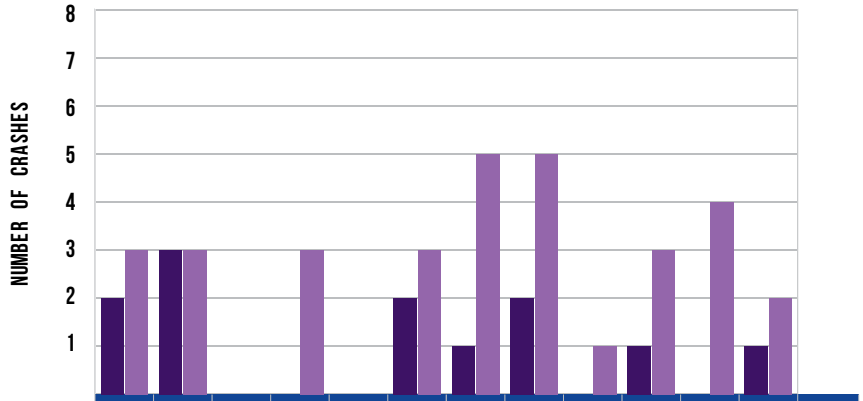


Note: "Restraints Used" represents shoulder belts only used, lap belts only used, both lap and shoulder belts used, child restraints used, and restraint failure. "Restraints Not Used" represents no belts available; no belts used; and child restraint not used, unavailable, or improper use.

Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.

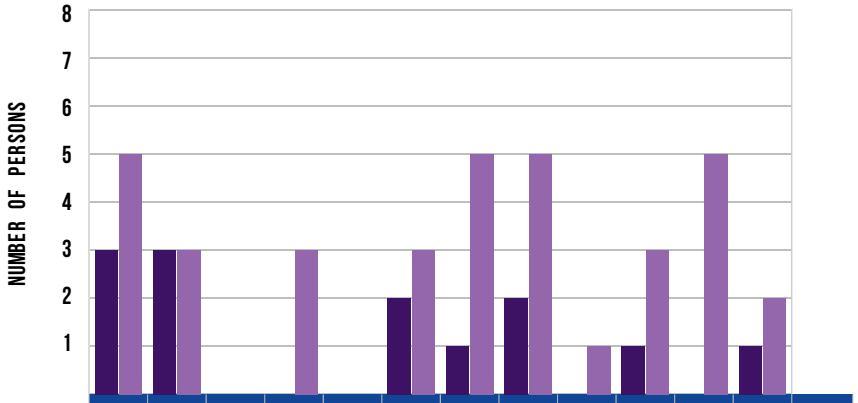
UPPER PENINSULA ALCOHOL INVOLVMENT IN FATAL CRASHES

HAD-BEEN-DRINKING FATAL CRASHES BY MONTH



	J	F	M	A	M	J	J	A	S	O	N	D	TOTALS
HBD FATAL CRASHES	2	3	0	0	0	2	1	2	0	1	0	1	12
TOTAL FATAL CRASHES	3	3	0	3	0	3	5	5	1	3	4	2	32

ALCOHOL-INVOLVED FATALITIES BY MONTH

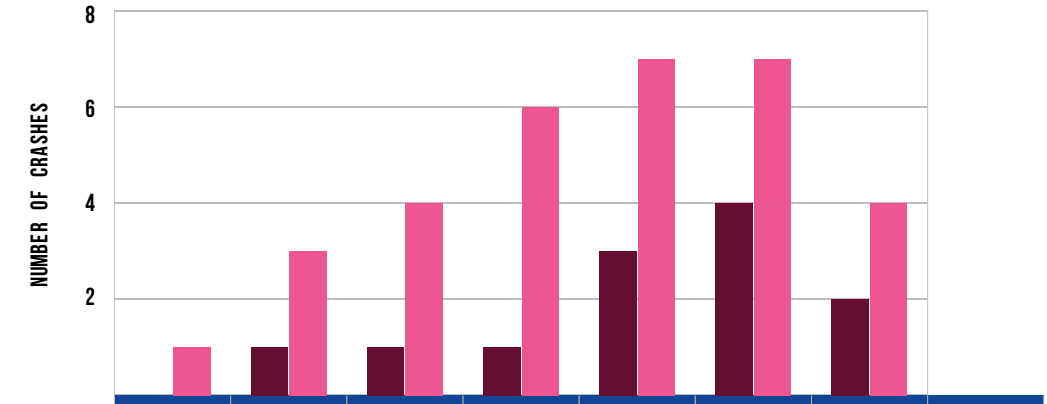


	J	F	M	A	M	J	J	A	S	O	N	D	TOTALS
ALCOHOL-INVOLVED FATALITIES	3	3	0	0	0	2	1	2	0	1	0	1	13
TOTAL FATALITIES	5	3	0	3	0	3	5	5	1	3	5	2	35

Had-been-drinking fatal crashes were highest in number during the month of February. The number of total fatal crashes (total of non-had-been-drinking and had-been-drinking fatal crashes) reached highest levels in July and August.

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

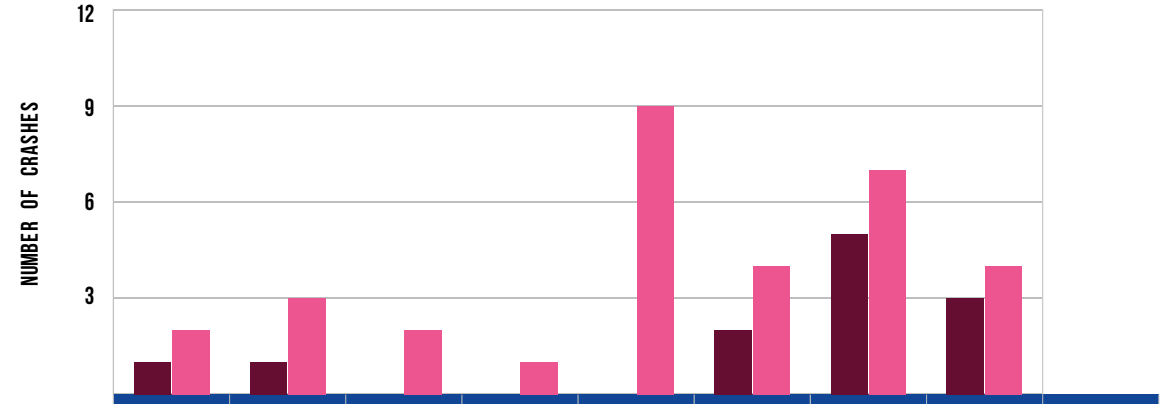
HAD-BEEN-DRINKING FATAL CRASHES BY DAY OF THE WEEK



	MON	TUES	WED	THURS	FRI	SAT	SUN	TOTALS
HBD FATAL CRASHES	0	1	1	1	3	4	2	12
TOTAL FATAL CRASHES	1	3	4	6	7	7	4	32

Friday and Saturday had the highest number of fatal crashes, and Saturday had the highest number of drinking-related fatal crashes in 2020.

HAD-BEEN-DRINKING FATAL CRASHES BY TIME OF DAY

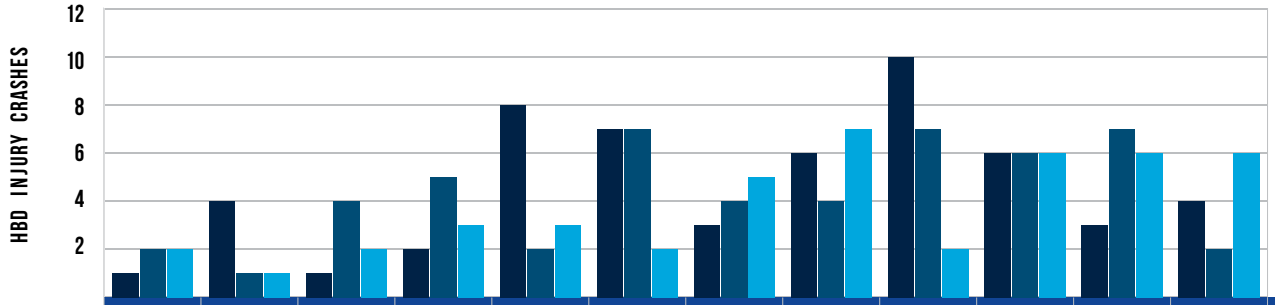


	12:00-2:59AM	3:00-5:59AM	6:00-8:59AM	9:00-11:59AM	12:00-2:59PM	3:00-5:59PM	6:00-8:59PM	9:00-11:59PM	TOTALS
HBD FATAL CRASHES	1	1	0	0	0	2	5	3	12
TOTAL FATAL CRASHES	2	3	2	1	9	4	7	4	32

The 6:00 PM to 8:59 PM time period had the highest number of HBD fatal crashes (5), while the 12:00 PM to 2:59 PM time period had the highest number of total fatal crashes (9).

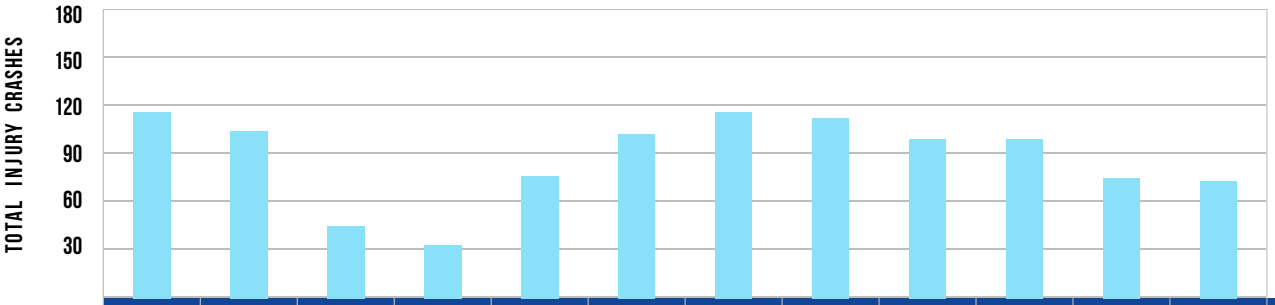
UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES

HAD-BEEN-DRINKING INJURY CRASHES BY MONTH



	J	F	M	A	M	J	J	A	S	O	N	D	TOTALS
HBD A INJURY CRASHES	1	4	1	2	8	7	3	6	10	6	3	4	55
HBD B INJURY CRASHES	2	1	4	5	2	7	4	4	7	6	7	2	51
HBD C INJURY CRASHES	2	1	2	3	3	2	5	7	2	6	6	6	45

TOTAL INJURY CRASHES BY MONTH



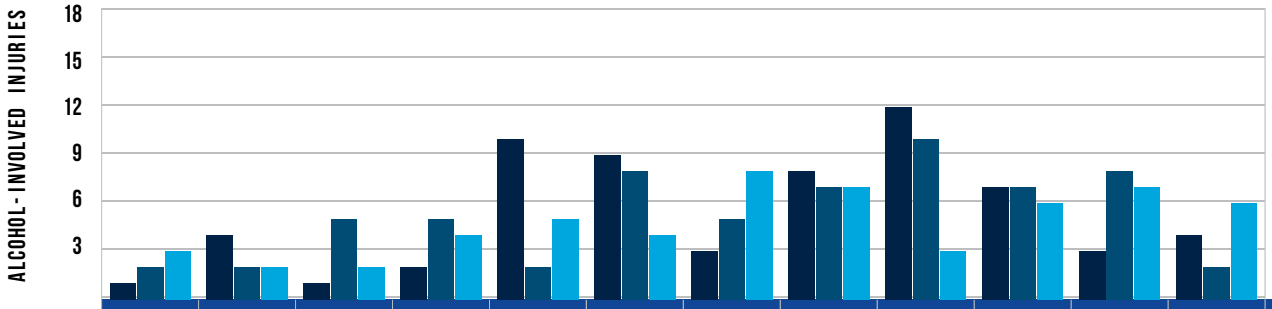
	J	F	M	A	M	J	J	A	S	O	N	D	TOTAL
TOTAL INJURY CRASHES	116	104	45	33	76	102	116	112	99	99	75	73	1,050

Alcohol involvement in injury crashes is an important indicator of the alcohol impaired driving problem. In 2020, the highest number of had-been-drinking injury crashes occurred in September (19).

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

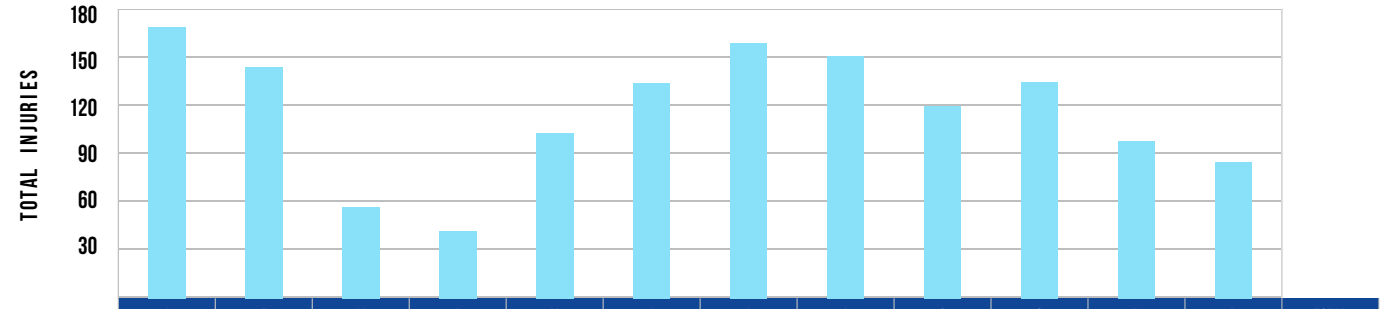
UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES (CONTINUED)

ALCOHOL-INVOLVED INJURIES BY MONTH



	J	F	M	A	M	J	J	A	S	O	N	D	TOTALS
ALCOHOL-INVOLVED A INJURIES	1	4	1	2	10	9	3	8	12	7	3	4	64
ALCOHOL-INVOLVED B INJURIES	2	2	5	5	2	8	5	7	10	7	8	2	63
ALCOHOL-INVOLVED C INJURIES	3	2	2	4	5	4	8	7	3	6	7	6	57

TOTAL INJURIES BY MONTH

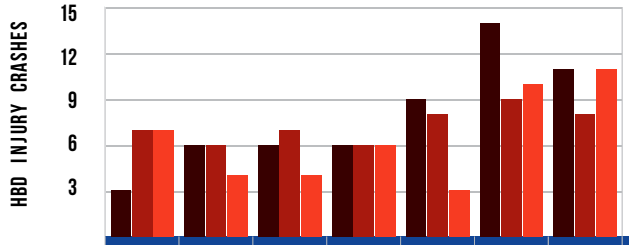


	J	F	M	A	M	J	J	A	S	O	N	D	TOTAL
TOTAL INJURIES	169	144	57	42	103	134	159	151	120	135	98	85	1,397

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

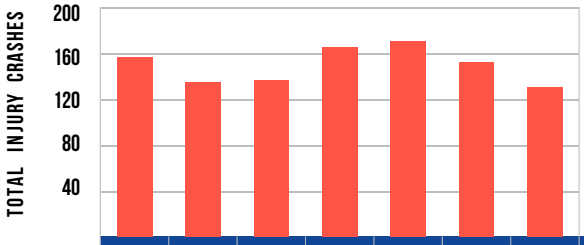
UPPER PENINSULA ALCOHOL INVOLVEMENT IN INJURY CRASHES (CONTINUED)

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



	MON	TUES	WED	THURS	FRI	SAT	SUN	TOTALS
HBD A INJURY CRASHES	3	6	6	6	9	14	11	55
HBD B INJURY CRASHES	7	6	7	6	8	9	8	51
HBD C INJURY CRASHES	7	4	4	6	3	10	11	45

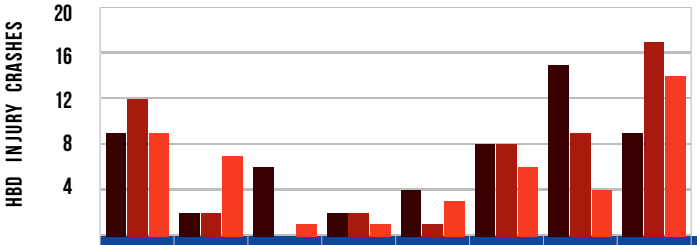
TOTAL INJURY CRASHES BY DAY OF THE WEEK



	MON	TUES	WED	THURS	FRI	SAT	SUN	TOTALS
TOTAL INJURY CRASHES	157	135	137	166	171	153	131	1,050

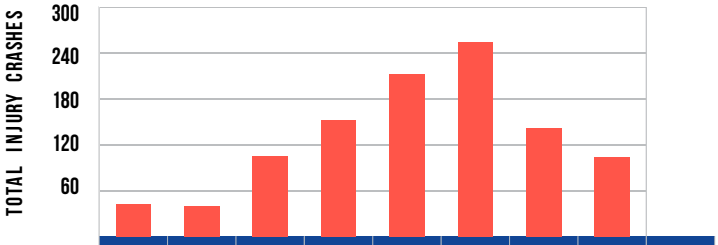
The peak day for all injury crashes is Friday. The highest proportion of had-been-drinking injury crashes to total injury crashes occurred on Sunday (22.9%).

HAD-BEEN-DRINKING INJURY CRASHES BY TIME OF DAY



	12:00-2:59AM	3:00-5:59AM	6:00-8:59AM	9:00-11:59AM	12:00-2:59PM	3:00-5:59PM	6:00-8:59PM	9:00-11:59PM	TOTALS
HBD A INJURY CRASHES	9	2	6	2	4	8	15	9	55
HBD B INJURY CRASHES	12	2	0	2	1	8	9	17	51
HBD C INJURY CRASHES	9	7	1	1	3	6	4	14	45

TOTAL INJURY CRASHES BY TIME OF DAY



	12:00-2:59AM	3:00-5:59AM	6:00-8:59AM	9:00-11:59AM	12:00-2:59PM	3:00-5:59PM	6:00-8:59PM	9:00-11:59PM	TOTALS
TOTAL INJURY CRASHES	41	39	105	152	212	255	142	103	1,049

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 11:59 PM. There was one injury crash where the time of day was unknown.

UPPER PENINSULA MALE DRIVERS BY AGE AND 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	12	0.2	0	0.0	1	7	2	2
14 years	6	0.1	0	0.0	2	2	0	2
15 years	9	0.2	0	0.0	1	1	1	6
16 years	89	1.6	1	2.6	3	7	6	72
17 years	101	1.8	0	0.0	4	5	8	84
18 years	123	2.2	0	0.0	1	6	9	107
19 years	159	2.8	0	0.0	0	4	13	142
20 years	110	1.9	0	0.0	4	4	10	92
21 - 24 years	489	8.6	2	5.3	17	32	47	391
25 - 34 years	1,022	17.9	8	21.1	45	54	69	846
35 - 44 years	864	15.1	6	15.8	35	43	57	723
45 - 54 years	872	15.3	6	15.8	31	46	51	738
55 - 64 years	888	15.6	6	15.8	38	35	76	733
65 - 69 years	324	5.7	4	10.5	12	16	21	271
70 - 74 years	291	5.1	2	5.3	8	14	24	243
75 - 79 years	154	2.7	1	2.6	6	10	13	124
80 - 84 years	95	1.7	2	5.3	3	5	9	76
85 - 89 years	59	1.0	0	0.0	3	4	8	44
90 years and over	18	0.3	0	0.0	0	0	2	16
Unknown	21	0.4	0	0.0	0	0	0	21
TOTAL	5,706**	100.0	38	100.0	214	295	426	4,733

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

***Note: This table excludes 459 drivers of unknown gender.*

UPPER PENINSULA MALE DRINKING DRIVERS BY AGE AND 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	1	0.4	0	0.0	0	0	0	1
16 years	1	0.4	0	0.0	0	1	0	0
17 years	0	0.0	0	0.0	0	0	0	0
18 years	5	2.0	0	0.0	0	0	0	5
19 years	11	4.4	0	0.0	0	1	3	7
20 years	6	2.4	0	0.0	2	1	0	3
21 - 24 years	26	10.4	0	0.0	4	5	6	11
25 - 34 years	67	26.9	3	33.3	14	5	7	38
35 - 44 years	62	24.9	2	22.2	10	4	6	40
45 - 54 years	29	11.6	2	22.2	3	7	4	13
55 - 64 years	23	9.2	0	0.0	6	3	3	11
65 - 69 years	11	4.4	1	11.1	1	3	3	3
70 - 74 years	4	1.6	0	0.0	1	2	1	0
75 - 79 years	2	0.8	1	11.1	0	1	0	0
80 - 84 years	0	0.0	0	0.0	0	0	0	0
85 - 89 years	1	0.4	0	0.0	0	0	0	1
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	249**	100.0	9	100.0	41	33	33	133

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

***Note: This table excludes one driver of unknown gender.*

UPPER PENINSULA FEMALE DRIVERS BY AGE AND 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	0	0.0	0	0.0	0	0	0	0
14 years	0	0.0	0	0.0	0	0	0	0
15 years	10	0.3	0	0.0	0	0	2	8
16 years	73	1.9	0	0.0	4	5	7	57
17 years	99	2.6	0	0.0	0	7	15	77
18 years	112	2.9	0	0.0	4	9	15	84
19 years	109	2.8	0	0.0	3	4	12	90
20 years	109	2.8	0	0.0	0	6	10	93
21 - 24 years	371	9.6	2	25.0	4	17	52	296
25 - 34 years	731	19.0	2	25.0	18	24	69	618
35 - 44 years	586	15.2	0	0.0	14	29	47	496
45 - 54 years	528	13.7	1	12.5	15	13	47	452
55 - 64 years	594	15.4	0	0.0	11	13	50	520
65 - 69 years	192	5.0	0	0.0	6	5	20	161
70 - 74 years	133	3.5	0	0.0	3	4	15	111
75 - 79 years	97	2.5	1	12.5	1	3	16	76
80 - 84 years	55	1.4	1	12.5	2	5	7	40
85 - 89 years	29	0.8	0	0.0	2	2	1	24
90 years and over	9	0.2	1	12.5	1	0	0	7
Unknown	8	0.2	0	0.0	0	0	0	8
TOTAL	3,845**	100.0	8	100.0	88	146	385	3,218

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

***Note: This table excludes 459 drivers of unknown gender.*

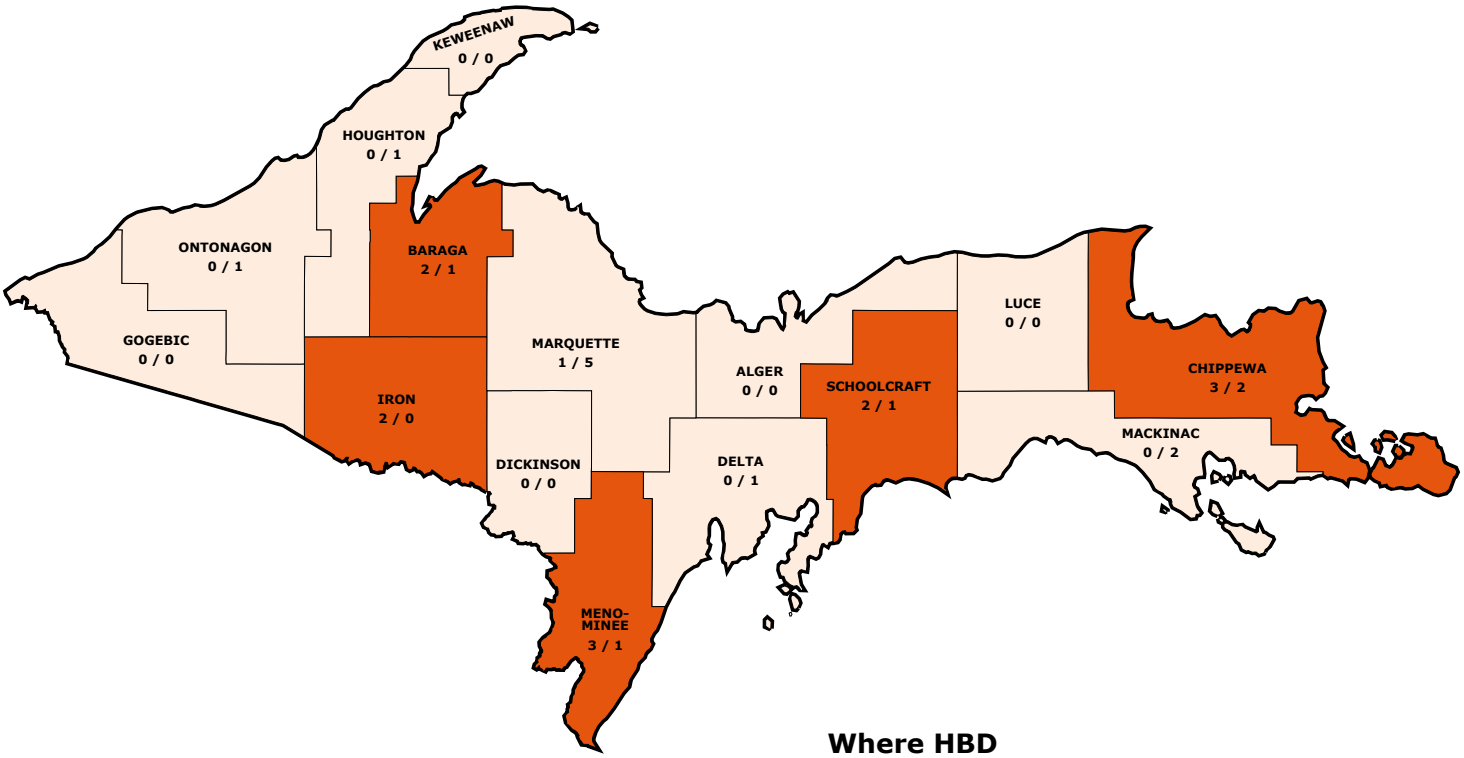
UPPER PENINSULA FEMALE DRINKING DRIVERS BY AGE AND INJURY SEVERITY IN CRASH

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	2	2.2	0	0.0	1	0	1	0
19 years	3	3.3	0	0.0	1	1	0	1
20 years	3	3.3	0	0.0	0	1	0	2
21 - 24 years	9	9.8	1	33.3	1	1	3	3
25 - 34 years	17	18.5	1	33.3	0	5	2	9
35 - 44 years	30	32.6	0	0.0	7	6	5	12
45 - 54 years	15	16.3	1	33.3	2	1	1	10
55 - 64 years	8	8.7	0	0.0	0	2	0	6
65 - 69 years	3	3.3	0	0.0	0	0	0	3
70 - 74 years	1	1.1	0	0.0	0	1	0	0
75 - 79 years	1	1.1	0	0.0	0	0	0	1
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	92**	100.0	3	100.0	12	18	12	47

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

***Note: This table excludes one driver of unknown gender.*

TRAFFIC FATALITIES WITH DRINKING INVOLVEMENT BY COUNTY



Where HBD
Traffic Fatalities Occured

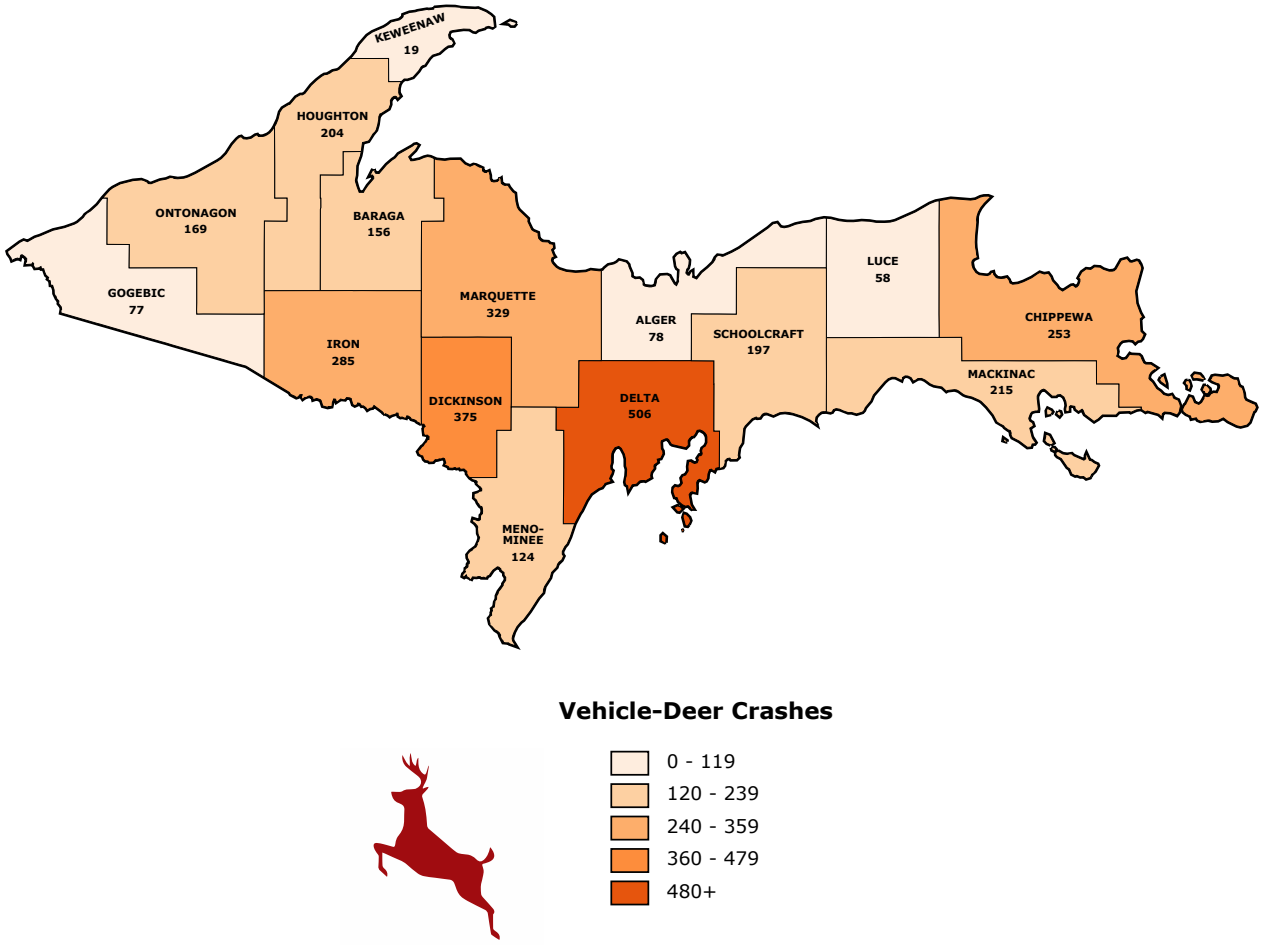
A One-Year Comparision
2020 = 13 / 2019 = 15

Same or decrease
Increase

DEER

This page left intentionally blank

UPPER PENINSULA MICHIGAN MOTOR VEHICLE-DEER INVOLVED CRASHES



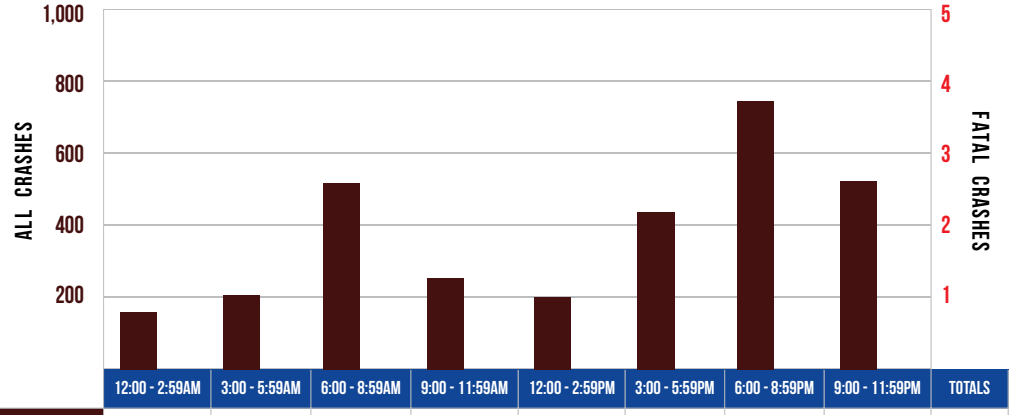
The Upper Peninsula had 3,045 reported vehicle-deer crashes during 2020. Those collisions resulted in 93 people injured and none killed. Of the 3,054 motor vehicles involved, 2,236 (73.2%) were passenger cars, SUVs, or vans; 724 (23.7%) were pickup trucks; 8 (0.3%) were motorhomes; and 31 (1.0%) were motorcycles. All other vehicle types (including uncoded and errors) totaled 55 (1.8%).

In the Upper Peninsula, 41.3 percent of crashes in all counties involved deer. This compares to 20.8 percent for the number of deer-involved crashes statewide. Delta County had the highest number of vehicle-deer crashes (506) in the Upper Peninsula, translating to 46.6 percent of the total crashes in that county in 2020.

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	1,083	35.6	0	0.0	11	15	12	1,045
Dawn	214	7.0	0	0.0	0	2	7	205
Dusk	228	7.5	0	0.0	0	1	2	225
Dark - Lighted	142	4.7	0	0.0	1	1	1	139
Dark - Unlighted	1,366	44.9	0	0.0	0	11	14	1,341
Other	0	0.0	0	0.0	0	0	0	0
Unknown	12	0.4	0	0.0	0	0	0	12
Uncoded & Errors	0	0.0	0	0.0	0	0	0	0
Total	3,045	100.0	0	0.0	12	30	36	2,967

TIME OF DAY AND SEVERITY OF DEER CRASHES



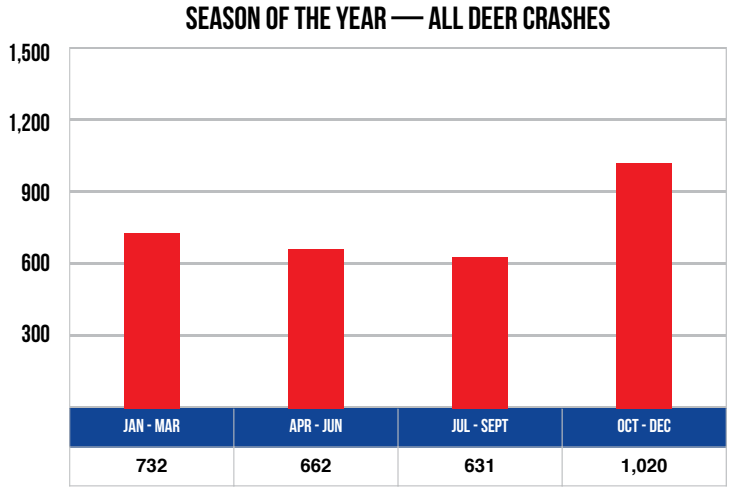
	12:00 - 2:59AM	3:00 - 5:59AM	6:00 - 8:59AM	9:00 - 11:59AM	12:00 - 2:59PM	3:00 - 5:59PM	6:00 - 8:59PM	9:00 - 11:59PM	TOTALS
ALL CRASHES	160	207	518	253	200	438	746	523	3,045
FATAL CRASHES	0	0	0	0	0	0	0	0	0

The highest number of reported vehicle-deer collisions occurred during the 6:00 PM to 8:59 PM time period, when 24.5 percent (746) of the vehicle-deer crashes occurred. No fatal vehicle-deer crashes occurred in the Upper Peninsula in 2020.

Note: Time and Severity chart excludes 0 crashes where time of day is unknown.

MONTHLY AND SEASONAL RATES FOR MOTOR VEHICLE-DEER CRASHES

MONTH	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
January	248	8.1	0	0.0	0	0	3	245
February	226	7.4	0	0.0	0	0	2	224
March	258	8.5	0	0.0	0	1	1	256
April	163	5.4	0	0.0	1	1	1	160
May	212	7.0	0	0.0	1	3	4	204
June	287	9.4	0	0.0	5	7	6	269
July	186	6.1	0	0.0	1	7	2	176
August	183	6.0	0	0.0	2	3	3	175
September	262	8.6	0	0.0	0	4	2	256
October	359	11.8	0	0.0	2	3	4	350
November	411	13.5	0	0.0	0	0	6	405
December	250	8.2	0	0.0	0	1	2	247
Total	3,045	100.0	0	0.0	12	30	36	2,967



Of the total 3,045 reported vehicle-deer collisions in the Upper Peninsula, 33.5 percent (1,020) occurred during the fourth quarter of the year.

This page left intentionally blank

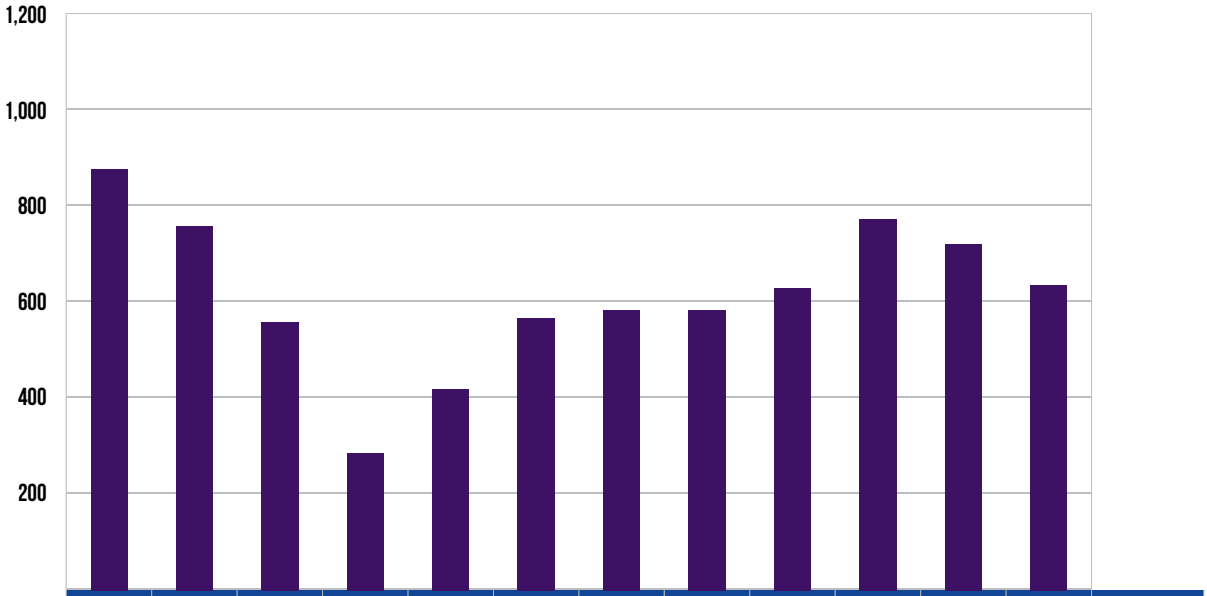
CRASH

(circumstances common to all traffic units in a crash)

This page left intentionally blank

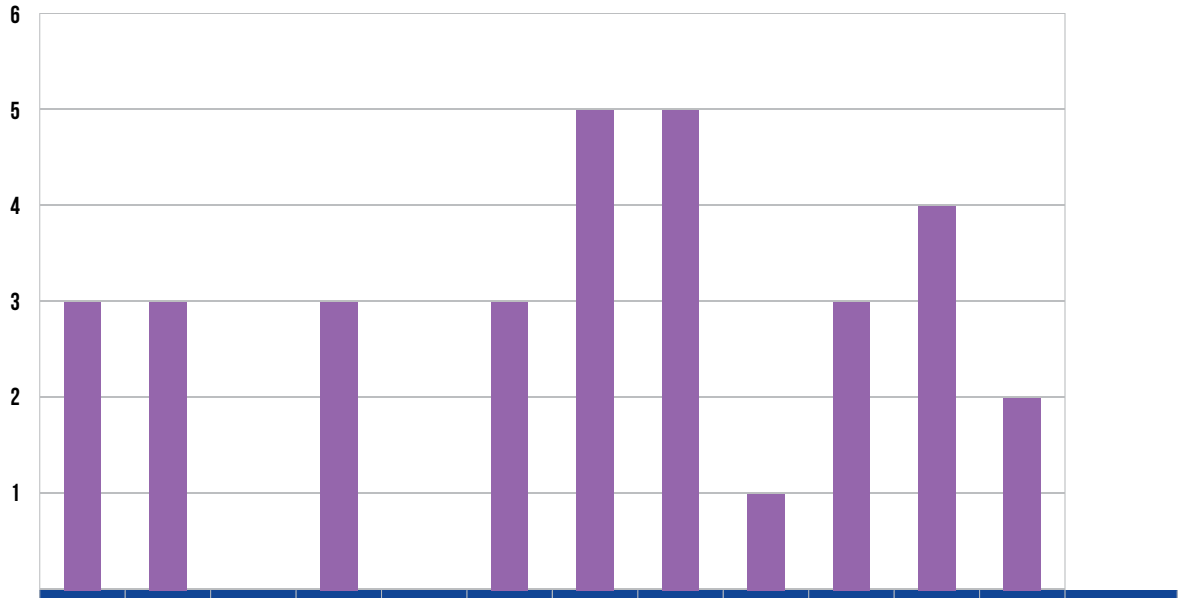
UPPER PENINSULA ALL CRASHES INJURY SEVERITY BY MONTH

TOTAL CRASHES



J	F	M	A	M	J	J	A	S	O	N	D	TOTAL
877	758	558	285	417	565	582	582	628	772	720	634	7,378

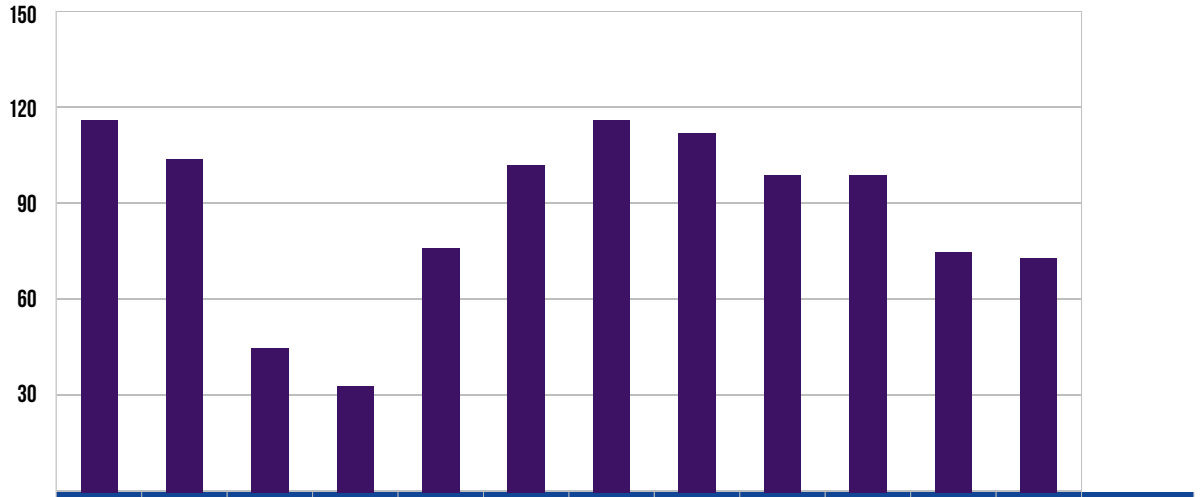
FATAL CRASHES



J	F	M	A	M	J	J	A	S	O	N	D	TOTAL
3	3	0	3	0	3	5	5	1	3	4	2	32

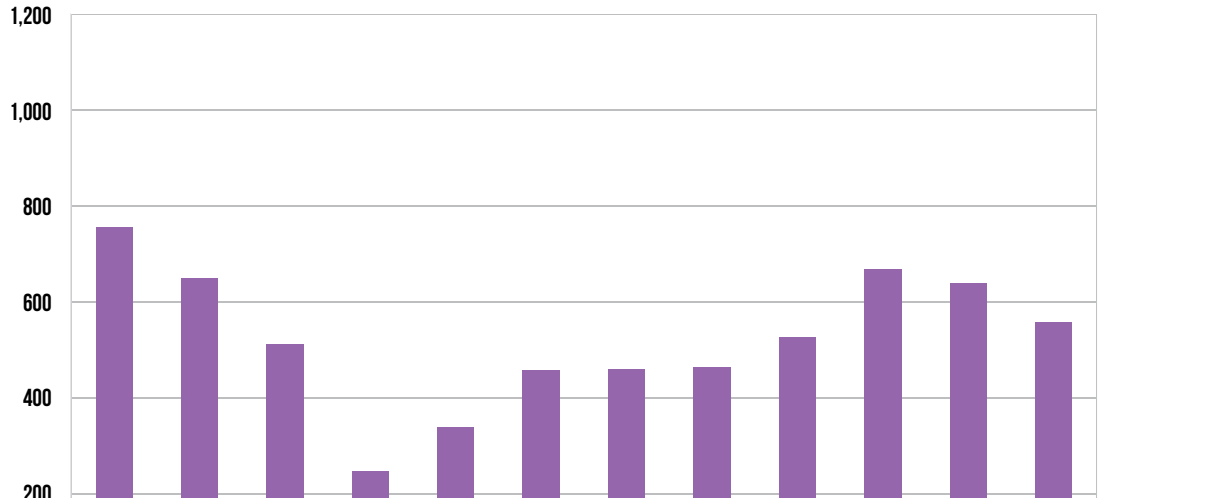
UPPER PENINSULA ALL CRASHES INJURY SEVERITY BY MONTH (CONTINUED)

INJURY CRASHES



J	F	M	A	M	J	J	A	S	O	N	D	TOTAL
116	104	45	33	76	102	116	112	99	99	75	73	1,050

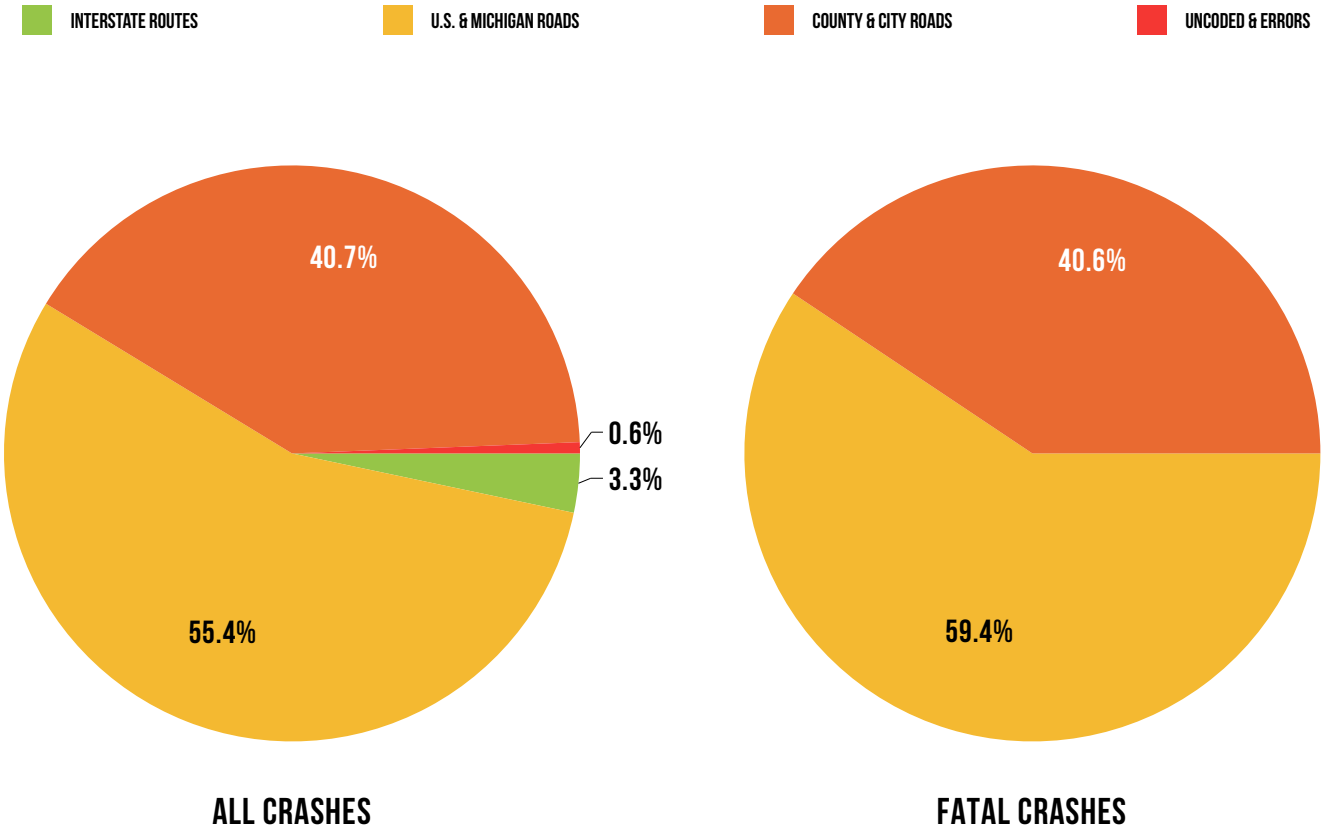
PROPERTY DAMAGE ONLY CRASHES



J	F	M	A	M	J	J	A	S	O	N	D	TOTAL
758	651	513	249	341	460	461	465	528	670	641	559	6,296

UPPER PENINSULA CRASH EXPERIENCE BY HIGHWAY CLASS

HIGHWAY CLASS	ALL CRASHES	FATAL CRASHES	INJURY CRASHES	PROPERTY DAMAGE ONLY
Interstate Routes	244	0	32	212
U.S. & Michigan Roads	4,087	19	508	3,560
County & City Roads	3,001	13	497	2,491
Uncoded & Errors	46	0	13	33



ALL CRASHES

FATAL CRASHES

The highest percentage of all crashes (55.4%), fatal crashes (59.4%), injury crashes (48.4%), and property damage only crashes (56.5%) occurred 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	4,797	65.0	17	53.1	128	187	241	4,224
Head On	77	1.0	6	18.8	16	12	8	35
Head On – Left Turn	105	1.4	1	3.1	9	7	22	66
Angle	772	10.5	6	18.8	26	47	105	588
Rear End	577	7.8	1	3.1	14	25	83	454
Rear End – Left Turn	49	0.7	0	0.0	2	2	11	34
Rear End – Right Turn	37	0.5	0	0.0	0	1	5	31
Sideswipe – Same Direction	361	4.9	0	0.0	3	8	17	333
Sideswipe – Opposite Directions	131	1.8	0	0.0	3	9	12	107
Backing	183	2.5	0	0.0	0	0	3	180
Other	235	3.2	1	3.1	10	13	19	192
Unknown	54	0.7	0	0.0	0	0	2	52
Uncoded & Errors	0	0.0	0	0.0	0	0	0	0
TOTAL	7,378	100.0	32	100.0	211	311	528	6,296

RELATIONSHIP TO ROADWAY

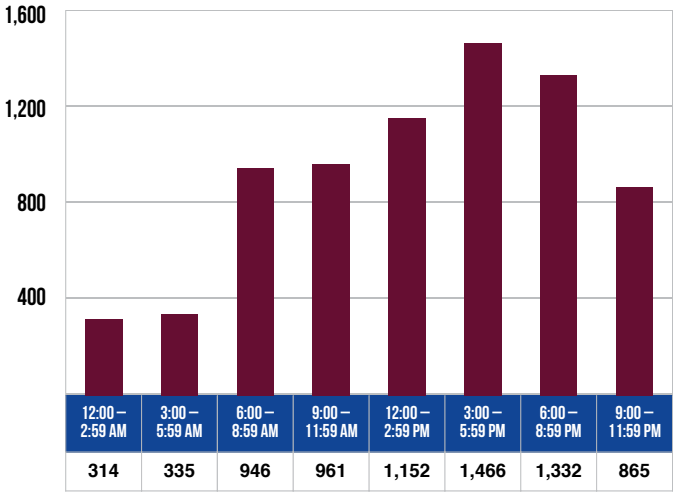
LOCATION OF FIRST IMPACT	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
On Road	6,126	83.0	20	62.5	136	211	400	5,359
Median	21	0.3	0	0.0	0	0	4	17
Shoulder	415	5.6	3	9.4	22	30	44	316
Outside of Shoulder/Curb	611	8.3	9	28.1	48	61	67	426
Gore	24	0.3	0	0.0	1	1	8	14
On-Street Parking	124	1.7	0	0.0	0	2	4	118
Off the Roadway	0	0.0	0	0.0	0	0	0	0
On the Sidewalk	8	0.1	0	0.0	1	1	1	5
In the Bicycle Lane	0	0.0	0	0.0	0	0	0	0
Other/Unknown	49	0.7	0	0.0	3	5	0	41
TOTAL	7,378	100.0	32	100.0	211	311	528	6,296

In the Upper Peninsula, only 8.3 percent of crashes occur outside of the shoulder/curb of the road, but these crashes account for 28.1 percent of the fatal crashes.

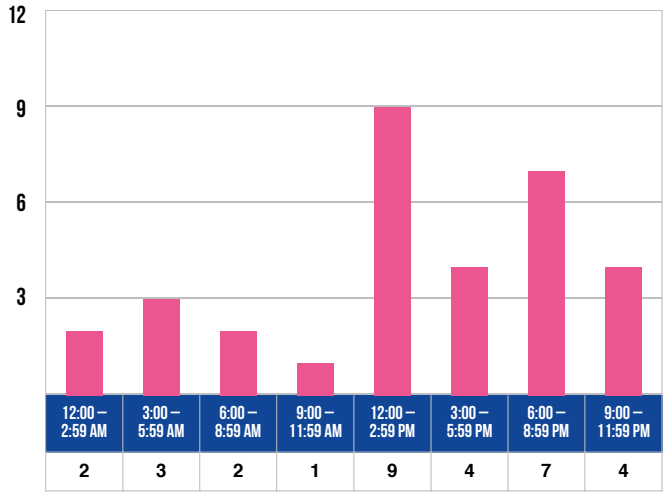
UPPER PENINSULA TIME AND SEVERITY

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	314	4.3	2	6.3	11	13	17	271
3:00 AM – 5:59 AM	335	4.5	3	9.4	9	10	20	293
6:00 AM – 8:59 AM	946	12.8	2	6.3	19	24	62	839
9:00 AM – 11:59 AM	961	13.0	1	3.1	31	38	83	808
12:00 PM – 2:59 PM	1,152	15.6	9	28.1	45	67	100	931
3:00 PM – 5:59 PM	1,466	19.9	4	12.5	52	73	130	1,207
6:00 PM – 8:59 PM	1,332	18.1	7	21.9	27	50	65	1,183
9:00 PM – 11:59 PM	865	11.7	4	12.5	17	36	50	758
Unknown	7	0.1	0	0.0	0	0	1	6
TOTAL	7,378	100.0	32	100.0	211	311	528	6,296

ALL CRASHES BY TIME OF DAY



FATAL CRASHES BY TIME OF DAY

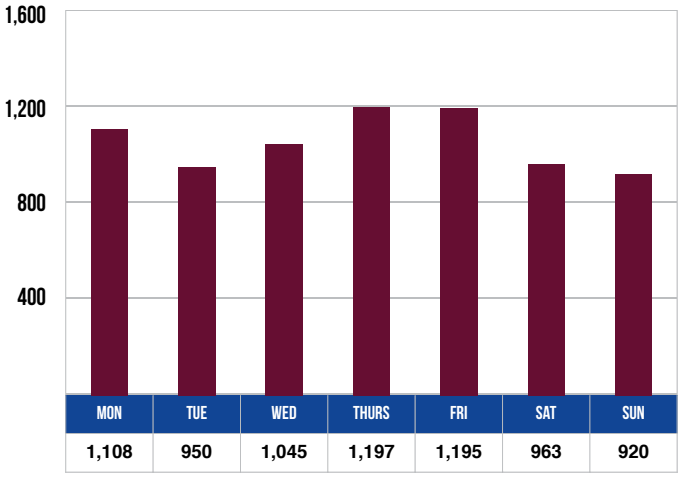


In the Upper Peninsula, crash frequencies peak in the late afternoon, then drop off until 6:00 AM (the morning rush hour). In 2020, fatal crashes were more prevalent in the PM hours than the AM hours, with the highest concentration (9) occurring during the 12:00 PM to 2:59 PM time period.

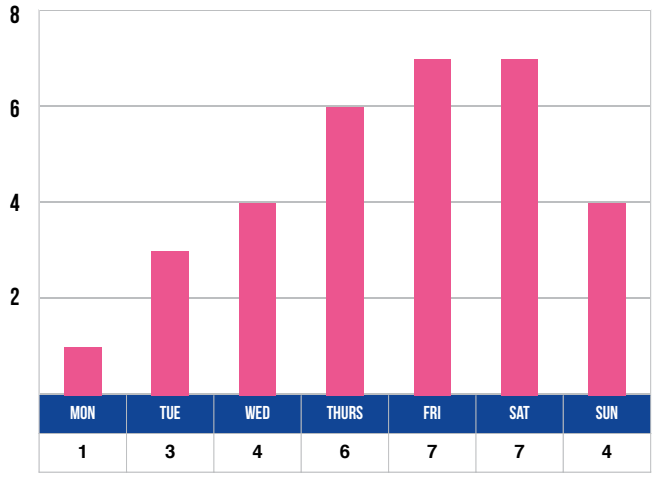
UPPER PENINSULA DAY OF WEEK

DAY OF WEEK	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Monday	1,108	15.0	1	3.1	28	46	83	950
Tuesday	950	12.9	3	9.4	26	38	71	812
Wednesday	1,045	14.2	4	12.5	31	33	73	904
Thursday	1,197	16.2	6	18.8	26	51	89	1,025
Friday	1,195	16.2	7	21.9	36	44	91	1,017
Saturday	963	13.1	7	21.9	35	51	67	803
Sunday	920	12.5	4	12.5	29	48	54	785
TOTAL	7,378	100.0	32	100.0	211	311	528	6,296

ALL CRASHES BY DAY OF WEEK



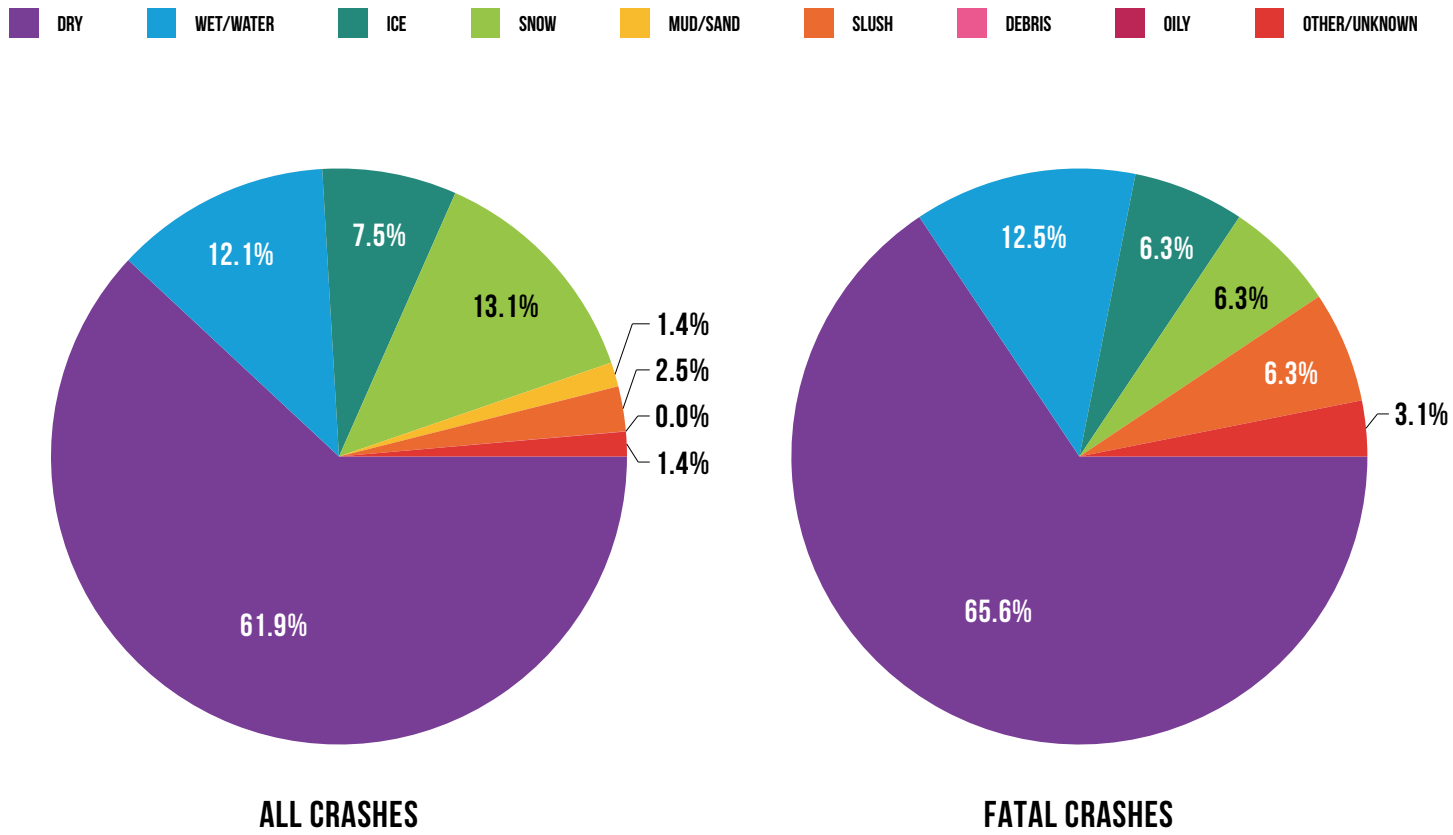
FATAL CRASHES BY DAY OF WEEK



In the Upper Peninsula, overall crash frequencies are the highest on Thursday (1,197), but Friday and Saturday both had the highest number of fatal crashes (7).

UPPER PENINSULA ROAD CONDITION

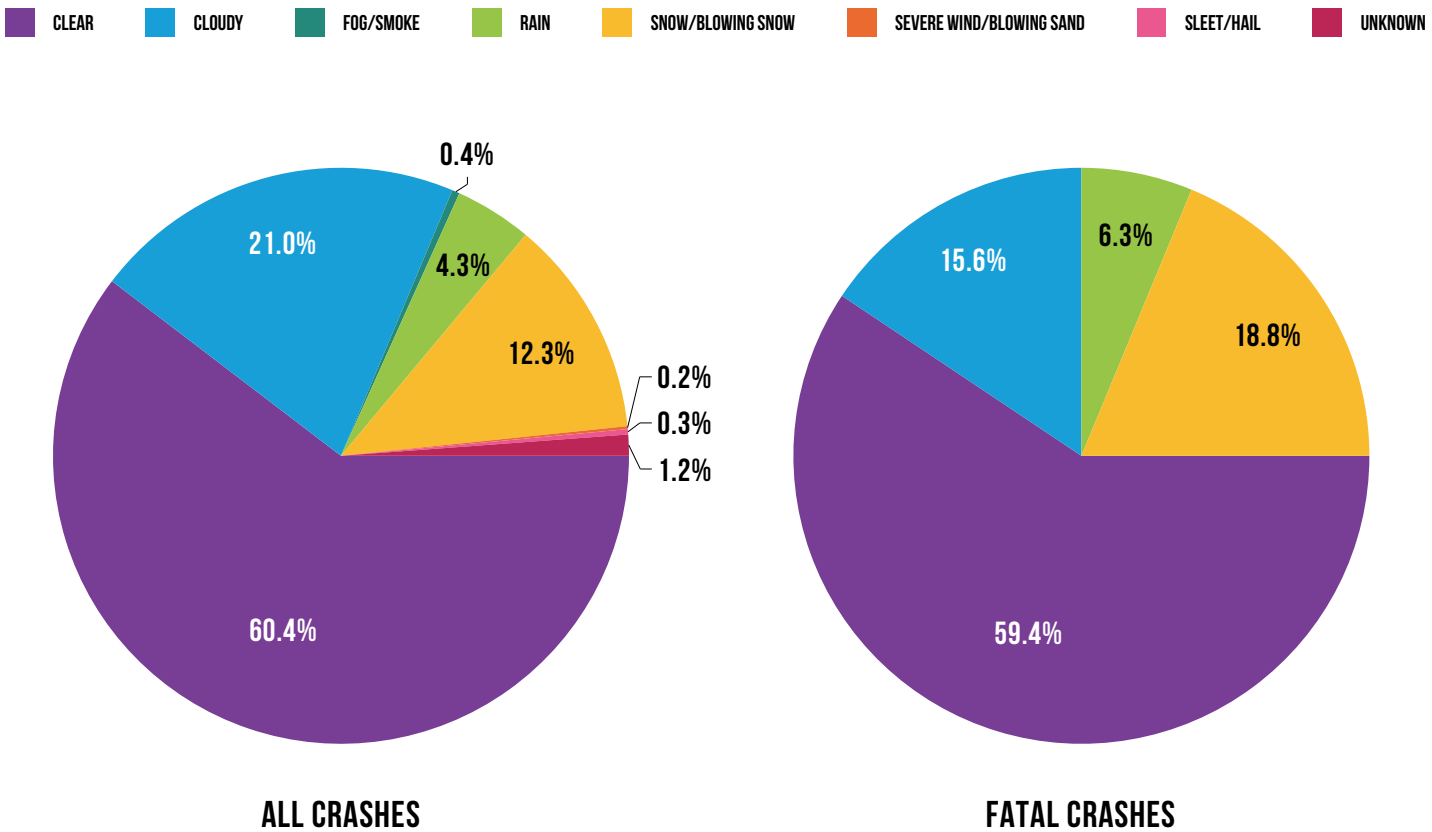
ROAD SURFACE CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Dry	4,570	61.9	21	65.6	156	190	294	3,909
Wet	894	12.1	4	12.5	15	35	58	782
Ice	557	7.5	2	6.3	9	18	57	471
Snow	966	13.1	2	6.3	16	38	80	830
Mud, Dirt, Gravel	96	1.3	0	0.0	13	20	11	52
Slush	186	2.5	2	6.3	2	7	27	148
Debris	1	0.0	0	0.0	0	0	0	1
Water (Standing/Flowing)	1	0.0	0	0.0	0	0	0	1
Sand	5	0.1	0	0.0	0	0	1	4
Oily	0	0.0	0	0.0	0	0	0	0
Other	3	0.0	0	0.0	0	1	0	2
Unknown	99	1.3	1	3.1	0	2	0	96
TOTAL	7,378	100.0	32	100.0	211	311	528	6,296



In the Upper Peninsula, the highest percentage of all crashes (61.9%), fatal crashes (65.6%), injury crashes (61.0%), and property damage only crashes (62.1%) occur on dry roads.

UPPER PENINSULA WEATHER CONDITION

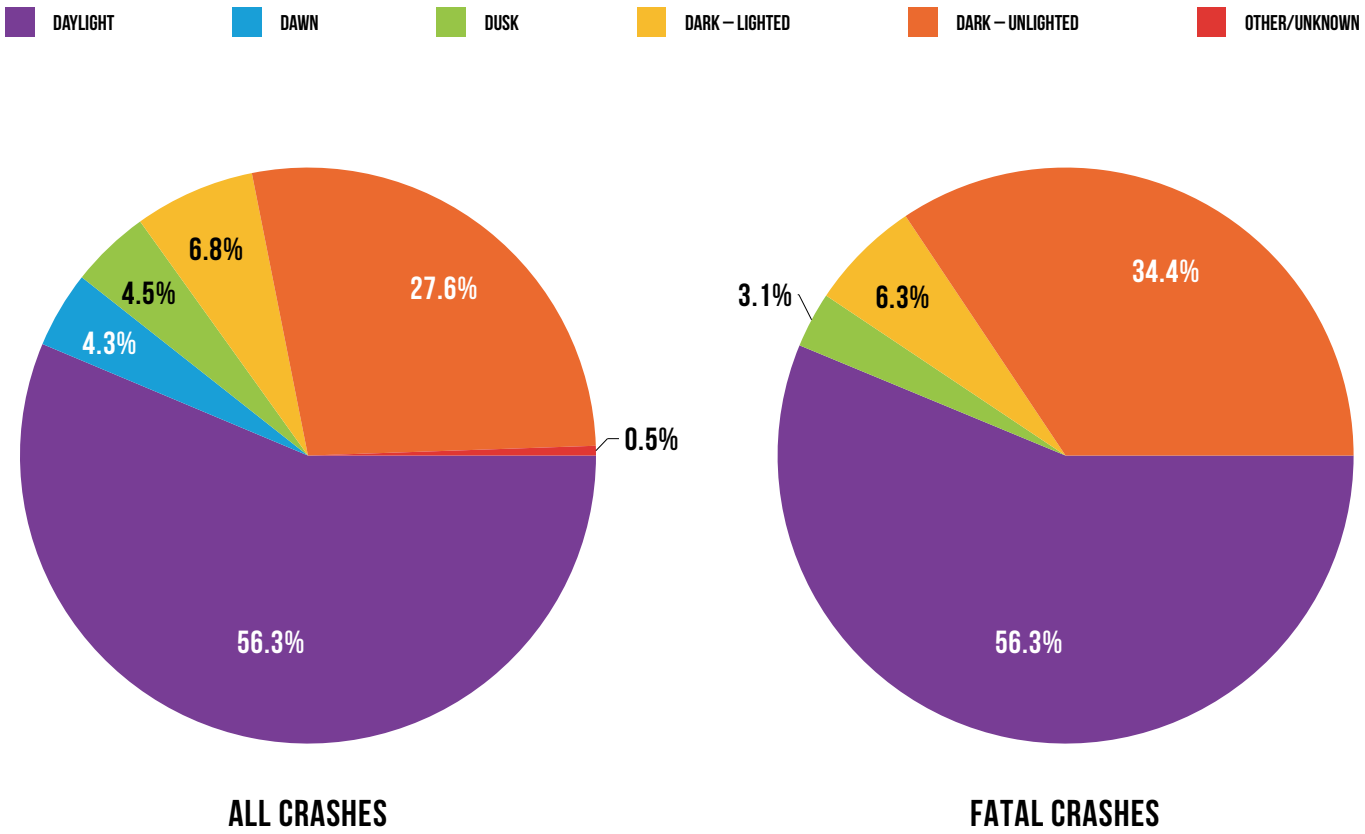
WEATHER CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Clear	4,454	60.4	19	59.4	145	199	317	3,774
Cloudy	1,546	21.0	5	15.6	44	66	91	1,340
Fog	31	0.4	0	0.0	1	0	5	25
Rain	320	4.3	2	6.3	10	14	15	279
Snow	806	10.9	3	9.4	7	22	83	691
Severe Crosswinds	12	0.2	0	0.0	1	0	2	9
Sleet/Hail	22	0.3	0	0.0	1	1	1	19
Blowing Snow	100	1.4	3	9.4	2	7	13	75
Blowing Sand, Soil, Dirt	0	0.0	0	0.0	0	0	0	0
Smoke	0	0.0	0	0.0	0	0	0	0
Unknown	87	1.2	0	0.0	0	2	1	84
TOTAL	7,378	100.0	32	100.0	211	311	528	6,296



In the Upper Peninsula, the highest percentage of all crashes (60.4%), fatal crashes (59.4%), injury crashes (63.0%), and property damage only crashes (59.9%) occur during clear weather conditions.

UPPER PENINSULA LIGHT CONDITION

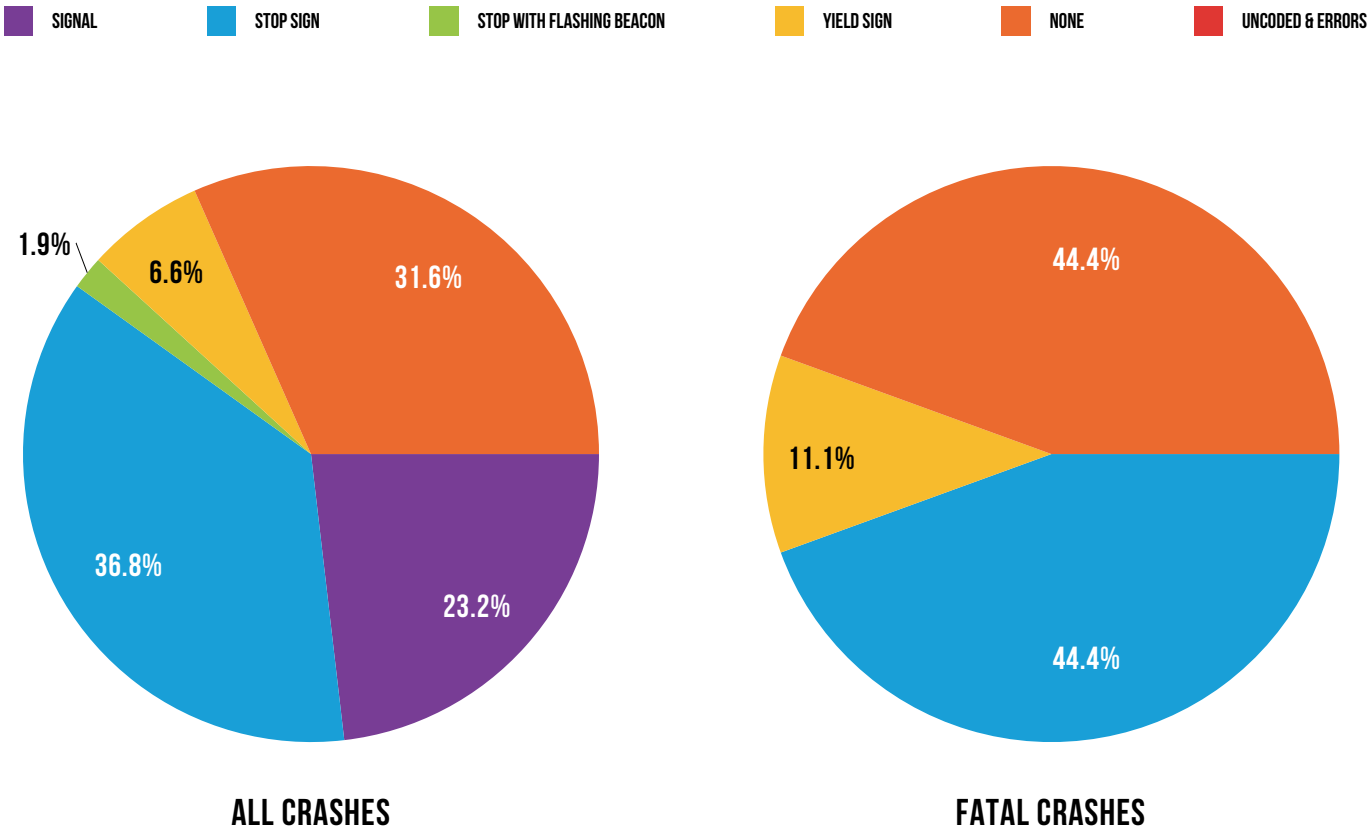
LIGHT CONDITION	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Daylight	4,156	56.3	18	56.3	148	212	365	3,413
Dawn	317	4.3	0	0.0	6	8	21	282
Dusk	330	4.5	1	3.1	5	9	10	305
Dark – Lighted	500	6.8	2	6.3	13	11	33	441
Dark – Unlighted	2,035	27.6	11	34.4	39	70	98	1,817
Other	3	0.0	0	0.0	0	0	0	3
Unknown	37	0.5	0	0.0	0	1	1	35
TOTAL	7,378	100.0	32	100.0	211	311	528	6,296



In the Upper Peninsula, the highest percentage of all crashes (56.3%), fatal crashes (56.3%), injury crashes (69.0%), and property damage only crashes (54.2%) occur during during daylight hours.

UPPER PENINSULA INTERSECTION CRASHES BY TRAFFIC CONTROL TYPE

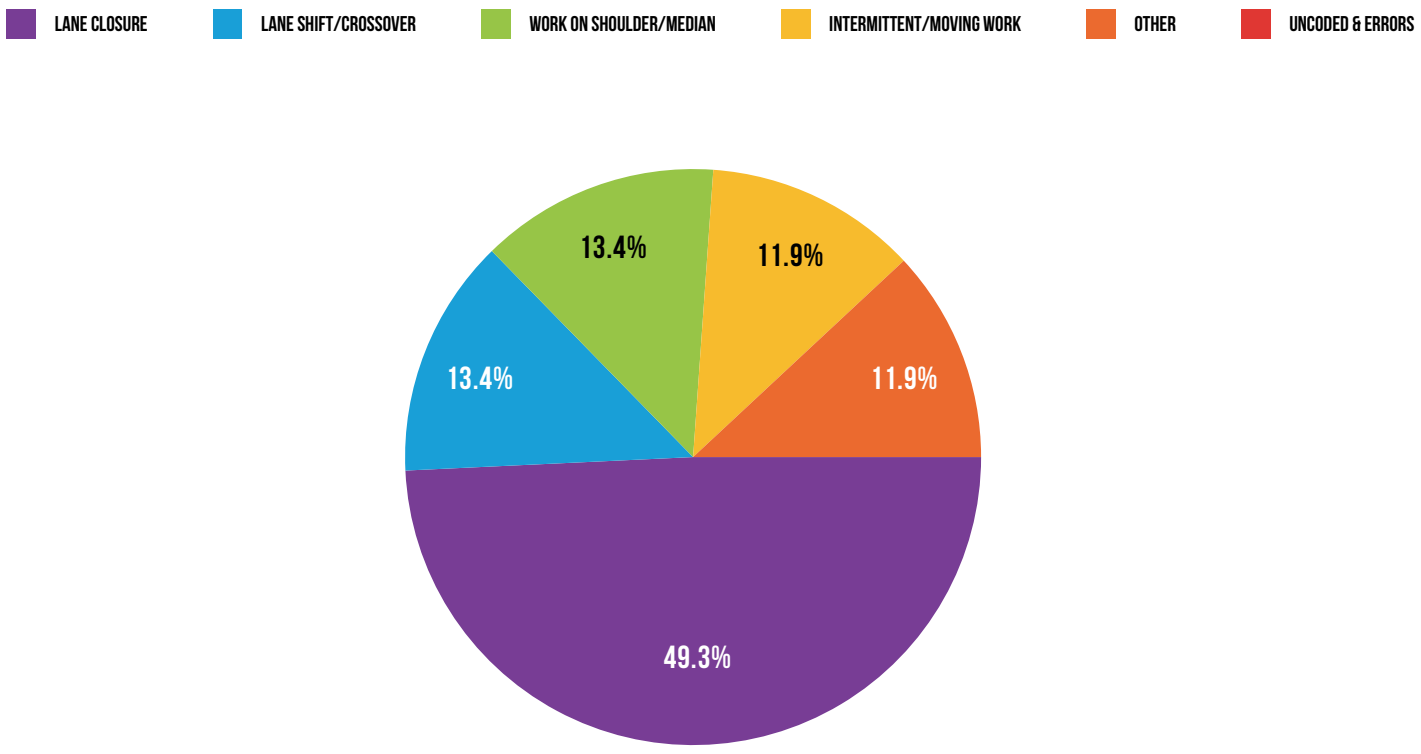
TRAFFIC CONTROL TYPE	ALL CRASHES		FATAL CRASHES		INJURY CRASHES			PROPERTY DAMAGE ONLY
	Number	% of Total	Number	% of Total	A	B	C	
Signal	361	23.2	0	0.0	11	19	54	277
Stop Sign	573	36.8	4	44.4	23	26	81	439
Stop with Flashing Beacon	29	1.9	0	0.0	1	4	3	21
Yield Sign	103	6.6	1	11.1	0	4	12	86
None	493	31.6	4	44.4	20	30	48	391
Uncoded & Errors	0	0.0	0	0.0	0	0	0	0
TOTAL	1,559	100.0	9	100.0	55	83	198	1,214



Compared to other intersection crashes, Upper Peninsula intersections with stop signs have the highest percentage of all crashes (36.8%), injury crashes (38.7%), and property damage only crashes (36.2%).

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 roadway-related features (e.g., overhead signs, signals).*							
Lane Closure	33	49.3	0	0.0	2	1	3	27
Lane Shift/Crossover	9	13.4	0	0.0	0	2	0	7
Work on Shoulder/Median	9	13.4	0	0.0	1	0	1	7
Intermittent/Moving Work	8	11.9	0	0.0	0	0	1	7
Other	8	11.9	0	0.0	0	3	0	5
Uncoded & Errors	0	0.0	0	0.0	0	0	0	0
TOTAL	67	100.0	0	0.0	3	6	5	53

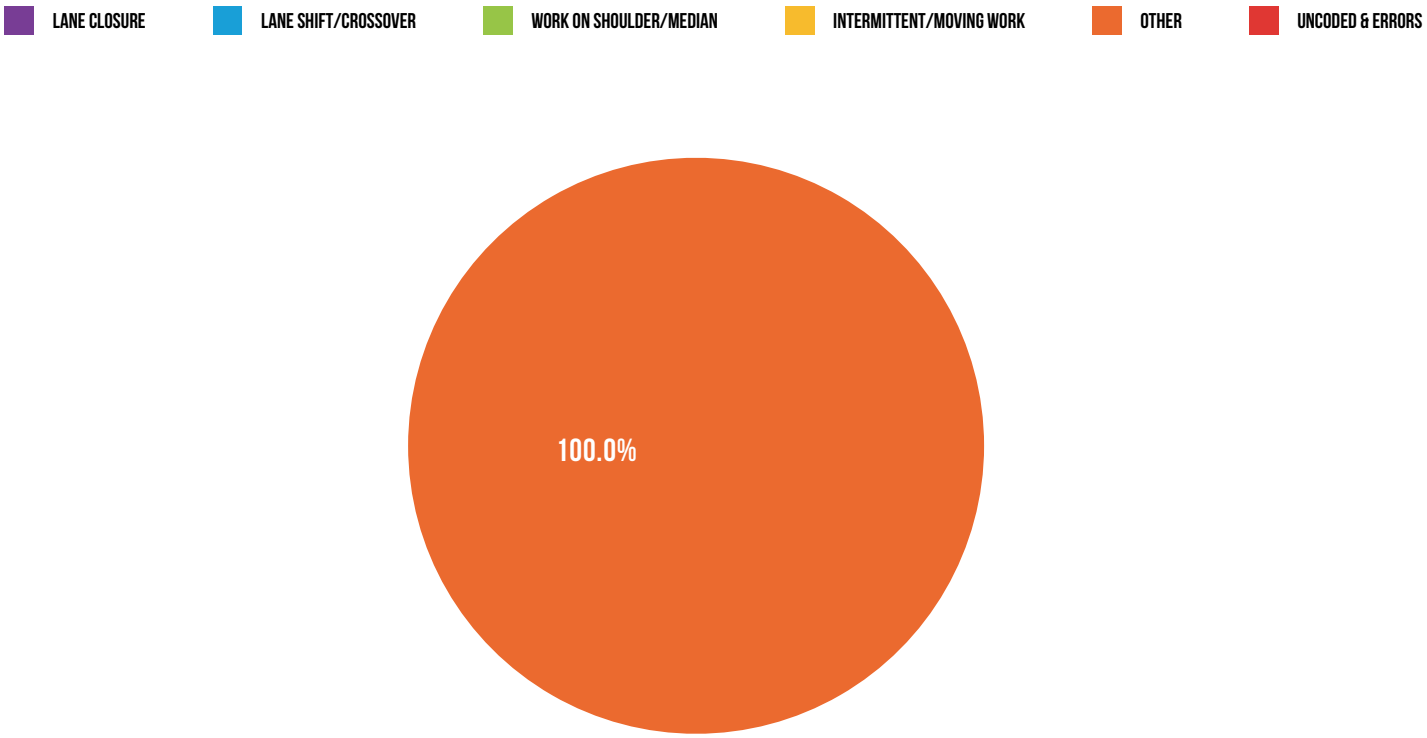


ALL CRASHES

For crashes taking place in construction/maintenance zones, the highest percentage of all crashes (49.3%), injury crashes (42.9%), and property damage only crashes (50.9%) occur in lane closure situations.

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	
UTILITY	*Indicates work on facilities other than the roadway such as telephone, electrical, cable television, water, or sewer.*							
Lane Closure	0	0.0	0	0.0	0	0	0	0
Lane Shift/Crossover	0	0.0	0	0.0	0	0	0	0
Work on Shoulder/Median	0	0.0	0	0.0	0	0	0	0
Intermittent/Moving Work	0	0.0	0	0.0	0	0	0	0
Other	1	100.0	0	0.0	0	0	0	1
Uncoded & Errors	0	0.0	0	0.0	0	0	0	0
TOTAL	1	100.0	0	0.0	0	0	0	1



ALL CRASHES

One crash occurred in a utility construction zone in the Upper Peninsula in 2020 and it was a property damage only crash.

VEHICLE/DRIVER

(characteristics specific to individual traffic units)

This page left intentionally blank

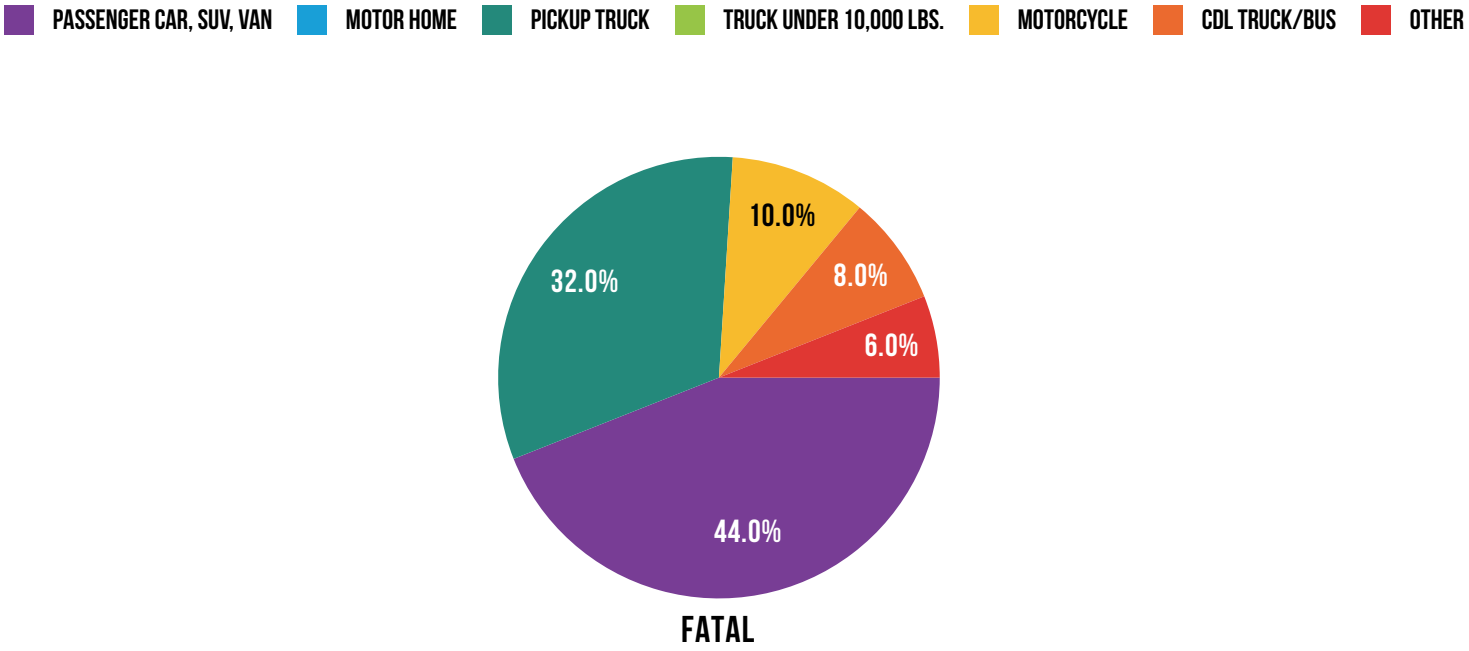
UPPER PENINSULA VEHICLE TYPE AND CRASH INVOLVEMENT

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, SUV, Van	6,860	68.5	22	44.0	979	5,859	17	58.6	708	6,135
Motor Home	23	0.2	0	0.0	4	19	0	0.0	3	20
Pickup Truck	2,333	23.3	16	32.0	330	1,987	5	17.2	214	2,114
Small Truck under 10,000 lbs. GVWR	49	0.5	0	0.0	11	38	0	0.0	9	40
Motorcycle	114	1.1	5	10.0	90	19	5	17.2	90	19
Moped / Goped	16	0.2	1	2.0	11	4	1	3.4	11	4
Go-cart / Golf Cart	1	0.0	0	0.0	1	0	0	0.0	1	0
Snowmobile	54	0.5	1	2.0	34	19	1	3.4	29	24
Off-Road Vehicle - ORV / All-Terrain Vehicle - ATV	77	0.8	0	0.0	63	14	0	0.0	61	16
Other	43	0.4	0	0.0	10	33	0	0.0	3	40
Unknown	120	1.2	1	2.0	6	113	0	0.0	0	120
CDL Truck/Bus (breakdown below)	320	3.2	4	8.0	47	269	0	0.0	21	299
Total Number of Vehicles	10,010	100.0	50	100.0	1,586	8,374	29	100.0	1,150	8,831

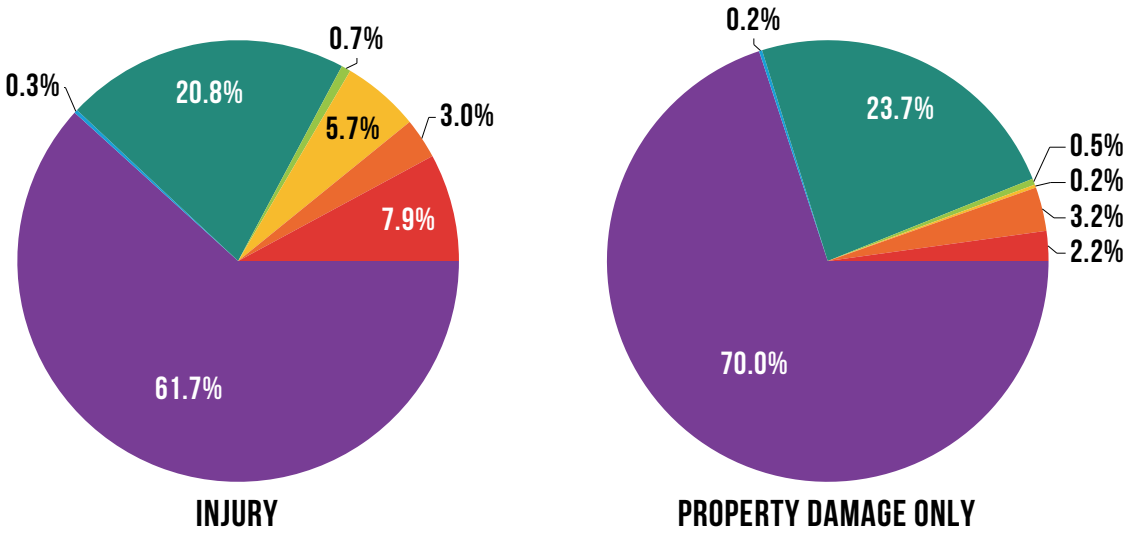
Note: Buses cannot be broken out of CDL Truck/Bus

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		
10,000 lbs. or Less	3	0.9	0	0.0	0	3	0	0.0	0	3
10,001 - 26,000 lbs.	124	38.8	1	25.0	13	110	0	0.0	5	119
Greater than 26,000 lbs.	192	60.0	3	75.0	34	155	0	0.0	16	176
Unknown Truck	1	0.3	0	0.0	0	1	0	0.0	0	1
Total Number of Vehicles	320	100.0	4	100.0	47	269	0	0.0	21	299

UPPER PENINSULA VEHICLE TYPES IN CRASHES BY CRASH SEVERITY



The top chart shows that 76.0 percent of vehicles involved in fatal crashes in the Upper Peninsula are passenger vehicles (passenger cars, SUVs, vans, motor homes, pickup trucks, or trucks under 10,000 lbs.). Motorcycles make up 10.0 percent of fatal crash involvements.



Passenger vehicles (passenger cars, SUVs, vans, motor homes, pickup trucks, or trucks under 10,000 lbs.) make up an even larger share of vehicles in injury crashes (83.5%) and property damage only (PDO) crashes (94.4%) than they do of fatal crashes.

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	6,812	68.1	35	200	298	545	5,734
Turning left	533	5.3	1	27	32	68	405
Turning right	273	2.7	1	3	6	21	242
Stopped on roadway	381	3.8	0	11	21	53	296
In prior crash	3	0.0	0	1	0	1	1
Changing lanes	86	0.9	0	1	4	5	76
Backing	304	3.0	0	0	1	3	300
Slowing/stopping on roadway	372	3.7	0	10	18	48	296
Slowing/stopping other	9	0.1	0	1	0	1	7
Starting up on roadway	131	1.3	0	2	6	18	105
Starting up other	1	0.0	0	0	0	0	1
Entering parking	18	0.2	0	0	1	0	17
Leaving parking	30	0.3	0	0	0	4	26
Entering roadway	124	1.2	1	6	8	9	100
Leaving roadway	23	0.2	0	2	5	2	14
Making U-turn	28	0.3	2	3	6	0	17
Overtaking or passing	54	0.5	1	2	2	4	45
Avoiding object	5	0.0	0	0	0	0	5
Avoiding animal	44	0.4	0	1	4	3	36
Avoiding pedestrian	2	0.0	0	0	1	0	1
Avoiding vehicle (front/back)	57	0.6	0	6	5	4	42
Avoiding vehicle (angle)	17	0.2	0	1	1	1	14
Driverless moving	17	0.2	1	0	0	1	15
Parked	385	3.8	5	5	13	11	351
Crossing at intersection	7	0.1	0	0	0	1	6
Crossing not at intersection	1	0.0	0	0	0	0	1
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	0.0	0	0	0	0	1
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	1	0.0	0	0	0	0	1
Playing in roadway	0	0.0	0	0	0	0	0
In roadway other reason	1	0.0	0	0	0	0	1
Not in roadway	0	0.0	0	0	0	0	0
Negotiating a curve	203	2.0	2	24	21	17	139
Other	25	0.2	1	0	2	3	19
Unknown	62	0.6	0	2	0	0	60
TOTAL	10,010	100.0	50	308	455	823	8,374

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	76	66.7	92	67.2	3	32	27	11	19
Turning left	6	5.3	6	4.4	0	3	1	2	0
Turning right	2	1.8	3	2.2	1	2	0	0	0
Stopped on roadway	2	1.8	3	2.2	0	1	0	2	0
In prior crash	0	0.0	0	0.0	0	0	0	0	0
Changing lanes	1	0.9	1	0.7	0	0	1	0	0
Backing	0	0.0	0	0.0	0	0	0	0	0
Slowing/stopping on roadway	4	3.5	4	2.9	0	0	1	1	2
Slowing/stopping other	0	0.0	0	0.0	0	0	0	0	0
Starting up on roadway	0	0.0	0	0.0	0	0	0	0	0
Starting up other	0	0.0	0	0.0	0	0	0	0	0
Entering parking	0	0.0	0	0.0	0	0	0	0	0
Leaving parking	0	0.0	0	0.0	0	0	0	0	0
Entering roadway	2	1.8	2	1.5	0	1	0	1	0
Leaving roadway	0	0.0	0	0.0	0	0	0	0	0
Making U-turn	1	0.9	2	1.5	0	0	0	0	2
Overtaking or passing	4	3.5	4	2.9	1	1	1	0	1
Avoiding object	0	0.0	0	0.0	0	0	0	0	0
Avoiding animal	0	0.0	0	0.0	0	0	0	0	0
Avoiding pedestrian	0	0.0	0	0.0	0	0	0	0	0
Avoiding vehicle (front/back)	5	4.4	7	5.1	0	3	3	0	1
Avoiding vehicle (angle)	1	0.9	1	0.7	0	1	0	0	0
Driverless moving	0	0.0	0	0.0	0	0	0	0	0
Parked	1	0.9	1	0.7	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
Negotiating a curve	9	7.9	11	8.0	0	6	3	1	1
Other	0	0.0	0	0.0	0	0	0	0	0
Unknown	0	0.0	0	0.0	0	0	0	0	0
TOTAL	114	100.0	137	100.0	5	50	37	18	26

*Includes one motorcyclist (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	13	72.2	0	2	3	2	6
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	1	5.6	0	0	1	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	2	11.1	1	0	1	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	1	5.6	0	0	1	0	0
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	1	5.6	1	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	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	0	0.0	0	0	0	0	0
Not in roadway	0	0.0	0	0	0	0	0
Negotiating a curve	0	0.0	0	0	0	0	0
Other	0	0.0	0	0	0	0	0
Unknown	0	0.0	0	0	0	0	0
TOTAL	18	100.0	2	2	6	2	6

*Includes no bicyclists 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	0	0.0	0	0	0	0	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	7	23.3	0	1	3	3	0
Crossing not at intersection	1	3.3	0	0	1	0	0
Getting on/off vehicle	0	0.0	0	0	0	0	0
In roadway with traffic	6	20.0	0	2	4	0	0
In roadway against traffic	1	3.3	0	0	1	0	0
Standing or lying in roadway	10	33.3	0	2	1	5	1
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	3.3	0	1	0	0	0
Not in roadway	0	0.0	0	0	0	0	0
Negotiating a curve	0	0.0	0	0	0	0	0
Other	2	6.7	0	1	0	0	0
Unknown	2	6.7	1	1	0	0	0
TOTAL	30	100.0	1	8	10	8	1

*Includes two pedestrians 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	142	1.4	2	4	9	18	109
Ran off roadway left	63	0.6	0	0	7	7	49
Ran off roadway right	113	1.1	0	3	9	20	81
Re-enter roadway	9	0.1	0	0	0	1	8
Overturn	343	3.4	3	31	54	67	188
Separation of Units	12	0.1	0	0	1	0	11
Fire/explosion	17	0.2	0	0	0	0	17
Immersion	2	0.0	0	0	0	1	1
Jackknife	9	0.1	0	0	0	1	8
Downhill runaway	2	0.0	0	0	1	0	1
Cargo loss/shift	17	0.2	0	0	1	0	16
Individual fell from vehicle	33	0.3	0	16	13	3	1
Other noncollision	35	0.3	0	4	1	4	26
Equipment failure (blown tire, brake failure, etc.)	27	0.3	0	0	2	4	21
Cross centerline	45	0.4	0	3	3	2	37
Cross median	3	0.0	0	0	0	1	2
SUBTOTAL	872	8.7	5	61	101	129	576

COLLISION WITH A NONFIXED OBJECT	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Pedestrian	25	0.2	1	7	10	5	2
Bicyclist	18	0.2	2	2	6	2	6
Motor vehicle in transport	4,433	44.3	28	152	233	522	3,498
Parked motor vehicle	401	4.0	3	8	11	17	362
Railroad train	1	0.0	0	0	0	0	1
Animal	3,141	31.4	0	10	18	34	3,079
Other nonfixed object	115	1.1	0	2	5	17	91
Work zone/maintenance equipment	3	0.0	0	0	0	0	3
Cargo falling/shifting/anything set in motion by a motor vehicle	20	0.2	0	2	0	2	16
SUBTOTAL	8,157	81.5	34	183	283	599	7,058

UPPER PENINSULA MOST HARMFUL EVENT (CONTINUED)

COLLISION WITH A FIXED OBJECT	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Bridge pier/abutment/support	1	0.0	0	0	0	0	1
Bridge rail	6	0.1	0	0	1	1	4
Guardrail face	56	0.6	0	3	0	2	51
Guardrail end	15	0.1	0	1	1	2	11
Other post/pole/support	16	0.2	0	1	1	1	13
Culvert	18	0.2	1	0	3	2	12
Curb	11	0.1	0	1	0	2	8
Ditch	200	2.0	0	7	13	16	164
Embankment	64	0.6	0	3	3	9	49
Fence	9	0.1	0	0	0	2	7
Mailbox	34	0.3	0	0	1	1	32
Tree	289	2.9	10	32	33	40	174
Rail crossing signal	2	0.0	0	1	0	0	1
Building	19	0.2	0	1	3	0	15
Traffic island	1	0.0	0	0	0	0	1
Fire hydrant	8	0.1	0	0	2	1	5
Impact attenuator	4	0.0	0	0	0	0	4
Other fixed object	49	0.5	0	6	1	2	40
Bridge overhead structure	0	0.0	0	0	0	0	0
Cable barrier	5	0.0	0	0	0	0	5
Concrete barrier	7	0.1	0	0	0	0	7
Traffic sign/post	71	0.7	0	3	1	3	64
Traffic signal equipment	3	0.0	0	0	0	0	3
Utility pole/light support	93	0.9	0	5	8	11	69
SUBTOTAL	981	9.8	11	64	71	95	740

	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Unknown Event	0	0.0	0	0	0	0	0
MOST HARMFUL EVENT TOTAL	10,010	100.0	50	308	455	823	8,374

UPPER PENINSULA VEHICLE DEFECTS IN CRASH INVOLVEMENT

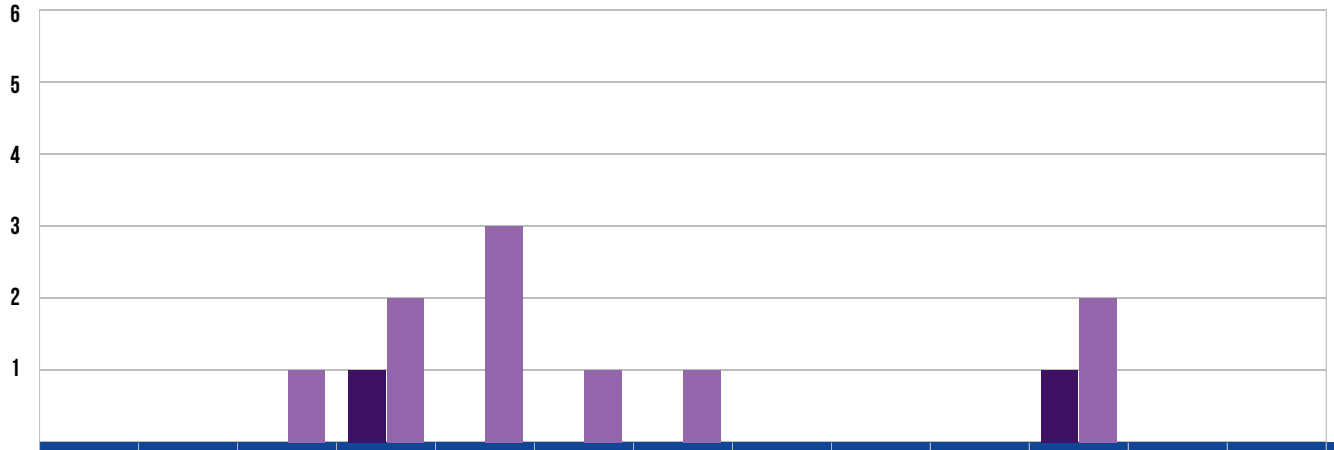
VEHICLE DEFECTS	MOTOR VEHICLES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Vehicles	% of Total		A	B	C	
Brakes	23	0.2	1	3	4	5	10
Lights/reflectors	5	0.0	0	0	0	0	5
Steering	8	0.1	0	0	2	1	5
Tires/wheels	28	0.3	0	0	1	8	19
Windows	1	0.0	0	0	0	0	1
Coupling/hitch/chains	6	0.1	0	0	0	0	6
Other	22	0.2	0	1	1	1	19
None or Unknown	9,917	99.1	49	304	447	808	8,309
TOTAL	10,010	100.0	50	308	455	823	8,374

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	5,981	59.8	19	123	187	358	5,294
Speed too fast	857	8.6	9	35	72	96	645
Speed too slow	3	0.0	0	0	0	2	1
Failed to yield	716	7.2	3	25	45	101	542
Disregard traffic control	129	1.3	0	8	7	22	92
Drove wrong way	2	0.0	0	0	0	1	1
Drove left of center	64	0.6	1	6	6	6	45
Improper passing	36	0.4	1	1	0	1	33
Improper lane use	113	1.1	1	0	3	5	104
Improper turn	95	0.9	1	6	5	6	77
Improper/no signal	10	0.1	0	0	0	1	9
Improper backing	200	2.0	0	0	0	3	197
Unable to stop in assured clear distance	551	5.5	0	9	22	73	447
Reckless driving	55	0.5	1	10	9	10	25
Careless/negligent driving	429	4.3	2	39	38	74	276
Other	357	3.6	2	32	44	37	242
Unknown	412	4.1	10	14	17	27	344
TOTAL	10,010	100.0	50	308	455	823	8,374

UPPER PENINSULA MICHIGAN BICYCLE CRASHES

2020 BICYCLIST FATALITIES AND INJURIES



	UNDER 1 YEAR OLD	1-3 YEARS	4-10 YEARS	11-15 YEARS	16-20 YEARS	21-24 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55-64 YEARS	65-74 YEARS	75 YEARS AND OVER	UNKNOWN	TOTAL
KILLED	0	0	0	1	0	0	0	0	0	0	1	0	0	2
INJURED	0	0	1	2	3	1	1	0	0	0	2	0	0	10
TOTAL FATALITIES AND INJURIES	0	0	1	3	3	1	1	0	0	0	3	0	0	12

In 2020 in the Upper Peninsula, there were 18 bicyclists involved in motor vehicle crashes, with two bicyclists killed and 10 injured.

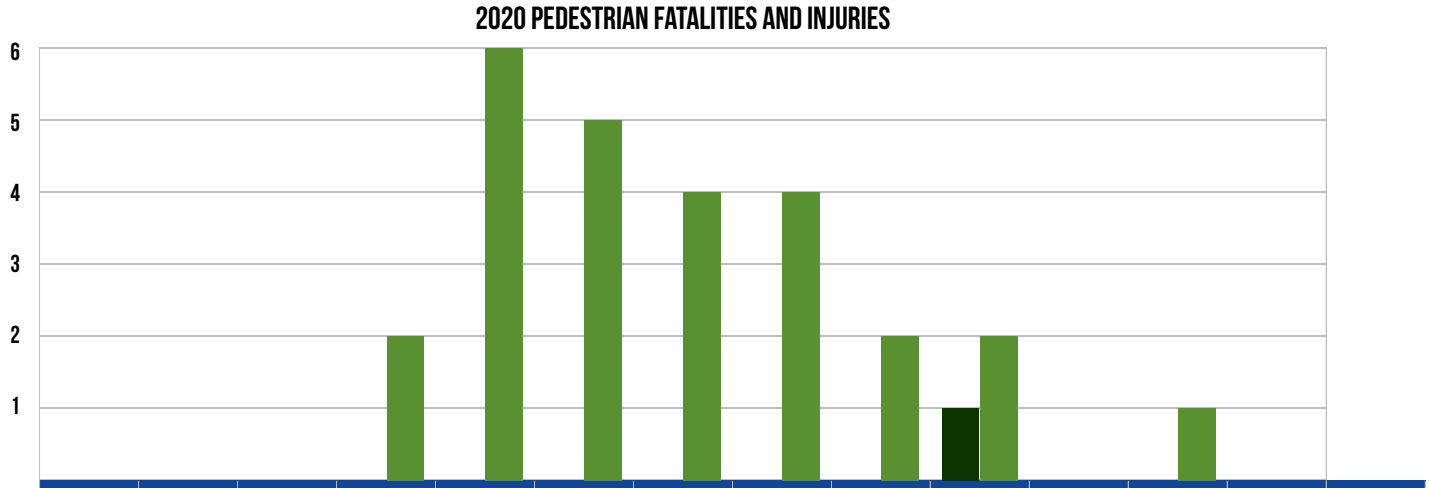
BICYCLE HELMET USE AND INJURY SEVERITY

HELMET USE	FATALITY	INJURY			NO INJURY	UNKNOWN	TOTAL
		A	B	C			
Worn	1	0	1	0	1	0	3
Not Worn	1	1	5	0	1	0	8
Unknown	0	1	0	2	4	0	7
Total	2	2	6	2	6	0	18

Note: The data does not include helmet use for all bicyclists. There were seven bicyclists with unknown helmet use.

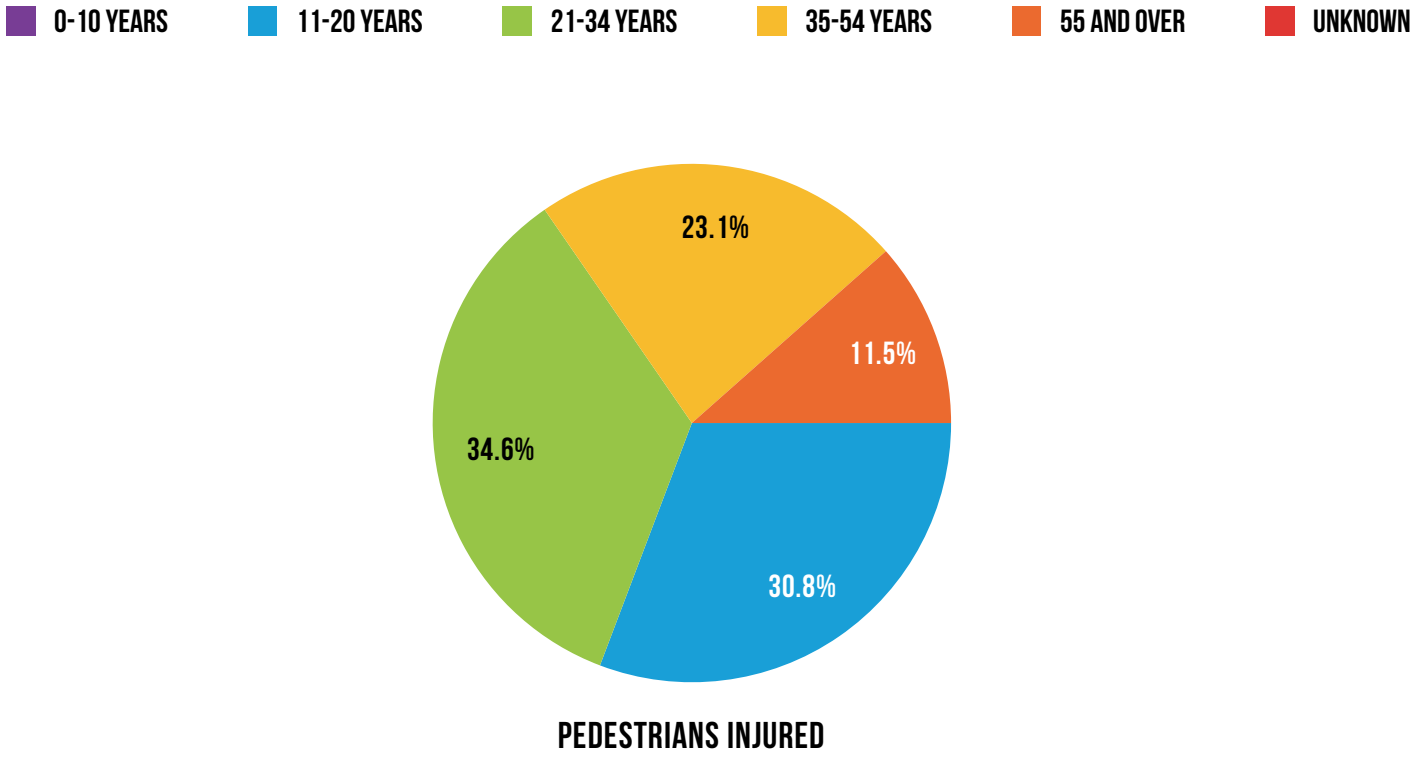
The National Center for Statistics and Analysis of the National Highway Traffic Safety Administration cites a study by the Centers for Disease Control [12]: “Bicycle helmets are 85 to 88 percent effective in mitigating head and brain injuries in all types of bicycle accidents, making the use of helmets the single most effective countermeasure available to reduce head injuries and fatalities resulting from bicycle crashes.”

UPPER PENINSULA MICHIGAN PEDESTRIAN CRASHES



	UNDER 1 YEAR OLD	1-3 YEARS	4-10 YEARS	11-15 YEARS	16-20 YEARS	21-24 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55-64 YEARS	65-74 YEARS	75 YEARS AND OVER	UNKNOWN	TOTAL
KILLED	0	0	0	0	0	0	0	0	0	1	0	0	0	1
INJURED	0	0	0	2	6	5	4	4	2	2	0	1	0	26
TOTAL FATALITIES AND INJURIES	0	0	0	2	6	5	4	4	2	3	0	1	0	27

In 2020 in the Upper Peninsula, there were 30 pedestrians involved in motor vehicle crashes, with one pedestrian killed and 26 injured.



UPPER PENINSULA MICHIGAN 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	1	1.9	0	0	0	0	1
Ran off roadway left	0	0.0	0	0	0	0	0
Ran off roadway right	0	0.0	0	0	0	0	0
Re-enter roadway	0	0.0	0	0	0	0	0
Overturn	3	5.6	0	1	1	1	0
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 from vehicle	11	20.4	0	3	7	1	0
Other noncollision	2	3.7	0	0	0	1	1
Equipment failure (blown tire, brake failure, etc.)	0	0.0	0	0	0	0	0
Cross centerline	0	0.0	0	0	0	0	0
Cross median	0	0.0	0	0	0	0	0
SUBTOTAL	17	31.5	0	4	8	3	2

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
Bicyclist	0	0.0	0	0	0	0	0
Motor vehicle in transport	21	38.9	1	7	0	4	9
Parked motor vehicle	3	5.6	0	0	0	2	1
Railroad train	0	0.0	0	0	0	0	0
Animal	3	5.6	0	0	0	0	3
Other nonfixed object	0	0.0	0	0	0	0	0
Work zone/maintenance equipment	0	0.0	0	0	0	0	0
Cargo falling/shifting/anything set in motion by a motor vehicle	0	0.0	0	0	0	0	0
SUBTOTAL	27	50.0	1	7	0	6	13

UPPER PENINSULA MICHIGAN 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/support	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
Other post/pole/support	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	1	1.9	0	1	0	0	0
Fence	0	0.0	0	0	0	0	0
Mailbox	0	0.0	0	0	0	0	0
Tree	6	11.1	0	0	1	2	3
Rail crossing signal	0	0.0	0	0	0	0	0
Building	1	1.9	0	0	1	0	0
Traffic island	0	0.0	0	0	0	0	0
Fire hydrant	0	0.0	0	0	0	0	0
Impact attenuator	0	0.0	0	0	0	0	0
Other fixed object	2	3.7	0	1	0	0	1
Bridge overhead structure	0	0.0	0	0	0	0	0
Cable barrier	0	0.0	0	0	0	0	0
Concrete barrier	0	0.0	0	0	0	0	0
Traffic sign/post	0	0.0	0	0	0	0	0
Traffic signal equipment	0	0.0	0	0	0	0	0
Utility pole/light support	0	0.0	0	0	0	0	0
SUBTOTAL	10	18.5	0	2	2	2	4

	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
MOST HARMFUL EVENT TOTAL	54	100.0	1	13	10	11	19

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 54 snowmobiles were reported in crashes on Upper Peninsula public roadways during 2020, resulting in one fatal crash. A total of 34 snowmobiles were involved in 29 injury crashes.

UPPER PENINSULA MICHIGAN 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	2	2.6	0	0	1	0	1
Ran off roadway left	0	0.0	0	0	0	0	0
Ran off roadway right	3	3.9	0	0	1	1	1
Re-enter roadway	0	0.0	0	0	0	0	0
Overturn	24	31.2	0	7	12	3	2
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	1	1.3	0	0	1	0	0
Cargo loss/shift	0	0.0	0	0	0	0	0
Individual fell from vehicle	4	5.2	0	2	1	1	0
Other noncollision	1	1.3	0	1	0	0	0
Equipment failure (blown tire, brake failure, etc.)	1	1.3	0	0	1	0	0
Cross centerline	0	0.0	0	0	0	0	0
Cross median	0	0.0	0	0	0	0	0
SUBTOTAL	36	46.8	0	10	17	5	4

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
Bicyclist	0	0.0	0	0	0	0	0
Motor vehicle in transport	23	29.9	0	6	8	0	9
Parked motor vehicle	3	3.9	0	0	2	0	1
Railroad train	0	0.0	0	0	0	0	0
Animal	0	0.0	0	0	0	0	0
Other nonfixed object	1	1.3	0	0	1	0	0
Work zone/maintenance equipment	0	0.0	0	0	0	0	0
Cargo falling/shifting/anything set in motion by a motor vehicle	1	1.3	0	0	0	1	0
SUBTOTAL	28	36.4	0	6	11	1	10

UPPER PENINSULA MICHIGAN 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/support	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
Other post/pole/support	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	1.3	0	1	0	0	0
Embankment	1	1.3	0	1	0	0	0
Fence	0	0.0	0	0	0	0	0
Mailbox	0	0.0	0	0	0	0	0
Tree	8	10.4	0	4	4	0	0
Rail crossing signal	1	1.3	0	1	0	0	0
Building	0	0.0	0	0	0	0	0
Traffic island	0	0.0	0	0	0	0	0
Fire hydrant	0	0.0	0	0	0	0	0
Impact attenuator	0	0.0	0	0	0	0	0
Other fixed object	2	2.6	0	2	0	0	0
Bridge overhead structure	0	0.0	0	0	0	0	0
Cable barrier	0	0.0	0	0	0	0	0
Concrete barrier	0	0.0	0	0	0	0	0
Traffic sign/post	0	0.0	0	0	0	0	0
Traffic signal equipment	0	0.0	0	0	0	0	0
Utility pole/light support	0	0.0	0	0	0	0	0
SUBTOTAL	13	16.9	0	9	4	0	0

	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ ATVs	% of Total		A	B	C	
Unknown Event	0	0.0	0	0	0	0	0
MOST HARMFUL EVENT TOTAL	77	100.0	0	25	32	6	14

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 77 off-road/all-terrain vehicles were reported in crashes on Upper Peninsula public roadways during 2020, resulting in no fatal crashes. An additional 63 ORV/ATVs were involved in 60 injury crashes.

UPPER PENINSULA MICHIGAN SNOWMOBILE CRASHES ON PUBLIC ROADWAYS

HAZARDOUS ACTION	SNOWMOBILES		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of Snowmobiles	% of Total		A	B	C	
None	22	40.7	0	3	4	7	8
Speed too fast	13	24.1	0	3	6	0	4
Speed too slow	0	0.0	0	0	0	0	0
Failed to yield	6	11.1	0	1	0	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	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	0	0.0	0	0	0	0	0
Reckless driving	1	1.9	0	0	0	1	0
Careless/negligent driving	7	13.0	1	3	0	1	2
Other	2	3.7	0	1	0	0	1
Unknown	3	5.6	0	2	0	0	1
Total	54	100.0	1	13	10	11	19

UPPER PENINSULA MICHIGAN ORV/ATV CRASHES ON PUBLIC ROADWAYS

HAZARDOUS ACTION	ORV/ATV		FATAL CRASH	INJURY CRASH			PROPERTY DAMAGE ONLY
	Number of ORV/ATVs	% of Total		A	B	C	
None	10	13.0	0	4	5	0	1
Speed too fast	26	33.8	0	9	13	2	2
Speed too slow	0	0.0	0	0	0	0	0
Failed to yield	10	13.0	0	2	3	1	4
Disregard traffic control	1	1.3	0	0	0	0	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	0	0.0	0	0	0	0	0
Improper turn	2	2.6	0	1	1	0	0
Improper/no signal	0	0.0	0	0	0	0	0
Improper backing	2	2.6	0	0	0	0	2
Unable to stop in assured clear distance	2	2.6	0	0	1	0	1
Reckless driving	1	1.3	0	1	0	0	0
Careless/negligent driving	8	10.4	0	3	3	0	2
Other	11	14.3	0	4	5	1	1
Unknown	4	5.2	0	1	1	2	0
Total	77	100.0	0	25	32	6	14

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 MICHIGAN FARM EQUIPMENT CRASHES

FARM EQUIPMENT CRASHES	2019	2020	% CHANGE
Crashes	9	4	-55.6%
Fatalities	0	0	0.0%
Injuries	1	5	400.0%

Four crashes involving farm equipment were reported on Upper Peninsula roadways during 2020. None of those crashes involved a fatality.

UPPER PENINSULA MICHIGAN VEHICLE-TRAIN CRASHES

VEHICLE TRAIN CRASHES	2019	2020	% CHANGE
Crashes	4	1	-75.0%
Fatalities	0	0	0.0%
Injuries	2	0	-100.0%

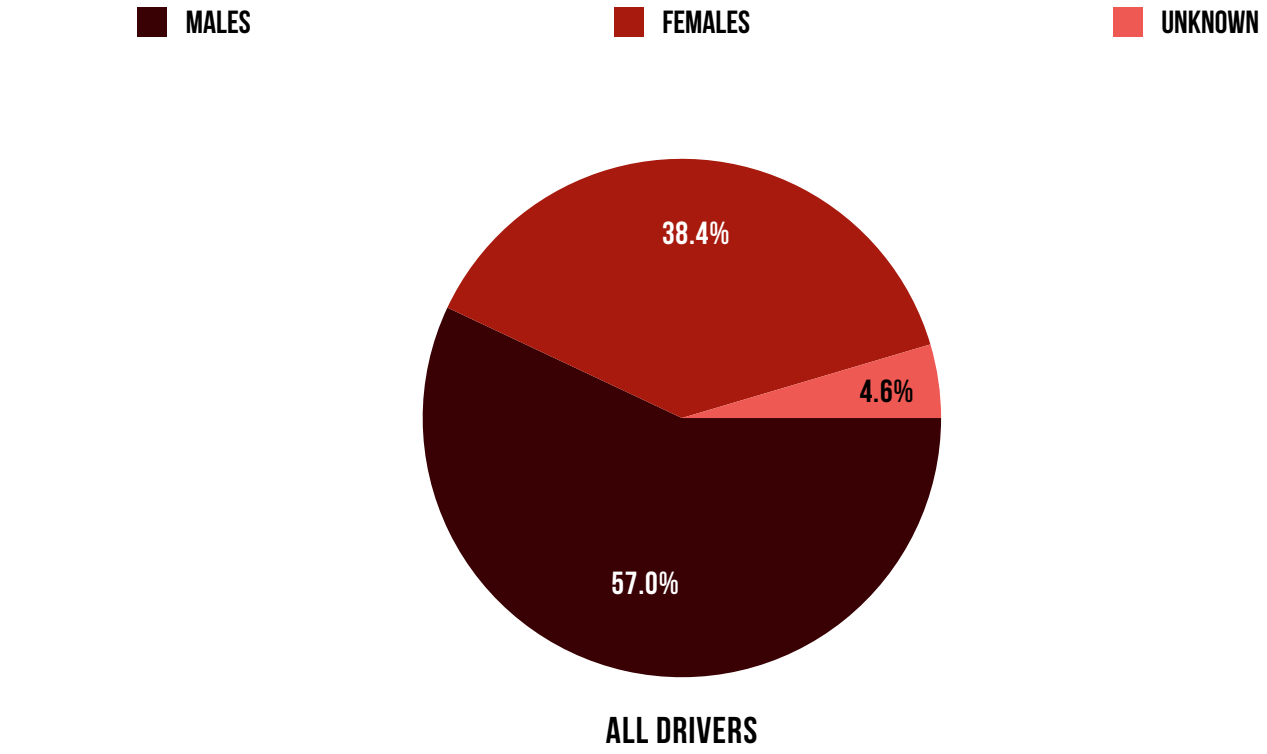
A total of one motor-vehicle crash involving trains was reported in the Upper Peninsula during 2020, and that crash did not involve a fatality.

UPPER PENINSULA MICHIGAN MOTORCYLE CRASHES

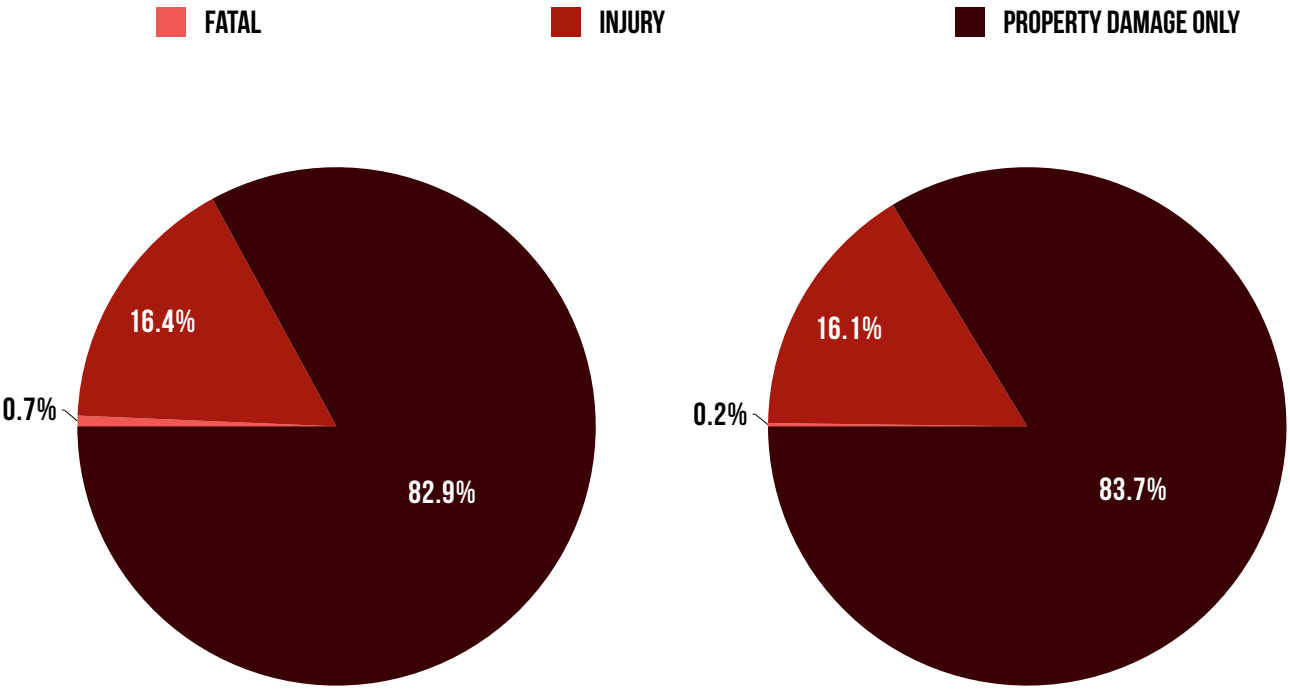
MOTORCYCLE DATA	2019	2020	% CHANGE
Motorcycle Registrations	8,873	7,985	-10.0%
Motorcycles in Crashes	102	114	11.8%
Motorcyclist Deaths	6	5	-16.7%
Motorcyclists Injured	68	105	54.4%
Death Rate based on 10,000 motorcycle registrations	6.76	6.26	-7.4%
Estimated Mileage based on 3,000 miles per motorcycle	26,619,000	23,955,000	-10.0%
Death Rate based on deaths per 100 million vehicle miles traveled	22.54	20.87	-7.4%

Motorcycles were involved in 1.5 percent of all traffic crashes in the Upper Peninsula in 2020. Injuries were proportionately more severe to motorcyclists than to persons in motor vehicles.

UPPER PENINSULA DRIVER GENDER INFORMATION



ALL DRIVERS



MALE CRASH SEVERITY

FEMALE CRASH SEVERITY

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 (0.7% vs. 0.2%).

UPPER PENINSULA PERSON AGE - DEMOGRAPHICS AND CRASH INVOLVEMENTS

AGE	LICENSED DRIVERS	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	1,233	47,429	37	0	0	85	6	1	2	0
16	2,110	3,175	162	1	0	32	1	0	0	0
17	2,420	3,293	200	0	0	30	1	0	1	0
18	2,221	4,000	235	0	0	37	1	0	1	0
19	2,604	5,026	268	0	0	35	0	0	1	0
20	2,721	5,141	219	0	0	20	1	0	3	0
21-24	11,233	18,719	860	4	1	146	1	0	6	0
25-29	13,188	16,755	873	4	3	121	1	0	2	0
30-34	14,394	15,336	880	6	4	113	0	0	2	0
35-39	14,733	16,530	778	0	0	93	1	0	3	0
40-44	14,411	15,540	672	6	4	84	0	0	1	0
45-49	14,059	16,244	699	3	2	90	0	0	1	0
50-54	16,047	17,881	702	4	4	88	0	0	1	0
55-59	19,495	21,925	747	3	3	96	0	0	2	0
60-64	22,169	23,602	735	3	2	95	2	0	2	1
65-69	22,118	22,202	516	4	1	68	3	1	0	0
70-74	17,785	17,212	424	2	3	49	0	0	0	0
75-79	11,394	11,940	251	2	2	33	0	0	1	0
80-84	7,364	8,222	150	3	2	27	0	0	0	0
85+	5,476	8,679	115	1	1	19	0	0	0	0
Unknown	---	---	487	4	0	0	0	0	1	0
TOTAL	217,175	298,851	10,010	50	32	1,361	18	2	30	1

**Population data for 2020 by age is not yet available. Data from 2019 is used.*

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	1,233	37	0.030
16	2,110	162	0.077
17	2,420	200	0.083
18	2,221	235	0.106
19	2,604	268	0.103
20	2,721	219	0.080
21-24	11,233	860	0.077
25-29	13,188	873	0.066
30-34	14,394	880	0.061
35-39	14,733	778	0.053
40-44	14,411	672	0.047
45-49	14,059	699	0.050
50-54	16,047	702	0.044
55-59	19,495	747	0.038
60-64	22,169	735	0.033
65-69	22,118	516	0.023
70-74	17,785	424	0.024
75-79	11,394	251	0.022
80-84	7,364	150	0.020
85-89	3,766	88	0.023
90-94	1,488	24	0.016
95-99	215	2	0.009
100+	7	1	0.143
TOTAL	217,175	9,523	0.044

Data entry errors may result in an over-representation of age "100+" drivers

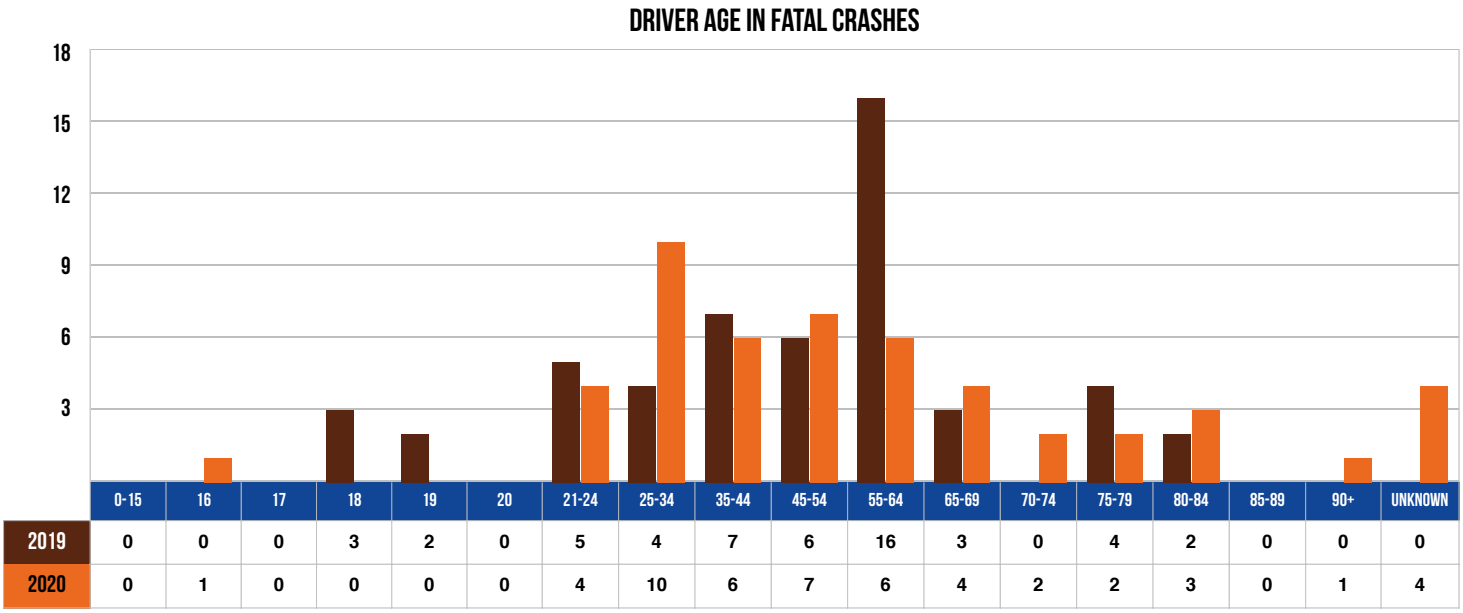
*Excludes 487 drivers with unknown age

Licensed drivers age 100 and over have the highest crash rate at 0.143 (total crash involvements in age group divided by total number of licensed drivers in age group). The lower crash rates of many 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	2019	2020	PERCENT CHANGE	PERCENT 2020 FATAL CRASH INVOLVEMENT	PERCENT ACTIVE DRIVING POPULATION*
15 years and under	0	0	0.0	0.0	0.6
16 years	0	1	---	2.0	1.0
17 years	0	0	0.0	0.0	1.1
18 years	3	0	-100.0	0.0	1.0
19 years	2	0	-100.0	0.0	1.2
20 years	0	0	0.0	0.0	1.3
21 - 24 years	5	4	-20.0	8.0	5.2
25 - 34 years	4	10	150.0	20.0	12.7
35 - 44 years	7	6	-14.3	12.0	13.4
45 - 54 years	6	7	16.7	14.0	13.9
55 - 64 years	16	6	-62.5	12.0	19.2
65 - 69 years	3	4	33.3	8.0	10.2
70 - 74 years	0	2	---	4.0	8.2
75 - 79 years	4	2	-50.0	4.0	5.2
80 - 84 years	2	3	50.0	6.0	3.4
85 - 89 years	0	0	0.0	0.0	1.7
90 years and over	0	1	---	2.0	0.8
Unknown	0	4	---	8.0	---
Total	52	50	-3.8	100.0	100.0

*Figures courtesy of the Michigan Department of State [13]



UPPER PENINSULA DRIVER CONDITION

POSSIBLE CONDITIONS OF DRIVER	CONDITIONS (CODED BY POLICE)	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
Normal	7,438	15	157	303	598	6,365
Fatigued or Asleep	69	1	4	8	20	36
Sick	15	0	2	4	2	7
Medicated	20	0	0	5	6	9
Emotional	143	1	14	24	33	71
Physically Disabled	42	3	23	7	5	4
Unknown	1,533	19	68	56	97	1,293
Other	257	5	40	38	53	121

Note: Drivers may have more than one condition including "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 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*	8,787	87.8	11	44.0	130	248	495	7,903	0
Restraint Not Used	187	1.9	13	52.0	42	31	20	81	0
Unknown	1,036	10.3	1	4.0	9	13	34	459	520
TOTAL	10,010	100.0	25	100.0	181	292	549	8,443	520
DRINKING DRIVERS ONLY									
Restraint Used*	172	62.1	3	50.0	14	22	15	118	0
Restraint Not Used	43	15.5	3	50.0	17	7	6	10	0
Unknown	62	22.4	0	0.0	3	6	9	44	0
TOTAL	277	100.0	6	100.0	34	35	30	172	0
DRUGGED DRIVERS ONLY									
Restraint Used*	36	67.9	1	20.0	3	8	6	18	0
Restraint Not Used	6	11.3	4	80.0	0	1	0	1	0
Unknown	11	20.8	0	0.0	2	1	1	7	0
TOTAL	53	100.0	5	100.0	5	10	7	26	0
DRINKING AND DRUGGED DRIVERS ONLY									
Restraint Used*	38	58.5	0	0.0	7	6	9	16	0
Restraint Not Used	11	16.9	3	100.0	3	2	2	1	0
Unknown	16	24.6	0	0.0	3	2	1	9	1
TOTAL	65	100.0	3	100.0	13	10	12	26	1

Note: '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	ALL CRASHES	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
1. Related to intersection	1,559	9	55	83	198	1,214
2. In intersection	795	4	34	49	124	584
3. With traffic control signal	216	0	9	14	35	158
4. With hazardous action*	50	0	2	4	8	36

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 50 crashes.

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

SPEED LIMIT*	ALL 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	22	0	1	0	3	18
30 miles per hour	2	0	0	0	0	2
35 miles per hour	9	0	1	2	0	6
40 miles per hour	0	0	0	0	0	0
45 miles per hour	11	0	0	0	4	7
50 miles per hour	1	0	0	0	0	1
55 miles per hour	5	0	0	2	1	2
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
TOTAL	50	0	2	4	8	36

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

CRASH TYPE	ALL CRASHES	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
Single Vehicle	0	0	0	0	0	0
Head On	0	0	0	0	0	0
Head On - Left Turn	2	0	0	0	1	1
Angle	43	0	2	4	7	30
Rear End	1	0	0	0	0	1
Rear End - Left Turn	0	0	0	0	0	0
Rear End - Right Turn	0	0	0	0	0	0
Sideswipe - Same Direction	2	0	0	0	0	2
Sideswipe - Opposite Directions	0	0	0	0	0	0
Backing	0	0	0	0	0	0
Other	2	0	0	0	0	2
Unknown	0	0	0	0	0	0
Uncoded & Errors	0	0	0	0	0	0
TOTAL	50	0	2	4	8	36

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

SPECIAL CIRCUMSTANCES*	ALL CRASHES	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
School Bus Involved/Associated	0	0	0	0	0	0
Drinking involved	0	0	0	0	0	0
Drug Use Involved	0	0	0	0	0	0
Pedestrian Involved	0	0	0	0	0	0
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	6	0	0	0	1	5
Emergency Vehicle Involved	2	0	0	1	0	1
Driver Hazardous Citation	24	0	2	2	3	17

*Crashes may involve more than one special circumstance

POSSIBLE CONDITIONS OF PERSONS IN CRASH*	CONDITIONS (CODED BY POLICE)	FATAL CRASHES	INJURY CRASHES			PROPERTY DAMAGE ONLY
			A	B	C	
Normal	46	0	2	4	8	32
Fatigued or Asleep	0	0	0	0	0	0
Sick	0	0	0	0	0	0
Medicated	0	0	0	0	0	0
Emotional	1	0	0	0	0	1
Physically Disabled	0	0	0	0	0	0
Unknown	1	0	0	0	0	1
Other	1	0	0	0	0	1

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

This page left intentionally blank

UPPER PENINSULA HEAVY TRUCK/BUS INVOLVED CRASHES

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 Upper Peninsula crash picture, heavy truck/bus crashes in the Upper Peninsula involve:**

- More turning and backing as the truck/bus driver action prior to crash.
- More noncollision events such as jackknife, cargo loss/shift, and overturn as the most harmful event.
- Fewer collisions with ditches, trees, and animals.
- Fewer single-vehicle crashes but more sideswipes.
- Fewer drivers indicated to be speeding, failing to yield, and reckless driving, but more drivers indicated to be making backing, lane use, and turning errors.
- Fewer crashes outside of the shoulder/curb.
- More crashes between the period of time between the hours of 7:00 AM and 3:59 PM.
- More crashes Monday through Thursday and fewer crashes on all other days of the week.

UPPER PENINSULA HEAVY TRUCK/BUS INVOLVED CRASHES (CONTINUED)

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	194	60.6	3	75.0	34	72.3
Turning Left	19	5.9	0	0.0	3	6.4
Turning Right	21	6.6	0	0.0	2	4.3
Stopped on Roadway	11	3.4	0	0.0	2	4.3
Involved in Prior Crash at Same Location	0	0.0	0	0.0	0	0.0
Changing Lanes	3	0.9	0	0.0	0	0.0
Backing	19	5.9	0	0.0	0	0.0
Slowing/Stopping on Roadway	10	3.1	0	0.0	2	4.3
Slowing/Stopping Other Area	0	0.0	0	0.0	0	0.0
Starting Up on Roadway	5	1.6	0	0.0	0	0.0
Starting Up in Other Area	0	0.0	0	0.0	0	0.0
Entering Parking	1	0.3	0	0.0	0	0.0
Leaving Parking	0	0.0	0	0.0	0	0.0
Entering Roadway	3	0.9	0	0.0	1	2.1
Leaving Roadway	1	0.3	0	0.0	0	0.0
Making U-Turn	0	0.0	0	0.0	0	0.0
Overtaking or Passing	3	0.9	0	0.0	0	0.0
Avoiding Object	0	0.0	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)	3	0.9	0	0.0	1	2.1
Avoiding Vehicle (angle)	0	0.0	0	0.0	0	0.0
Driverless Moving	2	0.6	1	25.0	0	0.0
Parked	5	1.6	0	0.0	1	2.1
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 Work 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
Negotiating a Curve	16	5.0	0	0.0	1	2.1
Other	1	0.3	0	0.0	0	0.0
Unknown	3	0.9	0	0.0	0	0.0
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	320	100.0	4	100.0	47	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	3	0.9	1	25.0	0	0.0
Ran Off Roadway Left	3	0.9	0	0.0	0	0.0
Ran Off Roadway Right	3	0.9	0	0.0	0	0.0
Re-Enter Roadway	0	0.0	0	0.0	0	0.0
Overturn	12	3.7	0	0.0	4	8.5
Separation of Units	1	0.3	0	0.0	1	2.1
Fire/Explosion	1	0.3	0	0.0	0	0.0
Immersion	0	0.0	0	0.0	0	0.0
Jackknife	2	0.6	0	0.0	1	2.1
Downhill Runaway	0	0.0	0	0.0	0	0.0
Cargo Loss/Shift	3	0.9	0	0.0	0	0.0
Individual Fell from Vehicle	0	0.0	0	0.0	0	0.0
Other Noncollision	3	0.9	0	0.0	0	0.0
Equipment Failure (blown tire, brake failure, etc.)	5	1.6	0	0.0	1	2.1
Cross Centerline	5	1.6	0	0.0	1	2.1
Cross Median	0	0.0	0	0.0	0	0.0
SUBTOTAL	41	12.8	1	25.0	8	17.0

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	0.6	1	25.0	1	2.1
Bicyclist	1	0.3	1	25.0	0	0.0
Motor Vehicle in Transport (in motion or on roadway)	177	55.3	1	25.0	30	63.8
Parked Motor Vehicle	13	4.1	0	0.0	1	2.1
Railroad Train	0	0.0	0	0.0	0	0.0
Animal	44	13.7	0	0.0	0	0.0
Other Nonfixed Object	7	2.2	0	0.0	1	2.1
Work Zone/Maintenance Equipment	0	0.0	0	0.0	0	0.0
Cargo Falling/Shifting/Anything Set in Motion by a Motor Vehicle	1	0.3	0	0.0	0	0.0
SUBTOTAL	245	76.6	3	75.0	33	70.2

The majority of heavy trucks/buses are involved in crashes with a motor vehicle in transport for all crashes (55.3%) and injury crashes (63.8%) 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/Support	1	0.3	0	0.0	0	0.0
Bridge Rail	2	0.6	0	0.0	1	2.1
Guardrail Face	3	0.9	0	0.0	1	2.1
Guardrail End	0	0.0	0	0.0	0	0.0
Other Post/Pole/Support	3	0.9	0	0.0	1	2.1
Culvert	2	0.6	0	0.0	0	0.0
Curb	0	0.0	0	0.0	0	0.0
Ditch	4	1.2	0	0.0	2	4.3
Embankment	1	0.3	0	0.0	0	0.0
Fence	0	0.0	0	0.0	0	0.0
Mailbox	0	0.0	0	0.0	0	0.0
Tree	3	0.9	0	0.0	0	0.0
Railroad Crossing Signal	0	0.0	0	0.0	0	0.0
Building	1	0.3	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 (crash cushion)	1	0.3	0	0.0	0	0.0
Other Fixed Object	0	0.0	0	0.0	0	0.0
Bridge Overhead Structure	0	0.0	0	0.0	0	0.0
Cable Barrier	0	0.0	0	0.0	0	0.0
Concrete Barrier	2	0.6	0	0.0	0	0.0
Traffic Sign/Post	0	0.0	0	0.0	0	0.0
Traffic Signal Equipment	1	0.3	0	0.0	0	0.0
Utility Pole/Light Support	10	3.1	0	0.0	1	2.1
SUBTOTAL	34	10.6	0	0.0	6	12.8

	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Uncoded & Errors	0	0.0	0	0.0	0	0.0
MOST HARMFUL EVENT TOTAL	320	100.0	4	100.0	47	100.0

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	100	31.3	2	50.0	10	21.3
Head On	5	1.6	1	25.0	2	4.3
Head On - Left Turn	3	0.9	0	0.0	0	0.0
Angle	47	14.7	1	25.0	10	21.3
Rear-end	37	11.6	0	0.0	6	12.8
Rear End - Left Turn	3	0.9	0	0.0	1	2.1
Rear End - Right Turn	5	1.6	0	0.0	1	2.1
Sideswipe - Same Direction	48	15.0	0	0.0	4	8.5
Sideswipe - Opposite Directions	24	7.5	0	0.0	7	14.9
Backing	15	4.7	0	0.0	0	0.0
Other	30	9.4	0	0.0	6	12.8
Unknown	3	0.9	0	0.0	0	0.0
Uncoded & Errors	0	0.0	0	0.0	0	0.0
TOTAL	320	100.0	4	100.0	47	100.0

The highest percentage of heavy trucks/buses are involved in single vehicle crashes for all crashes (31.3%) and fatal crashes (50.0%) and both single vehicle and angle crashes for injury crashes (21.3%).

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	187	58.4	3	75.0	30	63.8	0	0.0
Speed Too Fast	23	7.2	0	0.0	4	8.5	9	25.7
Speed Too Slow	0	0.0	0	0.0	0	0.0	0	0.0
Failed to Yield	13	4.1	0	0.0	3	6.4	4	11.4
Disregard Traffic Control	2	0.6	0	0.0	0	0.0	1	2.9
Drove Wrong Way	0	0.0	0	0.0	0	0.0	0	0.0
Drove Left of Center	6	1.9	0	0.0	3	6.4	2	5.7
Improper Passing	2	0.6	0	0.0	0	0.0	1	2.9
Improper Lane Use	8	2.5	0	0.0	2	4.3	4	11.4
Improper Turn	5	1.6	0	0.0	0	0.0	0	0.0
Improper/No Signal	0	0.0	0	0.0	0	0.0	0	0.0
Improper Backing	11	3.4	0	0.0	0	0.0	1	2.9
Unable to Stop in Assured Clear Distance	13	4.1	0	0.0	1	2.1	5	14.3
Reckless Driving	0	0.0	0	0.0	0	0.0	0	0.0
Careless/Negligent Driving	10	3.1	0	0.0	1	2.1	4	11.4
Other	28	8.8	0	0.0	3	6.4	3	8.6
Unknown	12	3.8	1	25.0	0	0.0	1	2.9
TOTAL	320	100.0	4	100.0	47	100.0	35	100.0

After no hazardous action, the most common hazardous action coded for drivers of heavy trucks/buses in all crashes is "other" (8.8%).

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	271	84.7	4	100.0	38	80.9
Median	0	0.0	0	0.0	0	0.0
Shoulder	22	6.9	0	0.0	5	10.6
Outside of Shoulder/Curb	20	6.3	0	0.0	3	6.4
Gore	1	0.3	0	0.0	0	0.0
On-Street Parking	4	1.3	0	0.0	0	0.0
Off the Roadway	0	0.0	0	0.0	0	0.0
On the Sidewalk	0	0.0	0	0.0	0	0.0
In the Bicycle Lane	0	0.0	0	0.0	0	0.0
Other/Unknown	2	0.6	0	0.0	1	2.1
TOTAL	320	100.0	4	100.0	47	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 - 2:59 AM	10	3.1	1	25.0	1	2.1
3:00 AM - 5:59 AM	21	6.6	0	0.0	2	4.3
6:00 AM - 8:59 AM	49	15.3	0	0.0	10	21.3
9:00 AM - 11:59 AM	79	24.7	0	0.0	13	27.7
12:00 PM - 2:59 PM	69	21.6	1	25.0	12	25.5
3:00 PM - 5:59 PM	52	16.3	1	25.0	8	17.0
6:00 PM - 8:59 PM	27	8.4	1	25.0	1	2.1
9:00 PM - 11:59 PM	13	4.1	0	0.0	0	0.0
Unknown	0	0.0	0	0.0	0	0.0
TOTAL	320	100.0	4	100.0	47	100.0

Heavy truck/bus frequencies in crashes peak in the late evening, then drop off steadily until 3 AM. The most common time for heavy trucks/buses to be involved in crashes is between 9:00 PM and 11:59 PM for all crashes (24.7%) and for injury crashes (27.7%).

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	16	5.0	0	0.0	2	4.3
U.S. and Michigan Roads	201	62.8	3	75.0	32	68.1
County & City Roads	102	31.9	1	25.0	12	25.5
Uncoded & Errors	1	0.3	0	0.0	1	2.1
TOTAL	320	100.0	4	100.0	47	100.0

The highest percentage of heavy trucks/buses are involved in crashes on U.S. & Michigan roads for all crashes (62.8%), fatal crashes (75.0%), and injury crashes (68.1%).

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	50	15.6	0	0.0	11	23.4
Tuesday	44	13.8	0	0.0	7	14.9
Wednesday	50	15.6	1	25.0	2	4.3
Thursday	83	25.9	2	50.0	11	23.4
Friday	47	14.7	0	0.0	9	19.1
Saturday	34	10.6	0	0.0	5	10.6
Sunday	12	3.8	1	25.0	2	4.3
TOTAL	320	100.0	4	100.0	47	100.0

The highest percentage of heavy trucks/buses are involved in crashes on Thursday for all crashes (25.9%) and fatal crashes (50.0%) and both Monday and Thrusday for injury crashes (23.4%).

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	299	93.4	3	75.0	42	89.4
Female	13	4.1	0	0.0	4	8.5
Unknown	8	2.5	1	25.0	1	2.1
TOTAL	320	100.0	4	100.0	47	100.0

The majority of heavy truck/bus drivers are male in all crashes (93.4%), fatal crashes (75.0%), and injury crashes (89.4%).

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	278	86.9	3	75.0	41	87.2
2 occupants	23	7.2	0	0.0	3	6.4
3 occupants	2	0.6	0	0.0	0	0.0
4 occupants	1	0.3	0	0.0	0	0.0
5 occupants	2	0.6	0	0.0	1	2.1
6+ occupants	6	1.9	0	0.0	1	2.1
0 occupants	8	2.5	1	25.0	1	2.1
Unknown	0	0.0	0	0.0	0	0.0
TOTAL	320	100.0	4	100.0	47	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, SUV, Van	149	65.4	2	40.0	26	61.9
Motor Home	1	0.4	0	0.0	1	2.4
Pickup	70	30.7	1	20.0	13	31.0
Small Truck (under 10,000 lbs.)	1	0.4	0	0.0	0	0.0
Motorcycle	1	0.4	0	0.0	1	2.4
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	0	0.0	0	0.0	0	0.0
Other	1	0.4	0	0.0	0	0.0
Uncoded & Errors	5	2.2	2	40.0	1	2.4
SUBTOTAL	228	100.0	5	100.0	42	100.0

HEAVY TRUCK/BUS GROSS VEHICLE WEIGHT RATING	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
10,000 lbs. or less	3	0.9	0	0.0	0	0.0
10,001 - 26,000 lbs	124	38.8	1	25.0	13	27.7
Greater than 26,000 lbs.	192	60.0	3	75.0	34	72.3
Uncoded & Errors	1	0.3	0	0.0	0	0.0
SUBTOTAL	320	100.0	4	100.0	47	100.0

	ALL CRASHES		FATAL CRASHES		INJURY CRASHES	
	Number of Vehicles	% of Total	Number of Vehicles	% of Total	Number of Vehicles	% of Total
Total Number of Vehicles in Heavy Truck/Bus Crashes	548	---	9	---	89	---

UPPER PENINSULA HEAVY TRUCK/BUS INVOLVED CRASHES (CONTINUED)

DRIVER HAZARDOUS ACTION WHERE HAZARDOUS CITATION ISSUED	HEAVY TRUCK/BUS INVOLVED CRASH						NON-HEAVY TRUCK/BUS 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 Non-Heavy Truck Vehicles	% of Total	Number of Vehicles	% of Total	Number of Vehicles	% of Total
None	0	0.0	0	0.0	0	0.0	5	1.2	1	0.2
Speed Too Fast	8	53.3	1	5.0	5	12.2	191	45.4	54	9.0
Speed Too Slow	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0
Failed to Yield	0	0.0	4	20.0	12	29.3	4	1.0	221	36.7
Disregard Traffic Control	0	0.0	1	5.0	3	7.3	7	1.7	50	8.3
Drove Wrong Way	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Drove Left of Center	0	0.0	2	10.0	1	2.4	4	1.0	10	1.7
Improper Passing	0	0.0	1	5.0	0	0.0	1	0.2	6	1.0
Improper Lane Use	1	6.7	3	15.0	1	2.4	4	1.0	20	3.3
Improper Turn	0	0.0	0	0.0	2	4.9	3	0.7	17	2.8
Improper/No Signal	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Improper Backing	0	0.0	1	5.0	3	7.3	0	0.0	2	0.3
Unable to Stop in Assured Clear Distance	1	6.7	4	20.0	7	17.1	3	0.7	124	20.6
Reckless Driving	0	0.0	0	0.0	0	0.0	10	2.4	6	1.0
Careless/Negligent Driving	3	20.0	1	5.0	3	7.3	139	33.0	64	10.6
Other	1	6.7	2	10.0	3	7.3	46	10.9	22	3.7
Unknown	1	6.7	0	0.0	1	2.4	3	0.7	4	0.7
CITED VEHICLES SUBTOTAL	15	100.0	20	100.0	41	100.0	421	100.0	602	100.0

	HEAVY TRUCK/BUS INVOLVED CRASH						NON-HEAVY TRUCK/BUS 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 Non-Heavy Truck Vehicles	% of Total	Number of Vehicles	% of Total	Number of Vehicles	% of Total
Cited Vehicles	15	14.7	20	9.2	41	18.4	421	8.8	602	13.1
Vehicles with No Citation Issued	87	85.3	198	90.8	182	81.6	4,337	91.2	3,988	86.9
Vehicles with Unknown Citation	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL VEHICLES INVOLVED	102	100.0	218	100.0	223	100.0	4,758	100.0	4,590	100.0

This page left intentionally blank

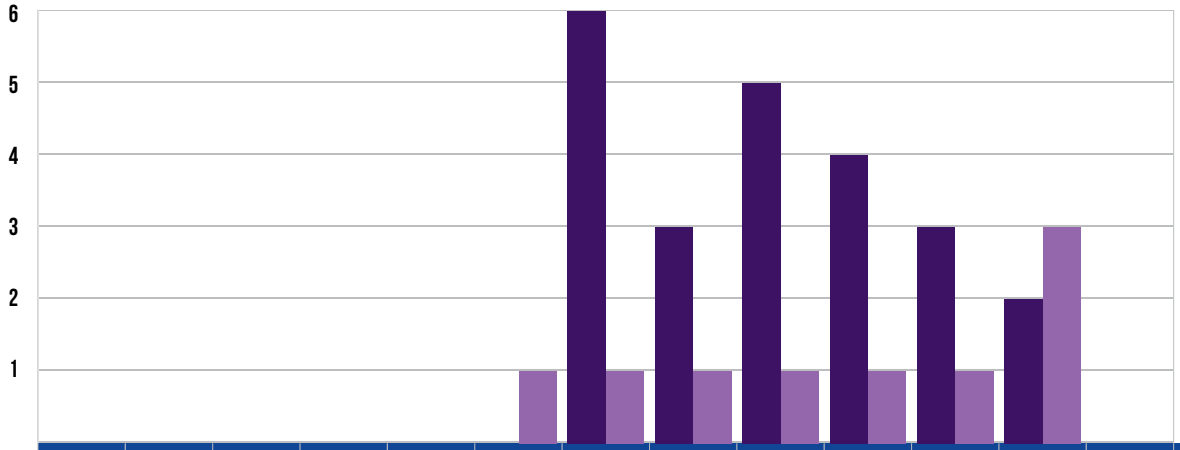
OCCUPANT/PERSON

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

This page left intentionally blank

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

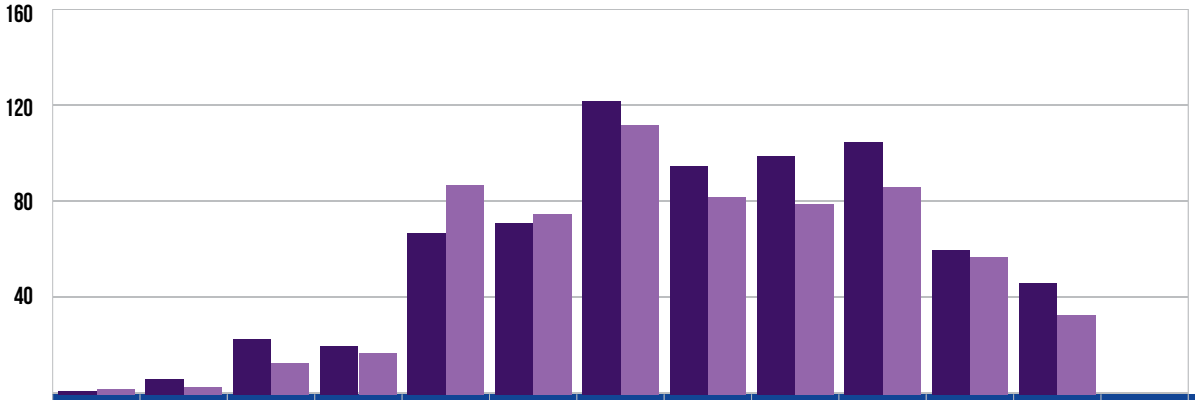
OCCUPANTS KILLED



	UNDER 1 YEAR OLD	1-3 YEARS	4-10 YEARS	11-15 YEARS	16-20 YEARS	21-24 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55-64 YEARS	66-74 YEARS	75 YEARS AND OVER	UNKNOWN	TOTAL
MALES KILLED	0	0	0	0	0	0	6	3	5	4	3	2	0	23
FEMALES KILLED	0	0	0	0	0	1	1	1	1	1	1	3	0	9
TOTAL	0	0	0	0	0	1	7	4	6	5	4	5	0	32

The majority (71.9%) of occupants killed in traffic crashes in 2020 were male.

OCCUPANTS INJURED



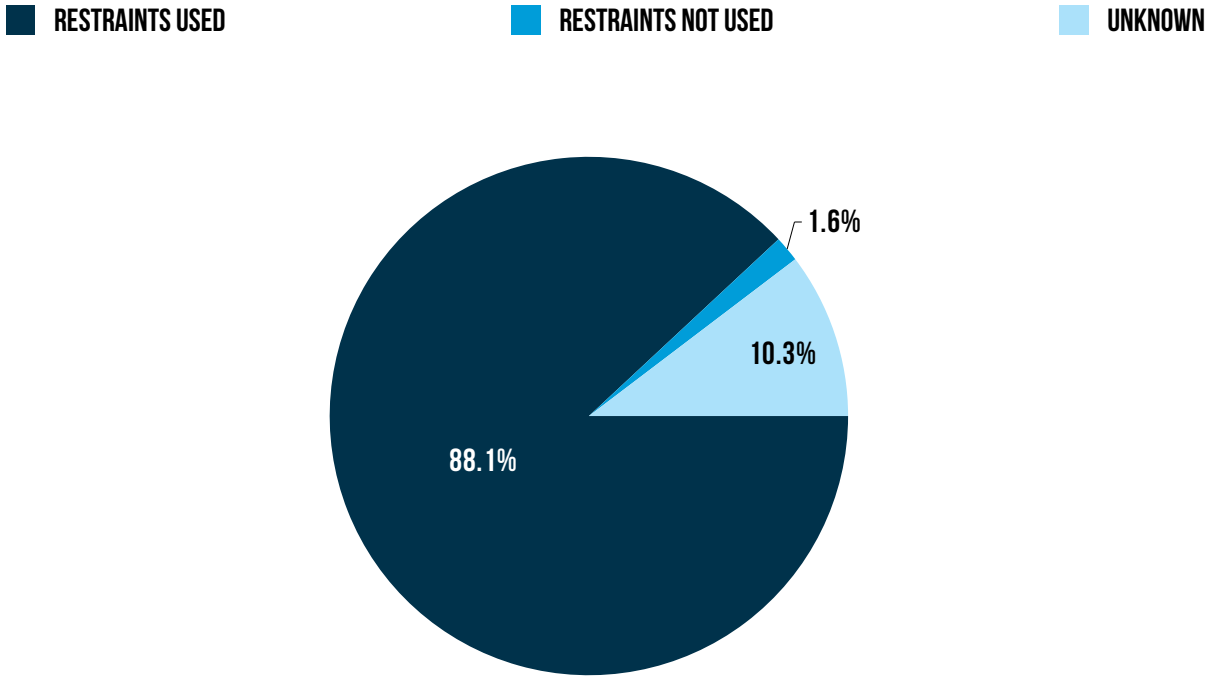
	UNDER 1 YEAR OLD	1-3 YEARS	4-10 YEARS	11-15 YEARS	16-20 YEARS	21-24 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55-64 YEARS	66-74 YEARS	75 YEARS AND OVER	UNKNOWN	TOTAL
MALES INJURED	1	6	23	20	67	71	122	95	99	105	60	46	0	715
FEMALES INJURED	2	3	13	17	87	75	112	82	79	86	57	33	0	646
UNKNOWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3	9	36	37	154	146	234	177	178	191	117	79	0	1,361

A slight majority (52.5%) of occupants injured in traffic crashes in 2020 were male.

Note: Occupants include all drivers plus all injured or killed persons in or on a motor vehicle.

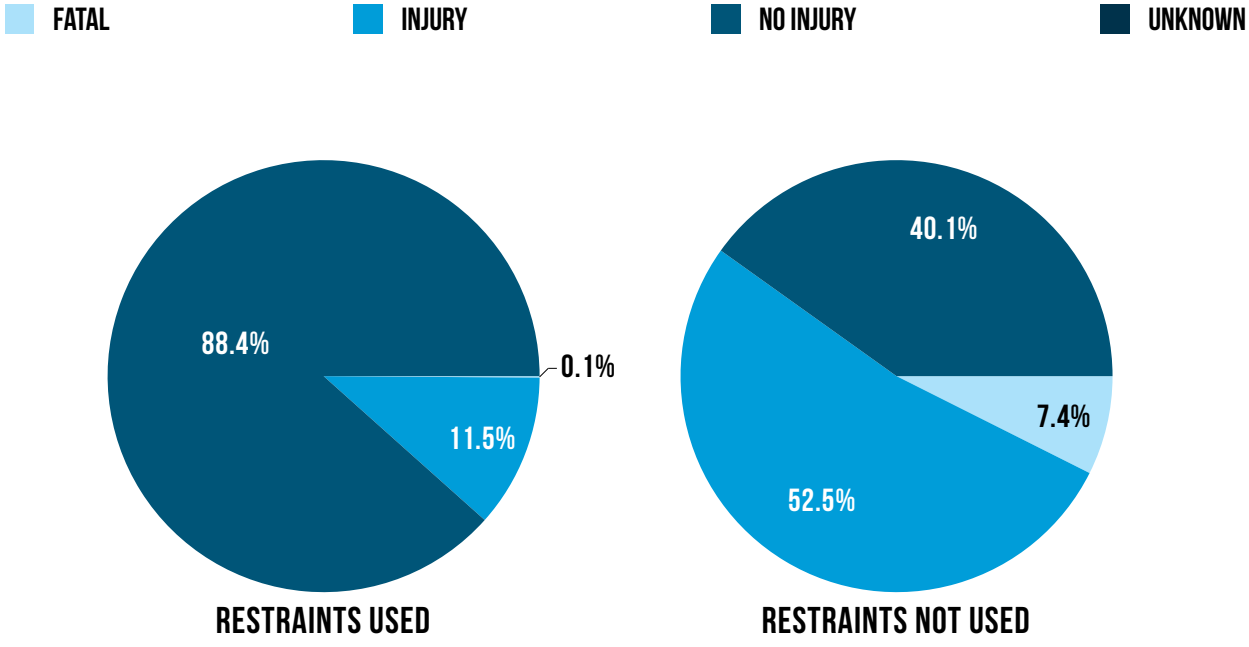
UPPER PENINSULA REPORTED OCCUPANT RESTRAINT USAGE FOR ALL DRIVERS AND INJURED PASSENGERS

REPORTED OCCUPANT RESTRAINT USAGE



Of the 10,100 drivers and injured passengers involved in crashes in the Upper Peninsula, 8,894 (88.1%) were REPORTED to be using occupant restraints.

INJURY SEVERITY



Occupants in crashes were 66 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	8,629	97.3	8	87	204	476	7,854
Center Front	13	0.1	0	1	3	6	3
Right Front	176	2.0	2	21	43	106	4
Left Rear Second Seat	25	0.3	0	1	9	15	0
Center Rear Second Seat	2	0.0	0	0	0	2	0
Right Rear Second Seat	17	0.2	0	5	6	6	0
Left Rear Third Seat	3	0.0	0	3	0	0	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
Left Rear Fourth Seat	0	0.0	0	0	0	0	0
Center Rear Fourth Seat	0	0.0	0	0	0	0	0
Right Rear Fourth Seat	0	0.0	0	0	0	0	0
Other Passenger Area	0	0.0	0	0	0	0	0
Unknown	1	0.0	0	0	0	0	1
Uncoded & Errors	0	0.0	0	0	0	0	0
TOTAL	8,866	100.0	10	118	265	611	7,862

* Belts Used includes use of lap, shoulder, or both belts, or restraint failure. Children who were using or not using a child restraint are in separate tables on the next two pages.

SEATING POSITION	BELTS NOT USED *		FATAL	INJURY			NO INJURY
	Number	% of Total		A	B	C	
Left Front	112	70.0	10	17	19	13	53
Center Front	1	0.6	0	0	0	0	1
Right Front	16	10.0	2	3	6	5	0
Left Rear Second Seat	8	5.0	0	3	3	2	0
Center Rear Second Seat	2	1.3	0	0	1	1	0
Right Rear Second Seat	8	5.0	0	1	3	4	0
Left Rear Third Seat	0	0.0	0	0	0	0	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
Left Rear Fourth Seat	0	0.0	0	0	0	0	0
Center Rear Fourth Seat	0	0.0	0	0	0	0	0
Right Rear Fourth Seat	0	0.0	0	0	0	0	0
Other Passenger Area	2	1.3	0	2	0	0	0
Unknown	10	6.3	0	0	0	0	10
Uncoded & Errors	1	0.6	0	0	0	0	1
TOTAL	160	100.0	12	26	32	25	65

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

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 USAGE - 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 - Forward Facing	0	0.0	0	0	0	0
Child Restraint Used - Rear Facing	2	100.0	0	0	0	2
Child Restraint Used - Booster Seat	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	2	100.0	0	0	0	2
AGE 1						
Belts Used	0	0.0	0	0	0	0
No Belts Used	0	0.0	0	0	0	0
Child Restraint Used - Forward Facing	0	0.0	0	0	0	0
Child Restraint Used - Rear Facing	2	100.0	0	0	0	2
Child Restraint Used - Booster Seat	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	2	100.0	0	0	0	2
AGE 2						
Belts Used	0	0.0	0	0	0	0
No Belts Used	1	33.3	0	0	1	0
Child Restraint Used - Forward Facing	2	66.7	0	0	1	1
Child Restraint Used - Rear Facing	0	0.0	0	0	0	0
Child Restraint Used - Booster Seat	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	3	100.0	0	0	2	1

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 - Forward Facing	3	75.0	0	1	0	2
Child Restraint Used - Rear Facing	0	0.0	0	0	0	0
Child Restraint Used - Booster Seat	1	25.0	0	0	1	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	4	100.0	0	1	1	2
AGE 4-7						
Belts Used	6	35.3	0	0	2	4
No Belts Used	0	0.0	0	0	0	0
Child Restraint Used - Forward Facing	6	35.3	0	1	2	3
Child Restraint Used - Rear Facing	1	5.9	0	0	0	1
Child Restraint Used - Booster Seat	3	17.6	0	0	0	3
Child Restraint Not Used	1	5.9	0	0	0	1
Restraint Failed	0	0.0	0	0	0	0
Unknown	0	0.0	0	0	0	0
Total	17	100.0	0	1	4	12
AGE 8-15						
Belts Used	32	74.4	0	3	12	17
No Belts Used	2	4.7	0	1	1	0
Child Restraint Used - Forward Facing	0	0.0	0	0	0	0
Child Restraint Used - Rear Facing	0	0.0	0	0	0	0
Child Restraint Used - Booster Seat	7	16.3	0	1	0	6
Child Restraint Not Used	1	2.3	0	0	0	1
Restraint Failed	0	0.0	0	0	0	0
Unknown	1	2.3	0	0	0	1
Total	43	100.0	0	5	13	25

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.

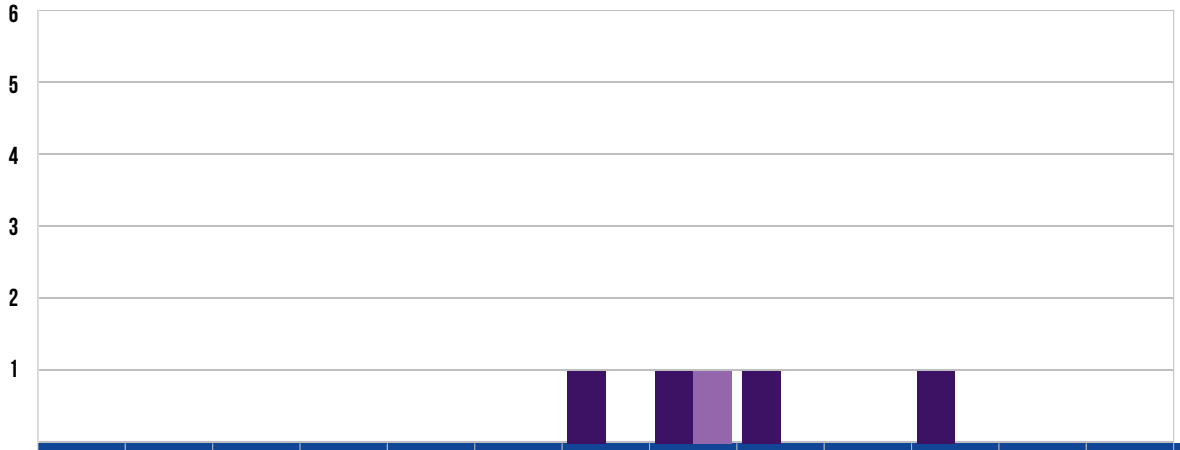
UPPER PENINSULA MOTOR VEHICLE OCCUPANT INJURY SEVERITY BY KNOWN AIRBAG DEPLOYMENT

MOTOR VEHICLE OCCUPANT AIRBAG DEPLOYMENT	OCCUPANTS*		FATAL	OCCUPANT INJURY SEVERITY			NO INJURY
	Number	% of Total		A	B	C	
Deployed - front	704	6.8	10	39	98	145	412
Deployed - side	117	1.1	0	1	13	26	77
Deployed - curtain	59	0.6	0	1	9	10	39
Deployed - combination	343	3.3	8	40	56	90	149
Deployed - other	4	0.0	0	0	0	1	3
Not deployed	8,156	78.8	4	66	121	419	7,542
Not equipped	375	3.6	8	83	83	40	161
Unknown	590	5.7	2	9	6	5	59
Uncoded & Errors	8	0.1	0	0	0	0	1
TOTAL	10,356	100.0	32	239	386	736	8,443

**Includes 520 occupants (drivers and passengers) with unknown injury severity.*

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

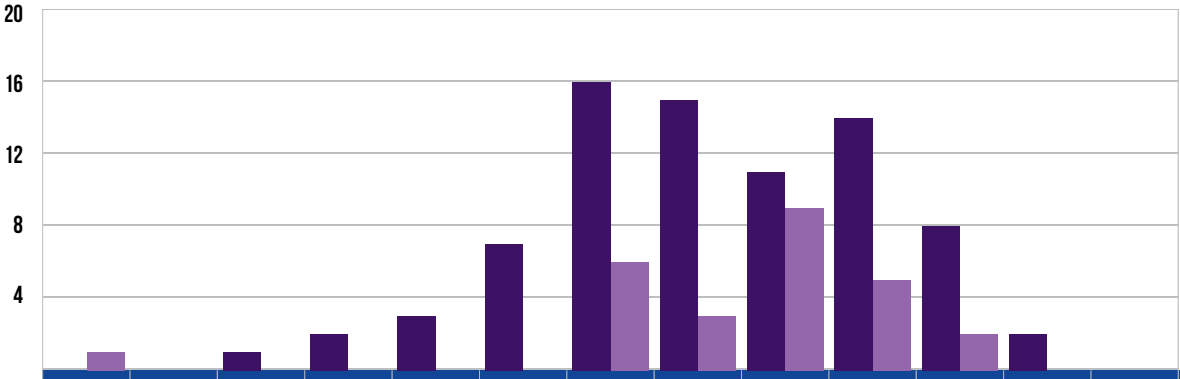
MOTORCYCLISTS KILLED



	UNDER 1 YEAR OLD	1-3 YEARS	4-10 YEARS	11-15 YEARS	16-20 YEARS	21-24 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55-64 YEARS	66-74 YEARS	75 YEARS AND OVER	UNKNOWN	TOTAL
MALES KILLED	0	0	0	0	0	0	1	1	1	0	1	0	0	4
FEMALES KILLED	0	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL	0	0	0	0	0	0	1	2	1	0	1	0	0	5

Of the 5 motorcyclists killed in traffic crashes in the Upper Peninsula in 2020, 80.0 percent were male. In comparison, 71.9 percent of all occupants killed in crashes in the Upper Peninsula were male.

MOTORCYCLISTS INJURED



	UNDER 1 YEAR OLD	1-3 YEARS	4-10 YEARS	11-15 YEARS	16-20 YEARS	21-24 YEARS	25-34 YEARS	35-44 YEARS	45-54 YEARS	55-64 YEARS	66-74 YEARS	75 YEARS AND OVER	UNKNOWN	TOTAL
MALES INJURED	0	0	1	2	3	7	16	15	11	14	8	2	0	79
FEMALES INJURED	1	0	0	0	0	0	6	3	9	5	2	0	0	26
UNKNOWN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	1	2	3	7	22	18	20	19	10	2	0	105

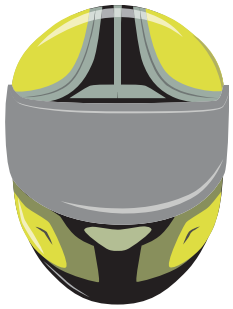
Of the 105 motorcyclists injured in traffic crashes in the Upper Peninsula in 2020, 75.2 percent were male. In comparison, 52.5 percent of all occupants injured in crashes in the Upper Peninsula were male.

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	1	0	0	0
4 - 10 years	0	0	0	1	0
11 - 15 years	0	1	0	1	0
16 - 20 years	0	0	2	0	0
21 - 24 years	0	3	3	0	2
25 - 34 years	1	2	10	3	2
35 - 44 years	0	5	3	1	1
45 - 54 years	1	10	4	3	6
55 - 64 years	0	6	5	2	5
65 - 74 years	0	3	3	0	2
75 years and over	0	0	1	0	0
Unknown	0	0	0	0	0
Subtotal	2	31	31	11	18
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	1	0	0	0
21 - 24 years	0	0	0	1	0
25 - 34 years	0	4	1	1	1
35 - 44 years	1	5	1	2	1
45 - 54 years	0	2	0	1	2
55 - 64 years	0	4	1	1	2
65 - 74 years	1	2	2	0	0
75 years and over	0	0	0	0	0
Unknown	0	0	0	0	0
Subtotal	2	18	5	6	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	1	0	0
35 - 44 years	1	1	0	0	0
45 - 54 years	0	0	0	0	0
55 - 64 years	0	0	0	0	1
65 - 74 years	0	0	0	0	1
75 years and over	0	0	0	1	0
Unknown	0	0	0	0	0
Subtotal	1	1	1	1	2
TOTAL	5	50	37	18	26

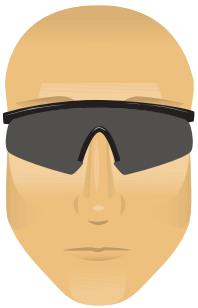
2011 Michigan motor vehicle crash data represents the last full year of data that was collected during Michigan's universal helmet law, enacted in 1969: Michigan Vehicle Code Public Act 300 of 1949, Section 257.658, requiring all motorcycle riders to wear a helmet. On April 13, 2012, Michigan changed 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: 2
PASSENGERS KILLED: 0

HELMET NOT WORN



DRIVERS KILLED: 2
PASSENGERS KILLED: 0

HELMET USE UNKNOWN

DRIVERS KILLED: 0
PASSENGERS KILLED: 1

UPPER PENINSULA OCCUPANT INJURY OUTCOME BY VEHICLE TYPE

VEHICLE	KILLED	INJURY			TOTAL KABC	% OF ALL CRASH INVOLVED KABC OCCUPANTS
		A	B	C		
Passenger car, SUV, van	20	103	209	545	877	63.0
Motor home	0	1	3	1	5	0.4
Pickup truck	5	38	82	128	253	18.2
Small Truck under 10,000 lbs. GVWR	0	0	5	6	11	0.8
Motorcycle	5	50	37	18	110	7.9
Moped/goped	1	5	4	2	12	0.9
Go-cart/golf cart	0	1	0	0	1	0.1
Snowmobile	1	10	10	9	30	2.2
Off-Road Vehicle - ORV/All-Terrain Vehicle - ATV	0	28	33	9	70	5.0
Other	0	1	1	1	3	0.2
Uncoded & Errors	0	0	0	0	0	0.0
CDL Truck/Bus (breakdown below)	0	2	2	17	21	1.5
Total Number of Occupants	32	239	386	736	1,393	100.0

HEAVY TRUCK/BUS GROSS VEHICLE WEIGHT RATING	KILLED	INJURY			TOTAL KABC	% OF ALL CRASH INVOLVED KABC OCCUPANTS
		A	B	C		
10,000 lbs. or less	0	0	0	0	0	0.0
10,001 - 26,000 lbs.	0	0	1	4	5	23.8
Greater than 26,000 lbs.	0	2	1	13	16	76.2
Uncoded & Errors	0	0	0	0	0	0.0
Total Number of Occupants	0	2	2	17	21	100.0

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 trafficway (in Michigan) and result in injury, death, or at least $1,000 in property damage.

This page left intentionally blank

REFERENCES

This page left intentionally blank

REFERENCES AND REPORTING AGENCIES

[1] Annual Estimates of the Resident Population for Counties of Michigan: 2010-2020. Population Division, U.S. Census Bureau. Release Date: July 2021. https://www.census.gov/programs-surveys/popest.html

[2] Leading Cause of Deaths for Ten Leading Causes by Age Michigan 2019. Michigan Department of Health & Human Services, Division for Vital Records & Health Statistics Section, Lansing, MI. https://vitalstats.michigan.gov/osr/chi/deaths/frame.asp?Topic=8

[3] Statistics Department, National Safety Council, 1121 Spring Lake Drive, Itasca, Illinois 60143-3201. https://injuryfacts.nsc.org/motor-vehicle/overview/preliminary-estimates/

[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, 530 W Allegan St, Lansing, MI 48922.

This page left intentionally blank

INDEX

This page left intentionally blank

A

B

C

D

G

H

I

L

M

O

P

R

S

T

U

V

W