OHSP Project

Collaboration with the Office of Highway Safety Planning to Prevent Injury and Support Post Crash Care

Systems of Care Conference

March 11, 2026.

MDHHS

Michigan Department of Health & Human Services

Mission

MDHHS provides services and administers programs to improve the health, safety and prosperity of the residents of the state of Michigan.

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Disclosures:

I have no disclosures

Objectives

- Participants will learn:
- About the National Highway Traffic Safety Administration (NHTSA) “Safe System” plan.
- The collaborative initiatives the EMS and SOC Division, partners and the Office of Highway Safety Planning are working on to reduce transportation injuries.
- How data from crash records, the trauma registry and the EMS patient care record can be used to inform both the public and traffic safety.

NHTSA

Highway Safety Public Act 1966 Section 402 grant

“Our Mission is to save lives, prevent injuries and reduce economic costs due to road traffic crashes through education, research, safety standards and enforcement”

402 Grant funds a variety of state traffic initiatives

2025 funding for Michigan was $11,034,246

NHSTA Safe System

Definition:

U.S. DOT's National Roadway Safety Strategy and the Department’s ongoing safety programs are working towards a future with zero roadway fatalities and serious injuries. In support of this approach, safety programs are focused on infrastructure, human behavior, responsible oversight of the vehicle and transportation industry, and emergency response.

Why Safe Systems

- Roadways were initially designed to move cars quickly.
- Road travel is much safer now than 50 years ago, but the rate of improvement slowed in the 1990's and remains unchanged.
- Death and serious injury is unacceptable.
- Post crash care can impact outcomes

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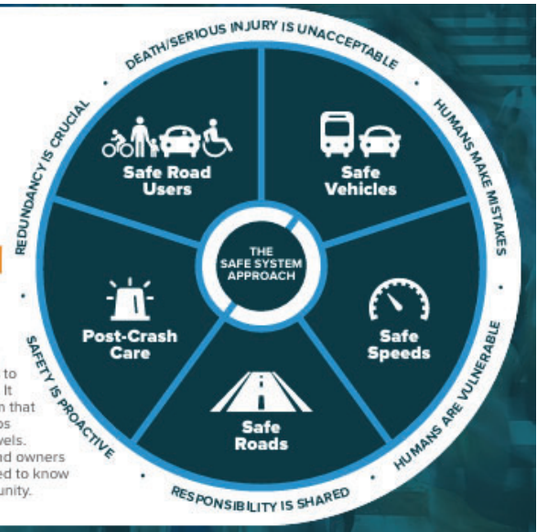
THE SAFE SYSTEM

APPROACH

Zero is our goal. A Safe System is how we will get there.

Imagine a world where nobody has to die from vehicle crashes. The Safe System approach aims to eliminate fatal & serious injuries for all road users. It does so through a holistic view of the road system that first anticipates human mistakes and second keeps impact energy on the human body at tolerable levels. Safety is an ethical imperative of the designers and owners of the transportation system. Here's what you need to know to bring the Safe System approach to your community.



SAFE SYSTEM PRINCIPLES

Death/Serious Injury is Unacceptable

While no crashes are desirable, the Safe System approach prioritizes crashes that result in death and serious injuries, since no one should experience either when using the transportation system.

Humans Make Mistakes

People will inevitably make mistakes that can lead to crashes, but the transportation system can be designed and operated to accommodate human mistakes and injury tolerances and avoid death and serious injuries.

Humans Are Vulnerable

People have limits for tolerating crash forces before death and serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates human vulnerabilities.

Responsibility is Shared

All stakeholders (transportation system users and managers, vehicle manufacturers, etc.) must ensure that crashes don't lead to fatal or serious injuries.

Safety is Proactive

Proactive tools should be used to identify and mitigate latent risks in the transportation system, rather than waiting for crashes to occur and reacting afterwards.

Redundancy is Crucial

Reducing risks requires that all parts of the transportation system are strengthened, so that if one part fails, the other parts still protect people.

Safe Roads for a Safer Future

SAFE SYSTEM ELEMENTS

Making a commitment to zero deaths means addressing every aspect of crash risks through the five elements of a Safe System, shown below. These layers of protection and shared responsibility promote a holistic approach to safety across the entire transportation system. The key focus of the Safe System approach is to reduce death and serious injuries through design that accommodates human mistakes and injury tolerances.

Safe Road Users

The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.

Safe Vehicles

Vehicles are designed and regulated to minimize the occurrence and severity of collisions using safety measures that incorporate the latest technology.

Safe Speeds

Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.

Safe Roads

Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.

Post-Crash Care

When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.

THE SAFE SYSTEM APPROACH VS. TRADITIONAL ROAD SAFETY PRACTICES

Traditional	Safe System
Prevent crashes	Prevent deaths and serious injuries
Improve human behavior	Design for human mistakes/limitations
Control speeding	Reduce system kinetic energy
Individuals are responsible	Share responsibility
React based on crash history	Proactively identify and address risks

Whereas traditional road safety strives to modify human behavior and prevent all crashes, the Safe System approach also refocuses transportation system design and operation on anticipating human mistakes and lessening impact forces to reduce crash severity and save lives.

WHERE ARE YOU ON THE SAFE SYSTEM JOURNEY?

Implementing the Safe System approach is our shared responsibility, and we all have a role. It requires shifting how we think about transportation safety and how we prioritize our transportation investments. Consider applying a Safe System lens to upcoming projects and plans in your community: put safety at the forefront and design to accommodate human mistakes and injury tolerances. Visit **safety.fhwa.dot.gov/zerodeaths** to learn more.

Safe System Fundamentals

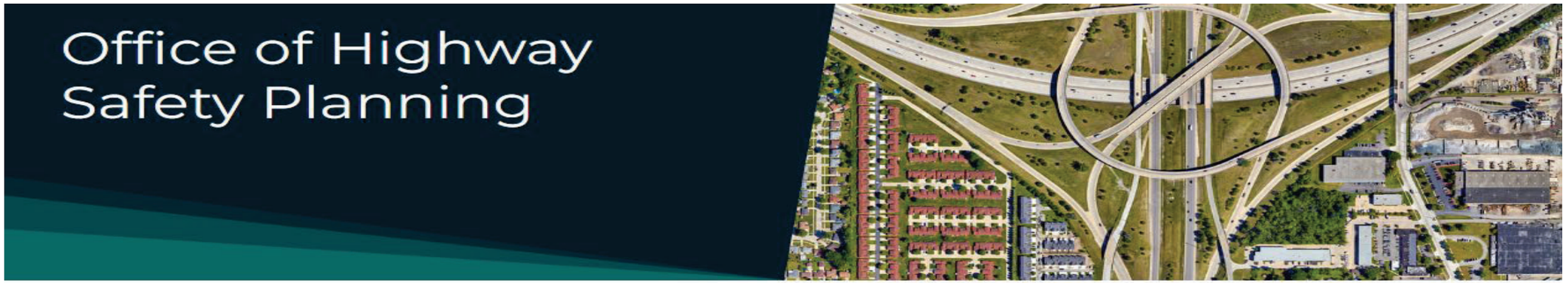
- Focus on preventing death and serious injury rather than preventing crashes.
- Interventions are focused on predictable behaviors (i.e. distractions and fatigue).
- People behave in repeated and predictable ways. The road system should assist them to do the right thing and reduce opportunities for errors or mistakes.
- Solutions should be implemented proactively and systematically.

How does it work?

- Rumble strips alert inattentive drivers (reduce head on crashes by 44-64% and off the road crashes by 13-51%)
- Separate bike lanes prevent car bicycle collisions.
- Lowering speed directly impacts crash forces and the probability of serious injury or death (roundabouts slow traffic through dangerous intersections and prevents deadly side impacts reducing severe crashes by 78-82%.
- Median barriers on rural divided highways reduce high energy head-on crashes by 97%.
- Sweden adopted Safe Systems approach and reduced fatalities 67% (1990-2017).



Michigan traffic safety

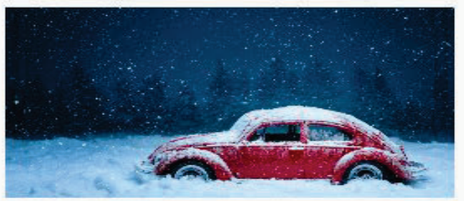


https://www.michigan.gov/msp/divisions/ohsp

2024 Traffic Crash Data

OHSP - What We Do

OHSP Grants - MGX



Winter Driving Safety

OHSP

- **Our Mission**
- To save lives and reduce injuries on Michigan roads through leadership, innovation, facilitation, and program support in partnership with other public and private organizations.
- **Our Vision**
- To be a catalyst for the development and implementation of innovative ideas, while encouraging the adaptation of successful strategies.
- To have a fully integrated problem-solving process that is fundamental to all decision-making.
- To be a leader in cultivating and supporting traffic safety initiative at the state and local levels.
- To have a work environment that fosters enthusiasm, creativity, integrity, and commitment.

Data

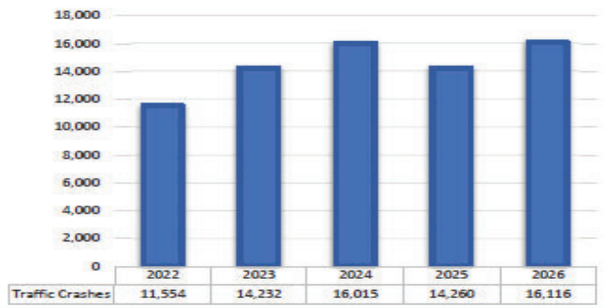
MICHIGAN STATE POLICE
CRIMINAL JUSTICE INFORMATION CENTER

TCRU TRAFFIC CRASH REPORTING UNIT

PRELIMINARY TRAFFIC CRASH DATA COMPARISON - YEAR TO DATE CRASH STATISTICS

		Traffic Crashes	Fatal Crashes	TCRS Fatalities	MFARS Fatalities*	Injury Crashes	Injuries	Suspected Serious (A) Injuries	Suspected Minor (B) Injuries	Possible (C) Injuries	Truck/Bus Crashes
2025 totals as of	January 25, 2026	16,116	11	13	37	2,220	2,953	169	704	2,080	852
2024 totals as of	January 26, 2025	14,260	27	29	33	1,885	2,521	176	583	1,762	716
	Difference	*+1,856*	*-16*	*-16*	*+4*	*+335*	*+432*	*-7*	*+121*	*+318*	*+136*
	Percent Change	**+13.0%**	**-59.3%**	**-55.2%**	**+12.1%**	**+17.8%**	**+17.1%**	**-4.0%**	**+20.8%**	**+18.0%**	**+19.0%**

Traffic Crashes

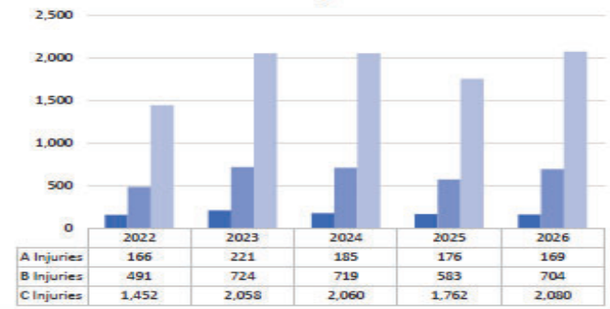


	2022	2023	2024	2025	2026
Traffic Crashes	11,554	14,232	16,015	14,260	16,116

MFARS Fatalities*

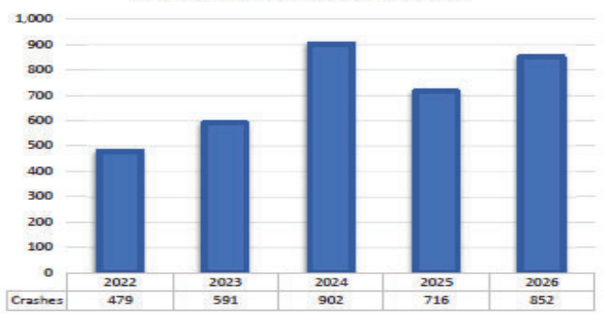
	2021	2022	2023	2024	2025
Fatalities	56	34	46	33	37

Traffic Injuries



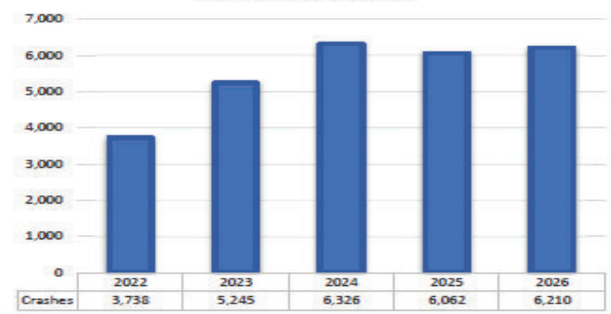
	2022	2023	2024	2025	2026
A Injuries	166	221	185	176	169
B Injuries	491	724	719	583	704
C Injuries	1,452	2,058	2,060	1,762	2,080

Truck/Bus Involved Crashes



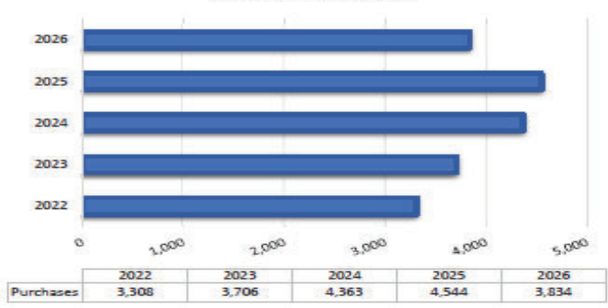
	2022	2023	2024	2025	2026
Crashes	479	591	902	716	852

Trunkline Crashes



	2022	2023	2024	2025	2026
Crashes	3,738	5,245	6,326	6,062	6,210

TCPS Purchases



	2022	2023	2024	2025	2026
Purchases	3,308	3,706	4,363	4,544	3,834

Sources: Preliminary data from the Traffic Crash Reporting System (TCRS) and the Michigan Fatality Analysis Reporting System (MFARS)
The TCRS database provides crash statistics for all Michigan crash data submitted to the Michigan State Police using the UD-10e State of Michigan Traffic Crash Report.
*The MFARS fatality total provides a current representation of statewide traffic crash fatalities. MFARS compiles traffic fatality early notification data submitted by law enforcement and through media articles.

https://www.michigan.gov/msp/divisions/cjic/traffic-crash-reporting-unit

MICHIGAN STATE POLICE
CRIMINAL JUSTICE INFORMATION CENTER

TCRU TRAFFIC CRASH REPORTING UNIT

MICHIGAN TRAFFIC CRASH DECADE AT-A-GLANCE

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Total Crashes	288,880	287,953	293,341	282,640	245,432	314,377	312,798	314,921	312,172	297,023
Total Injuries	71,316	71,085	70,281	71,246	60,986	74,963	75,838	78,394	79,724	74,157
Total A Injuries	5,781	5,816	5,782	5,979	5,433	5,629	5,586	6,084	5,634	4,865
Total Fatalities	1,099	1,095	1,123	1,131	1,083	985	974	1,028	1,064	963
Fatal Crashes	1,012	1,021	1,053	1,068	1,010	902	905	937	980	893
Fatality Rate per 100m VMT**	1.1	1.1	1.2	1.2	1.3	1.0	1.0	1.0	1.1	1.0
Fatal Crash Rate per 100m VMT**	1.0	1.0	1.1	1.1	1.2	0.9	0.9	0.9	1.0	0.9
Fatality Restraint Use*	50.1%	49.7%	47.8%	45.3%	43.2%	51.7%	54.7%	53.0%	52.3%	52.5%
Alcohol and/or Drug Involved Fatal Crashes*	406	404	420	475	422	378	394	421	378	346
% of Alcohol and/or Drug Involved Fatal Crashes to Total Fatal Crashes	40.1%	39.6%	39.9%	44.5%	41.8%	41.9%	43.5%	44.9%	38.6%	38.7%
Alcohol/Drug Involved Fatalities*	447	445	454	505	453	419	434	470	412	384
% of Alcohol/Drug Involved Fatalities to Total Fatalities	40.7%	40.6%	40.4%	44.7%	41.8%	42.5%	44.6%	45.7%	38.7%	39.9%
Alcohol Involved Fatal Crashes	276	272	301	336	303	266	287	320	251	271
Alcohol Involved Fatalities	307	297	322	357	326	295	315	359	271	303
Drug Involved Fatal Crashes	246	230	229	259	250	214	220	221	213	159
Drug Involved Fatalities	272	256	249	275	267	237	247	246	236	179
OUIL Arrests *(all agencies)***	25,318	26,408	26,707	27,506	25,820	30,626	31,856	32,474	32,610	33,720
Registered Vehicles *(Millions)****	9.59	9.79	9.39	9.54	9.00	9.10	8.43	8.48	8.38	8.26
MVMT *(Billions)***	99.4	98.3	96.7	96.7	86.3	102.1	102.3	101.7	99	98.1
Population *(Millions)*****	10.05	10.03	10.12	10.05	9.99	9.99	9.99	9.96	9.93	9.92

Sources:

*Michigan Fatality Analysis Reporting System (MFARS) database. Fatality restraint use by deceased occupants of motor vehicles equipped with safety belts.

**Michigan Department of Transportation (MDOT). Updated 12/5/2025.

***Breathalyzer Database and total arrests match the Michigan Annual Drunk Driving Audit

****Michigan Department of State (MDOS) Registration, Driver License, and Title Transaction History

*****United States Census - Michigan Population by County

Date Created: 12/5/2025

For questions, please contact the Traffic Crash Reporting Unit at 517-241-1699.

Trafficway

Description: The trafficway is used to indicate if a roadway is divided and whether it serves one-way or two-way traffic.

Crash Totals by Trafficway

Trafficway	Traffic Crashes
Interstate Route	33,246
US Route	24,128
M Route	59,737
Interstate Business Loop	3,816
US Business Route	2,374
M Business Route	57
Connector	561
Road, City Street or Unknown	164,659
Not Reported	302
Total:	**288,880**

Fatal Crash Totals by Trafficway

Trafficway	Traffic Crashes
Interstate Route	81
US Route	75
M Route	236
Interstate Business Loop	10
US Business Route	11
M Business Route	0
Connector	3
Road, City Street or Unknown	594
Not Reported	2
Total:	**1,012**

Road Surface Condition

Description: Even though several road surface conditions can exist simultaneously in Michigan, the single most significant road surface condition that describes the crash scene is selected.

Crash Totals by Road Surface Condition

Road Condition	Traffic Crashes
Dry	212,246
Wet	40,417
Ice	10,969
Snow	15,491
Mud, Dirt, Gravel	2,283
Slush	2,391
Debris	61
Water (Standing/Moving)	187
Sand	38
Oily	38
Other	75
Unknown	4,684
Not Reported	0
Total:	**288,880**

Fatal Crash Totals by Road Surface Condition

Road Condition	Traffic Crashes
Dry	816
Wet	125
Ice	17
Snow	18
Mud, Dirt, Gravel	22
Slush	5
Debris	0
Water (Standing/Moving)	0
Sand	0
Oily	0
Other	2
Unknown	7
Not Reported	0
Total:	**1,012**

2024 Deer Involved Traffic Crashes

Description: The responding Law Enforcement Official must report if a deer is involved in a traffic crash or is a contributing factor in a traffic crash. This includes a deer making physical contact with the motor vehicle or a driver causing a collision due to avoidance of a deer within the roadway.

2024 Summary:

- Deer involved traffic crashes decreased one percent from 58,806 in 2023 to 58,324 in 2024.
- Deer involved fatalities decreased 26 percent from 19 in 2023 to 14 in 2024.
- 55.79 percent were male, and 44.11 percent were female in deer involved traffic crashes.
- 80.82 percent of deer involved fatalities and injuries were wearing a shoulder and lap belt restraint.
- November had the highest number of deer involved traffic crashes by month with 10,017 total crashes.
- Weekdays had the highest number of deer involved traffic crashes.
- There were 58,324 total deer involved traffic crashes in 2024, and 66,137 total individuals involved in these crashes, indicating that most deer involved crashes involved single occupant vehicles.
- Deer involved traffic crashes occurred most between 6 a.m. and 8:59 a.m. and 6 p.m. and 8:59 p.m.

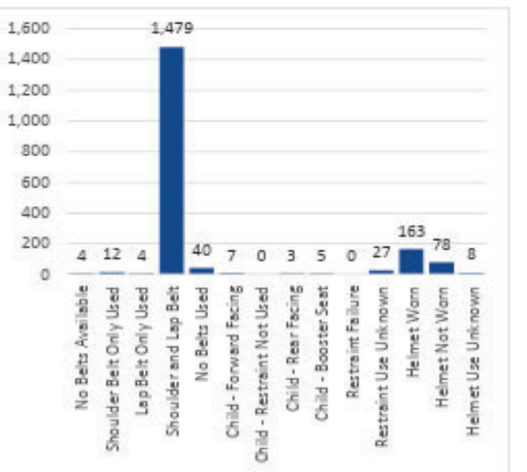
Deer Involved Traffic Crash Statistics for 2020-2024

	2020	2021	2022	2023	2024
Total Deer Involved Traffic Crashes	51,103	52,218	58,984	58,806	58,324
Total Deer Involved Fatal Traffic Crashes	5	10	11	19	14
Total Deer Involved Fatalities	5	10	11	19	14

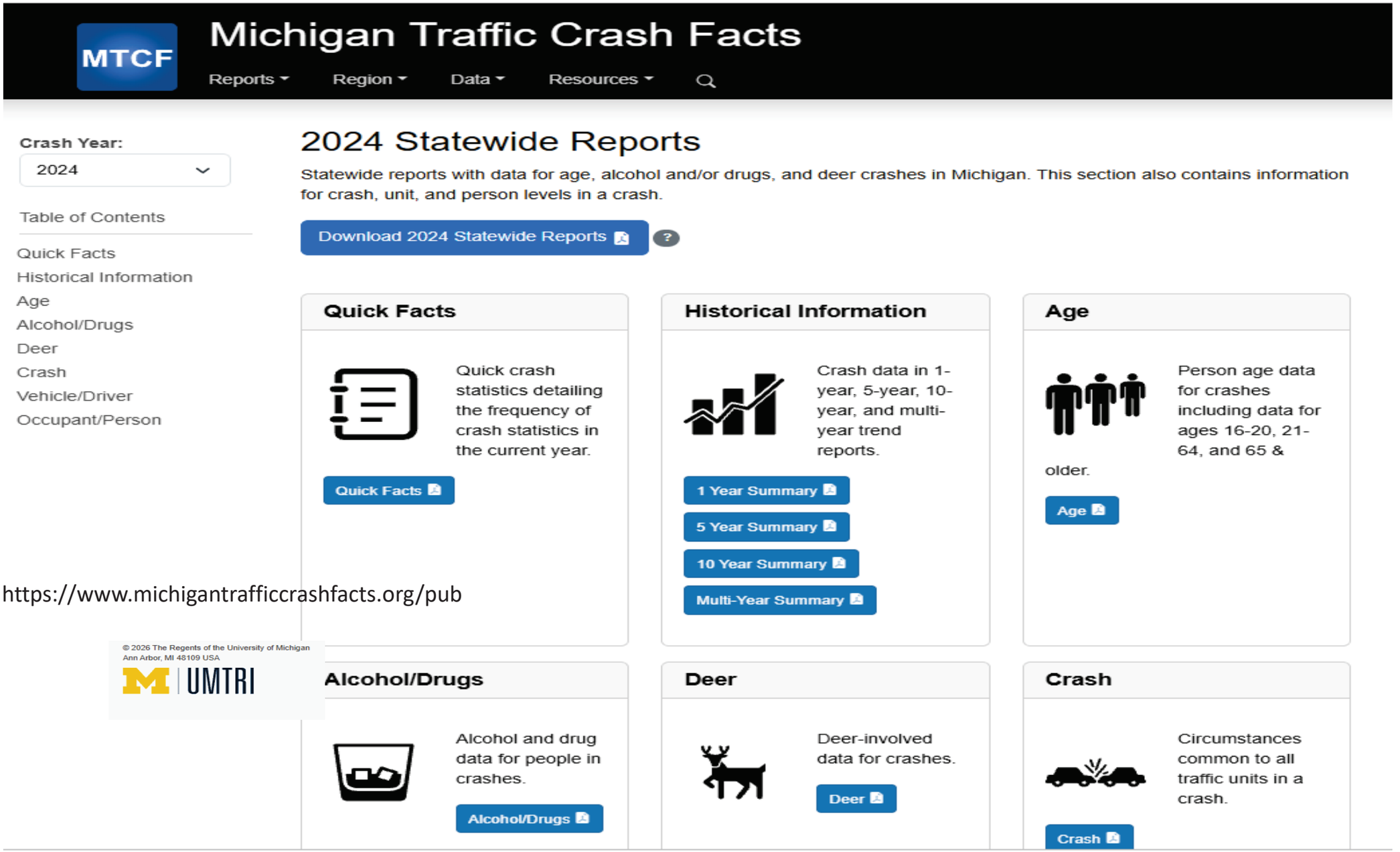
Age and Gender for Deer Involved Traffic Crashes

Age Range	Total	Male	Female	Non-Binary	Unknown
< 1	105	47	58	0	0
1-3	370	191	178	0	1
4-10	866	431	435	0	0
11-15	798	378	420	0	0
16-20	4,940	2,825	2,111	2	2
21-24	4,989	2,870	2,112	4	3
25-34	12,070	6,784	5,281	3	2
35-44	11,678	6,278	5,397	2	1
45-54	11,108	6,103	5,004	0	1
55-64	10,342	5,798	4,543	1	0
65-74	6,333	3,698	2,634	1	0
75-84	2,176	1,292	884	0	0
85-94	298	191	107	0	0
> 95	8	2	6	0	0
Not Reported	56	10	4	0	42
Total:	**66,137**	**36,898**	**29,174**	**13**	**52**
Percentage:		**55.79%**	**44.11%**	**0.02%**	**0.08%**

Restraint Use for Deer Involved Fatalities and Injuries



The table and chart above include all party types involved in a deer involved traffic crash (driver, passenger, pedestrian, bicyclist or train engineer)



https://www.michigantrafficcrashfacts.org/pub

Office of Highway Safety Planning

- Traffic Safety Campaigns
- Secondary Road Patrol
- Child Passenger Safety
- Distracted Driving
- Equipment
- Grant Applications
- Law Enforcement Programs
- Traffic Safety Materials
- Safety Programs
- Safety Summit
- Traffic Crash Data
- Traffic Safety Partners

OHSP-Michigan

Division of Michigan State Police

Post Crash Care

Michigan Trauma System-right patient to the right resources at the right time

Prevention-EMS-Trauma Facilities-Rehab

OHSP Collaborations

- EMS Traffic Records Reporting
- GAPRS project
- Trauma Data Dashboard
- Transportation Injury Prevention

Improving Quality of Crash Severity and Injury Assessment within MIEMSIS

- TR-23-08 / TR-04-IG
- Michigan OHSP – SIGMA Grant

- Full time data analyst
- Four-year project
- Focused on traffic crash records to evaluate current documentation, identify gaps, provide education, and support improvement
- Lays the groundwork for future projects by ensuring that we have accurate information

2023 Highway Safety Grant TR-23-08

Year 1	Year 2	Year 3	Year 4	Continued…
EVALUATE	CREATE	IMPROVE	EDUCATE	EXPAND
Hire Traffic Crash Data Quality Specialist	Develop template for documentation improvement plans to insert data from MI-EMSIS and biospatial reports.	Determine best practices for documentation of motor vehicle crashes.	Develop and distribute an education plan for documentation and reporting of motor vehicle crashes.	Improving Quality of Crash Severity Assessment within MIEMSIS
Identify data elements that contribute to a crash record	Utilizing MI-EMSIS and biospatial report, create individual reports based on: • EMS agencies • Software Vendors • Medical Control Authorities • Preparedness Region	Identify workflow and provider practices to complete proper documentation for each software vendor.	Develop the following for EMS education program sponsors and continuing education: • Lesson plans • Education tools • Presentation materials	Injury Prevention in Emergency Vehicle Crashes
Identify case definition	Distribute crash documentation improvement plans for: • EMS agencies • Software vendors • Medical Control Authorities	Create and publish tool for EMS personnel that covers documentation of motor vehicle crashes for each software vendor.	Distribute and publish materials using available digital platforms: • Michigan EMS Website • MI-Train	Statewide Post Crash Care
Develop reporting templates for comparison and initiative tracking				
Create graphical representation of element present reporting				
Identify percentage of missing or inconsistently reported elements sorted by: • EMS agency • Software Vendor • Medical Control Authority • Preparedness Region				

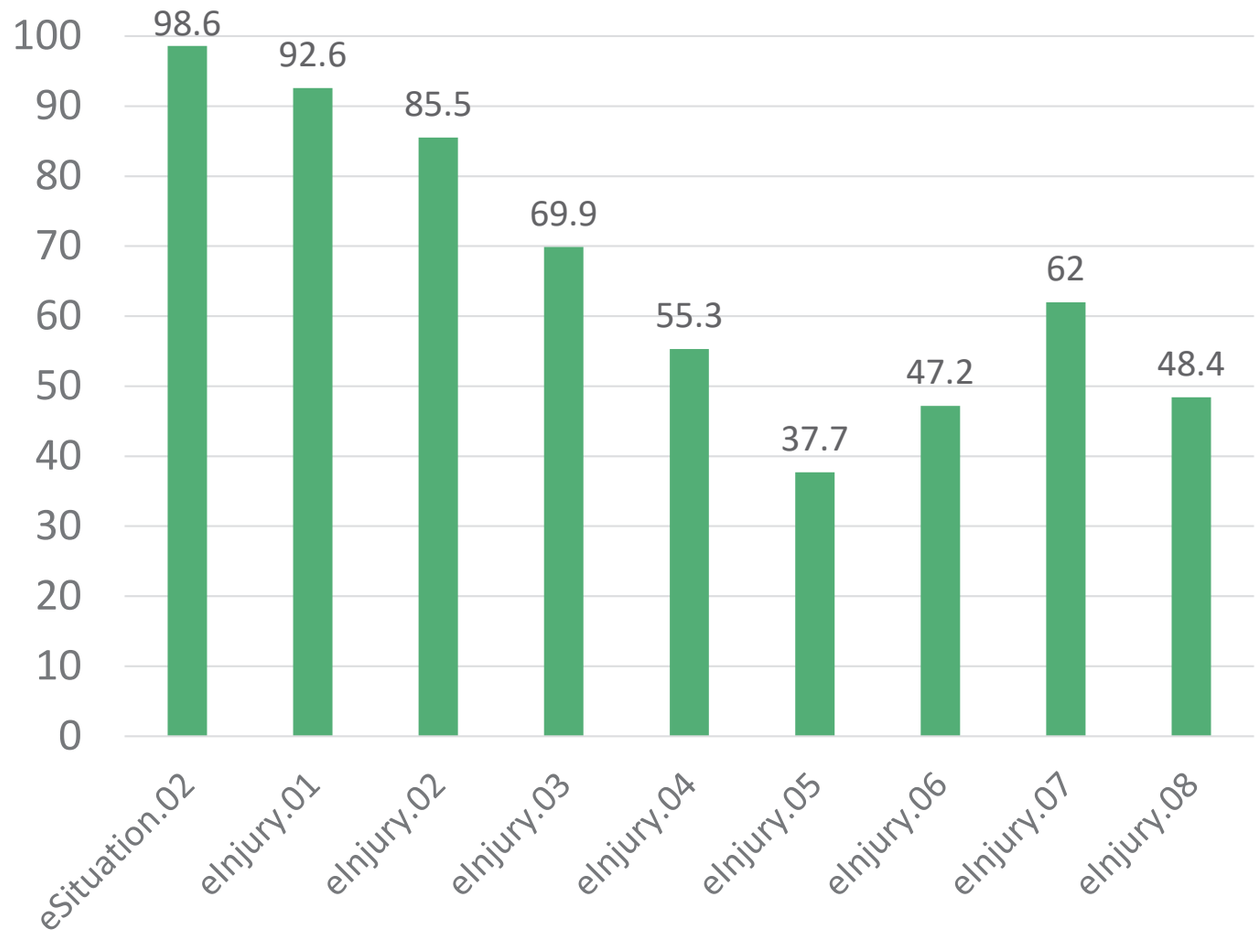
MDHHS
Michigan Department of Health & Human Services

MSP/EMS Data Linkage

- Before linkage: police and EMS each had separate records
- In late 2022:
  - 10 years of historical data sent from Michigan State Police to biospatial
  - Records started submitting to Biospatial monthly
- Police and EMS each have their own repositories, but now we can easily go back and forth

MVC Elements – Completeness (%)

- eSituation.02 – Possible Injury
- eInjury.01 – Cause of Injury
- eInjury.02 – Mechanism of Injury
- eInjury.03 – Trauma Center / Triage Criteria
- eInjury.04 – Vehicular, Pedestrian or Other Injury Risk Factor
- eInjury.05 – Main Area of Vehicle Impacted by Collision (Clock Position)
- eInjury.06 – Location of Patient in the Vehicle
- eInjury.07 – Use of Occupant Safety Equipment
- eInjury.08 – Airbag deployment



Statewide Post Crash Care Quality Improvement

Michigan OHSP – SIGMA Grant

2024-TR-07-IG

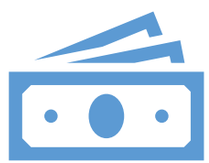
- Establish data linkages across the system
- Evaluate post-crash care, and documentation of, throughout Michigan
- Develop education curriculum for EMS personnel and unlicensed first responders to promote quality care for MVC patients
- Support system-wide training needs

Ground Ambulance Pediatric Restraint Systems (GAPERS)

Collaborative opportunity-EMS and Systems of Care Division and OHSP to support EMS agencies through reimbursement for the purchase of Ground Ambulance Pediatric Restraint systems to safely transport pediatric patients.

14 EMS agencies have participated

197 GAPRS secured

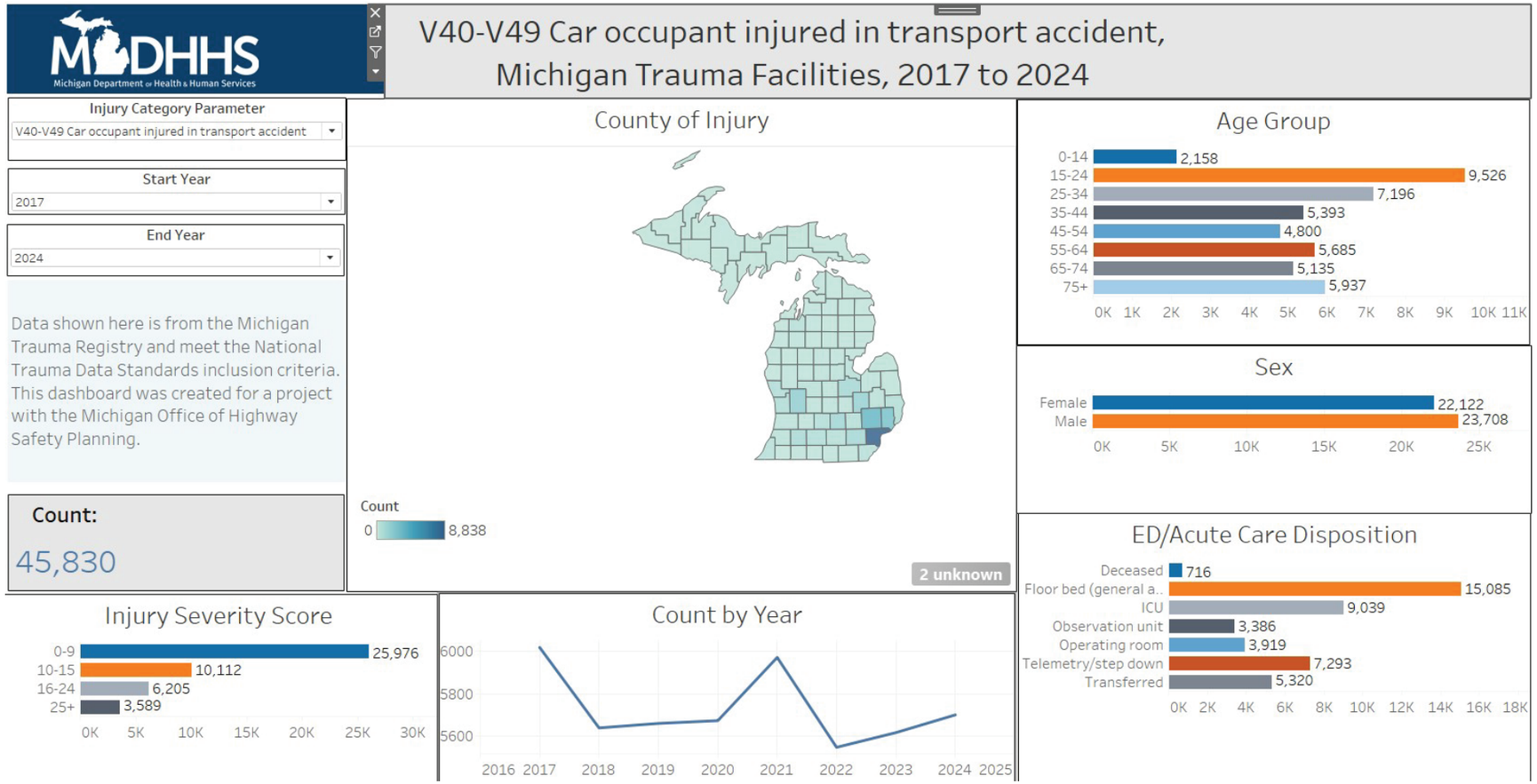


$99,461 for reimbursement

SOC Section & OHSP Collaboration

- Accurate, complete trauma registry data supported by Data Technician.
- Develop and publish an interactive trauma injury data dashboard.
- Survey Injury Prevention Coordinators (120) to assess the number, type, reach and impact of transportation safety programs.
- Establish a statewide committee of Injury Prevention subject matter experts to consider collaborating on and leveraging resources for transportation injury prevention initiatives, gaps in services and education.

Trauma Dashboard

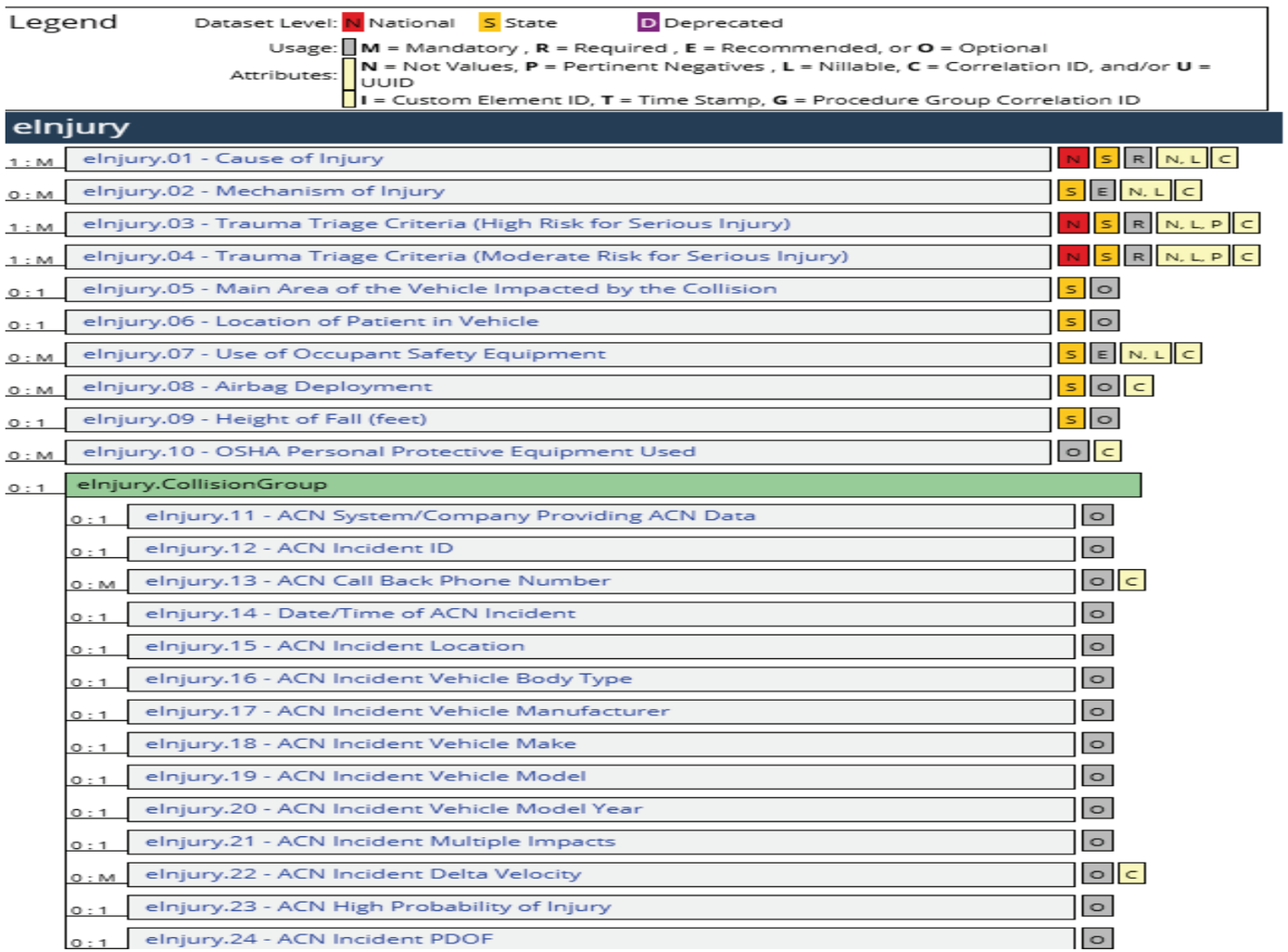


Data sets tell the story…. Each one a little differently

Data Collection Systems

MI-Emergency Medical Services Information System	Michigan Trauma Registry	Traffic Crash Reporting System
Type-Patient Care Record	**Type-**Registry	**Type**-Central Repository for all traffic crash data
Users-EMS Providers & hospital staff approx. 28,000+, researchers, Medicaid, Opioid Epidemiologists	**Users-**Trauma facility staff, researchers, regional trauma system partners, Injury Prevention partners	**Users**-law enforcement, federal, state, local traffic safety partners, UMTRI
Data set-National EMS Information System (NEMSIS) + state elements	**Data Set-**National Trauma Data Set (NTDS)	**Data Set-**UD-10 report (form required by law on all reportable crashes)
Number of records-15,430,027	Number of Records-795,665	Number of Records-315,000 annually
Software vendor-Image Trend/biospatial	Software vendor-Image Trend/biospatial	Software-MI-Crash Analysis Tool-view records
Data Dictionary	Data Dictionary	User manual

NEMSIS v 3.5 Data Dictionary



Trauma Registry

- National Trauma Data Set (NTDS)
- Validated data collected and submitted by trained data staff
- American College of Surgeons-Trauma Quality Improvement Program (ACS-TQIP)
- Michigan Administrative Rule requirement
- 2017 first year full data set
- Number of Incidents in the trauma registry-795,665 (2025)

Trauma Registry Data Dictionary

Demographics TR1.20 – Patient's Home Zip/Postal Code

Definition

The Patient's Home Zip/Postal Code of primary residence.

Field Values

Relevant value for data element

Additional Information

Can be stored as a 5- or 9-digit code (XXXXX-XXXX) for US or can be stored in the postal code format of the applicable country.
May require adherence to HIPAA regulations.
If *Patient's Home ZIP/Postal Code* is "Not Applicable", report data element: *Alternate Home Residence*.
If *Patient's Home ZIP/Postal Code* is "Not Known/Not Recorded", report: *Patient's Home Country*, *Patient's Home State* (US only), *Patient's Home County* (US only) and *Patient's Home City* (US only).
If *Patient's Home ZIP/Postal Code* is reported, must also report *Patient's Home Country*.
When ZIP is "99999," element will populate as "Not Known."

Data Source Hierarchy Guide

1. Fact Sheet
2. Billing Sheet
3. Admission Form

Associated Edit Checks (NTDS)

Rule ID	Level	Message
0001	1	Invalid value
0002	2	Field cannot be blank
0040	1	Single Entry Max exceeded

UD-10 Report

Injury

Injury ○K ○A ○B ○C ○O

An **Injury** selection must be made for each driver/person that's recorded as a unit. The injury recorded should be based on the latest information available at the time the report was completed.

Injury

K - Fatal Injury:
Any injury which results in death

A - Suspected Serious Injury:
Any injury other than fatal which prevents normal activities and generally requires hospitalization

B - Suspected Minor Injury:
Any minor injury that is evident to others at the scene

C - Possible Injury:
Any possible injury that is reported or claimed

O - No Injury:
No indication of injury

Note: Any injured passengers involved in the crash must be recorded in the **Involved Party Section**.

K **Fatal Injury** is any injury that results in death due to a motor vehicle traffic crash. Also be sure to select **Fatal** under **Special Checks**. Fatal injuries are further explained in Section 1.

A **Suspected Serious Injury** is any injury, other than fatal, that prevents the injured person from walking, driving, or normally continuing the activities which he or she was capable of performing prior to the motor vehicle traffic crash.

Includes: Severe lacerations/broken or distorted limbs/skull fracture/crushed chest/ internal injuries/unconscious when taken from the crash scene/unable to leave crash scene without assistance/significant burns/paralysis.

Excludes: Momentary unconsciousness.

General: Determinations are made at the time the injured person leaves the crash scene. It is not necessary to consult with doctors or hospitals unless information is not otherwise available. Apparent condition immediately after the crash does not govern classification because the person may recover from hysteria quickly or may begin to feel the effects of internal or other injuries between the time of the crash and time of leaving the scene.

a. Medical treatment at the crash scene or later makes no difference. What the person does at the scene is important.
b. Hospitalization normally will be required for serious injuries.
c. Duration of the disability after injury makes no difference. Incapacitation is important.
d. Developments after leaving the scene make no difference, except in case of death.

B **Suspected Minor Injury** is any minor injury that is evident at the scene of the crash, other than fatal and serious injuries.

Includes: Lump on head/abrasion/minor lacerations.

Excludes: Limping (the injury cannot be seen).

C **Possible Injury** is any injury reported or claimed which is not a fatal, suspected serious, or suspected minor injury.

Includes: Momentary unconsciousness/claim of injuries not evident/limping/complaint of pain or nausea.

General: Possible injuries are those which are claimed or reported, or indicated by behavior, but no wounds or injuries are readily evident.

O **No Injury** is a situation where there is no reason to believe that the person received any bodily harm from the traffic crash.

Trauma System Components

Prevention-Pre-hospital-Hospital-Rehabilitation

The trauma system works to ensure the right patient gets to the right resource at the right time for the best outcome and return to a productive life

What happens after the crash

Prehospital assessment, triage, care and destination

Trauma team is activated and resources ready

Trauma resuscitation implemented (airway-breathing-circulation)

Post resuscitation care ongoing (could include ongoing plans for transfer)

Hospital care

Discharge planning

Rehabilitation

Education and training, documentation is constant

Readiness resources can cost up to $2 million/year

Specialty services may be needed i.e. ophthalmology, neurology, hand surgery, pediatrics

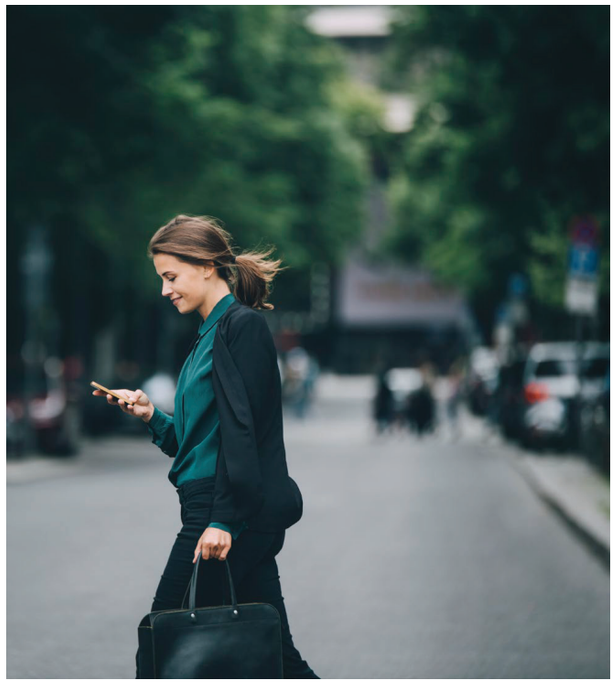
Trauma system is designed to support the verification of resources

Some injuries require multiple surgeries, critical care services and complex care

Rehabilitation is multifaceted

Trauma System

- Pre-hospital triage protocol and destination determination
- Trauma facilities resources verified and designated
- Regional structure drives the system
- Data collected and used for decision making
- Rehabilitation to support a return to a productive life
- Injury prevention to reduce death and disabilities



Safe systems

Humans make mistakes

Humans are vulnerable

Responsibility is shared

Safety is Proactive

Death and Serious Injury is Unacceptable

Thank you

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