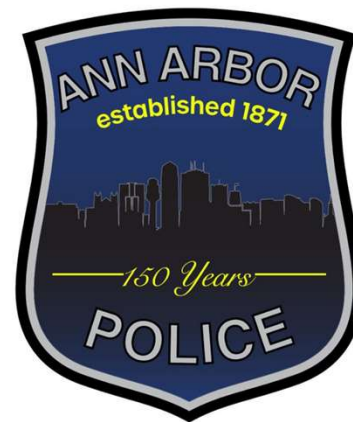


# Vision Zero Plan Progress Report



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**TOWARDS VISION ZERO**

September 2024

## Presenters

### **Ann Arbor Police Department**

Mike Scherba, Police Lieutenant

### **Engineering**

Cynthia Redinger, Transportation Engineer

Suzann Flowers, Transportation Program Manager



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# Agenda

- Traffic safety plan, Vision Zero through a Safe Systems Approach
- City-wide crash summary and trends
- Engineering review
- Program Areas



## AAPD 2024 Traffic Safety Plan Elements

- Traffic Unit Mission
- Commitment to Vision Zero
- Traffic Crash Analysis
- Crash Mitigation Strategy
- Driving Equality Ordinance
- School Safety Programs



# TRAFFIC UNIT MISSION



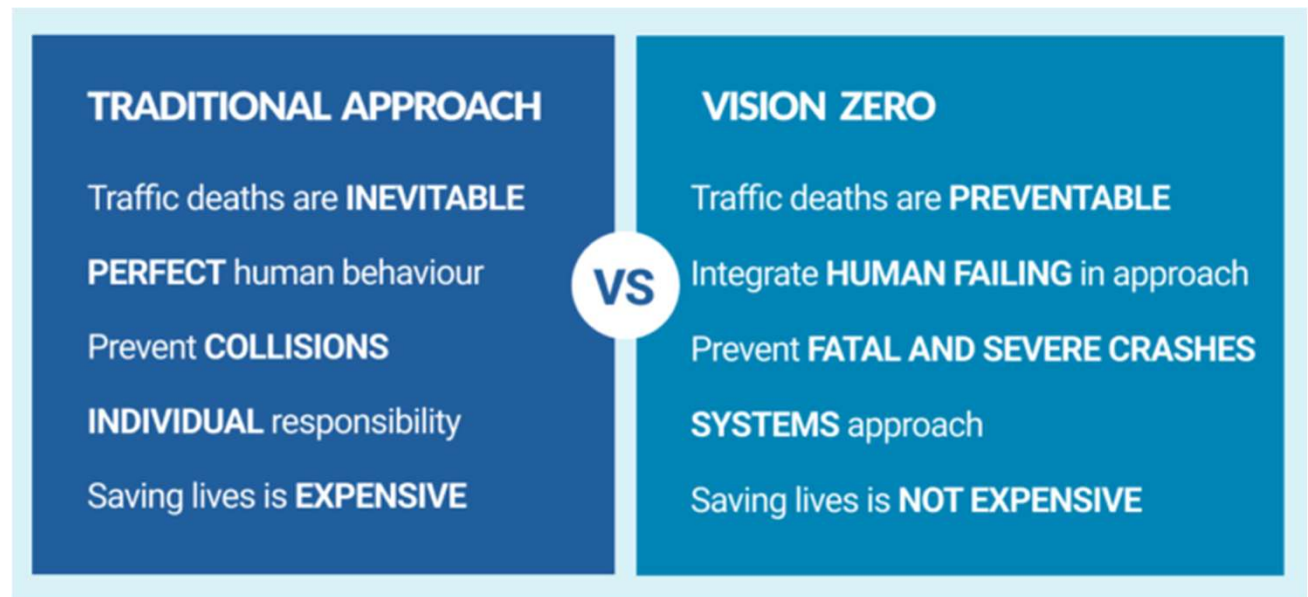
To make traveling in Ann Arbor safer by changing driver behavior through education, enforcement and engineering



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## What is Vision Zero?

Approach to eliminating death and serious injuries from traffic crashes



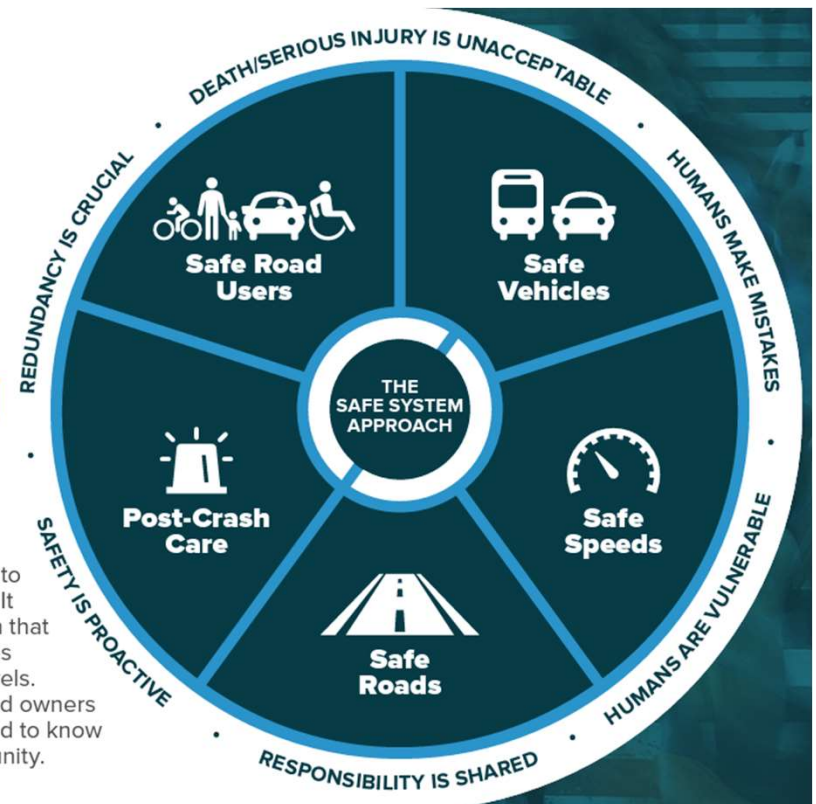
# Vision Zero and Safe Systems Approach

## 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.



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# Vision Zero and Safe Systems Approach

## 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.





## VZ and SSA is a Paradigm Shift

Cities that adopt Vision Zero policies are trying to create an **entirely new framework** for addressing a problem...”



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# How A2 Moving Together aligns with safe systems

A2 Moving Together Program Areas	Safe Roads	Safe Road Users	Safe Vehicles	Safe Speeds	Post Crash Care
Behavior Change		X		X	
Speed Management Program	X	X		X	
Street Reconfiguration Road Diet/Other	X			X	X
Quick Build Program	X	X		X	X
Capital Investment	X			X	X
Messaging Campaign		X		X	
Education & Enforcement Campaign		X		X	

# Serious Traffic Crash Overview



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# The S.A.R.A MODEL

of Problem-Oriented Policing

## SCANNING

Too many traffic crashes  
resulting in serious injury  
or death



## ANALYSIS

Use crash data to pinpoint  
root causes and location of  
crashes



## RESPONSE

Address driver behavior  
through education,  
enforcement and  
engineering



## ASSESSMENT

Evaluate the effectiveness of  
the response



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# Complaints received by AAPD

(all traffic related  
complaints)

## **2024**

- 140 traffic complaints received thus far
  - 79 traffic complaints expressed concerns of speeding
  - 14 of those speed complaints were school zone related

## **2023**

- 385 traffic complaints received
  - 231 traffic complaints expressed concerns of speeding
  - 41 of those speed complaints were school zone related

## **2022**

- 297 traffic complaints
  - 186 traffic complaints expressed concerns of speeding
  - 41 of those speed complaints were school zone related

## **2021**

- 107 traffic complaints
  - 70 traffic complaints expressed concerns of speeding



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## Injury Type - A

**Suspected Serious Injury (A)** – A suspected serious injury is any injury other than fatal which results in one or more of the following:

- ◆ Severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood.
- ◆ Broken or distorted extremity (arm or leg).
- ◆ Crush injuries.
- ◆ Suspected skull, chest, or abdominal injury other than bruises or minor lacerations.
- ◆ Significant burns (second and third degree burns over 10% or more of the body).
- ◆ Unconsciousness when taken from the crash scene.
- ◆ Paralysis.



## Injury Type - B and C

**Suspected Minor Injury (B)** – A minor injury is any injury that is evident at the scene of the crash, other than fatal or serious injuries. Examples include lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue/muscle).

**Possible Injury (C)** – A possible injury is any injury reported or claimed which is not a fatal, suspected serious or suspected minor injury. Examples include momentary loss of consciousness, claim of injury, limping, or complaint of pain or nausea. Possible injuries are those that are reported by the person or are indicated by his/her behavior, but no wounds or injuries are readily evident.



## Crash Investigation (CI) Unit Callouts

**Over the past 5+ years there have been a  
total of  
37 crash investigation (CI) callouts**

### **2024**

5 callouts. 3 fatalities and 4 serious injuries.

### **2023**

8 callouts. 4 fatalities and 4 serious injuries.

### **2022**

5 callouts. 1 fatality and 4 serious injuries.

### **2021**

6 callouts. 5 fatalities and 1 serious injury

### **2020**

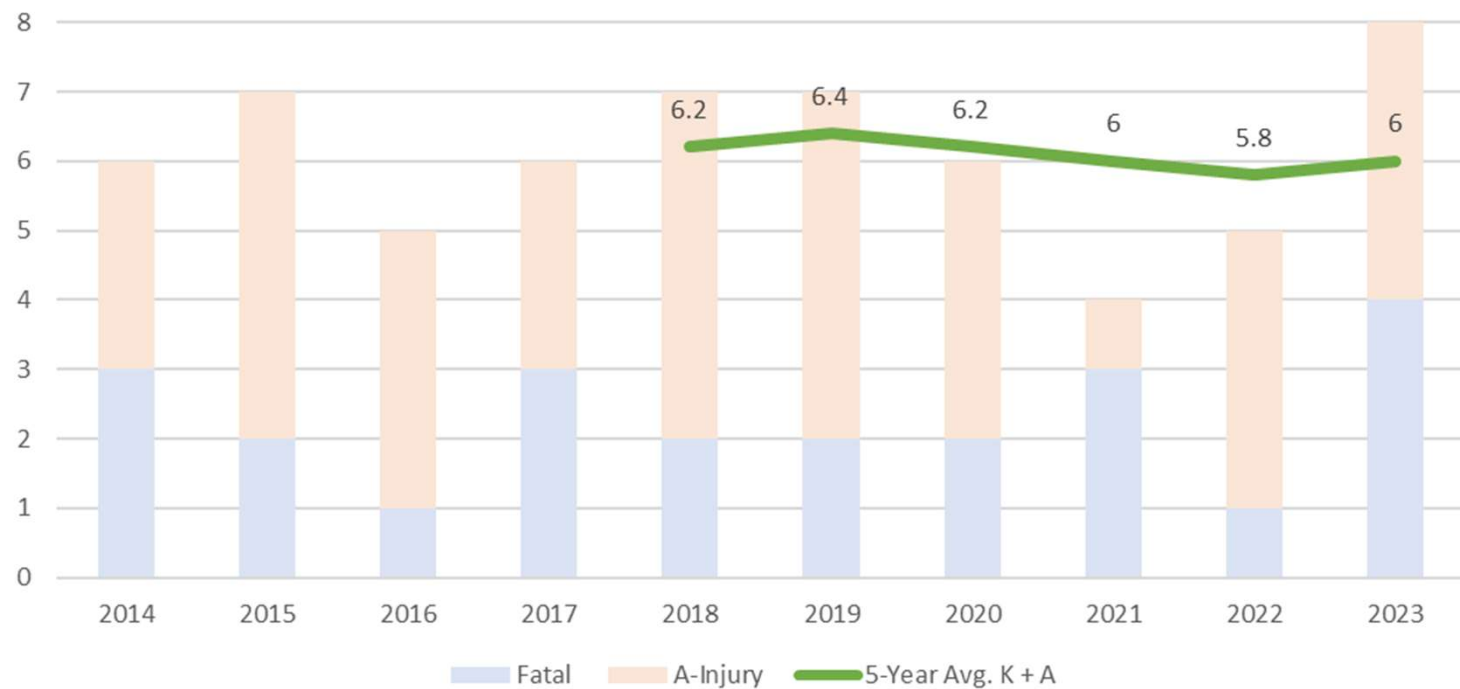
6 callouts. 2 fatalities and 4 serious injuries

### **2019**

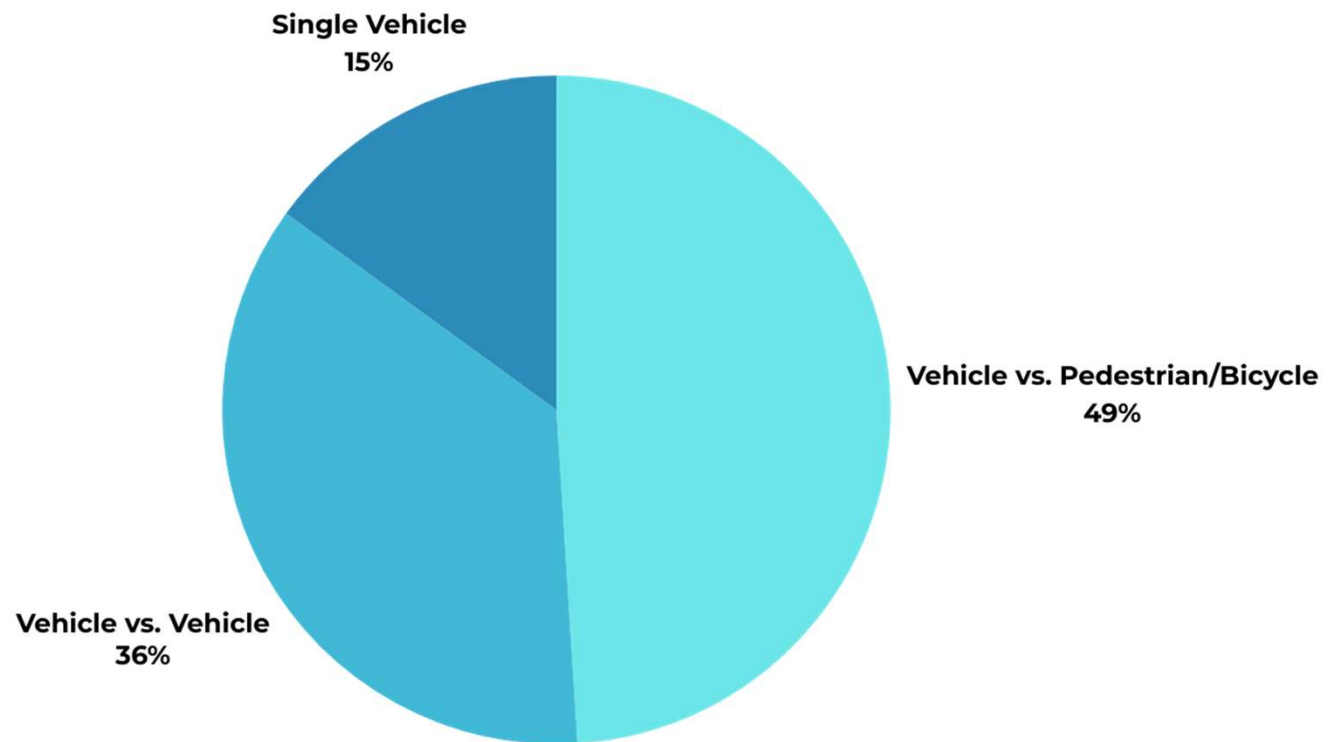
7 callouts. 2 fatalities and 5 serious injuries



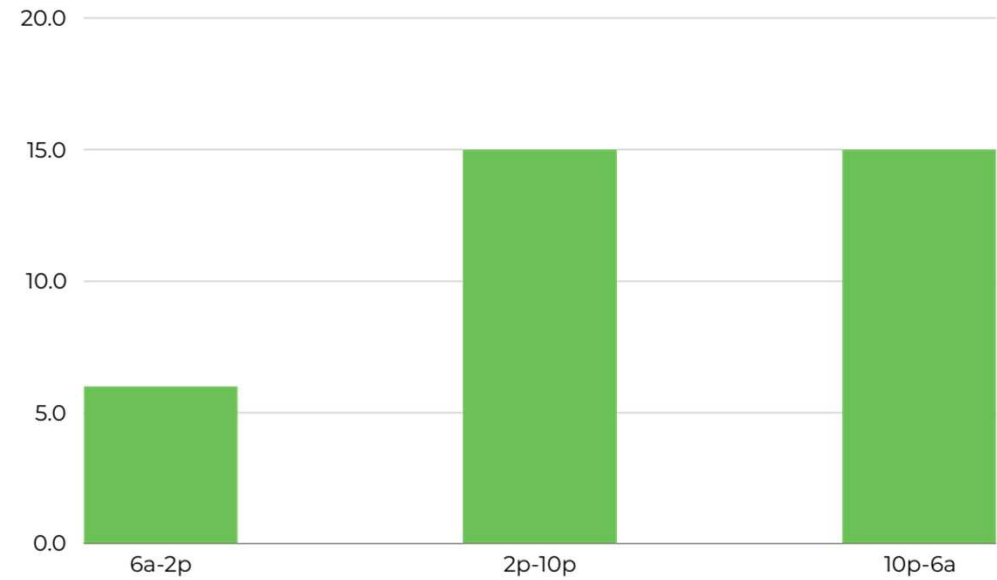
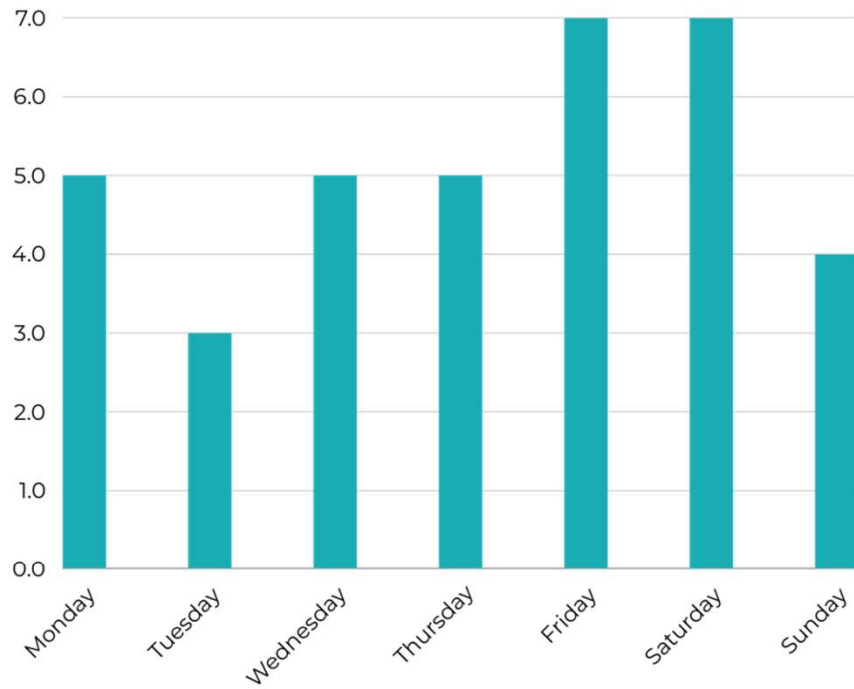
## AAPD Crash Investigations 2014-2023



## AAPD Crash Investigations by Type



## Serious Crash/Fatal CI - Days and Times

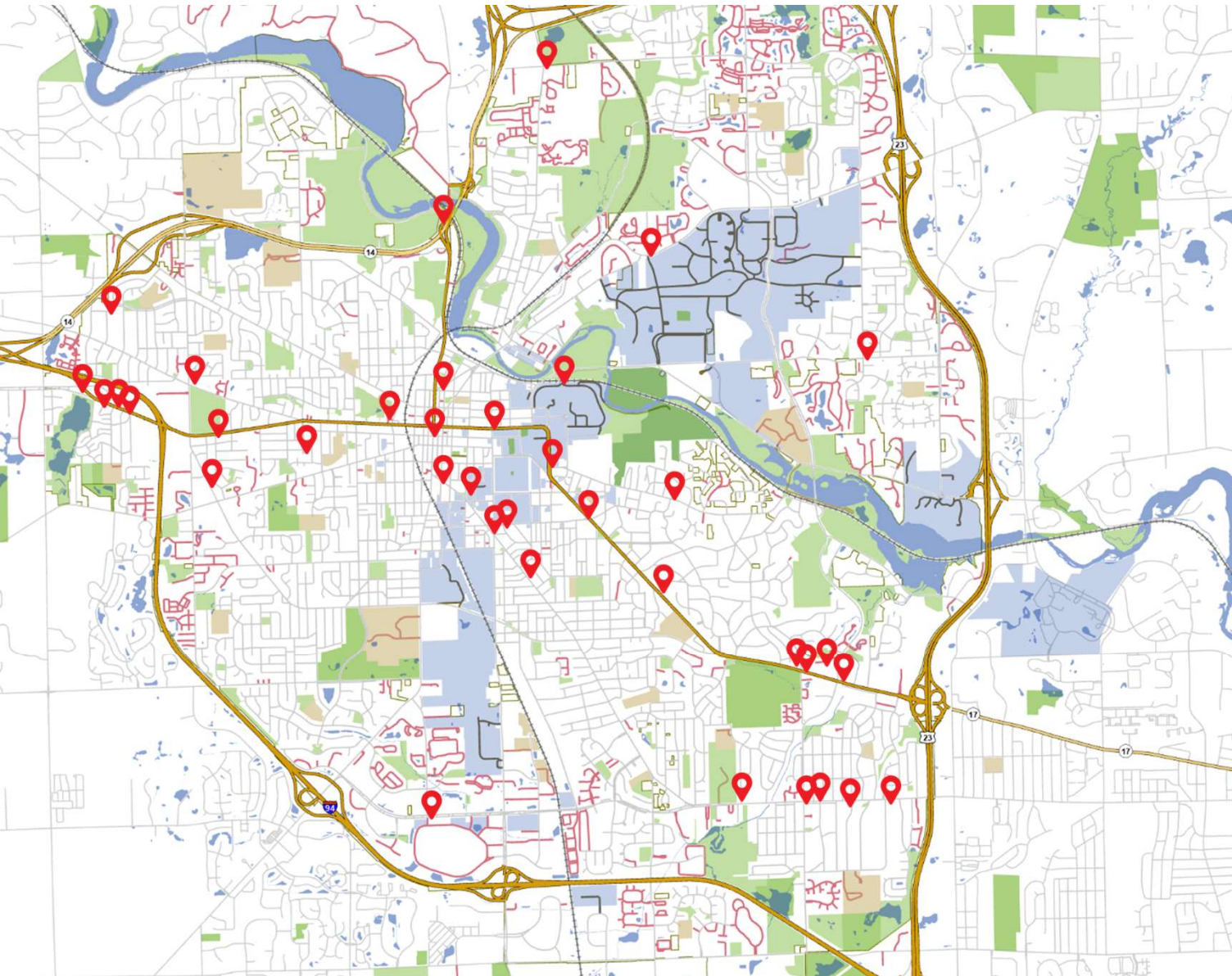


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## 2019-2024 Accident CI



**AI Callout Locations**



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## CI Callouts – Top 3 Corridors

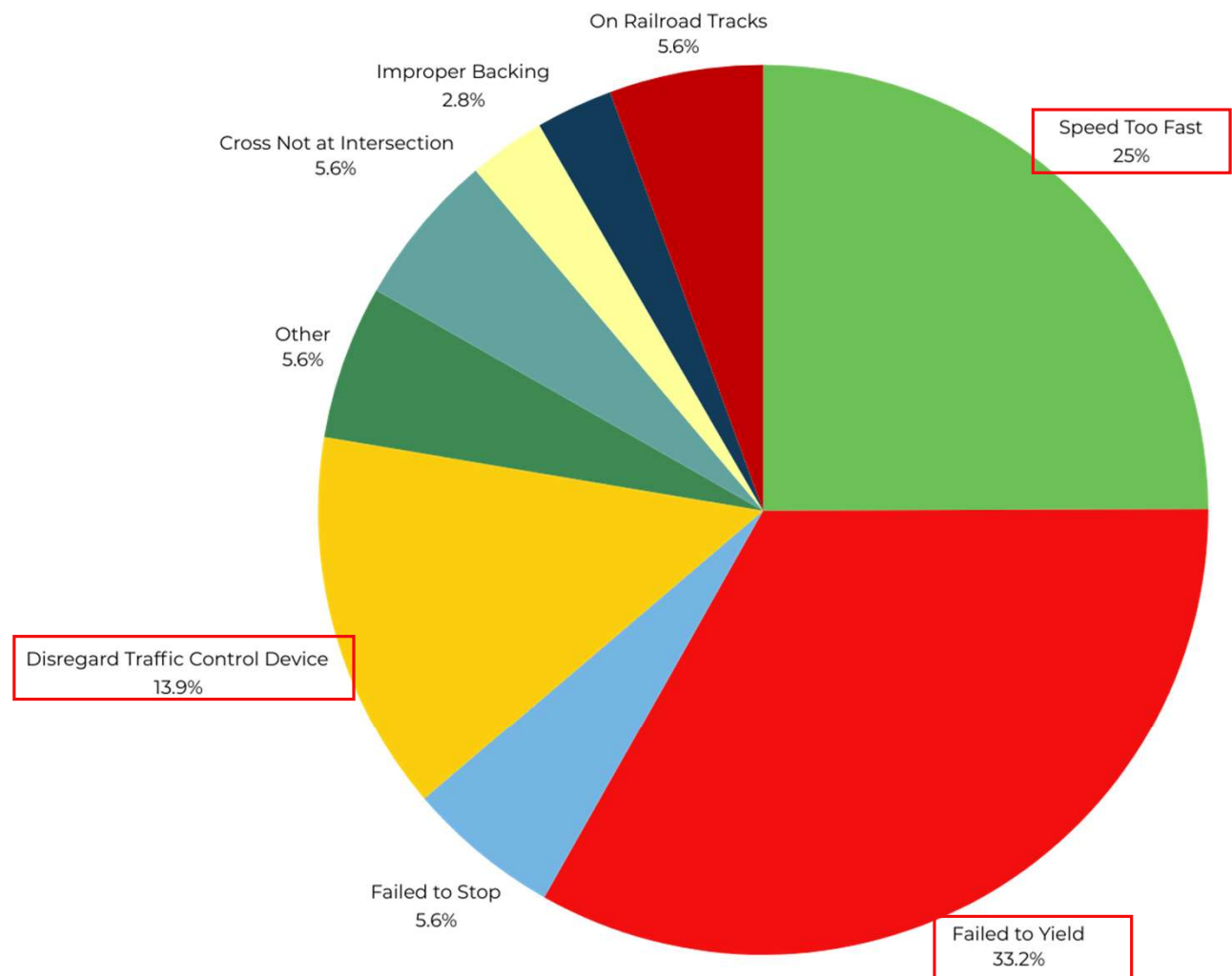
Washtenaw Ave from Geddes Ave to Huron Pkwy.  
6 call outs

Packard St from Fifth Ave to Turnberry Dr.  
6 call outs

Jackson Ave from Burwood Ave to Gralake Ave.  
5 call outs

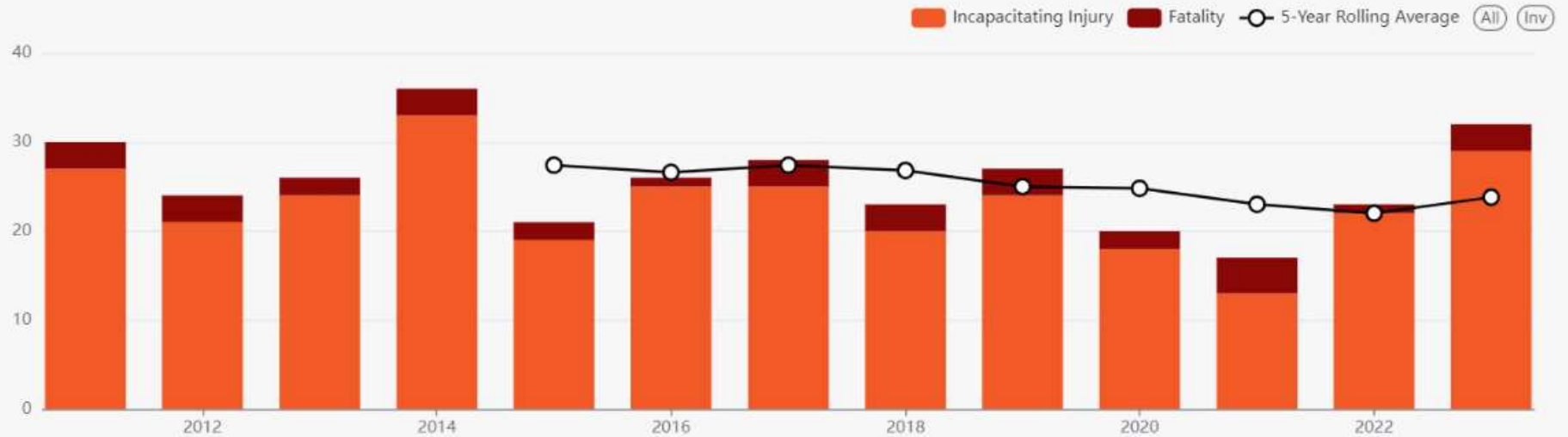


## Hazardous actions found in K+A crashes



# Annual Crash Data Summary

Crashes by Year



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## Annual Crash Data Summary

Injury Type	2019	2020	2021	2022	2023
<b>Fatality (K)</b>	3	2	4	1	3
<b>Incapacitay Injury (A)</b>	24	18	13	22	29
<b>Possible Injury (B)</b>	249	131	187	156	168
<b>Non-Incapacitating Injury (C)</b>	189	96	134	133	150
<b>Property Damage Only</b>	2.67K	1.26K	1.69K	1.81K	2.11K

\*2024 data set not available until spring  
2025



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## Annual Crash Data Summary

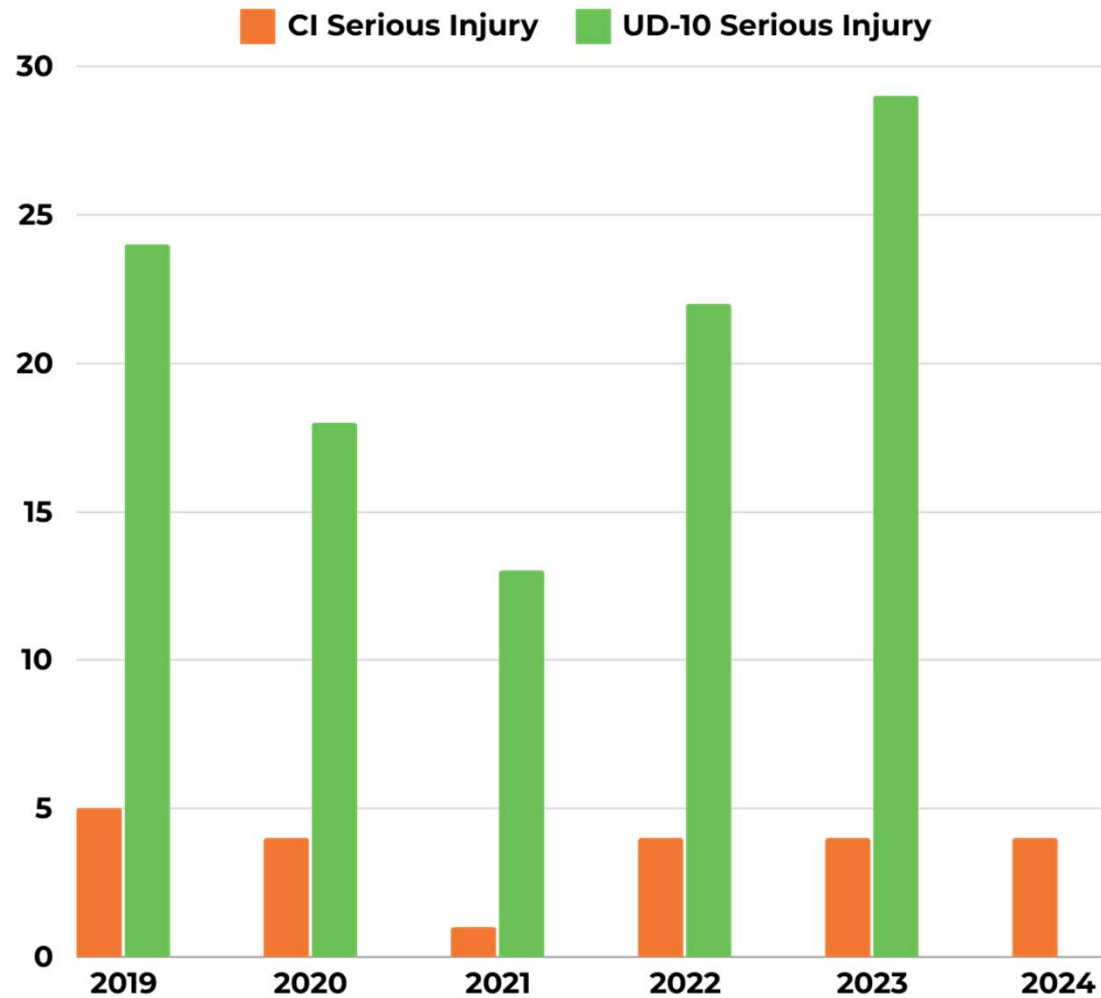
Injury Type	2019	2020	2021	2022	2023
<b>Fatality (K)</b>	3	2	4	1	3
<b>Incapacity Injury (A)</b>	24	18	13	22	29



## CI Callouts and UD-10 Fatal Crashes



## CI Callouts and UD-10 Serious Injury Crashes



What are the  
K+A UD-10 cited  
behaviors in  
Ann Arbor  
crashes?

**51%**



Failure to Yield

**11%**



Impaired Driving

**7%**



Reckless/careless driving

**7%**



Speeding

**3%**



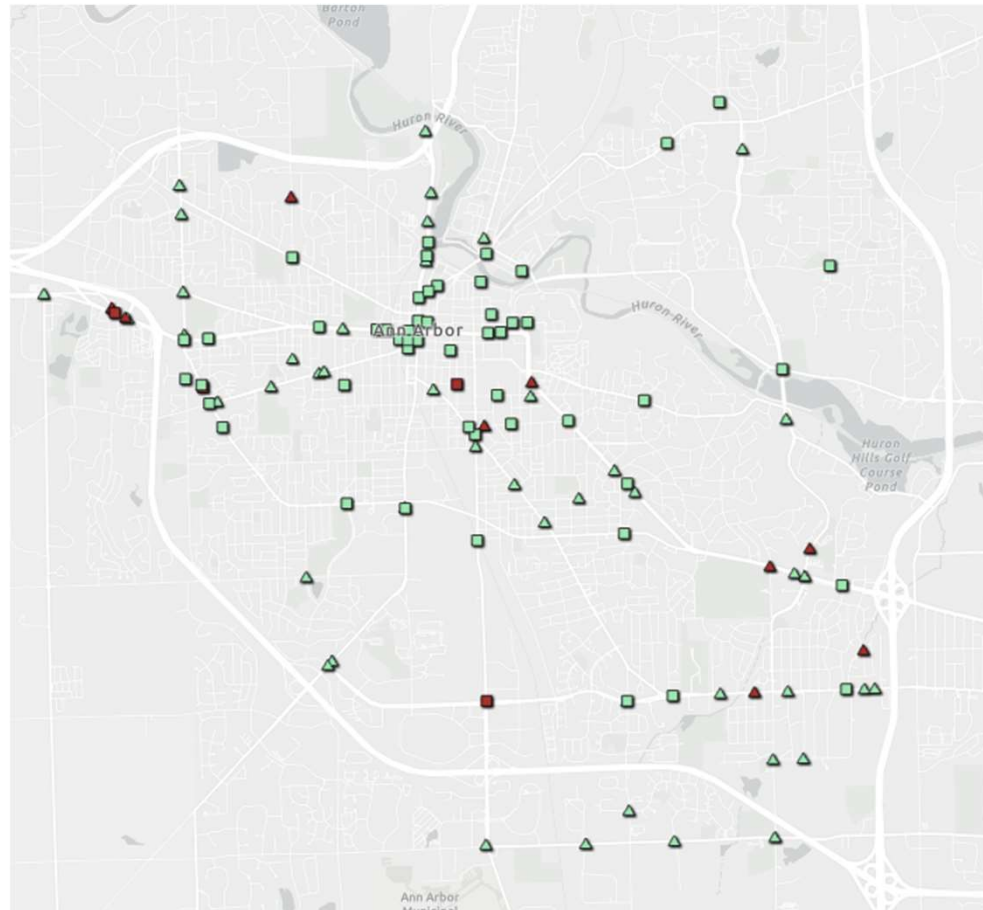
Disregarded traffic signs/signals



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## K+A Crash Map

## Crash Map



### Severe Crashes

#### Pedestrian or Bicycle Severe Crashes

■ Incapacitating Injury

■ Fatal

#### Vehicle Severe Crashes

▲ Incapacitating Injury

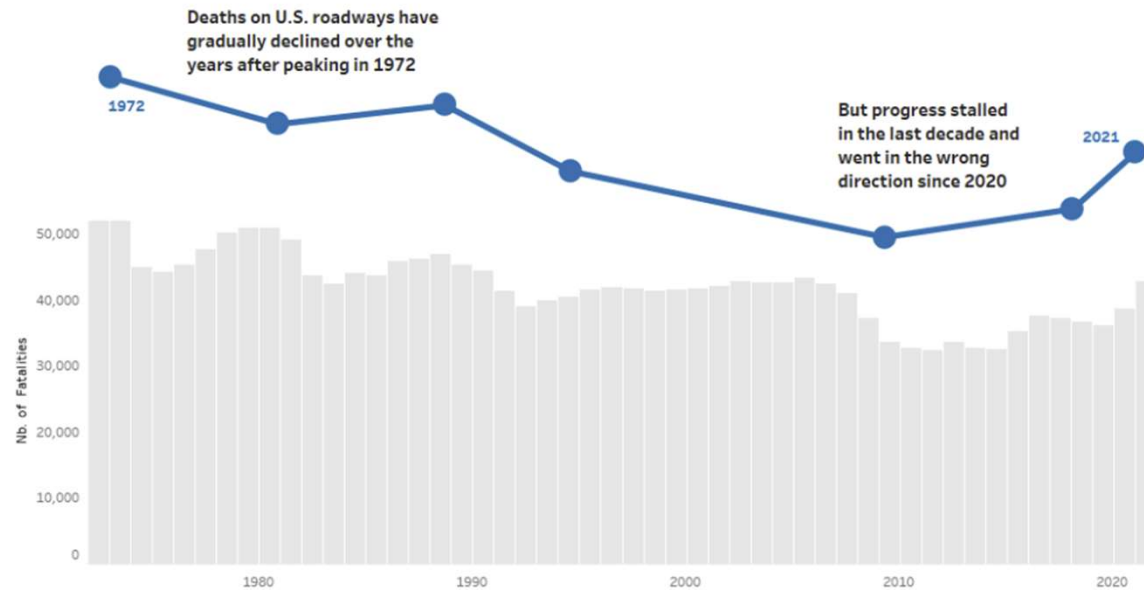
▲ Fatal



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## National Data

### 42,915 people died on America's roads in 2021



Compared to 2020, fatalities increased:

- 10.5% overall. 42,915 lives were lost, *the highest total number recorded since 2007*
- 16% on urban roads
- 14% among drivers ages 65 and older
- 13% among people walking, totaling 7,342 lives lost, *the highest recorded in decades*
- 13% among fatal crashes involving at least one large truck
- 9% among motorcyclists, totaling 6,101 lives lost, *the highest total ever recorded*

Source: Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2021, National Highway Traffic Safety Administration, DOT HS 813 298, May 2022.

[The Roadway Safety Problem -  
transportation.gov/NRSS/SafetyProblem](https://www.transportation.gov/NRSS/SafetyProblem)

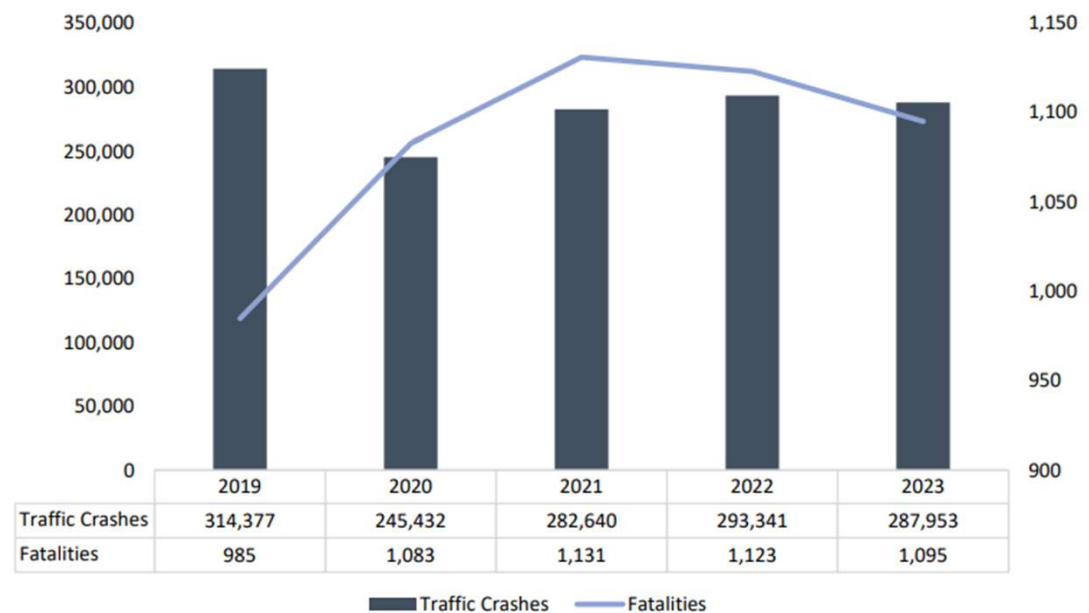


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## State Data

**Michigan Traffic Crash Statistics for 2019-2023**

	2019	2020	2021	2022	2023
Total Crashes	314,377	245,432	282,640	293,341	287,953
Total Fatal Crashes	902	1,010	1,068	1,053	1,021
Total Fatalities	985	1,083	1,131	1,123	1,095
Total Injury Crashes	54,539	44,417	51,666	51,066	51,097
Total Injuries	74,963	60,986	71,246	70,281	71,085
Total Property Damage Crashes	258,936	200,005	229,906	241,222	235,835



[2023 Statewide Traffic Crash Data Year End Report](https://michigan.gov/msp)  
[michigan.gov/msp](https://michigan.gov/msp)



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## State Data

### Hazardous Action Reported for Traffic Crashes

Hazardous Action	Total
None	252,399
Speed Too Fast	21,535
Speed Too Slow	146
Failed to Yield	46,434
Disregard Traffic Control	10,806
Drove Wrong Way	420
Drove Left of Center	2,395
Improper Passing	3,261
Improper Lane Use	14,579
Improper Turn	5,875
Improper / No Signal	440
Improper Backing	6,195
Unable to Stop	57,513
Other	14,060
Unknown	28,593
Reckless Driving	2,594
Careless Driving	10,792
Not Reported	6,320
<b>Total:</b>	<b>484,357</b>

### Hazardous Action Reported for Fatal Traffic Crashes

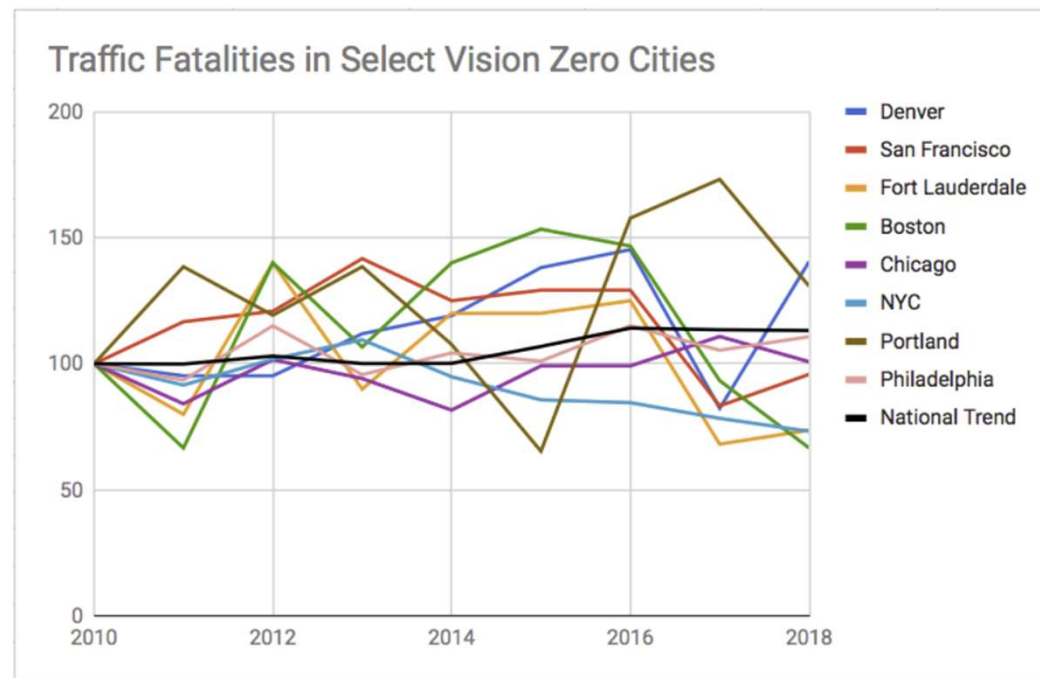
Hazardous Action	Total
None	686
Speed Too Fast	195
Speed Too Slow	1
Failed to Yield	117
Disregard Traffic Control	64
Drove Wrong Way	19
Drove Left of Center	61
Improper Passing	10
Improper Lane Use	16
Improper Turn	10
Improper / No Signal	1
Improper Backing	3
Unable to Stop	46
Other	62
Unknown	179
Reckless Driving	102
Careless Driving	77
Not Reported	14
<b>Total:</b>	<b>1,663</b>



## Where is Vision Zero working?

"The main reason that communities are failing, there's **not the will** to **make changes** that are, in the end, probably going to slow people down driving," she said. "And there's probably going to be pushback."-NPR

"It's not an exaggeration to say **behavior** on the **road** today is the **worst** I've ever seen," Capt. Michael Brown, a state police district commander in Michigan, told me."-Bloomberg



Traffic fatality rates for selected Vision Zero cities normalized to a 2010 baseline. Graph: Streetsblog

"Seattle, Boston, Portland, New York have seen **fairly steady declines** over the last few years — a good sign that their programs are starting to have an impact. But the trend is so recent that a **single bad year could wipe out any sign of progress.**"- Streetsblog



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Engineering  
solutions  
alone will not  
get us to  
Vision Zero

**Scio Church Rd.**



**Earhart Rd.**



## Enforcement Plan

2024 Vision Zero  
Safety Corridors



Washtenaw Corridor – Officer Kelso

Packard Corridor – Officer Wells

Jackson Corridor – Officer Gilbee



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# Safety Corridors Crash Mitigation Strategies



- Increased officer presence
- RadarSign Deployment
- Education Campaign  
Dept. Communications  
City Communications
- Increased Enforcement
- Patrol Officer buy-in



## Ann Arbor's Driving Equality Ordinance 2023

# Michigan's first driving equality ordinance gets 10-0 final OK in Ann Arbor

Updated: Jul. 07, 2023, 2:26 p.m. | Published: Jul. 07, 2023, 10:42 a.m.

- Ensures minor violations alone no longer cause for traffic stops
- Ensures equitable, non-discriminatory administration of traffic stops
- Allows officer to focus on hazardous violations
- Supports Vision Zero aimed at eliminating crashes causing serious injury or death

Source -

<https://a2gov.legistar.com/View.ashx?M=F&ID=12148769&GUID=1F2C736B-61B9-4A38-A3EC-C055CC6D9F5C>



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# School Education Programs

## TEENS & SPEEDING: THE FACTS



**SPEEDING IS THE MOST COMMON MISTAKE** made by teen drivers involved in fatal crashes.

**PARENTS: PUT YOUR FOOT DOWN ABOUT SPEEDING.**

**WHEN DRIVERS SPEED... IT TAKES LONGER TO STOP.**



...THEIR FIELD OF VISION NARROWS, so they can't see what's going on around the vehicle.

...THEY USE MORE FUEL and have to spend more at the gas station.

...VEHICLE SAFETY EQUIPMENT BECOMES LESS EFFECTIVE.

...VEHICLE DAMAGE AND OCCUPANT INJURIES are more severe in a crash.



**TO PREVENT SPEEDING CRASHES TEEN DRIVERS CAN:**

**KNOW THE SPEED LIMIT.** rather than relying on the flow of traffic.

**MAINTAIN A 3-4 SECOND CUSHION** between their car and the car ahead of them. **SEE HOW.**

**TEENS ARE MORE LIKELY TO SPEED** than older drivers.

The presence of any **MALE TEENAGE PASSENGER** increases the likelihood of speeding.

**SPEED LIMITS ARE BASED ON IDEAL DRIVING CONDITIONS**

Drivers should go even slower when:  
**• WEATHER IS POOR** (rain, snow, fog, etc.)  
**• IT'S DARK**  
**• THEY'RE IN A WORK ZONE**  
 Unless otherwise posted, the speed limit in a work zone is 40 mph.

**LEAVE EARLY**, so they won't feel the need to drive faster.



## POOR WEATHER CONDITIONS MAKE DRIVING MORE DANGEROUS FOR TEENS

Speed limits are set based on ideal driving conditions. In poor conditions (rain, snow, fog, etc.), drivers must adhere to a speed that allows them to drive safely and maintain control of their vehicle—a speed that is often slower than the speed limit, especially for inexperienced teen drivers.

### TEEN DRIVERS SHOULD SLOW DOWN...



**...WHEN IT'S FOGGY**

Reduced visibility gives teens less time to react to other vehicles or obstacles. Drivers should avoid using high beams, which only reduce visibility further. If visibility is very poor, pulling over and waiting for the fog to clear may be the best option.



**...WHEN IT'S RAINING**

Wet pavement can be slick. Teens should make turns cautiously and leave extra room between their car and the vehicle ahead of them. If heavy rains seriously reduce visibility, they should pull over and wait out the worst of it.



**...WHEN THERE'S ICE OR SNOW**

Teach your teen driver the rhyme, "Drive slow on ice and snow." Teens should make turns slowly and cautiously to avoid skidding, and leave extra room between their vehicle and the one ahead of them. To learn more safe driving tips for winter weather, visit our **WINTER DRIVING** page.



**...WHEN THERE ARE HIGH WINDS**

Today's vehicles are made lighter to improve gas mileage and can be more easily pushed off course by high winds. The faster your teen drives, the less stable their vehicle becomes.



## Go hands-free. Just drive. It's the law.

It is now illegal to manually use a cell phone or other mobile electronic device while operating a vehicle on Michigan roads. Under the law, a driver cannot hold or support a phone or other device with any part of their hands, arms, or shoulders.

Even if a cell phone or other device is mounted on your dashboard or connected to your vehicle's built-in system, you cannot use your hands to operate it beyond a single touch.

As a result, you cannot manually do any of the following on a cell phone or other electronic device while driving:

- Make or answer a telephone or video call.**
- Send or read a text or email message.**
- Watch, record, or send a video.**
- Access, read, or post to social media.**
- Browse or use the Internet.**
- Enter information into a GPS or navigation system.**

The law makes holding or manually using a cell phone or other mobile electronic device while operating a vehicle a primary offense—which means an officer can stop and ticket drivers for this violation.

### PENALTIES

1st violation \$100 fine and/or 16 hours of community service.	2nd or subsequent violations \$250 fine and/or 24 hours of community service.	3 violations within a 3-year period Complete a driving improvement course.
---	--	---

### Fines doubled

If a traffic crash occurs and the at-fault driver was holding or manually using a mobile device while operating the vehicle, any civil fines will be doubled.



Michigan Office of Highway Safety Planning  
 P.O. Box 30634, Lansing, MI 48909  
 Michigan.gov/DistractedDriving • 517-284-3332

- Q** Can I use my device while I am stopped at a light or in traffic?  
**A** You cannot hold or manually use a cell phone or other mobile electronic device at any time while operating a vehicle. Operation includes being stopped at a light or in traffic but does not include being legally parked.
- Q** My phone is mounted on my dashboard, so I'm hands-free. Can I send a text?  
**A** You cannot use your hands to operate a cell phone or other device beyond a single touch, even if it is mounted. Use voice-activated commands instead.
- Q** Can I use Bluetooth or my vehicle's built-in system?  
**A** You can use hands-free technology such as Bluetooth or integrated systems within the vehicle as long as you do not manually use the system. Anything more than a single touch is against the law.
- Q** What if I see a crash or have an emergency?  
**A** You can use a cell phone to call or text 911 to report an emergency or seek help.
- Q** When does this law take effect?  
**A** Beginning June 30, 2023, police will start issuing citations for violating this law.

## PARENTS: GET INVOLVED

**TEEN DRIVERS WITH ACTIVELY INVOLVED PARENTS ARE:**

- HALF AS LIKELY** to be involved in a crash
- 71% LESS LIKELY** to drive while intoxicated
- 30% LESS LIKELY** to use a cell phone while driving
- 50% MORE LIKELY** to buckle up, and recognize the importance of doing so
- ...WHEN COMPARED TO TEENS WITH UNINVOLVED PARENTS.\***

**BE THE DRIVER YOU WANT YOUR TEEN TO BE**

- Kids learn driving behaviors by watching you. Set a good example:**
- Don't speed, and make it clear that speeding is not acceptable.
  - Always wear your seat belt.
  - Never use your cell phone, eat, put on makeup, or do any other distracting activities while driving. When you drive, just drive.



**GRADUATED DRIVER LICENSING (GDL)**

The GDL program is designed to guide novice drivers through all types of driving conditions and circumstances. The program begins with the Level 1 Learner's License, in which all driving must be supervised by a licensed parent or guardian or other designated adult, 21 or older.

Make the most of your driving practice by signing a Parent/Teen Driving Agreement with your teen that outlines both their responsibilities and yours. The Ford Driving Skills for Life program offers this [DOWNLOADABLE AGREEMENT](#).

Other sample agreements are available through:

- **CHECKPOINTS**
- **AMERICAN AUTOMOBILE ASSOCIATION (AAA)**
- **THE SUPERVISED DRIVING GUIDE**

**KEEP HITCHING A RIDE**  
 It takes 3-5 years for a novice driver to be exposed to the many driving situations they'll encounter. So even after a teen completes Level 1 training, parents should control the keys, monitor their driving activity, and ride along as often as possible.

**FACTORS THAT INCREASE TEENS' CRASH RISK**

- Speeding
- Inexperience
- Immaturity
- Fatigue
- Alcohol/drug impairment
- Passengers and other distractions

\*Source: OHV's Analysis of Problems



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## Program Areas

Vision Zero Program Areas	% of Crashes Impacted	Current Grant Funding
<b>Behavior Change</b>	85%	?
<b>Speed Management Program</b>	55%	Yes
<b>Street Reconfiguration: Road Diet</b>	21%	No
<b>Street Reconfiguration: Other</b>	8%	No
<b>Quick Build Program</b>	25%	Yes
<b>Capital Investment</b>	29%	Yes
<b>Messaging Campaign</b>	82%	No
<b>Education &amp; Enforcement Campaign</b>	8%	?

\*Staff are working on sustainable funding for the program areas



## Next Steps

1. Implement enforcement plan
2. Implement school education programs
3. Provide S.A.R.A model update
4. Evaluate methodology for Tier 1-2 corridors and intersections, bring back to Transportation Commission
5. Review monthly crash data between Police Department and Engineering, began in 09/2024
6. Present and receive guidance from Transportation Commission on program areas



# Program Areas

Vision Zero Program Areas	Transportation Commission Topics
Behavior Change	Post enforcement follow up
Speed Management Program	SS4A and Traffic calming
Street Reconfiguration: Road Diet	Multi-lane street evaluation
Street Reconfiguration: Other	Multi-lane street evaluation
Quick Build Program	SS4A
Capital Investment	Capital Improvement Program (CIP)
Messaging Campaign	School education
Education & Enforcement Campaign	Post enforcement follow up

