

# House Transportation Committee

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## Work Zone Safety

May 18, 2021

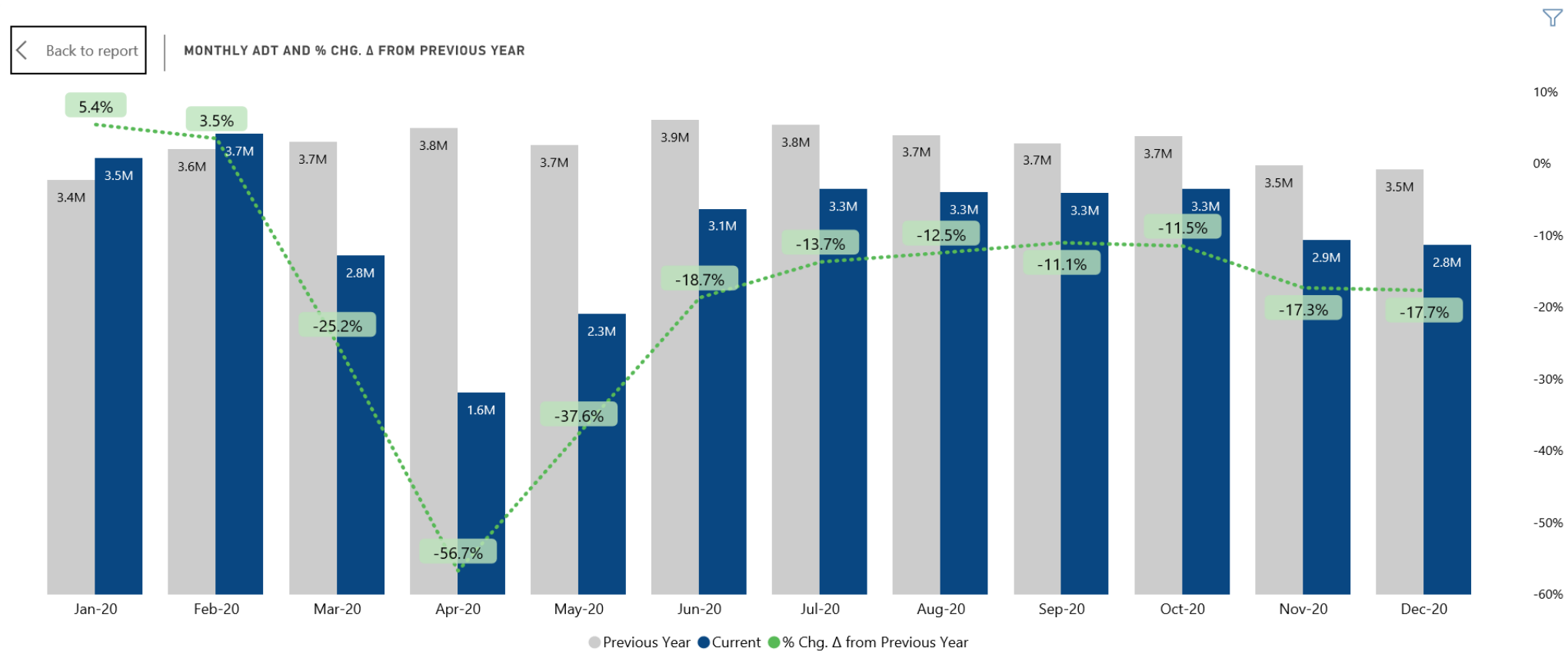


**Tony Kratofil, PE**  
Chief Operating Officer & Chief Engineer  
Michigan Department of Transportation

**Mike Malloure**  
President  
C A Hull Company

**John Osika**  
Journeyman & Apprentice Training Director  
Operating Engineers Local 324

# Michigan Traffic & Fatal Crash Trends During the Pandemic



## Michigan Traffic Crash Deaths

	Urban	Rural	Total	Commercial Vehicle	Motorcycle	Pedestrian	Bicycle
2019	581	404	985	106	122	149	21
2020	595	409	1004	73	140	160	39
Change	2.4%	1.2%	1.9%	-31.1%	14.8%	7.4%	85.7%

# National Fatal Crash Trends During the Pandemic

**Table 2: Fatalities, VMT, and Fatality Rate by Month or Quarter in 2020, and the Percentage Change in Fatalities From the Corresponding Month or Quarter in 2019**

Year	1st Quarter				2nd Quarter				3rd Quarter				4th Quarter			
	Jan	Feb*	Mar	Total	Apr	May	Jun	Total	Jul	Aug	Sep	Total	Oct	Nov	Dec	Total
<b>Fatalities in 2020 and Percentage Change in Fatalities for the Corresponding Month and Quarter From the 2019</b>																
2019	2,664	2,388	2,764	7,816	2,817	3,166	3,189	9,172	3,294	3,351	3,308	9,953	3,197	3,050	2,908	9,155
2020†	2,650 -0.5%	2,660 11%	2,550 -7.7%	7,860 0.6%	2,295 -19%	3,080 -2.7%	3,695 16%	9,070 -1.1%	3,710 13%	3,810 14%	3,740 13%	11,260 13.1%	—	—	—	—
<b>Fatality Rate per 100 Million Vehicle Miles Traveled (VMT)/VMT (in Billion)**</b>																
2019	1.07 248.2	1.05 226.7	1.02 271.5	1.05 746.4	1.00 281.4	1.11 286.0	1.14 280.9	1.08 848.3	1.11 295.6	1.17 286.5	1.22 271.7	1.17 853.8	1.13 284.0	1.17 260.5	1.06 274.1	1.12 818.6
2020†	1.04 253.7	1.15 232.1	1.16 220.1	1.11 705.8	1.36 168.5	1.45 212.9	1.51 244.0	1.45 625.4	1.41 262.5	1.52 251.2	1.51 248.3	1.48 762.0	—	—	—	—

Source: 2019 FARS Annual Report File.

† 2020 Statistical projections and rates based on these projections.

\*February 29, 2020, was a leap day.

\*\*VMT: FHWA June 2020 Traffic Volume Trends for 2019 & 2020 VMT.

**National Safety Council estimates an 8% increase for all of 2020; 42,060 fatalities up from 39,107 in 2019**

Source:

Early Estimate of Motor Vehicle Traffic Fatalities for the First 9 Months (Jan-Sep) of 2020; USDOT, NHTSA, December 2020.





*Zach Morisette*

*St. Clair Shores*

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*Macomb County  
Roads Department*



*Jeremy Zeitz*

*Gladwin*

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*Anlaan Corporation*



*Nicholas Sada*

*Lansing*

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*C&D Hughes, Inc.*



*Davyon Rose*

*Lansing*

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*C&D Hughes, Inc.*



*Allen Craig*

*Richmond*

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*Dan's Excavating,  
Inc.*



*Larry Leonarduzzi*

*Gaastra*

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*Iron County Road  
Commission*



# MDOT/Road Owner's Role

- ✓ Establish policy and standards
- ✓ Determine project specific requirements and articulates them in contract documents
- ✓ Provide inspection and oversight to ensure compliance with contract requirements



# Contractor's Role

- ✓ Control the work site
- ✓ Determine the means and methods for complying with the contract requirements
- ✓ Procure, install and maintain work zone devices





# Labor's Role

- ✓ Recruit qualified, competent workforce
- ✓ Provide training and education for safe work practices





## Technology

Marc VanTil, Give 'em A Brake  
Craig Innis, MDOT



## Enforcement

Kim Webb, MDOT  
Rob Coppersmith, MITA



## Balancing Mobility & Safety

Aden Shea, PK Contracting  
Steve Brink, MDOT



## Culture

Mike Malloure, CA Hull  
Tom Fox, MDOT



## Flexibility to Implement Safety

Ryan O'Donnell, Anlaan  
Craig Heidelberg, MDOT



## Marketing

Lindsey Renner, MDOT  
Mike DeFinis, Iafrate



## Education

Brian Morley, Great Lakes Engineering  
Chris Brookes, MDOT & Deven Rau, Cadillac Asphalt \*

\* Joined in 2021:  
John Osika, Operating Engineers  
Daryl Gallant, Laborers



# Significant 2019-20 Accomplishments

- ✓ Established dialogue & relationship with Prosecutors' Association
- ✓ Improvements to MDOT Work Zone Safety & Mobility Manual & plan development process
- ✓ Expanded use of Alternate Technical Concepts (ATC) for Maintenance of Traffic
- ✓ **Proposed concept for Safety Contingency Fund to be piloted in 2021**
- ✓ Completed first and second industry-wide Work Zone Safety Perception Survey
- ✓ **Developed “use statements” for high value safety technology/devices**
- ✓ **Proposed process of early industry review on constructability & safety to be piloted in 2020**
- ✓ Initiated design & procurement of Work Zone Safety awareness trailer for education efforts
- ✓ Established social media presence & **#WorkZoneWednesday** industry-wide messages
- ✓ **Held first-ever industry-wide work zone safety technology forum**
- ✓ Encouraged safety moments in all project meetings



# Pilot Initiatives



**Early industry review on constructability & safety**



**Work Zone Safety Collaboration Special Provision**



**Work Zone Safety Contingency Fund**





# Higher Urgency on Key Themes



Positive Protection



Night Work



High Risk Operations  
(e.g. Set-ups & Stage Changes)



Enforcement



Temporary Rumble Strips



Truck Mounted Attenuators



Worker Training



# Industry Work Zone Safety Perception Survey

- Do the people who work in construction zones feel safe?
  - Construction Workers
  - Inspectors
  - Engineers
- Issued in Spring 2019 and Fall 2020
- Results were very similar year-to-year

**3,000+**

Responses  
from contractor,  
consultant and  
MDOT staff

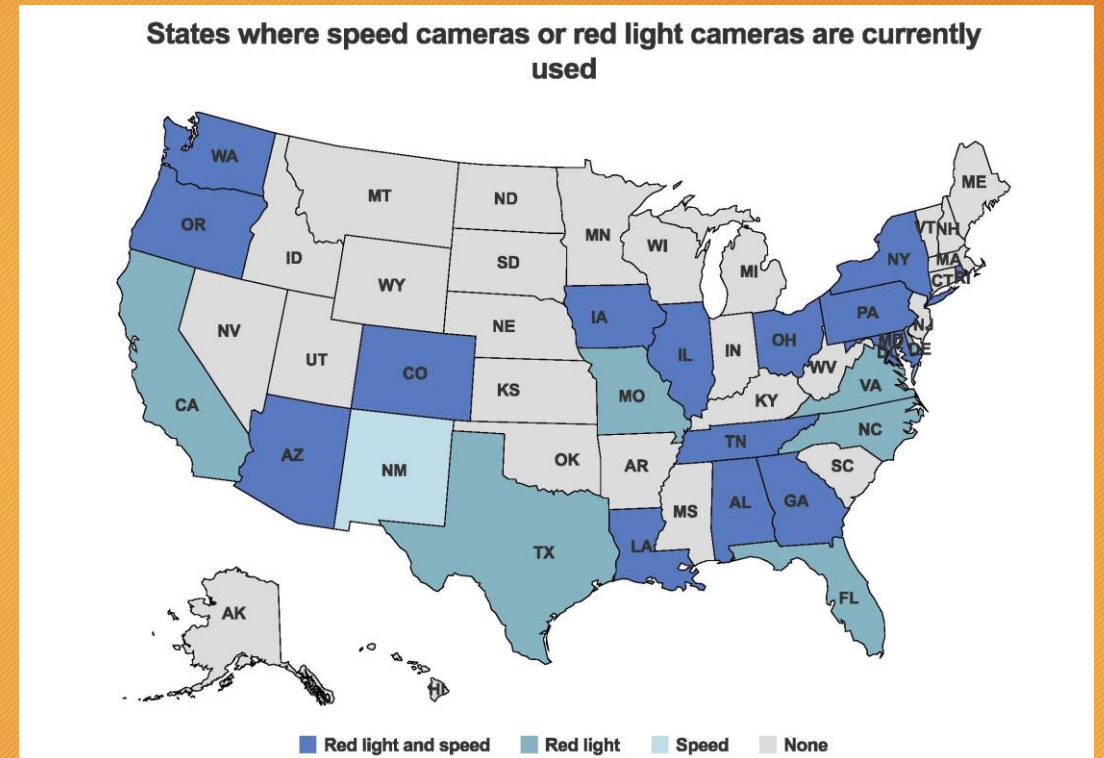
# Industry Work Zone Safety Perception Survey

- Key Takeaways
  - Respondents do not feel safe when working near traffic
  - Distracted & Drunk Driving is a major concern
  - Need a better balance between public mobility and worker safety
    - Slower traffic = Safer Work Zones
  - Motorists' behavior needs to change
    - Increase Police presence
    - Education
    - Promotion of Work Zone Safety



# Where the Legislature Can Help

- ✓ Pass tougher distracted driving laws (House Bills 4277, 4278 and 4279)
- ✓ Ensure “truth in sentencing” (so existing laws and penalties are upheld)
- ✓ Limit liability for drivers’ education providers (so they can teach safe navigation of work zones)
- ✓ Adequately fund law enforcement (having sufficient numbers of officers to be present as much as we need them)
- ✓ Allow for automated enforcement tools to support law enforcement’s efforts (References: Insurance Institute for Highway Safety; Pennsylvania’s Work Zone Automated Speed Enforcement Pilot)



Source: Insurance Institute for Highway Safety, 2021



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