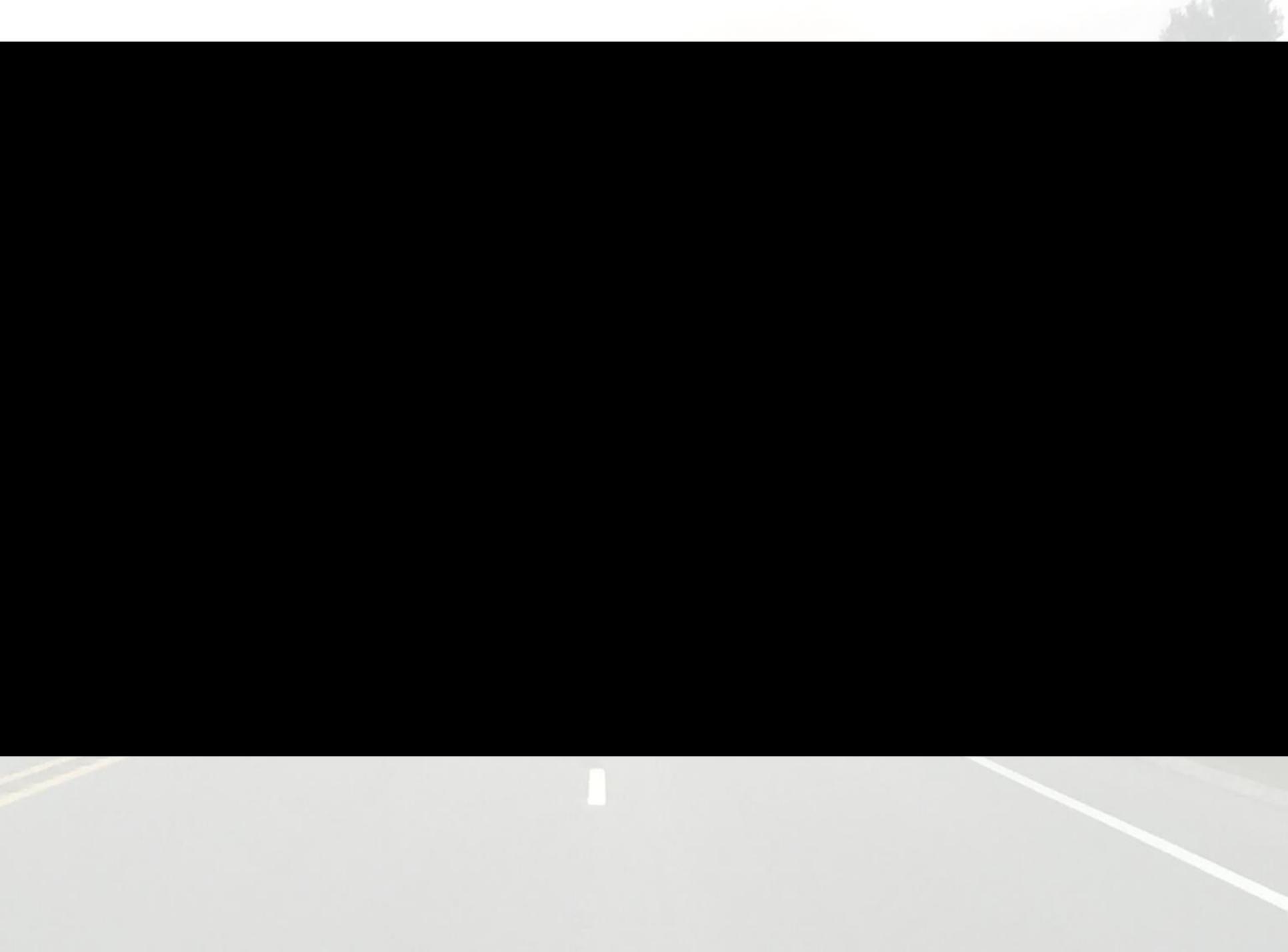


# Work Zone Safety Principles Drivers and Workers

Michigan Department of Transportation  
State Transportation Building  
425 W. Ottawa St.  
P.O. Box 30050  
Lansing, MI 48909  
517-373-2090

MIOSHA  
Consultation Education and Training  
530 W. Allegan St.,  
P.O. Box 30643  
Lansing, MI 48909-8143  
517-284-7720





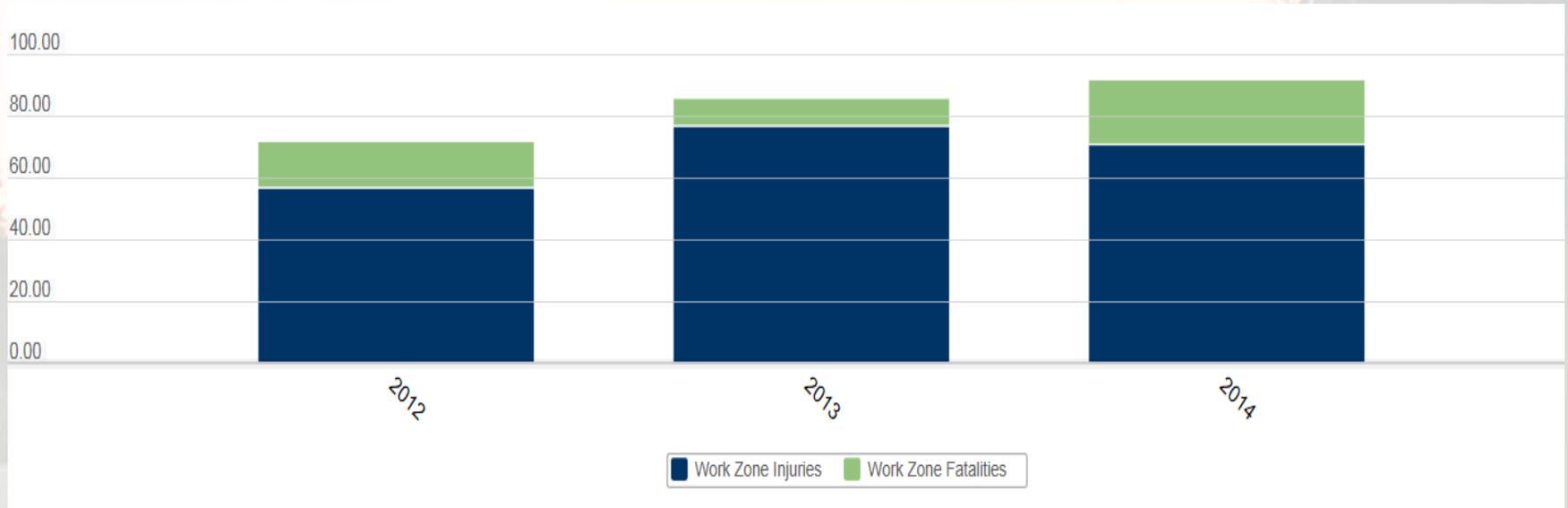
# What are we doing here?

- Michigan has lost 199 lives in work zones over the past decade. Many more were injured!
- Michigan has increased road construction. This means more work zones, employees at risk, and impatient drivers.

## **This Presentation:**

- Recent Incidents
- Work Zone Safety
- Distracted Driving
- Best practices

# MI Work Zone Incidents



72 total  
52 injuries

89 total  
77 injuries

92 total  
71 injuries

Striking Vehicle

Crew's Truck

Struck while inspecting manhole.





Not in use at time of accident





CHEVROLET





I - 275 / MICHIGAN

Video hosted by [TrafficLand.com](http://TrafficLand.com)

# Traffic Control

**Rule 2223. (1)** Traffic control devices shall be installed and maintained as prescribed in Part 6 of the 2011 MMUTCD.



# Traffic Control

## Rule 2223.(2)

Signaling directions by traffic regulators shall conform to the provisions of Part 6 of the 2011 MMUTCD



# Traffic Control

**MIOSHA Rule 2223 (5)**  
traffic regulator shall ...

**&**

**MMUTCD Section 6D.03 (04)**

All workers, including emergency responders, within the right-of-way who are exposed either to traffic or to work vehicles and construction equipment within the TTC zone, **shall wear high-visibility safety apparel that meets the Performance Class 2 or 3 requirements of the ANSI/ISEA 107–2004**



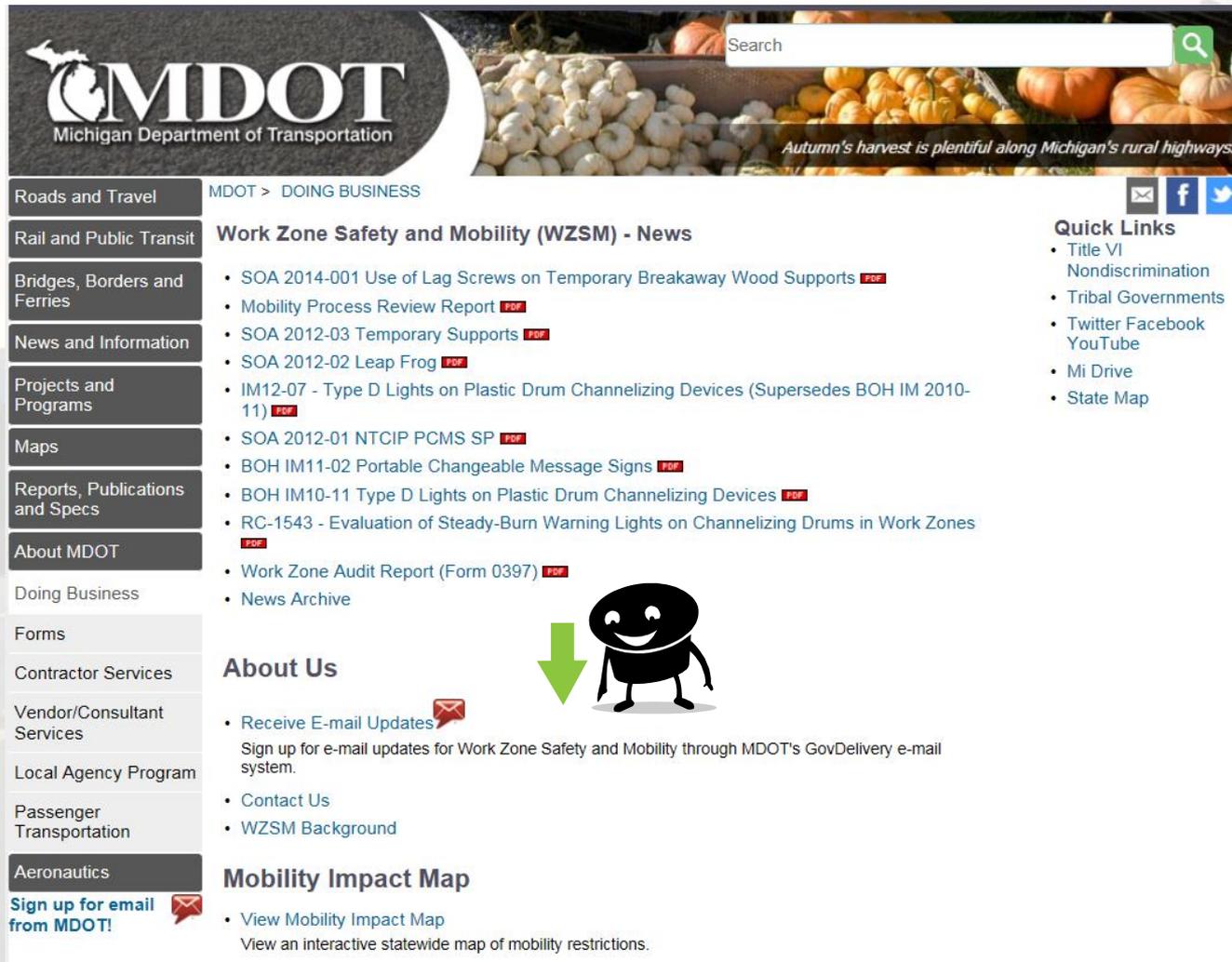
# Traffic Control

## Best Practice:

If traffic violates laws and creates a hazard to employees, notify the appropriate law enforcement agencies for the enforcement of applicable speed limits and other traffic laws. Do not try to enforce traffic laws.



## Sign up for the Emails



**MDOT**  
Michigan Department of Transportation

Search

Autumn's harvest is plentiful along Michigan's rural highways.

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**Work Zone Safety and Mobility (WZSM) - News**

- SOA 2014-001 Use of Lag Screws on Temporary Breakaway Wood Supports [PDF](#)
- Mobility Process Review Report [PDF](#)
- SOA 2012-03 Temporary Supports [PDF](#)
- SOA 2012-02 Leap Frog [PDF](#)
- IM12-07 - Type D Lights on Plastic Drum Channelizing Devices (Supersedes BOH IM 2010-11) [PDF](#)
- SOA 2012-01 NTCIP PCMS SP [PDF](#)
- BOH IM11-02 Portable Changeable Message Signs [PDF](#)
- BOH IM10-11 Type D Lights on Plastic Drum Channelizing Devices [PDF](#)
- RC-1543 - Evaluation of Steady-Burn Warning Lights on Channelizing Drums in Work Zones [PDF](#)
- Work Zone Audit Report (Form 0397) [PDF](#)
- News Archive

**Quick Links**

- Title VI Nondiscrimination
- Tribal Governments
- Twitter Facebook YouTube
- Mi Drive
- State Map

**About Us**

- [Receive E-mail Updates](#)  Sign up for e-mail updates for Work Zone Safety and Mobility through MDOT's GovDelivery e-mail system.
- [Contact Us](#)
- [WZSM Background](#)

**Mobility Impact Map**

- [View Mobility Impact Map](#) View an interactive statewide map of mobility restrictions.

**Sign up for email from MDOT!** 

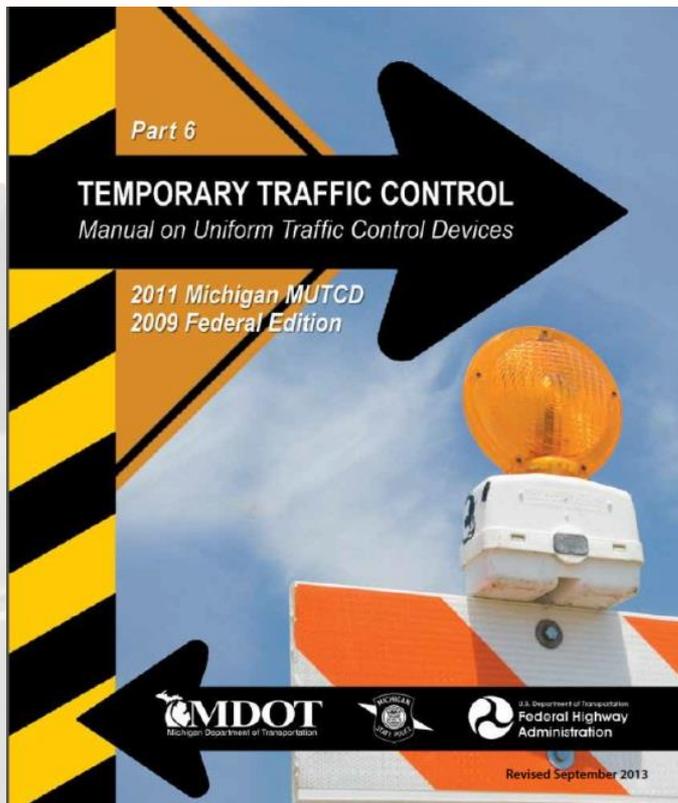


# Work Zone Resources

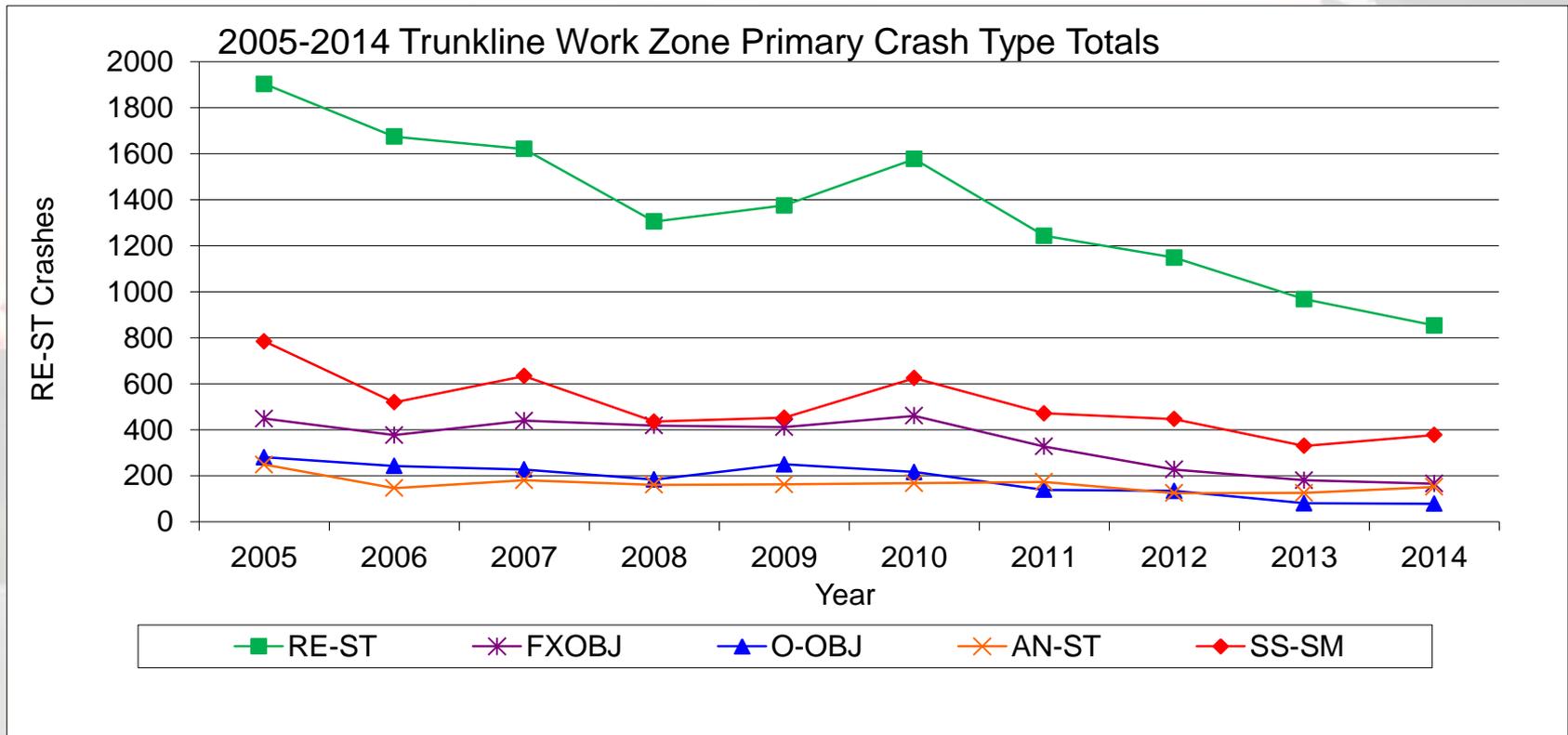
[www.michigan.gov/mdotworkzones](http://www.michigan.gov/mdotworkzones)

MMUTCD  
Revised Sept 2013

Currently Under Revision



# Work Zone Crashes Trunk Line



# Barrier Wall Mount Signs

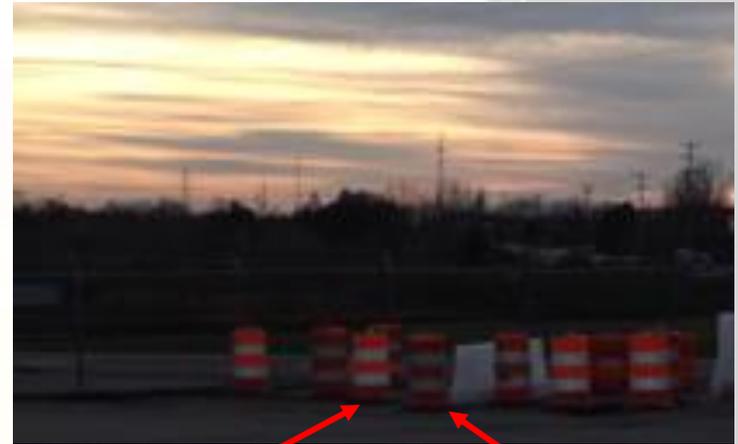


# Barrier Wall Mount Signs



# Florescent Drum Sheeting

- Currently specified in 22 states
- Increased Reaction Time
  - 180 addition feet of sight distance at 50 MPH (Football Field = 360 feet)
  - Better visibility in dusk, dawn, and rainy conditions
- 2010-2014 dusk, dawn and rainy work zone crashes target with this treatment
  - Fatalities – 52 out of 137 total (38%)
  - Serious Injuries – 2,239 out of 6,881 (33%)
  - Crashes – 11,568 out of 37,339 (31%)



Proposed

Current



# Dates and Time Frames

- 10/01/16 – Notify of the upcoming phase in period.
- 10/1/17 – Type IV Fluorescent and Type IV White Required on all “I” routes.
- 10/1/18 – Type IV Fluorescent and Type IV White Required on all “I” “US”, and “M” routes.
- 10/1/19 – Type IV Fluorescent and Type IV White Required on all MDOT and Local roadways.
- There will be a new Pay item and Spec when the new devices are in the plans
  - Plastic Drum, Fluorescent, Furn
  - Plastic Drum, Fluorescent, Oper
  - Channelizing Device, 42 Inch, Fluorescent, Furn
  - Channelizing Device, 42 Inch, Fluorescent, Oper

# Temporary Wet Reflective Markings

## Existing Type NR

- 16 mils thick
- Glass Beads 8lbs / Gal

## New Wet Reflective Type NR

- 18 mils thick
- WR Optics 4lbs / Gal
- Glass Beads 6lbs / Gal

- Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, (color), Temp..... Foot
- Pavt Mrkg, Wet Reflective, Type NR, Paint, 4 inch, (color), Temp..... Foot

# Work Zone Lighting

- MIOSHA Rule
  - 5 foot candles required where work is not being immediately performed but where workers may pass through.
  - 10 foot candles **shall** be provided on a jobsite where construction work is being performed.
- MIOSHA and MDOT will be enforcing this rule
  - Inadequate lighting = project shut down and citation by MIOSHA.
  - 2012 Spec Book **812.03.H**



# Understanding The Motorist

The Motorist may also have physical limitations or reduced skills:

- Poor vision
- Reduced reaction time
- Medications
- Distracted driving







# When Working Near Traffic...Your Responsibilities

- Think **Safety** at all times
- Always look and listen.
- Do not walk side by side.
- Know where you are at all times.
- Always try to have an escape path.
- When possible, work with a traffic spotter.
- When possible do not turn your back to traffic.

# When Working Near Traffic...Your Responsibilities

- Think **Safety** at all times.
- Assume all lanes are open to traffic.
- Never assume that traffic sees you.
- Never assume that the driver is driving safely.
- [Pay attention to work equipment and operators.](#)

# Questions?



# Distracted Driving

Leading factor in most crashes and near-crashes, according to the National Highway Traffic Safety Administration and Virginia Tech Transportation Institute

There are three main types of distraction:

Visual - taking your eyes off the road

Manual - taking your hands off the wheel

Cognitive - taking your mind off of what you're doing

# Distracting Activities

Using a cell phone and/or texting

Eating and drinking

Talking to passengers

Grooming

Reading, including maps

Using a PDA or navigation system

Watching a video

Changing the radio station, CD, or MP3 player

# MICHIGAN VEHICLE CODE

## 257.602b (1) and (2)

A person shall not read, manually type, or send a text message on a wireless 2-way communication device that is located in the person's hand or in the person's lap, including a wireless telephone used in cellular telephone service or personal communication service, while operating a motor vehicle that is moving on a highway or street in this state.

# MICHIGAN VEHICLE CODE

## 257.602b (3)

A person shall not use a hand-held mobile telephone to conduct a voice communication while operating a commercial motor vehicle or a school bus on a highway, including while temporarily stationary due to traffic, a traffic control device, or other momentary delays. This subsection does not apply if the operator of the commercial vehicle or school bus has moved the vehicle to the side of, or off, a highway and has stopped in a location where the vehicle can safely remain stationary.

# Best Practices

- Include Driving Rules and Procedures in the Company Safety and Health Program
- Training Employees on Defensive Driving and Work Zone Safety
- Consult with, MDOT, and MIOSHA when setting up a work zone, notify local police.



# Focus on Driving

- Get familiar with vehicle.
- Preset radio stations, navigation, and climate control.
- Secure items that may move around when the car is in motion. Do not reach down or behind the seat to pick up items.
- Do not text, access the Internet, watch videos, play video games, search MP3 devices, or use any other distracting technology while driving.

# Focus on Driving

- Do personal grooming at home-not in the vehicle
- Review maps and driving directions before hitting the road
- Monitor traffic conditions before engaging in activities that could divert attention away from driving
- Ask a passenger to help with activities that may be distracting
- If driving long distances, schedule regular stops, every 100 miles or two hours
- Travel at times when you are normally awake and stay overnight rather than driving straight through

# Please – Don't Text and Drive

Thursday November 12, 2015, Bryan and Valerie Chunko attended a memorial prayer service for their great nephew Sean Joseph Verfaillie. Sean died twelve days before his eighteenth birthday. Sean was an active member of St. Margaret of Scotland Church, in Clair Shores where he attended school and served on mission trips. When he was in school, he worked with the 7th and 8th grade youth group at the church. Sean had graduated, was going to college, owned a car and worked at a local restaurant. The testimonies heard at the memorial from teachers, employer, friends and family were those of a good kid always willing to help others.

November 7, 2015, Sean finished work, got in his car and was driving home. At 1:51 p.m., he posted something on Facebook. At 1:52 p.m., he sent a private text. The police received the 911 call at 1:53 p.m. They believe it was the same time the car veered from the road. The car continued a short distance. The police think Sean was not aware at first that the car had left the road. Police speculate that when Sean realized the car was off road he over steered and the car rolled. Sean was dead at 2:00 p.m.

Sean was a good kid and all indicators were he would be a good man. He made a bad decision. When the family went to the accident scene that evening, they found birthday gifts that Sean had received scattered on the ground. Please share this story with those you meet and those you love. Texting and driving are deadly.

# Thank you for attending this presentation!

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425 W. Ottawa St.  
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517-373-2090

MIOSHA  
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