



**NORTH CAROLINA**  
Department of Transportation

# 2023 CAPA/NCDOT Workshop Work Zone Traffic Control Update

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Connecting people, products and places safely and efficiently with customer focus, accountability and environmental sensitivity to enhance the economy and vitality of North Carolina

## Today's Topics

- Work Zone Crash Data
- Work Zone Awareness Week
- WZTC Training Updates
- Traffic Control -- Back to Basics
- Interstate Resurfacing Provision
- Open Discussion



# Work Zone Crash Data & National Work Zone Awareness Week

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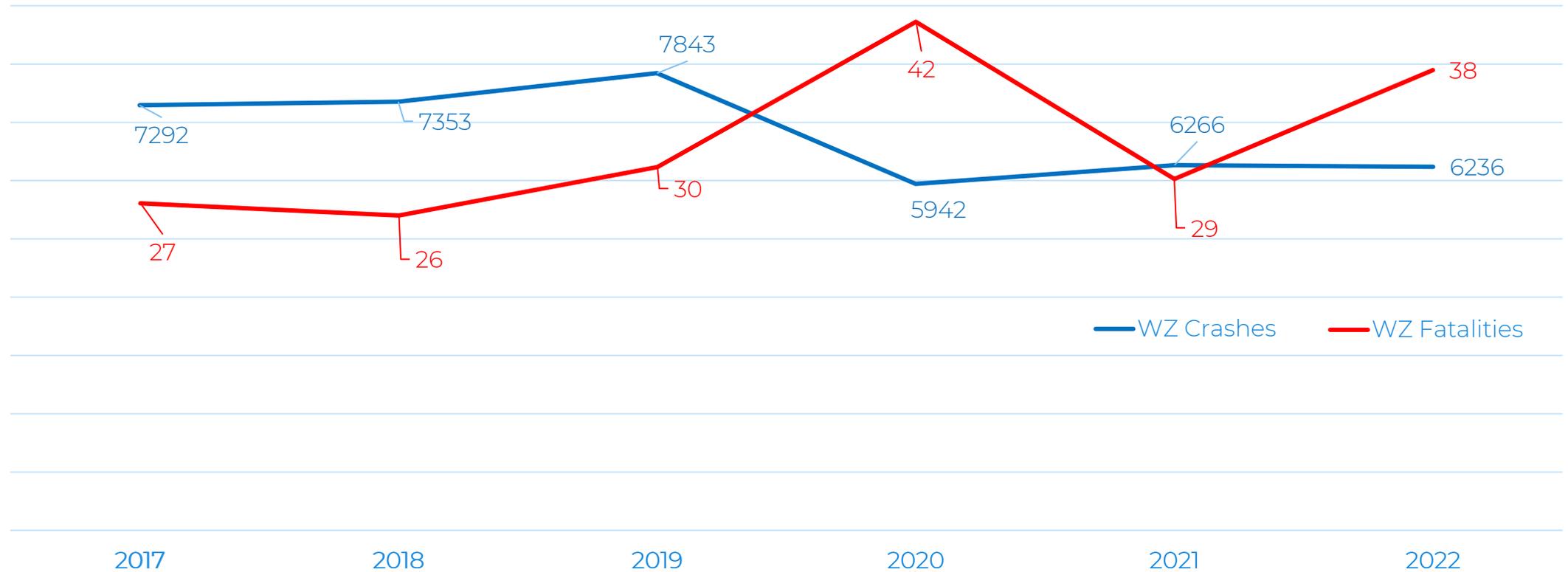
## Work Zone Crash Data\*

- 42 Fatalities in 2020
  - 5,942 Total Work Zone Crashes
- 29 Fatalities in 2021
  - 6,266 Total Work Zone Crashes
- 38 Fatalities in 2022\*
  - 6,236 Total Work Zone Crashes\*
  
- Preliminary 2022 data compared to 2021:
  - 0.5% decrease in total crashes
  - 31% increase in fatal crashes

\*2022 Data not yet certified by NCDMV



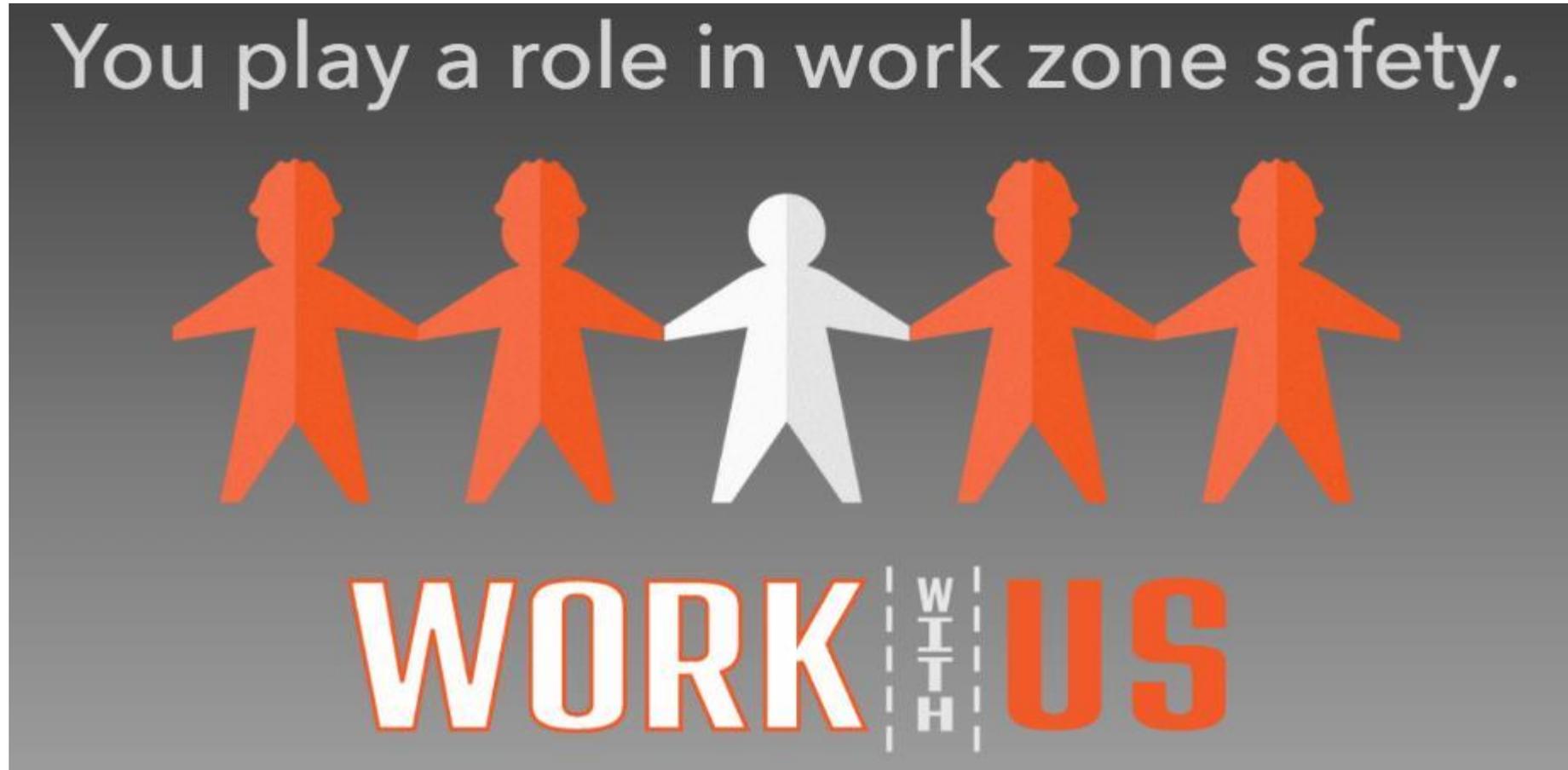
## Work Zone Crash Data\*



\*2022 Data not yet certified by NCDMV

## National Work Zone Awareness Week

April 17-21, 2023



## Go Orange Day

Wed, April 19, 2023

Show support for those killed in work zones, as well as their families, by wearing orange.

Post images to social media

- #NZWZAW
- #Orange4Safety
- #GoOrangeDay



# Work Zone Certification Training

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## Work Zone Certifications

- WZ-EVA: Online database for Residents and Inspectors to verify WZ training credentials
- Every certification should be in the WZ-EVA system
- Each certification has a unique identifying number.
- Re-certifications will get a unique number



**Name** *Trainee Name*

**NCDOT Certification Type: Flagger**

**Training: 5/30/2017-Expires: 7/1/2021**

**ID:** *Unique ID Number*

**Card holder completed approved training program  
developed by ITRE, training conducted by Tim Baughman  
of ITRE.**

## Out-of-State Certifications

SC/VA certification reciprocity grace period is 1 year.

- WZTC unit will be tracking these certification requests
- Individuals will be issued a NC Certification card that expires in 1 year, and they will be listed in WZ-EVA.
- Non-renewable – Individuals must obtain NC certification within that year to avoid a disruption in certification



## Installer Certification (Reminder)

Effective July 1, 2021

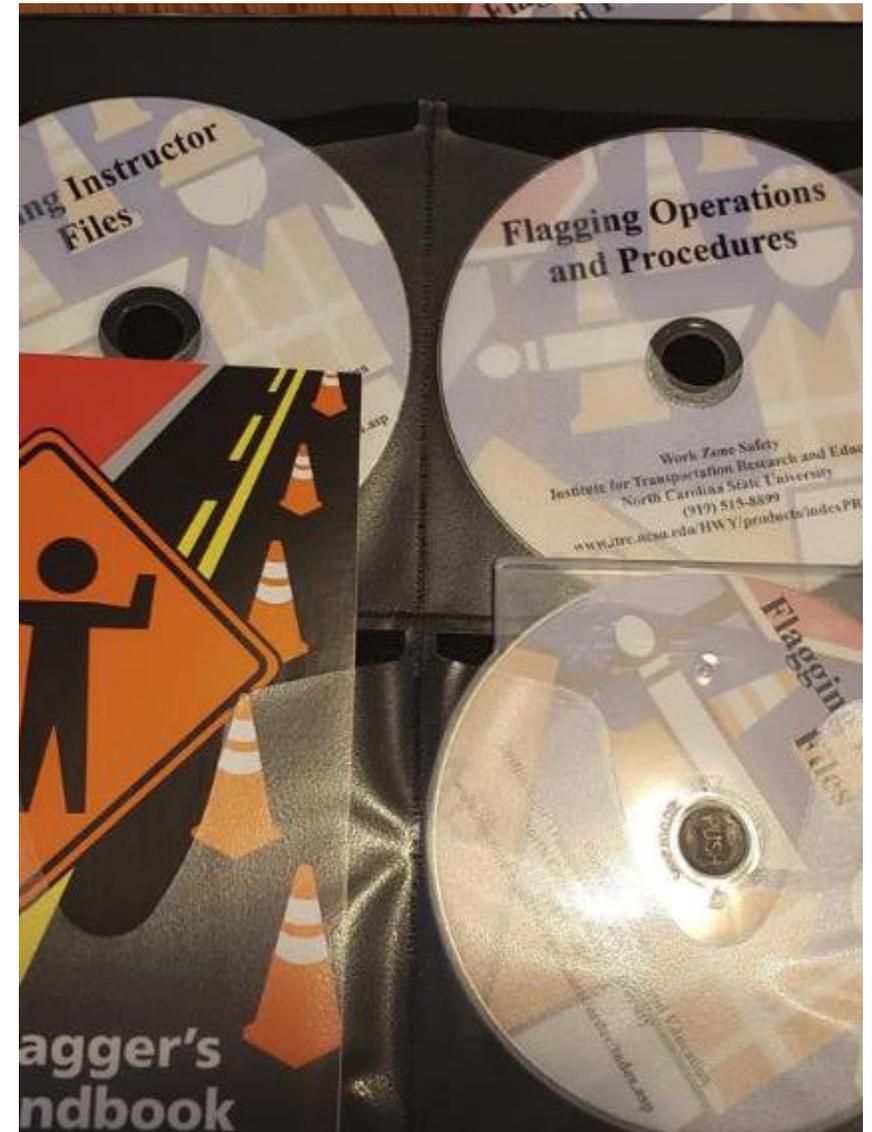
- At least one member of every crew responsible for setup, installation, and removal of traffic control devices within any highway right of way shall be trained and certified as a Work Zone Installer.
- The certified Work Zone Installer should serve as crew leader and shall be on site and directing the installation and removal of temporary traffic control.
- All other members of the crew shall be certified flaggers, even if flagging is not being performed as part of the traffic control.



## Updated Training Curriculums

Coming Soon!

- Updates to training curriculums for WZ Installer and Supervisor
- Scheduled for Summer 2023 Release
- All approved training providers will be notified once available
- 6 Months grace period to update courses
- NCDOT staff conducting course audits will be checking for updated materials



# Traffic Control – Back to Basics

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## NC DOT Central Work Zone Safety Reviews

- NCDOT Central staff plan to review more work zones in 2023
- All types – TIP, Encroachment, Maintenance
- Looking for the basics
  - Advance warning messages
  - Sign spacing
  - Taper lengths
  - Lateral/Longitudinal buffer spaces
  - End of lane closure tapers
  - Material/Equipment Storage
  - Pavement drop-offs



## NCDOT Central Work Zone Safety Reviews

Do your part – Help make sure our work zones are easy to navigate!



## Back to Basics

Do your part – Help make sure our work zones are easy to navigate!



## Flagging Operations

- Flaggers should stand outside of white edgeline
- Flagger stations should be visible for a distance equal to stopping sight distance
- Flagger stations need to be lit during night time hours
- STOP/SLOW paddle should not be propped up by a cone/drum.



## Flagging Operations

- Flaggers should be in constant communications with all other flaggers and pilot car
- At RxR crossings, additional flagger as a queue-break before the tracks
- Only Law Enforcement can flag through an operating traffic signal, and intersection should have lighting.



## AFADs

- NCDOT encourages getting flaggers off the roadways!
- AFADs need to be controlled by an operator
  - AUTO or TIMED mode is not permitted.
- Operator must have unobstructed view of traffic approaching each device in both directions
- Pilot car driver can operate AFADs that have cameras
  - AFAD gates cannot close automatically



## Portable Traffic Signals

- Portable signals can replace flaggers on most 1-Lane 2-Way operations
- Can be left unattended and operate in auto mode
- Can also be operated in pilot car mode
  - Yellow and Red phase changes can happen automatically
- Pedestal units can be used up to 72 hours
- Do not use if queues will back into other signalized intersections or RxR crossings



# Pedestrian Traffic Control

Do your part – Help make sure our work zones are easy to navigate!

- Pedestrian access must be maintained
- New Special Provisions included with these packages
  - RWZ-4
  - ADA Compliant Traffic Control Devices
  - Pedestrian Transport Service
- Skinny Drums with caution tape, Type II, and Type III barricades are non-compliant
- If on site, can provide an escort to assist the pedestrian around the location



# Pedestrian Traffic Control

Do your part – Help make sure our work zones are easy to navigate!

## Temporary Pedestrian Detour

- Detour requires approval of the Engineer
- Detour cannot exceed ½ mile of additional travel
- Accessibility features are consistent with the closed sidewalk
- No existing accessibility pedestrian signals with ½ mile
- Use ADA compliant control devices (SP and Pay Item provided)



# Pedestrian Traffic Control

Do your part – Help make sure our work zones are easy to navigate!



## Truck Mounted Attenuators

- Need to be fully in lane, or fully out of lane
  - NC does not allow TMA's to straddle the shoulder or lane lines.
- Bed should be empty, or all items shall be secured. No loose cones/drums!
- TMA operator needs to remain seat-belted at all times.



# Interstate Resurfacing Provision

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## Interstate Resurfacing – General

- Using Drums for lane closures provides the best visibility, and is the safer option
- Skinny drums may be used, but the spacing requirement is 20' centers
- If the speed limit is reduced, ALL existing speed limit signs need to be covered
  - The DSLs should remain in place 24/7, as they have the Work Zone and \$250 fine placards
- Law enforcement cannot be in an active travel lane to block or shield lane closure installation/removal
  - Must be on shoulder or inside a closed lane



## Lane Closures Single/Double/Triple

- Intended for resurfacing operations that are installed and removed daily
- Not for use with:
  - Lane closures that are in place for more than one work period
  - Operations that change traffic patterns for more than one work period
  - Any type of temporary barrier
- Traditional bid items will be used for these situations



## Ramp/Loop Traffic Control and Closure

- Ramp/Loop traffic control only paid for multi-lane ramps/loops that will have lane closures
- Ramp/Loop closure includes whatever traffic control is necessary on mainline to close the exit.
  - Aux. lanes and drop lanes would require arrow board, signs, etc.

New RSD coming in 2024 to standardize ramp closure traffic control.



# Open Discussion

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# Contact Us

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**Thank you!**

