

















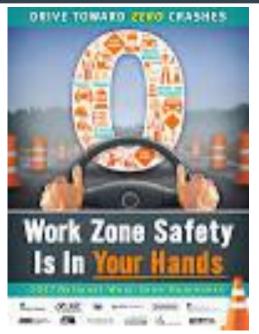


2020 NCDOT/AGC Workshop-Work Zone Traffic Control

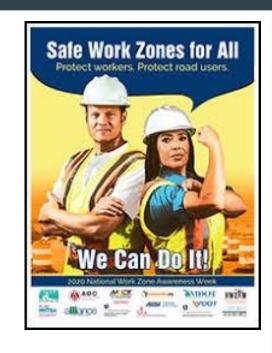
Don Parker, PE, Western Work Zone Engineer Karman Dais, PE, Project Design Engineer February-March 2020

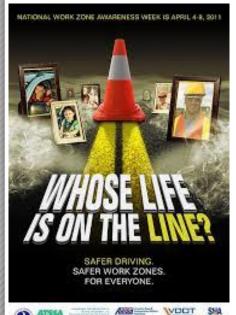
Today's Discussion Topics

- Work Zone Crash Data
- Installer Certification Requirements
- Pedestrian Management/Safety Plans
- Revised Resurfacing Specifications
- Results of "Interim" Study on Digital Speed Limit Signs and Work Zone Presence Lights.



National Work Zone Awareness Week April 20-24, 2020







Work Zone Crash Data



Work Zone Crash Data

- <u>30 Fatalities in 2019 (5 Year Average = 25)</u>
- 2019 Work Zone Crash Data
 - 7,843 Work Zone Crashes
 - Over 80% of the Fatalities are Motorists
 - Most crashes occur on clear, dry days

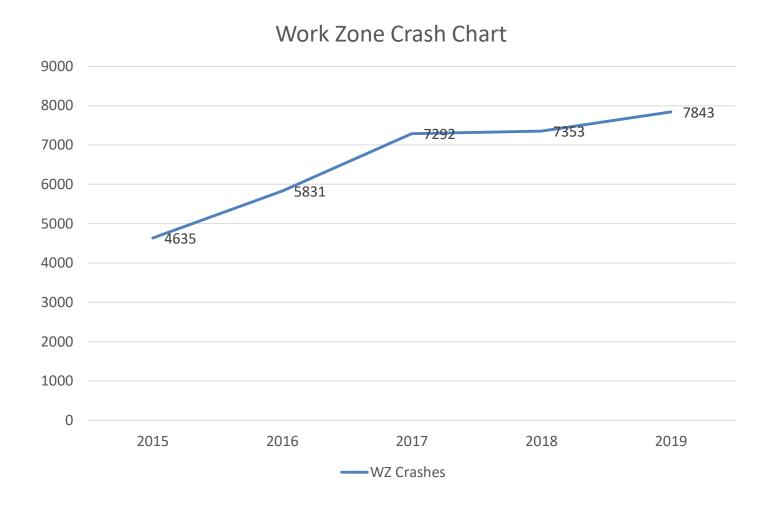
Work Zone Crash Data

However, keep in mind that many of our major corridors had very long work zones

- 1) I-77 Mecklenburg was a 26.5 mile work zone
- 2) I-85 Cabarrus/Rowan was a 14 mile work zone

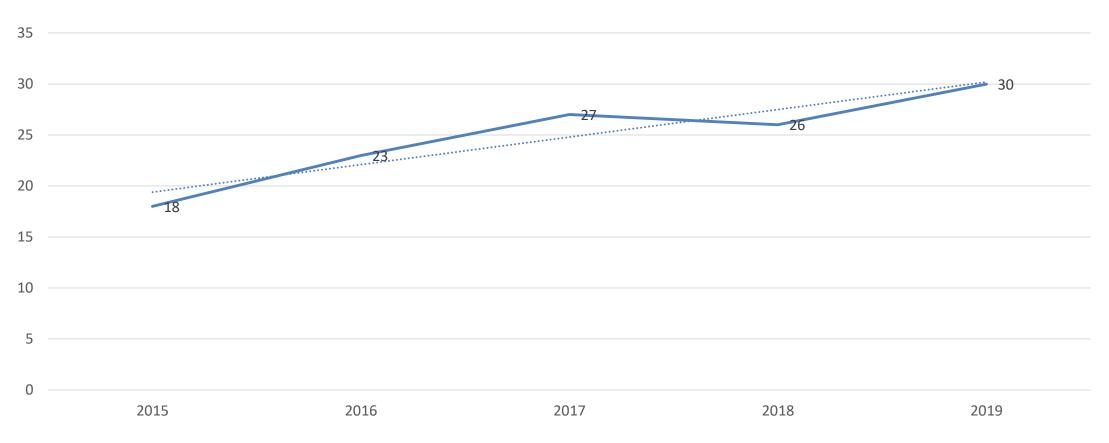
In 2020, over 40 miles of I-95 in Divisions 4 and 6 will be under Construction as well as over 15 miles of I-26 in Divisions 13 and 14

5 Year Trend of Work Zone Crashes



5 Year Trend for WZ Fatalities

Work Zone Fatalities



Work Zone Fatalities involving Construction Workers in 2019

FLAGGER FOR ROAD CONSTRUCTION ALONG 421 KILLED IN HIT AND RUN

Written by Bill Fisher News Published: 29 July 2019



A man who was working as a flagger on road construction along Highway 421 was struck by an alleged drunk driver Friday and died from his injuries Saturday morning.

The Watauga Democrat reports Israel Alejandro Flores, age 21, reportedly left the scene but was later brought back and charged with felony hit and run and DWI, and then was charged with felony death by vehicle after the flagger, Brittian South, died from his injuries.

According to the report, South was holding a stop/yield sign and was wearing reflective gear.

South is from both Deep Gap and Mountain City. Flores has both a Winston Salem and a Boone address.

Flores was being held on a \$350,000 bond

The incident occurred in the are of 421 and the 105 bypass.

South was flown to Johnson City Medical Center after the accident, and died around 8:30 Saturday morning.

NFM2

Construction worker dead, three others injured after being hit by drunk driver near Concord Mills Mall





Installer Certification



National WZ Awareness Week April 20-24



WZ Installer Certification

Allowing some changes to give more time and flexibility in obtaining Certifications

- 1) Current Certified Work Zone Installers do not have to be recertified under this requirement
- 2) A Certified WZ Supervisor does NOT have to be Certified as an Installer

WZ Installer Certification

3) If a Certified WZ Supervisor is "on-site" during traffic control operations, employees under their supervision may work without Installer Certification until January 1, 2021

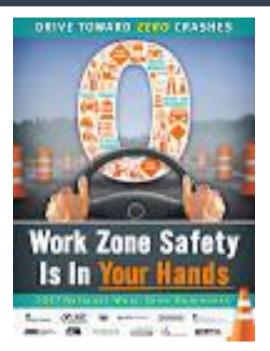
4) General laborers who are NOT involved with placement of traffic control signs or devices do NOT have to be Certified.

WZ Installer Certification

However, it's the intent of NCDOT that all workers involved with Traffic control be trained and Certified by January 1, 2021.



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Pedestrian Traffic Control

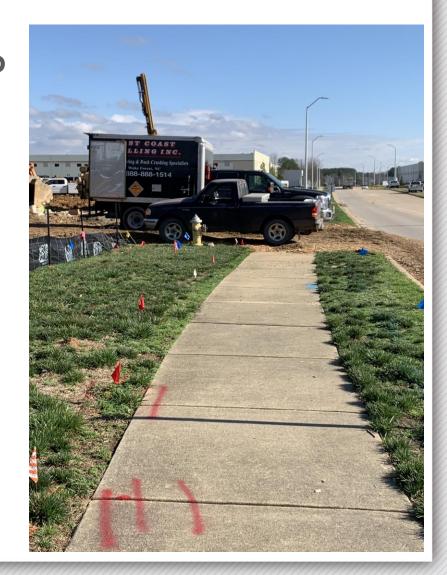


National WZ Awareness Week April 20-24

- Have Policy that provides guidance on levels of accommodation for pedestrians based on Pedestrian Volume
- The 4 levels of accommodation based on Ped Volumes
 - 1) Absence of Need
 - 2) Basic
 - 3) Moderate
 - 4) Full

Look for details to be part of the TMP
 Main Concepts are:

1) Don't park on Sidewalks



Look for details to be part of the TMP Main Concepts are:

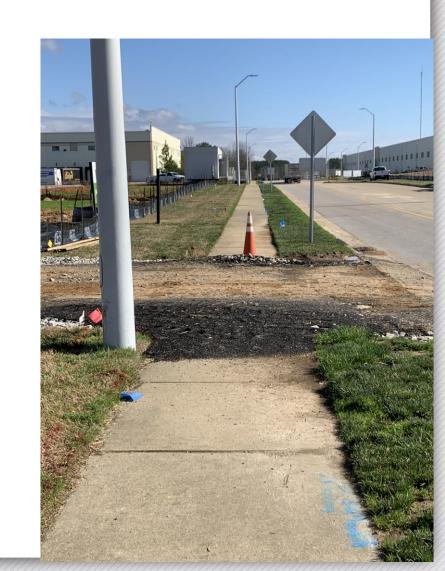
2) Use ADA compliant traffic control devices to properly close sidewalks when needed



Main Concepts are:

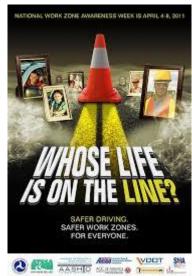
3) Try to maintain pedestrian traffic as close to the project as practical

4) Avoid detouring pedestrians unless its unavoidable



Revisions to Interstate Resurfacing Provision





National WZ Awareness Week **April 20-24**

Interstate Resurfacing Provision Changes

1) Pay Items- Lane Closures

Lane Closures are paid per "Single", per "Double" and per "Triple" Lane Closure.

NOTE: An extension of a lane closure is not paid as a separate lane closure as is the preferred method over setting up a separate closure

Interstate Resurfacing Provision Changes

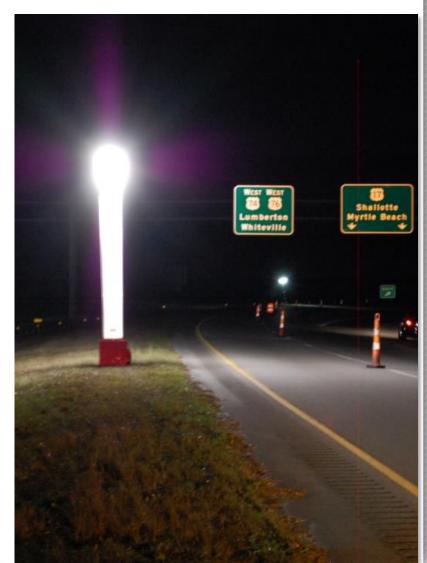
1) Pay Items- Ramps/Loops
Ramp/Loop "Traffic Control" is paid per Each

Ramp/Loop "Closure" is paid per Each

Interstate Resurfacing Provision Changes

2) Work Zone Presence Lights
These have been moved to the
"Advanced Warning Area" and
have a revised drawing to show
location and spacing.

No more moving the lights during the night



Rural Roads Resurfacing Provision(RWZ) Changes

Language that recommends use of AFAD's and Portable Traffic Signals for Mainline Flagging where practical

Language recommending use of Law Enforcement and Lighting when resurfacing activities are at Night



"Interim Report" on WZ Presence Lights and Digital Speed Limit Signs

We're selected up to 6
Interstate/Freeway Projects to
collect Speed Data to measure
the influence of the Presence
Lights and Digital Speed Limit
Signs



"Interim Report" on WZ Presence Lights and Digital Speed Limit Signs

So far we've collected 18 nights of Speed Data on 2 projects, 1 on I-95 and the other on US 264

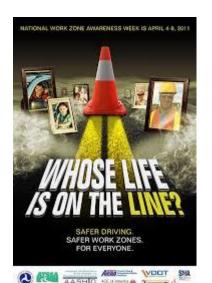
The remaining data collection will be done Spring/Summer

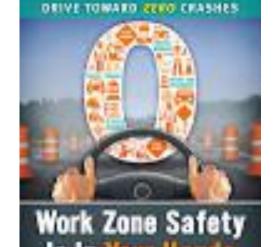


"Interim Report" on WZ Presence Lights and Digital Speed Limit Signs

"Interim" Results

Route	AVE Reduction w/DSL's	Ave Reduction w/DSL's and WZPL's
I-95	9.37 MPH	12.66 MPH
US 264	14.36 MPH	15.82 MPH
Average	11.87 MPH	14.24 MPH





Questions/Comments?

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