



## NATIONWIDE

# 96,000

Work zone crashes in 2022.<sup>1</sup>

## CONNECTICUT

# 835

Work zone crashes in 2022.<sup>1</sup>

Following the implementation of speed cameras in Delaware work zones, there has been:<sup>5</sup>

|                                  |   |                                   |   |
|----------------------------------|---|-----------------------------------|---|
| <b>55%</b>                       | ↓ | <b>50%</b>                        | ↓ |
| REDUCTION<br>IN TOTAL<br>CRASHES |   | REDUCTION<br>IN INJURY<br>CRASHES |   |



*Know the Zone Campaign Branding*

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## STRATEGY AT-A-GLANCE

# Work Zone Safety

According to the National Work Zone Safety Information Clearinghouse, there were approximately 96,000 total work zone crashes in 2022<sup>1</sup> nationwide, 835 of which occurred in Connecticut. Of the work zone crashes in Connecticut, 6 were serious injury and 2 were fatal in 2022. The majority of work zone crashes in Connecticut occur on either urban-state or urban-local roads, with speeding, commercial vehicle, and roadway departure crash factors having the highest overlap with work zone crashes. Key strategies that can be implemented to mitigate work zone crashes include reducing speeds in work zones, ensuring proper maintenance and protection of traffic (M&PT), raising driver awareness when navigating work zones, and implementing Smart Work Zones (SWZ).

## What Actions Should Drivers Take to Navigate Work Zones Safely?<sup>2</sup>

- » Look for **advance warning signs**.
- » **Slow down** when approaching a work zone and follow posted speed limits.
- » **Know that speeding fines are doubled** in Connecticut work zones with additional penalties and fines for distracted, aggressive, and/or impaired driving.
- » **Respect the zone** as they are meant to protect both drivers and crew members.
- » **Keep a safe distance** of at least 3 car-lengths.
- » **Wear seatbelt.**
- » **Stay alert** and avoid distractions.
- » **Expect the unexpected.**
- » **Follow instructions** from traffic control personnel.
- » **Do not stop** unless instructed as sudden braking can lead to collisions.
- » **Know Before You Go.** Current CTDOT roadway projects can be found here: [Major Projects Weblink](#)
- » **Know the Zone.** Signs are present at the beginning and ends of work zones; ensure you are maintaining a reduced speed throughout the entirety of the work zone.



## Application in Connecticut

This section outlines three applications in Connecticut with information that can be used to assist municipalities to help improve work zone safety.

### 1 Speed Reduction

In April 2023, the Connecticut Department of Transportation (CTDOT) launched the Automated Work Zone Speed Control (AWZSC) Pilot Program, which permitted the use of automated enforcement speed cameras in work zones. Over 24,900 warnings were issued, as well as about 750 violations with a fine<sup>3</sup>, which emphasizes the need for countermeasures to help reduce speeds in work zones.

In conjunction with the AWZSC Pilot, the Know the Zone campaign conducted a branded public engagement and awareness effort that aimed to reduce speeding, crashes, injuries, and fatalities in work zones by:

- » Providing messaging via billboards, television ads, social media ads, and in news media stories that emphasize reducing work zone crashes.
- » Fostering a connection between public safety in work zones and the need to reduce vehicle speeds.
- » Developing statewide awareness of the AWZSC Pilot program's intent and protocols.

Both the AWZSC Pilot and *Know the Zone* campaign concluded in October 2023. A legislative report outlining the results of the program was published in February 2024<sup>2</sup>.

In April 2024, a bill was passed allowing permanent implementation of CTDOT's AWZSC program<sup>4</sup>:

- » On any highway with a speed limit of 45 mph or more, with no limit on the number of locations.
- » Tickets to be administered to vehicles exceeding the posted work zone speed limit by 10 mph or more.
- » Warnings to be issued for the first violation followed by a fine of \$75 for all subsequent violations.
- » A fine of \$75 is automatically issued to drivers exceeding 85 mph.

CTDOT will have a program manager and vendor on board for the program start anticipated by the fall of 2025.

Connecticut is currently one of 10 states to legislatively authorize the use of speed cameras in work zones. In addition to reductions in speed, there are also promising trends around crash reductions in work zones as a result of speed camera installation, with the Delaware Department of Transportation reporting a 55% reduction in total crashes<sup>5</sup> and a 50% reduction in injury crashes following implementation.



*Town of Vernon receiving Work Zone Safety Package*

## 2 Maintenance and Protection of Traffic

Another effective strategy used to enhance work zone safety is ensuring proper M&PT through:

- » Providing a sufficient number of travel lanes and pedestrian pass-ways to safely move traffic<sup>6</sup> in instances where the roadway is not closed due to construction.
- » Placing proposed temporary signage, pavement markings, traffic cones, and other temporary traffic control devices per standards outlined within the CTDOT's special provision for Item No. 0971001A (Maintenance and Protection of Traffic: Traffic Control Plans and Typical Materials)<sup>7</sup> and the Construction Maintenance and Incident Management Signs section of CTDOT's Sign Catalog.<sup>8</sup>
- » Adhering to the standard specifications (Form 819), supplemental specifications, special provisions, and any M&PT related plans, such as staging, temporary traffic control signals, temporary barriers and/or detours, that are included in a contract. This especially includes the special provision for Section 1.08.04 – Prosecution and Progress: Limitation of Operations.<sup>9</sup>
- » Utilizing the Manual on Uniform Traffic Control Devices (MUTCD), which provides standards and guidelines for installing and maintaining temporary traffic control devices on all roadways and developing M&PT plans. The MUTCD also provides more detailed information on temporary traffic control elements, worker safety, flagger control, signage, pavement markings, and applications.<sup>10</sup> CTDOT is currently in the process of reviewing and adopting the [11th Edition of the MUTCD](#) which was published in December 2023.

## PROGRAM SPOTLIGHTS

The *Connecticut Work Zone Safety Program* launched by the University of Connecticut's Technology and Transfer (T2) Center and CTDOT was conducted in 2018 to help municipalities enhance their M&PT in work zones by providing all municipalities that requested:

- » A work zone safety package that included pole mounted stop/slow paddles, traffic cones, reflective roll up signs, sign stands, Class III safety vests, hard hats, and all-weather flagger whistles.
- » Work zone safety and flagger training for 4 town employees.

In coordination with CTDOT, a *Work Zone Safety Awareness Committee* aims to reduce crashes in work zones by raising awareness, providing education, and administering special projects on the dangers of driving through and working within work zones. The Committee also runs the Obey the Orange Campaign, which raises awareness for work zone safety through PSAs providing:

- » Tributes to those who have lost their lives in work zones.
- » Signage reminding drivers they are slowing down for friends and family, not just work zones.
- » Messaging prompting drivers to slow down.

Work zone safety mascots (Terri the Turtle, Slow Down Sam, Work Zone Wally, Darryl the Barrel Dog) are also used to reinforce the message to Obey the Orange and slow down for work zones by making appearances at various community events.



*Terri the Turtle & Slow Down Sam Mascots*





*Manual on Uniform Traffic Devices  
for Streets and Highways: 11th Edition*

### 3 Smart Work Zones

An emerging technology that municipalities should consider.

#### **BENEFITS:**

Smart Work Zones (SWZ) utilize temporary Intelligent Transportation Systems (ITS) technology in work zones to help increase safety and mobility. Real-time work zone information is collected and analyzed, providing users information on delays, travel times, queue warnings, and intrusion alerts, allowing for improved travel times and speed by improving the overall operational efficiency of the work zone.<sup>11</sup> There are currently 7 projects utilizing SWZs in Connecticut, with 3 pending projects, and 6 completed projects. An [SWZ Guide](#) has been developed to help ensure correct, consistent, and uniform SWZ implementation in Connecticut.

#### **COST CONSIDERATIONS:**

The cost to implement SWZs is highly dependent on the scope of the project, considering duration, number of devices used, whether equipment is leased or purchased, and relative capital costs to get the SWZ up and running. For example, CTDOT's Highway Operations unit has deployed SWZs within Connecticut for \$150,000 - \$200,000 per year on average, with these costs varying depending on project size and scope. The Utah Department of Transportation (UDOT), with assistance from an FHWA Accelerated Innovation Deployment demonstration grant, also implemented a program to raise and lower regulatory speed limits at four work zones through the use of Portable Variable Speed Limit (PVSL) integration. For this program, UDOT rented equipment on a per-day basis, with costs ranging \$173 to \$329 per day.<sup>12</sup>

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