



NATIONWIDE



Fatalities due to **speeding** in 2022.¹



CONNECTICUT

141

Fatalities due to **speeding** in 2022.²



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Speed Enforcement

Speeding is defined as traveling too fast for conditions or exceeding the posted speed limit. Speeding is one of the major factors in roadway fatalities. In 2022, there were 42,514 traffic fatalities nationally, of which 12,151 (29%) were speeding-related.¹ Unfortunately, the portion of speed related fatalities in Connecticut is even higher. In 2022, there were 373 traffic fatalities of which 141 (38%) were speeding-related.² From 2015 to 2022, speeding contributed to 859 (36%) of fatalities in Connecticut, of which about:

- » 82% occurred on non-interstate roads,
- » 17% involved older drivers,
- » 12% involved younger drivers, and
- » 10% of pedestrian fatalities involved a speeding vehicle.

The influence of speeding on crash severity is clear. As noted in the graphic below, a speed increase of just 10 MPH can dramatically increase the likelihood of a driver killing a pedestrian. Recent research from the Insurance Institute for Highway Safety (IIHS) has indicated that the percentage of SUVs of all registered vehicles has increased and vehicles with higher hood heights and less sloping front end profiles are more likely to result in pedestrian fatalities.³

While mitigating speeding and related crashes involves engineering, driving behavior, education, and enforcement, this Tech Brief focuses on two types of speed enforcement: high-visibility enforcement (HVE) and speed safety camera (SSC) enforcement. Both approaches have advantages and disadvantages and are effective in certain situations.



National Traffic Safety Board (2017) Reducing Speeding-Related Crashes Involving Passenger Vehicles. Available from: <u>https://www.ntsb.gov/safety/safety-studies/Documents/SS1701.pdf</u>

At the 2024 Connecticut Road Safety Summit, both the National Traffic Safety Board (NTSB) and the National Highway Safety Administration (NHTSA) presented information regarding intelligent speed assistance (ISA) systems. NHTSA is supporting research on these systems and is recommending all new vehicles be required to have ISA that, at a minimum, warns the driver when the vehicle exceeds the speed limit.⁴

High-Visibility Enforcement (HVE)

During HVE, law enforcement focuses on high-crash or high-violation locations, corridors, or geographical areas for enhanced enforcement. This is to raise awareness and convince the driving public that speeding is likely to be detected with the objective of changing driver behavior. Enforcement efforts are widely publicized and used across the state to deter speeding, along with other negative driver behaviors such as driving while impaired and being unbelted. Based on NHTSA's Countermeasures That Work⁵, HVE is highly effective and linking education with enforcement improves the overall success of reducing speeds and increasing awareness.

Benefits

HVE deters speeding and other negative driver behaviors while in use. If implemented appropriately, HVE is most successful when focused on specific corridors where speeding has historically contributed to crashes.

Cost Considerations

HVE is expensive due to law enforcement participation and publicity campaigns. Municipalities should consider using grants offered through the CTDOT Highway Safety Office (HSO) to offset their HVE costs. The HSO has indicated that grant money is available under the Police Traffic Services (PTS)-1: Speed and Aggressive Driving HVE. Funding is based on the severity of speed and aggressive driving problems represented by the crash data of the top 25 towns. More information on grant money allocated towards PTS is outlined in the State of Connecticut 2024 Annual Grant Application.⁶

Speed Safety Camera (SSC) Enforcement

SSC enforcement uses speed measurement devices to detect speeding and capture photographic or video evidence of vehicles that are violating speed limits allowing infractions to be issued. Speed safety cameras have been identified as an Federal Highway Administration (FHWA) Proven Safety Countermeasure. They can be used to supplement other speed management techniques (e.g., HVE, traffic calming, social norms) to alter driver behavior. SSCs can be:⁷

- » Fixed units—a single, stationary camera targeting one location
- » Point-to-Point (P2P) units—multiple cameras to capture average speed over a certain distance
- » Mobile units—a portable camera, generally in a vehicle or trailer

Benefits

The use of speed safety cameras for enforcement can contribute to reductions in both speed and crashes. P2P units can reduce fatal, and injury crashes up to 37% on urban expressways, freeways, and principal arterials, while mobile units can reduce fatal, and injury crashes up to 20% on urban principal arterials.⁷

Cost Considerations

The cost of SSCs is based on equipment choices, operational and administrative characteristics of the program, and vendor contracts. For example, a traffic calming solutions manufacturer has options to lease SSCs for a three year term for under \$400 per month or purchase equipment for a one time hardware fee.⁸

SSC Enforcement has been shown to reduce fatal and all injury crashes by up to: 37% + 20% + POINT-TO-POINT UNITS MOBILE UNITS

Where should Connecticut municipalities consider using HVE and SSC Enforcement?

Municipalities should conduct a network analysis of speeding-related crashes to identify locations for speed enforcement programs. The Connecticut Crash Data Repository² can be used to access Connecticut crash data and more advanced network analysis can be performed using the Connecticut Roadway Safety Management System.⁹ The analysis can include scope, location types, roadway types, times of day, and road users most affected by speed-related crashes. Public trust is essential for any type of speed enforcement, therefore programs should be planned with community input and equity impacts in mind.

Application in Connecticut

HVE Programs

Connecticut has led several statewide HVE efforts to address speed-related fatalities. These programs have been conducted in conjunction with education and awareness campaigns and are highlighted in the Connecticut Highway Safety Plan. In 2022, CTDOT participated in <u>Speeding Wrecks Lives</u>, an HVE effort in partnership with state and local law enforcement and NHTSA, as well as the Slow Down New England initiative with the other five New England states. In early 2024, Connecticut State Police launched an effort to increase highway patrols to reduce speed related fatalities and crashes through the Speed and Aggressive Driving HVE campaign. Enforcement mobilization coincides with a CTDOT HSO media campaign using the slogan When Speeding Kills, It's Never an Accident.¹⁰





CTDOT "Slow Down" (Speeding) video9

SSC Programs

CTDOT's Know the Zone: Speed Safety Camera Program was a oneyear pilot program that took place during 2023 which aimed at reducing speeding, crashes, injuries, and fatalities in work zones. The program used SSC's specifically in select work zones on limited access highways, issuing warnings for the first violation and citations for subsequent violations. Speeds at all five of the pilot work zones declined, with four locations showing significant reductions in speed. At two work zones on I-95, speeding was reduced by up to 18%. The reduction can be attributed to the active speed enforcement, signage, and public outreach through the Know the Zone campaign.¹¹ In 2024, a law was passed making this program permanent.

In 2023, the Connecticut state legislature passed a law allowing municipalities to install Automated Traffic Enforcement Safety Devices (ATESDs), designed to identify violations and speeding of greater than 10 miles per hour over the posted speed limit. The guidance issued in January 2024 outlines the criteria for implementing ATESDs.¹² Municipalities must prepare a plan, create an ordinance, hold a public hearing, and submit the final plan to CTDOT prior to installing ATESDs.

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