



# Speed Safety Camera Program and Planning Operations Guide: An Overview

Photo Credit: Getty Images.

The Federal Highway Administration (FHWA) and the National Highway Traffic Safety Administration (NHTSA) published the [Speed Safety Camera Program Planning and Operations Guide](#)<sup>1</sup> (figure 1) in 2023. FHWA staff are publishing this fact sheet to introduce the content of the guide and share how State and local transportation agency practitioners can use it when considering the deployment of speed safety camera (SSC) programs as part of their comprehensive work zone safety strategies.

≡ The purpose of the *Speed Safety Camera Program Planning and Operations Guide* is to help jurisdictions plan, deploy, and operate SSC programs to improve safety and maintain program reliability and accountability.

Except for the statutes and regulations cited, the contents of this document do not have the force and effect of law and are not meant to bind the States or the public in any way. This document is intended only to provide information regarding existing requirements under the law or agency policies.

## MOTIVATION AND PURPOSE

SSCs, also referred to as speed camera enforcement or automated speed enforcement, are a [proven safety countermeasure](#)<sup>2</sup> that jurisdictions may use as one part of their comprehensive speed management program to target speeding-related safety problems.

The purpose of the guide is to help State and local jurisdictions plan, deploy, and operate SSC programs, while maintaining program reliability and accountability. These programs may help improve safety by reducing fatalities and serious injuries resulting from speeding-related crashes. To help improve safety, the guide includes SSC program information as one approach within a comprehensive speed management program. This inclusion is intended to ensure community involvement, responsible SSC operations, strong oversight, and transparency in order to maximize public benefit, support, and trust. Public trust is a vital component of any type of enforcement. With proper implementation, SSC programs have the potential to offer fair and equitable enforcement of speed limits, regardless of driver age, race, gender, or socioeconomic status.

## APPLYING THE GUIDE TO A WORK ZONE SPEED SAFETY CAMERA PROGRAM

Although the guide is written for all types of SSC deployments, the steps and activities described in it apply to work zone applications. As such, the guide is a helpful reference for practitioners initiating a work zone SSC program, as explained below for each section of the guide.

**Introduction.** The guide introduces the rationale and benefits of using SSCs to help reduce speeding. This includes references to various initiatives that SSCs support, such as the [National Roadway Safety Strategy](#)<sup>3</sup> and [Vision Zero](#)<sup>4</sup> efforts, as well as studies that document SSC benefits. This information may provide a starting point to justify the creation of a work zone SSC program to legislators, practitioners, and external stakeholders such as law enforcement or the traveling public.

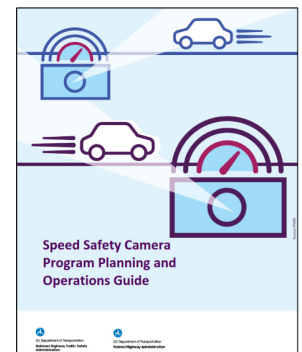


Figure 1. Image. The Speed Safety Camera Program Planning and Operations Guide. Source: FHWA.

<sup>1</sup> <https://highways.dot.gov/sites/fhwa.dot.gov/files/Speed%20Safety%20Camera%20Program%20Planning%20and%20Operations%20Guide%202023.pdf>

<sup>2</sup> <https://highways.dot.gov/safety/proven-safety-countermeasures/speed-safety-cameras>

<sup>3</sup> <https://www.transportation.gov/NRSS>

<sup>4</sup> <https://highways.dot.gov/safety/zero-deaths>



**Steps for Planning, Implementing, and Operating Speed Safety Cameras.** The guide describes six key steps for decision makers, practitioners, and other stakeholders implementing an SSC program. Associated activities, relevant studies, references, and examples from SSC programs that are pertinent to work zone deployments are described for each step.

The guide emphasizes ideas and considerations for planning in States that lack current authorization for SSCs and highlights recommendations from the National Transportation Safety Board. The guide also incorporates research and practices from the United States and international jurisdictions.

**Case Studies.** The guide provides four case studies on how five different jurisdictions in the United States have implemented or taken steps toward implementing programs. One case study highlights two work zone SSC programs:

- Pennsylvania began operations for a 5-year work zone SSC pilot in 2020, which was reauthorized as a program in 2023, following its demonstrated success with a 38-percent reduction in speeding and 15- to 50-percent reduction in work zone crashes.<sup>5</sup>
- Maryland initiated a work zone SSC pilot in 2009, which led to the creation of a work zone SSC program. A 2019 program evaluation showed a 90-percent decrease in vehicle speeds above the citation threshold of 12 mph over the work zone speed limit since program initiation.

**Additional Resources.** The guide also includes an appendix with trends regarding speed limits and community use of SSCs from the Insurance Institute for Highway Safety (available at: <https://www.iihs.org/topics/speed#speed-cameras>), as well as other resources. These resources may help practitioners identify agency peers to contact when developing a work zone SSC program. The guide also includes statistics and resources citing benefits of SSCs that may assist in gaining buy-in and support.

## STEPS TO IMPLEMENT A WORK ZONE SPEED SAFETY CAMERA PROGRAM

1. **Strategic Planning** to assess work zone safety needs, conduct legal and policy review regarding work zone SSC use, and conduct community and stakeholder engagement to gain buy-in for work zone SSC authorization and deployment.
2. **Speed Safety Camera Program Planning** includes creating program goals (e.g., reducing highway worker fatalities and injuries, reducing speeding-related work zone crashes), selecting work zone conditions for SSC deployment (e.g., channelized, unprotected work zones on State-operated freeways), and developing a work zone SSC program plan for communications, administration, and oversight.
3. **Enforcement Planning and Field Operations** considers work zone selection based on demonstrated safety and equity needs, appropriate signing, the enforcement speed threshold, and the selection of strategies and equipment type(s) for work zone SSC deployment.
4. **Violation Structure, Processing, Delivery, and Adjudication** includes timely, reliable, and equitable processing of violations (and oversight), access to and protection of violator data, and issuing and tracking citations, adjudication, and performance outcomes.
5. **Program Startup** involves final activities to implement enforcement and violation processing plans such as procuring equipment, vendor and interagency agreements, data management security and privacy considerations, public education, and a warning period.
6. **Program Evaluation** and monitoring to determine whether safety goals are being met and identify possible changes to improve effectiveness and public perception.

## FOR MORE INFORMATION

**FHWA/NHTSA Speed Safety Camera Program Planning and Operations Guide** [https://highways.dot.gov/sites/fhwa.dot.gov/files/Speed Safety Camera Program Planning and Operations Guide 2023.pdf](https://highways.dot.gov/sites/fhwa.dot.gov/files/Speed%20Safety%20Camera%20Program%20Planning%20and%20Operations%20Guide%202023.pdf)

**National Work Zone Safety Information Clearinghouse** (“Speed Safety Cameras” subheading under “Smart Work Zones”) <https://workzonesafety.org/topics-of-interest/smart-work-zones>

**FHWA “Speed Safety Cameras: Proven Safety Countermeasures”** <https://highways.dot.gov/safety/proven-safety-countermeasures/speed-safety-cameras>

**NHTSA “Countermeasures That Work: Speed Safety Camera Enforcement”** <https://www.nhtsa.gov/book/countermeasures-that-work/speeding-and-speed-management/countermeasures/enforcement/speed-safety-camera-enforcement>

## POINTS OF CONTACT

**Martha Kapitanov**  
FHWA Office of Operations  
202-695-0736  
[martha.kapitanov@dot.gov](mailto:martha.kapitanov@dot.gov)

**Jeffrey A. King**  
FHWA Office of Safety  
602-382-8991 | 202-409-2421  
[jeff.king@dot.gov](mailto:jeff.king@dot.gov)

**Phillip Bobitz, P.E.**  
FHWA Office of Safety  
717-221-4574  
[phillip.bobitz@dot.gov](mailto:phillip.bobitz@dot.gov)

<sup>5</sup> More information is available at [https://workzonecameras.penndot.gov/wp-content/uploads/2023/04/2023PennDOT-AWZSE-Report\\_033023.pdf](https://workzonecameras.penndot.gov/wp-content/uploads/2023/04/2023PennDOT-AWZSE-Report_033023.pdf)