

Primary Highway System Automated Traffic Enforcement Guidelines

Iowa Department of Transportation
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Introduction

When used properly, automated camera enforcement technology has the potential to be an effective tool to enhance traffic safety. It should only be considered after other engineering and enforcement solutions have been explored and implemented.

These guidelines are designed to ensure consistency statewide in the use of automated enforcement technology on the Primary Highway System. Devices covered by this guidance include speed and red-light camera enforcement technologies.

Iowans value the safety and security of their communities. They expect their transportation system to provide them and others with a safe and efficient means of travel. Therefore, they should expect automated enforcement systems to be used only at locations where there is a significant crash history or high-risk of such occurrences; and where the technology can directly address the primary traffic safety issue. Iowans should also expect these systems to provide uniform notice and meet a high standard for operational practice.

Seldom should an automated enforcement system be used as a long-term solution for speeding or red-light running. Instead, a traffic safety plan should be developed that includes solutions such as infrastructure improvements, use of innovative traffic control systems, alternative enforcement approaches and public education, which can eliminate the need for automated enforcement. Funding for these long-term solutions could come from collection of traffic citation fees.

These guidelines include a requirement for ongoing evaluation to measure the effectiveness of automated traffic enforcement technology on lowering traffic speeds and/or reducing crashes. This evaluation process can also be used to convey to the public the effectiveness of the system on enhancing traffic safety. In addition, it will assist in determining whether continued use of the technology is warranted at specific locations.

Use of traffic safety data

Traffic safety data must be used to determine where fixed automated enforcement is warranted. Potential candidates include high-crash and high-risk locations. These guidelines apply to all municipalities currently using or planning to use these technologies on Iowa's Primary Highway System. Existing and proposed photo enforcement systems not on Iowa's Primary Highway System are not subject to these guidelines and may be used as deemed necessary by the jurisdiction responsible for those roadways.

- **High-crash locations** are those where data indicates a greater frequency or higher rate of crashes.
- **High-risk locations** are those where the safety of citizens or law enforcement officers would be at higher risk through conventional enforcement methods.

Submitting a “Justification report”

A municipality requesting to install a fixed automated enforcement system on the Primary Highway System shall prepare a justification report. The report shall be submitted to the Iowa Department of Transportation district engineer. Its content will be used to consider for approval installation of automated enforcement at a specific highway location(s). If approved, the municipality will be directed to complete the necessary permit(s) to perform installation.

The justification report shall provide adequate information on the proposed location(s) and supporting evidence as to why an automated enforcement system is needed. The Iowa DOT will consider the potential for operational and safety benefits.

1. Site selection criteria

To be considered for installation of an automated enforcement system, the highway location must fit within one or more of these descriptions.

- An area where conventional enforcement is unsafe, ineffective or unable to adequately address the traffic safety need
- An area or intersection with a significant history of crashes, which can be attributed to red-light running or speeding
- An intersection with a significant history of red-light offenses
- A school zone
- A work zone
- A location where operational issues create significant problems and an automated enforcement system can help manage a more orderly flow of traffic

2. Supporting data

The justification report shall document existing traffic speeds, posted speed limits, locations of speed limit signs, traffic volumes, intersection geometry, traffic violations, crash history, law enforcement measures taken, and public education provided. This data shall also be used to report on the primary cause(s) of the traffic problem(s) and to identify potential countermeasures.

Automated enforcement technology should only be considered after other engineering and enforcement solutions have been explored and implemented. The justification report shall document what other solutions have been implemented and why additional countermeasures cannot be taken.

In addition, the report shall document discussions held and actions taken with partnering agencies who have resources that could aid in the reduction of crashes.

The justification report shall also provide assurance that the existing speed limits and traffic signal timings are appropriate and were established using accepted standards.

NOTE: In 2012, the Center for Transportation, Research & Education at Iowa State University published the report, [Toolbox of Countermeasures to Reduce Red Light Running](#). This report will serve as a reference for local agencies and the Iowa DOT. Presently, no similar reference exists for automated speed enforcement.

Minimum requirements

For each fixed automated enforcement system installed on the Primary Highway System, the following minimum requirements shall be met.

1. Public awareness

A key element to the success of any traffic enforcement practice, including the use of automated enforcement, is implementation of a strong public awareness campaign. Minimally, the following communication strategies shall be employed.

- Information on the location of each automated enforcement site shall be published on a public website within the jurisdiction(s) where the site is located. The public and media shall be notified of the location of the website.
- The public shall be notified of the municipality's intent to install automated enforcement technology at any new location. Minimally, this shall be accomplished by publishing an official public notice in the local paper once per month for a total of three months prior to installation. Other means of notifying the public are encouraged.
- With each new installation, the local jurisdiction shall provide a one month familiarization period in which the automated enforcement technology will be in normal use; however, only warning notices will be issued to violators.

2. Signage

- Permanent signs may be posted on primary access roads entering municipalities that use automated traffic enforcement technology.
- For all speed or red-light running automated enforcement locations, signs shall be posted in advance of the locations to advise drivers that cameras are in place.
- For mobile automated enforcement (equipment installed in a vehicle or trailer parked along a shoulder), temporary signs advising that speed is monitored by automated traffic technology shall be posted in advance of the enforcement area.
- All signing will be in accordance with the *Manual on Uniform Traffic Control Devices*.

3. Enforcement

Automated traffic enforcement technology shall be used in conjunction with conventional law enforcement methods; and not used as a replacement for law enforcement officer contact.

Evaluation

Annually, each jurisdiction with active automated enforcement on Iowa Primary Highway systems shall evaluate the effectiveness of its use. The results shall be reported to the Iowa DOT's Office of Traffic and Safety by April 15th each year following a full calendar year of operation, based on performance for the previous year. At a minimum, the evaluation shall:

- Address the impact of automated traffic enforcement technology on reducing the speeds and/or number of red-light running violations at sites being monitored.
- Identify the number and type of collisions at the sites being monitored, listing comparison data for before-and-after years (for intersection enforcement, only the monitored approaches need to be included in the evaluation).
- Provide information on the total number of citations issued, fees assessed, fees collected, costs incurred by the municipality to operate/manage the system, and fees paid to any vendor.

Continued use of automated enforcement technology

The Iowa DOT will utilize information collected annually from municipalities using automated enforcement technologies to assist in evaluating the continued need for such systems at each authorized location. Continued use will be contingent on the effectiveness of the system and appropriate administration of it by the municipality. The department understands that even the most effective safety countermeasure will only reduce crashes to a certain level, at which time, crash numbers will plateau at this lower level.

The Iowa DOT reserves the right to require removal or modification of a system in a particular location, as deemed appropriate.