

Red-Light Cameras

Red-light-runners cause about 106,000 crashes a year in the U.S., resulting in nearly 1,000 deaths and 89,000 injuries. Drivers and passengers are injured in 45 percent of red-light-running crashes.

Unlike collisions in which drivers have no control of the outcome, those caused by red-light-running are preventable, and the problem can be solved with engineering, education and enforcement solutions. One such solution is an automated red-light-running photo-enforcement system. The "red-light camera" can be an effective and reliable tool to help reduce the number of red-light-running violations and associated crashes.

Automated Enforcement Systems can be effective and reliable tools to help reduce the number of red-light-running violations and associated crashes.

When Does Red-Light-Running Occur?

Red-light-running occurs when a driver enters an intersection after the traffic signal has turned red. The traditional way of enforcing this violation is to station a patrol vehicle near an intersection. This method is dangerous for the officer, expensive to localities and a drain on valuable police resources. Red-light cameras can supplement police efforts by being where officers cannot be all the time.

How Do Red-Light Cameras and Automated Enforcement Programs Work?

Typically, these systems detect a motor vehicle that passes over sensors in the pavement after a traffic signal has turned red. The sensors are connected to computers in high-speed cameras, which take two photographs of the violation. The first photo is taken of the front of the vehicle when it enters the intersection and the second when the vehicle is in the intersection.

Law enforcement officials review the photograph, and in many localities with the systems, a citation is mailed to the registered owner of the vehicle. The owner can challenge the citation if he or she was not the driver at the time of the violation.

Red Light Camera Program Facts

- The objectives of red-light cameras are to stop red-light-running, reduce crashes, save lives, prevent injuries, lower health care costs and respond to community concerns about drivers who break traffic laws.
- Red-light cameras have been shown to deter red-light-running, and are an effective supplement to traditional means of law enforcement. For many localities using red light cameras, violations and crashes have been dramatically reduced.
- Red-light cameras are being used to enforce traffic laws and save lives in about 70 communities in the United States. Six States and the District of Columbia have statewide red-light camera laws. Other States have laws authorizing camera use in specific areas or under specific circumstances. Internationally, red-light cameras are used in the United Kingdom, the Netherlands, Israel, Austria and other countries.²
- In Oxnard, California, front-into-side crashes at intersections with traffic signals (the type of collision most commonly associated with red light running) were reduced by 32 percent. There were 68 percent fewer front-into-side crashes involving injuries.³



- In Fairfax, Virginia, after one year of camera enforcement, violations were reduced by 41 percent.⁴
- San Francisco and Los Angeles, California, realized a 68 and 92 percent reduction in violations, respectively.
- The Charlotte, North Carolina, program cut red-light-running violations by more than 70 percent during the first year of operation. Crashes throughout the city were reduced by more than 10 percent.
- A 1998 Harris public opinion poll found that 65 percent of the public supported State adoption of automated enforcement laws. Approximately three-fourths of the respondents supported adopting automated enforcement laws in a poll the following year. A September 2001 Harris poll found that 73 percent of Americans want more attention given to red-light-running, and a majority of more than two to one favored State red-light camera authorization laws.⁵
- An April 2001 survey of 10 cities by the Insurance Institute for Highway Safety found that opinions about red-light camera use are favorable in communities both with and without programs (between 84 and 77 percent and between 82 and 72 percent, respectively).
- Fairness is a critical ingredient to any automated enforcement system. Motorists should be made



aware of systems through extensive public education campaigns and signs notifying them that red-light cameras are in use. An engineering review should take place before the installation of cameras. Engineering and law enforcement officials should review citations after the program begins to identify traffic engineering elements and operational compliance issues that need to be addressed.

¹ Federal Highway Administration, Stop Red-Light-Running facts, May 2002.

² Insurance Institute for Highway Safety, Red-Light Cameras in Action, November 2001.

³ Insurance Institute for Highway Safety, Status Report, April 28, 2001.

⁴ Insurance Institute for Highway Safety, Automated Enforcement Laws, April 2002.

⁵ Lou Harris Poll for Advocated for Highway and Auto Safety, April 1998 and September 2001.

⁶ Insurance Institute for Highway Safety, Status Report, April 28, 2001.