

Safety First!

The City of SeaTac Automated Photo Red Light Enforcement Program

BACKGROUND

National statistics show red-light running is the leading cause of serious urban auto accidents. Motorists are more likely to be injured severely in accidents involving failure to obey traffic controls than in any other type of accidents. Recent advances in photo detection systems have provided law enforcement agencies the ability to address red-light violations with technology. These advances have produced automated traffic intersection enforcement systems which produce photographic evidence of vehicles illegally running red lights. The systems combine a computer with a high-speed camera and detection system to provide around the clock intersection enforcement. Most municipalities that have used automated red light systems have noted decreases in accidents and serious injury accidents at intersections, and red light running in general.

RED LIGHT SYSTEM

A typical system consists of a fixed camera cabinet / pole and detection loops that determine approaching vehicle speeds approaching a given intersection. If a vehicle is traveling too fast to safely stop at a red light intersection, the system is enabled to capture rear license plate images and video of the violating vehicle. That incident is electronically sent to a processing center where the vendor conducts the first part of the quality check. If there is a clear violation, the violation is forwarded to the Police for officer approval. The Police Officer verifies information about the violating vehicle, and then approves of the citation being mailed to the registered owner of the vehicle. Washington State law determined that these kinds of violations are issued to the registered owner of the violating vehicle, and are not placed on any driver's driving record. The vendor will install automated red light systems at several intersections throughout the City. The systems will be placed at intersections based on analysis; intersections will be chosen considering accident rates and volumes.

ENFORCEMENT

SeaTac Police will play a key role in the success of the Photo Enforcement Program. Police will review all photos and video of violations and approve any citations prior to issuance. Officers are being trained regarding the technology, and will work with the vendor to keep up to date on any technology improvements. Violators will be able to view the violation photo or video online with a unique password that will be mailed with the citation. Violators can request hearings, pay the violation, or provide an affidavit that they were not in control of the offending vehicle at the time of the violation.

QUESTIONS

If you have any questions regarding this program, please call 206-973-4990.

SAFETY TIPS

- Allow ample time to reach your destination safely.
- Unsafe or aggressive driving puts everyone at risk!
- Be extra cautious during twilight hours.
- Never drive when you are tired.
- Remember—speed kills.
- Wear a seat belt, drivers and passengers.
- Keep a safe distance away from the vehicle in front of you. A "safe distance" depends on a variety of factors: weather, road conditions, time of day, and speed limit. However, in general, you should maintain one car-length between you and the car in front of you for every 10 mph of speed.
- Turn lights on if your windshield wipers are on.
- [Don't drink and drive.](#)
- Adjust your maximum speed for prevailing weather and traffic conditions.
- Right turn on red—after a complete stop, and only where right on red is allowed.
- Be considerate, pay attention to vehicles at intersections that may be turning or using a legal U-turn.
- Stay alert when driving at all times—don't be distracted by phone calls, reading, or other activities.

1. *What is red light running?*

A violation occurs when a motorist deliberately enters an intersection after the signal light has turned red. Motorists inadvertently in an intersection when the signal changes to red -- when waiting to turn, for example -- aren't red light runners.

2. *Is red light running a big problem?*

Drivers who run red lights are responsible for an estimated 260,000 crashes each year, of which approximately 750 are fatal. On a national basis, fatal motor vehicle crashes at traffic signals increased 18 percent between 1992 and 1998, far outpacing the 6 percent rise in all other fatal crashes. Red light running is a big part of the problem. Institute researchers determined that during this time period there were 5,294 red light running crashes, rising from 702 in 1992 to 745 in 1998, a 6 percent increase. Running red lights and other traffic controls like stop and yield signs is the most frequent type of urban crash, Institute research shows.

Researchers studied police reports of crashes on public roads in four urban areas during 1990 and 1991. Of 13 crash types researchers identified, running traffic controls accounted for 22 percent of all crashes. Among crashes involving running traffic controls, 24 percent involved running red lights. The same study shows that motorists are more likely to be injured in crashes involving red light running than in other types of crashes. Occupant injuries occurred in 45 percent of the red light running crashes studied, compared with 30 percent for other crash types.

3. *How often do drivers run red lights?*

A study conducted over several months at a busy intersection in Arlington County, Virginia, an urban area outside Washington, D.C., indicates that motorists frequently run red lights. On average, a motorist ran a red light every 12 minutes. During peak travel times, red light running was more frequent. For example, between 8 and 9 a.m., a motorist ran a red light every 5 minutes.

4. *Isn't conventional police enforcement sufficient?*

Enforcing traffic laws in dense urban areas by traditional means poses special difficulties for police, who in most cases must follow a violating vehicle through a red light to stop it. This can endanger motorists and pedestrians as well as officers, and police can't be everywhere at once. Communities don't have the resources to allow police to patrol intersections as often as would be needed to ticket all motorists who run red lights. The cameras allow police to focus on other enforcement needs.

5. *What safety benefits do red light cameras provide?*

They've been shown to reduce red light violations and intersection crashes. A recent Institute study of a program in Oxnard, California, shows that red light running violations dropped a total of 42 percent after cameras were introduced at nine intersections, which includes a similar decline at intersections that weren't equipped with them. Another study showed violations declined about 40 percent in Fairfax, Virginia after one year of camera enforcement. Victoria, Australia, began using red light cameras at traffic signal intersections in 1983 and posted signs alerting

motorists of their presence. A subsequent report by the Road Traffic Authority found a 32 percent decrease in right-angle collisions and a 10 percent reduction in injuries after the cameras were installed.

6. *Who runs red lights?*

The Institute created a profile of red light runners by studying driver behavior at an Arlington, Virginia, intersection equipped with a red light camera. The study compared red light runners to motorists who had an opportunity to run a red light but didn't. As a group, red light runners were younger, less likely to use safety belts, had poorer driving records, and drove smaller and older vehicles than drivers who stopped for red lights. Red light runners were more than three times as likely to have multiple speeding convictions on their driver records. No gender differences were found between violators and drivers who didn't run red lights.

7. *Do the cameras photograph every vehicle passing through an intersection?*

No. The cameras typically are set so only those vehicles that enter an intersection after the light has turned red are photographed. Drivers who enter on yellow and find themselves in an intersection when the light changes to red aren't photographed. This technology is intended to catch vehicles driven by motorists who intentionally enter an intersection well after the signal has turned red.

8. *Does someone review the photographs before motorists are ticketed?*

Yes. Trained police officers review every picture to verify vehicle information and ensure that the vehicle is in violation. Tickets are mailed to vehicle owners only in cases where it's clear the vehicle ran the red light.

9. *Do red light cameras violate motorists' privacy?*

No. Driving is a regulated activity on public roads. By obtaining a license, motorists agree to abide by certain rules -- to obey traffic signals, for example. Neither the law nor common sense suggests drivers shouldn't be observed on the road or have their violations documented. In addition, red light camera systems are designed to photograph only a vehicle's rear license plate -- not vehicle occupants.

10. *Are special laws needed to allow localities to use red light cameras to cite violators?* In order for localities to use the cameras for law enforcement purposes, laws must authorize enforcement agencies to cite red light violators by mail. The legislation also must make the vehicle owner responsible for the ticket, establishing a presumption that the registered owner is the vehicle driver at the time of the offense. Red light cameras are currently permitted in 12 states -- Arizona, California, Colorado, Delaware, Hawaii, Illinois, Maryland, New York, North Carolina, Oregon, Virginia, and Washington -- and the District of Columbia. Violations photographed by red light cameras are most commonly treated in two ways -- as traffic violations or as the equivalent of parking tickets, depending on state law. If, as in New York, red light camera violations are treated like parking citations, the law can make registered vehicle owners responsible without regard to who is driving at the time of the offense. Virginia makes red light camera violations a civil offense like New York, but unlike New York, the state allows registered owners to avoid citations by filing affidavits swearing they weren't driving when the violations occurred.

11. *Are red light camera programs expensive?*

A red light camera costs about \$50,000. Installation and sensors cost about \$5,000.

12. Does the American public support the use of red light cameras?

The U.S. public strongly supports the use of red light cameras. Two 1995 surveys sponsored by a traffic safety institute revealed that nationwide, 66 percent of 1,006 people polled said they favor the use of red light cameras, compared with 28 percent who opposed. A 1996 survey by the Insurance Research Council found that the highest support for red light cameras was in large cities, where 83 percent of respondents supported their use. Strong support is also found in communities where the cameras are used; recent red light camera programs in Oxnard, California and Fairfax, Virginia, were supported by 80 percent of residents polled.

13. Do major US cities use red light cameras?

They're used for law enforcement in New York City; Washington, DC; Baltimore; Los Angeles, San Diego, and San Francisco, California; and Charlotte, North Carolina, in addition to many smaller communities.

14. What other countries use red light cameras?

Photographic detection devices are used extensively in many other countries including Australia, Austria, Belgium, Canada, Germany, Israel, the Netherlands, Singapore, South Africa, Switzerland, Taiwan, and the United Kingdom.