Red-Light-Running Issues

The National Highway Traffic Safety Administration (NHTSA) reports that about 6.4 million crashes occurred on America's roadways in 2000. According to the United States Department of Transportation (U.S. DOT), around 40 percent of them occurred at intersections or were "intersection-related." Red-light-running, which results in roughly 950 deaths and 90,000 injuries a year, is estimated to be the cause in 92,000 annual crashes.

Red light runners cause an estimated 92,000 crashes, resulting in about 950 deaths and 90,000 injuries annually.

When Does Red-Light-Running Occur?

Red-light-running is one of the leading problems at urban intersections with traffic signals. Red-light-running occurs when a driver enters an intersection after the traffic signal has turned red. A motorist who is already in an intersection when the signal changes to red, such as when waiting to make a left turn, is not a red-light-runner.

Red-Light-Running Facts

Fatal motor vehicle crashes at traffic signals increased 18 percent nationally between 1992 and 1998. By comparison, a six percent increase occurred at all other collision location types with fatalities.[1]

Researchers at the Insurance Institute for Highway Safety (IIHS) studied police reports of crashes on public roads in four urban areas. Of 13 crash types identified, violating traffic control devices accounted for 22 percent of all crashes. Of those, 24 percent were attributed to red-light-running.[2]

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, compared to 30 percent for other crash types.[3] This is due, in part, to the higher frequency of side-impact crashes.

According to a survey conducted by the U.S. DOT and the American Trauma Society, 63 percent of Americans witness a red-light-running incident more than once a week. One in three Americans knows someone who has been injured or killed because of a red-light-runner.

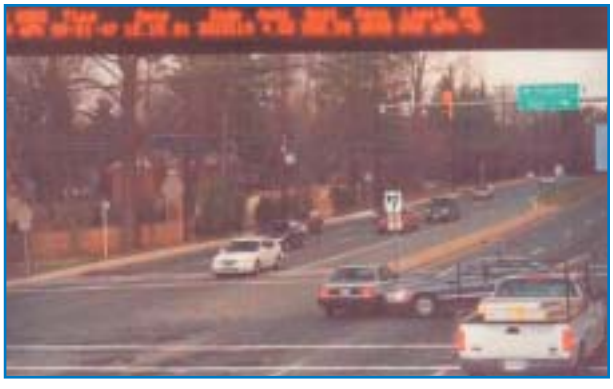
The IIHS conducted a study on who runs red lights. As a group, red-light-runners were younger, less likely to use safety belts, had worse driving records and drove smaller and older vehicles than older drivers. Red-light-runners were more than three times as likely to have multiple speeding convictions on their driving records. No gender differences were discernible.

Numerous public opinion surveys demonstrate strong support for improving intersection safety. In a 1998 U.S. DOT survey, 95 percent of Americans were concerned about red-light-running. In a September 2001 Harris poll, 78 percent of the public wanted more attention paid to improving intersection safety.

Addressing the Problem of Red-Light-Running

Comprehensive, national data on red-light-running is needed to understand the magnitude and complexity of the problem. Identifying the causes of red light running allows authorities to focus on specific ways to reduce violations.

Photos taken from a Red-Light Enforcement camera.



The most common crash type—a driver violating a traffic control device—might be reduced by re-timing a signal, improving signal and sign visibility, increasing decision sight distances and reducing vehicle speeds near intersections.

The Federal Highway Administration (FHWA) and the Institute of Transportation Engineers (ITE) are developing guidance related to engineering countermeasures for the problem. This guidance should be available by Fall 2002.

Red light enforcement cameras can be used to supplement police enforcement. Upholding traffic laws can be dangerous for law officers when they must also run the red light to pursue the violator. The safety of other motorists and pedestrians at an intersection may be threatened if police themselves run the light.

Crashes may be prevented or mitigated through the use of Intelligent Transportation System (ITS) technologies that attempt to overcome human and vehicle limitations. Examples of ITS technologies include infrastructure-based systems, which can provide a warning to drivers who are going to violate a signal and to drivers who may be in the path of an oncoming offender. These systems may eventually interface with in-vehicle warnings, or automated actions, to prevent crashes. However, it is expected to take many years for this technology to reach the market.

The U.S. DOT is committed to a 20 percent reduction in road-related fatalities and serious injuries by 2008. Red-light-running is an identified problem that has been targeted. In 1995, the FHWA created the *Stop Red-Light-Running Program*. It is a community-based safety program focused on raising awareness and reducing fatalities through combined and coordinated education, engineering and enforcement efforts.

[1] American Trauma Society, Stop Red Light Running, May 2002.
[2] Insurance Institute for Highway Safety, Q&A: Red Light Cameras, November 2001.
[3] Insurance Institute for Highway Safety, Q&A: Red Light Cameras, November 2001.