

Photo Red Light and Speed Enforcement
Public Forum
May 26, 2010
7:00 pm to 8:30 pm
City Council Chamber, 350 Kimbark Street

Purpose/Introduction

Members of the Longmont Police Department Traffic Unit and Public Safety Chief Michael Butler will provide information regarding the technology, the administration and programmatic features of a red light and speed camera program. This forum will also provide an opportunity for any participant to ask questions. There will also be time allotted for anyone to speak, for up to two minutes, regarding the red light and speed camera program. During the forum, participants will also be encouraged to take part in a survey regarding the red light and speed camera program. For those unable to attend the forum, the information presented at the forum is offered below. For those unable to attend the forum, you can submit questions and participate in the survey on the City's website. All information gathered at the forum or through this website will be presented to City Council on a date to be determined. City Council will make final decisions regarding the red light and speed camera program. We thank you for your interest and look forward to your hearing your perspective.

History

During the three year period between 2007 and 2009, there were five fatalities in Longmont resulting from either a broadside collision or approach turn collision (turning left in front of another car). Both of these collisions typically occur at intersections and involve one vehicle failing to yield the right of way. The broadside collisions occur either when a driver fails to stop as required by a traffic control device (i.e. signal light, or stop sign), or when a driver initially stops, but then fails to yield the right of way to the other vehicle traveling on a perpendicular roadway. The approach turn collisions occur either when a person making a left turn fails to yield to a car travelling towards them who has the right of way, or a vehicle fails to stop at a red light and collides with a car making a left turn.

When looking at all broadside collisions between 2007 and 2009, 20.8% of the broadside collisions occurred because a vehicle failed to stop, or disregarded, a *red signal light* at an intersection. Of the broadside collision accidents which resulted in severe injury or a fatality, 30.5% were caused by a driver *failing to stop at a red signal light*.

When looking at the approach turn collision (turning left in front of another car), the data does not distinguish whether the approaching car ran a red light or had the right of way.

In 2009, the Longmont Police Department completed a Community Survey as they have done every two years since 1999. In these surveys, residents are asked to identify what issues they believe are "Moderate" or "Major" problems. The #1 problem identified by

residents in all the surveys from 1999 to 2009 is “Speeding cars.” During 2009, there were a total of 4,003 speeding tickets issued by the Longmont Police Department. This was an increase from 2,482 tickets issued in 2008. However, even with the increased number of speeding citations issued, the 2009 survey still indicates that citizens still feel there is a speeding problem in our community. Current staffing resources are taxed, and given the economic downturn, additional staffing to enforce traffic laws is not likely.

The increase in traffic enforcement in 2009 did help decrease the overall number of traffic accidents in the city. The number of accidents in 2009 decreased by 11% compared to the number of accidents in 2008. However, the number of injury accidents increased by 26% and the number of fatal accidents increased by 700%. In one of the fatal accidents, speed and alcohol were factors which contributed to the death of a driver and passenger.

In regards to staffing and the police department’s ability to enforce traffic laws, the department currently has 5 police officers assigned to the Traffic Unit plus 3 Community Service Officers. The 5 police officers assigned to the traffic unit divide their time among accident investigation, education programs, and traffic enforcement. Because of the traffic officer’s duties, they are not constantly available for proactive traffic enforcement. Community Service Officers are non-commissioned employees who complete accident investigations, but they cannot proactively enforce traffic laws. There are 74 police officers who work in the Patrol Division, 6 police officers in the Gang and Crime Suppression Unit, and 6 police officers in the School Resource Officer Unit. These officers do enforce traffic laws, too, but they are also charged with a myriad of other duties and responsibilities. The department’s remaining police officers work in the Detective Division or in Administration and they do not work in uniform patrolling the streets of Longmont.

Why do we need a red light camera and a photo speed program?

While the Longmont Police Department diligently endeavors to make the streets safe, a red light camera program would provide 24-hour, 7-days-a-week enforcement at intersections where violations and crashes occur most frequently. Collisions involving red light running are most likely to result in injuries and significant property damage. When there is no collision involved, it is often more dangerous for police officers to apprehend and cite a red light runner because the officer must often also run the red light to stop the violator. Often times, the act of pursuing the red light violator is too dangerous, and therefore the officer does not pursue the violator to issue a summons. Furthermore, the use of the automated enforcement technology would act as a “force multiplier” allowing the Longmont Police Department to focus on the more egregious needs of the city and to target other vehicle stops for offenses such as DUI, careless, and reckless driving behaviors.

Speed enforcement is conducted on a daily basis. However, due to the fact that speeding occurs at all hours of the day, often times the speeders go undetected as officers are focused on other tasks such as criminal investigations, calls for service from citizens,

arrests, accident investigations, educational programs, and other tasks. Often times, speeding and aggressive driving behaviors occur during times where the number of calls for service are so high that officers are not able to proactively monitor speeding. With mobile photo speed enforcement, officers can continue to provide services and answer calls for service, while speed is being monitored.

The City of Fort Collins utilizes photo speed enforcement. Fort Collins has seen speed compliance increase since the implementation of the automated speed enforcement system. When the program was implemented, the city had an approximate speed compliance rate of 18%. In 2009, the city saw a speed compliance rate of approximately 53%.

Per the state law, photo speed enforcement can only be used in residential neighborhoods with speed limits posted 35 mph or less, on a street bordering a park, in school zones, or in construction zones or work zones where construction is actively occurring. The photo speed cameras would augment the police department's resources and focus the speed enforcement in areas where children and families live.

Why can't police officers enforce the red light violations?

Many of the red light violations occur during peak traffic times and often result in crashes. These times also coincide with a higher rate of calls for service. Often times, the calls for service are a higher priority which means officers have to focus their attention and time on the calls for service and not traffic enforcement. The red light cameras are designed for the sole purpose of red light enforcement and operate 24 hours a day, seven days a week, 365 days a year, regardless of the calls for service.

Why should we privatize traffic enforcement?

Even though cameras, provided by a third party vendor, are documenting the violation, the Longmont Police Department still has the ultimate authority and decision making power when deciding if a citation is issued. The officer will review all violations and take into consideration all of the factors in each incident. The officer will determine if a ticket will be issued. This is exactly the same as if the officer pulled the vehicle over and decided to issue a warning or a ticket. The red light cameras are an additional enforcement tool used by the Longmont Police Department. The cameras will be used in the same manner as a radar unit operated by a single officer is used to determine a vehicle's speed during speed enforcement.

When utilizing photo speed enforcement, officers are not placed in a dangerous position standing on the side of the road near traffic. Currently it takes an officer approximately 10 minutes to issue a ticket for a violation during a traffic stop. During this time, an unknown number of other speed violations are going unobserved. Photo speed enforcement increases the likelihood that more violators who pass the camera will be held accountable for their actions.

What are the fines for a red light ticket and photo speed ticket?

The fine for a red light ticket is \$75 and is controlled by state statute. The fine cannot be changed. Per the state's statute, no points are assessed against the violator's driver's license and the violation does not go on the driver's driving record.

The fine for a speeding ticket is \$40 and is controlled by state statute. If the speeding violation occurs in a school zone, the fine is doubled to \$80. No points are assessed against the driver's license of the violator.

Who controls the traffic light timing? Can the light timing be changed to increase the number of violations? Can the traffic light timing be changed so crashes will not be a problem and there will not be a need for red light cameras?

The traffic signal timing is controlled by the City of Longmont traffic engineers. There are minimum recommendations for light timing at intersections based on physics and other factors including speed, approach speed, and the size and shape of an intersection. All of the timing is controlled by the traffic engineers and is not influenced by vendors. Citations which are issued are reviewed by a police officer.

The timing of the lights is a science. If the yellow light time is too short, drivers will not have enough time to react and stop to the light which is changing colors and this could lead to more accidents. If the yellow light time is too long, drivers will often try to beat the light changing to red and this could lead to more crashes. Poor yellow light timing can increase the number of crashes and the city's traffic engineers will continue to insure the yellow light timing is optimized for safety.

What are the costs to run a red light and speed enforcement program?

The costs of the program vary dependant on the vendor selected. Currently, the city has not selected a vendor, so it is unclear how much the program will cost. Most cities that have a program running have not seen a deficit.

Can the City of Longmont participate in a cost neutral program?

Under Colorado law, no portion of the fines collected for violations may be paid to the vendor of the red light camera or photo speed enforcement. In a cost neutral program, the vendor states in a contract that the city would not lose money when utilizing an automated enforcement system such as a red light camera or a speed camera. The vendor would charge "X" dollars for the use of an automated system. If the fines collected were less than "X" dollars, the outstanding balance would carry over to the next month. If the fines collected during the next month exceeded "X" dollars, the overage would be applied to the negative balance from the month prior. If at the end of the contract, the City collected fines less than what was owed to the vendor, the city would not have to pay the vendor the outstanding balance.

The City of Longmont's attorney has reviewed the state statute and determined a conflict could exist with a cost neutral program and the state statute governing automated traffic enforcement such as red light cameras and photo speed enforcement. This information will be relayed to City Council in an upcoming council meeting along with further data and research that has been done since the council meeting which occurred on January 19, 2010. The police department will seek a decision from the council as to whether the council would like the police department to pursue other contract options with automated enforcement vendors.

Do red light cameras reduce the number of accidents?

The city of Fort Collins has experienced a 62% decrease in broadside crashes since the implementation of red light cameras. The city of Boulder has seen a 65% reduction in red light violations at intersections where red light cameras have been installed. There has been a reduction of 57% of accidents caused by red-light running at the intersections where red light cameras are installed.

“Each year crashes involving red light running claim the lives of more than 800 people and injure another 200,000 people.¹ More than half of the deaths in red light running crashes are other motorists and pedestrians, so there should be no debate about the fact that red light runners are dangerous drivers who put other road users at risk. A recent Insurance Institute for Highway Safety study in Oxnard, California, showed that red light running violations dropped a total of 42 percent after well publicized photo enforcement was introduced.² Another study in Fairfax, Virginia, showed that violations declined about 40 percent after one year of photo enforcement.³ A key to all effective traffic law enforcement is publicity; without it there is no deterrent effect, and the purpose of red light cameras is deterrence.” (Insurance Institute for Highway Safety www.iihs.org/research/topics/myths.html)

¹Retting, R.A.; Ulmer, R.G. and Williams, A.F. 1999. Prevalence and characteristics of red light running crashes in the United States. *Accident Analysis and Prevention* 31:687-94.

²Retting, R.A.; Williams, A.F.; Farmer, C.M. and Feldman, A.F. 1999. Evaluation of red light camera enforcement in Oxnard, California. *Accident Analysis and Prevention* 31:169-74.

³Retting, R.A.; Williams, A.F.; Farmer, C.M. and Feldman, A.F. 1999. Evaluation of red light camera enforcement in Fairfax, Virginia. *ITE Journal* 69:30-34.

Several studies of cities with red light cameras showed a reduction in red-light violations as well as a reduction in crashes that resulted from red-light running at intersections where cameras were installed. The studies also showed some cities saw a reduction in crashes at intersections where cameras were not installed. (Bochner and Walden, “Effectiveness of Red-Light Cameras” *ITE Journal*, May 2010:18-24).

How does a red light camera work?

Per state law, signs have to be posted prior to cameras being utilized. The signs have to be posted a minimum of 200 feet away, but no further than 500 feet. Sensors are placed in the roadway prior to the intersection. The cameras and sensors are linked with the traffic signals. When the light turns red, the camera is activated. The vehicle has to pass over the two sensors, which records the vehicle's speed. When the vehicle crosses over

the stop bar/solid white line after the light turns red, the activated camera takes a photograph. There are often several cameras which work together taking a photograph of the vehicle's license plates as well as a photo of the driver. Many of the systems also have video of the violation. The system records the time when the vehicle entered the intersection after the light turned red as well as the vehicle's speed. The information is attached to the photograph. The video footage, along with the photographs, are sent to the vendor of the equipment. The vendor locates the registered owner's name by the license plate on the car. Utilizing motor vehicle files, the vendor searches for a driver's license record for the same name and address found on the registration. If a match is found, the physical description on the driver's license is compared with the photograph of the driver taken at the time of the violation. If the physical description found on the driver's license matches the photo taken of the driver, the vendor moves onto the next step of the ticket process. The vendor reviews the violation using standards set by the Longmont Police Department. If the violation meets the definition of a violation based on the standards set, the violation is forwarded to the Longmont Police Department. At the police department, a Longmont Police Officer reviews the violation and determines if a citation will be issued. If, for example, the photographic and video evidence shows that a driver lawfully turned right after stopping for a red light, no citation would be issued. If the officer elects to issue the citation, notice is sent to the vendor who prints the citation and mails it to the registered owner's address.

When the registered owner receives the citation, they review it. Many of the vendors offer a secure internet link to view the photographs of the violation as well as the video of the incident. The owner can see the photograph of the driver. If the owner is not the driver, they can send the citation back with a copy of their driver's license showing their picture. The pictures can be compared, and if the driver is determined to be someone other than the registered owner, the citation could be dismissed or the owner can provide the name of the person who was driving the vehicle and the citation can be issued to them. The Longmont Police Department will decide if further attempts will be made to identify/locate the driver.

Who is using a red light camera and/or photo speed enforcement program?

Currently there are 10 Colorado cities who are utilizing red light cameras as an enforcement tool. They are:

Aurora
Boulder
Cherry Hills Village
Denver
Fort Collins
Greenwood Village
Lone Tree
Northglenn
Pueblo

The cities of Colorado Springs and Commerce City will soon be implementing red light cameras.

There are 3 Colorado cities who are utilizing photo speed enforcement programs:

Boulder
Denver
Fort Collins

Do the systems become unreliable or malfunction?

As with any technology, there can be mistakes or malfunctions. However, cameras have been in use for over 20 years in Europe, and over 10 years in the USA. During that time, the cameras have been proven reliable.

Each violation is reviewed by an officer who verifies the vehicle entered the intersection after the traffic light turned red. Since the violation is caught on both still photographs as well as video, the officer will be able to see if the vehicle actually crossed into the intersection after the light turned red. The system will have to be maintained frequently at the cost of the vendor.

Per Colorado state law, an employee of the City of Longmont would have to be present during photo speed enforcement to ensure the equipment is working properly at the time of the violation.

All parties who receive a citation have the right to due process and can request a trial. The prosecutor would have to prove the system was operating properly at the time of the violation.

What happens next?

Since presenting a red light camera and photo speed enforcement program to City Council on January 19, 2010, Longmont Police Officers have been conducting research. That research, along with the information gathered from the upcoming public forum and the information collected from the City of Longmont's website, will be presented in an upcoming city council meeting. The city council will be asked for a decision as to whether the Longmont Police Department should begin a selection process for a vendor.

Further information can be found at <http://www.iihs.org/research/topics/rlr.html>.