

June 11, 2013

Honorable Wayne Schmidt and Members of the House Transportation Committee

SEMCOG, the Southeast Michigan Council of Governments, has long supported the concept of using cameras to enhance enforcement efforts to reduce red-light running. With some added language, we feel HB 4763 will be another important tool in the effort to save lives by reducing red-light running in our state. Attached is a "Q&A" document prepared by the Federal Highway Administration that provides answers to many of the questions raised in committee from last week's testimony.

Let us be clear. The causes of crashes at intersections are often a complicated and complex issue. SEMCOG strongly believes that professional traffic safety engineers should be involved in the process of determining whether or not it makes sense to use cameras at red lights. A traffic safety engineer can and should review the issues at specific traffic signals. For example, the problem could be the timing of a traffic signal in relationship to other traffic signals. Another potential problem is the visibility of a signal. The point is, this is an area where professional engineers can make a difference and the use of cameras as part of the enforcement process should be an option.

Some of the research and previous testimony indicates that permitting cameras to assist in red light enforcement will create more dangerous situations. The worst and most dangerous type of crash at an intersection are "angle" crashes, where a violating vehicle smashes into the side of an oncoming car. Data indicates cameras at red lights help to reduce this type of crash. Data also indicates that "rear end" crashes may increase with the use of cameras, it should be noted that these types of crashes, while serious, do not cause the number of fatalities and serious injuries as angle crashes.

SEMCOG strongly believes that this type of tool should not be used for raising revenue. That is another reason why we believe a traffic engineer should be part of this process.

Finally, it has been discussed that using photographs for law enforcement purposes might be an invasion of privacy. As used in the attached FHWA document, "The Supreme Court has held that driving in open view on a public highway does not afford Fourth Amendment protection of an individual's privacy." However, the FHWA document makes clear the use of such images need to be specifically limited to driver identification purposes and any use should be strictly confidential.

To conclude, with adoption of amendatory language, SEMCOG can and will support this legislation.

SEMCOG STATS: Red Light Running

1. Top 10 Red-Light-Running (RLR) Communities, 2008-2010 (Ranked by three-year RLR crash average)

Rank	Community	County	3-Year Average		Average % RLR to All Crashes
			RLR Crashes	All Crashes	
1	Detroit	Wayne	797	21,081	3.8%
2	Sterling Heights	Macomb	156	3,614	4.3%
3	Warren	Macomb	144	3,577	4.0%
4	Dearborn	Wayne	132	3,012	4.4%
5	Livonia	Wayne	112	2,909	3.9%
6	Ann Arbor	Washtenaw	98	2,748	3.6%
7	Southfield	Oakland	95	2,950	3.2%
8	Troy	Oakland	93	2,732	3.4%
9	Westland	Wayne	83	1,608	5.2%
10	Clinton Township	Macomb	78	2,435	3.2%

2. Crashes by Involvement

	2008	2009	2010	2011	2012	% of Crashes 2008-2012
Red-light Running	3,840	3,508	3,53	3,505	3,452	2.9%
Lane Departure	22,099	19,171	18,236	18,538	17,943	15.4%
Alcohol	4,538	4,397	4,001	4,129	4,187	3.4%
Drugs	686	816	976	998	1,008	0.7%
Deer	6,278	6,560	6,062	5,443	5,206	4.7%
Train	20	16	10	20	13	0.0%
Commercial Truck/Bus	6,476	4,869	5,301	5,373	4,740	4.3%
School Bus	412	409	425	437	395	0.3%
Emergency Vehicle	1,074	979	900	924	815	0.8%
Motorcycle	1,456	1,285	1,176	1,131	1,326	1.0%
Intersection	45,289	41,437	41,347	41,469	41,006	33.7%
Work Zone	2,662	3,243	3,262	2,572	2,428	2.3%
Pedestrian	1,204	1,180	1,217	1,350	1,244	1.0%
Bicyclist	976	967	940	858	936	0.7%
Older Driver (65 and older)	25,255	24,763	26,178	27,222	27,543	21.0%
Young Driver (16 to 24)	46,132	42,570	43,149	43,519	43,342	35.0%

3. Total number of RLR crashes are going down but fatalities have increased three times from 2012 to 2011. Below is trend for RLR for recent five years for K and A-injuries.

Year	Fatalities	A-injuries
2008	11	184
2009	12	188
2010	19	173
2011	7	169
2012	21	173

Red-Light Camera Q & As

1. Question: How serious is the red-light running problem?
2. Question: Why do people run red-lights?
3. Question: What is the position of the Federal Highway Administration (FHWA) and the National Highway Traffic Safety Administration (NHTSA) on the use of photo enforcement cameras?
4. Question: Do studies show that there are safety benefits from installation of these cameras systems? Do rear-end collisions increase when red-light cameras are installed—in which case, aren't we just trading one type of crash for another?
5. Question: Why don't you just increase the time of yellow lights in dangerous intersections?
6. Question: Do public agencies use photo enforcement to generate revenue?
7. Question: If cities are financially dependent on the revenue these devices bring in; doesn't that actually discourage implementing engineering solutions that would make intersections safer?
8. Question: How many cities in the U.S. are using red-light cameras today?
9. Question: What is the appropriate and proper use of red-light cameras?
10. Question: Are other measures as effective as cameras, or are cameras the only option?
11. Question: Is FHWA providing any guidance on red-light running countermeasures (other than enforcement as a countermeasure)?
12. Question: In light of the consequences—increased insurance costs, for example—do insurance companies support red-light cameras out of self-interest?
13. Question: It often takes weeks before a person receives a red-light running citation in the mail—will this make his or her ability to challenge it more difficult?
14. Question: Red-light camera citations are often issued on the assumption that the driver of the car and the person to whom the car is registered are one and the same. If this assumption is not true, the owner of the car will nonetheless be forced to pay. Is that fair?
15. Question: How can red-light cameras taking a photograph of my vehicle without my permission not be an invasion of privacy?
16. Question: Do private companies responsible for the cameras get a "kickback" for each ticket issued?
17. Question: How do I get information on starting a Stop Red-Light Running campaign?

1. Question: How serious is the red-light running problem?

ANSWER: Red-light running is a serious intersection safety issue across the nation. According to the National Highway Traffic Safety Administration's (NHTSA) *Traffic Safety Facts 2008 Report*, there were more than 2.3 million reported intersection-related crashes, approximately 733,000 injury crashes, and more than 7,770 fatalities in 2008. NHTSA's *Fatality Analysis Reporting System (FARS)* reports that red-light running crashes alone caused 762 deaths in 2008 ([click here to learn more about how red-light running is defined and how crash figures are determined](#)). An estimated 165,000 people are injured annually by red-light runners. (Source: *Status Report, Vol. 42, No. 1*, IIHS, January 2007).

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2. Question: Why do people run red-lights?

ANSWER: Red-light running is a dangerous form of aggressive driving. Based on self-reported behavioral surveys, red-light running is a result of people wanting to save time. However, several factors can lead to red-light running, such as impatient and inattentive drivers, improperly timed traffic signals, lack of enforcement efforts, and the attitude that no harm will come from running a red-light.

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3. Question: What is the position of the Federal Highway Administration (FHWA) and the National Highway Traffic Safety Administration (NHTSA) on the use of photo enforcement cameras?

ANSWER: FHWA and NHTSA support a comprehensive approach to intersection safety that incorporates engineering, education, and enforcement countermeasures to prevent red-light running and improve intersection

intentionally violating the red-light and entering the intersection later. More information can be found in the following document:

- ***Making Intersections Safer: A Toolbox of Engineering Countermeasures to Reduce Red-Light Running***, ITE Report 115, 2003. [[HTML](#), [PDF 2.47 MB](#)]

The length of the yellow intervals should be set in accordance with the ***Manual on Uniform Traffic Control Devices for Streets and Highways in Section 4D.10, Yellow Change and Red Clearance Intervals*** guidelines and applicable state and local agency policies and procedures.

Additional information regarding how to adjust yellow signal intervals to reduce the incidence of red-light running can be found in the following documents:

- ***Determining Vehicle Signal Change and Clearance Intervals***, Institute of Transportation Engineers (ITE), August 1994. [[PDF](#)]
This report contains more detailed discussion of methods for the calculation of clearance intervals for specific circumstances.
- ***Guidance Memorandum on Consideration and Implementation of Proven Safety Countermeasures***, FHWA, 2008. [[HTML](#)]
Research shows that yellow interval duration is a significant factor affecting the frequency of red-light running and that increasing yellow time to meet the needs of traffic can dramatically reduce red-light running. This memo from the Associate Administrator, Office of Safety, FHWA to Division Administrators and Federal Lands Highway Division Engineers, provides guidance on determining yellow change intervals based on intersection characteristics to reduce red-light running. See ***Yellow Change Intervals (Rev. 7/1/09)***. [[HTML](#)]

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6. Question: Do public agencies use photo enforcement to generate revenue?

ANSWER: Red-light cameras should only be used to enhance traffic safety. The goal of red-light camera programs should strictly be to reduce crashes and the resulting injuries and deaths. Where a private contractor is responsible for the processing of citations, compensation based on the number of citations issued should be avoided. For additional information on this issue, see the resource below:

- ***Red-Light Camera Systems Operational Guidelines***, FHWA, January 2005. [[HTML](#), [PDF 1.32MB](#)]
The information contained in this document is intended to foster discussions and initiatives that will improve intersection safety by reducing crashes due to red-light running. This document is an update to a 2003 version. It is not a regulatory requirement and the decision to use red-light cameras is a matter for local decisionmakers.

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7. Question: If cities are financially dependent on the revenue these devices bring in; doesn't that actually discourage implementing engineering solutions that would make intersections safer?

ANSWER: Jurisdictions considering the use of red-light camera systems should conduct an engineering study to determine the factors contributing to red-light running violations and to identify appropriate countermeasures that could be implemented to reduce the number of crashes resulting from red-light violations. Red-light running is a complex issue that needs to be addressed through a comprehensive approach that includes engineering, enforcement and education solutions.

In many areas, red-light camera programs have not produced profits to cities. One example is the finding of the California State Auditor that "local governments themselves make little or no profit from their programs." The following document provides additional information on this example:

2003 version. It is not a regulatory requirement and the decision to use red-light cameras is a matter for local decisionmakers.

- **Determining Vehicle Signal Change and Clearance Intervals**, Institute of Transportation Engineers (ITE) Technical Task Force I4TF-1, 1994 [[PDF](#) 1.58 MB]

This report provides direction to practitioners on the lengths of yellow interval and all-red clearance periods.

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10. **Question: Are other measures as effective as cameras, or are cameras the only option?**

ANSWER: Like any traffic safety problem, there is no single solution or answer, but rather a multitude of solutions depending on the specific situation. Engineering improvements can make a difference. Enforcement, whether traditional or automated, can be an effective deterrent. See the following documents for additional materials available to assist communities in reducing red-light running crashes:

- **Red-Light Camera Systems Operational Guidelines**, FHWA and NHTSA (FHWA-SA-05-002, January 2005, [[HTML](#), [PDF](#) 1.32MB])
- **Engineering Countermeasures to Reduce Red-Light Running (RLR): Issue Brief 6** (FHWA, November 2009, [[PDF](#)])
- **Making Intersections Safer: A Toolbox of Countermeasures to Reduce Red-Light Running**, FHWA/ITE Report 115, 2003. [[HTML](#), [PDF](#), 2.47 MB])
- **Engineering Safer Intersections**, Hasson, Patrick, FHWA and Midwest Research Center. [[PPT](#), 4.87MB] This 28-slide presentation was developed to support Stop Red-Light Running programs and campaigns at the State and local level. It provides red-light running crash statistics and outlines a range of engineering countermeasures demonstrated to reduce red-light running.

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11. **Question: Is FHWA providing any guidance on red-light running countermeasures (other than enforcement as a countermeasure)?**

ANSWER: FHWA worked with the Institute of Transportation Engineers (ITE) to develop an informational report, *Making Intersections Safer: A Toolbox of Countermeasures to Reduce Red-Light Running*, FHWA/ITE Report 115, 2003 [[HTML](#), [PDF](#), 2.47 MB])

Engineering countermeasures that are considered useful include: improving signal visibility (placement and number of signal heads, size of signal display, line of sight), improving signal conspicuity (redundancy, light emitting diode signal lenses, backplates), increasing the likelihood of stopping (signal ahead signs, advanced warning flashers, rumble strips, left-turn signal signs, and pavement condition), addressing intentional violations (traffic signal optimization, change in cycle lengths, change in timing of yellow and red intervals, and dilemma zone protection), and eliminating the need to stop (remove unwarranted signals, change to flashing mode operation or convert intersections to roundabouts)."

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12. **Question: In light of the consequences—increased insurance costs, for example—do insurance companies support red-light cameras out of self-interest?**

ANSWER: Most States using red-light cameras do not add points to the driver's license. Therefore, red-light running citations do not result in higher insurance rates because most States do not report the citations to insurance companies. The insurance industry does have a vested interest in the traffic safety programs that result in fewer crash claims for vehicles hit or damaged in red-light running crashes.

17. **Question: How do I get information on starting a Stop Red-Light Running campaign?**

ANSWER: The best place to get information is on this web site, under Marketing and Outreach Support Materials. You can get detailed information as well as contact information for FHWA specialists that can answer your questions.

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