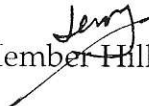


May 14, 2010

Hon. Jerry Hill  
Assembly Member, 19<sup>th</sup> District  
Room 4146, State Capitol  
Sacramento, CA 95814

Dear Assembly Member ~~Hill~~: 

In a letter dated March 16, 2010, you requested information regarding the current use of automated enforcement systems to identify drivers who enter a local intersection when the traffic signal is red. You asked a series of questions which we have restated below, followed by our responses. As suggested by your staff, we focused some of our responses on the automated red light enforcement systems utilized in San Mateo and Los Angeles Counties. In preparing our response to your request, we reviewed various research reports prepared by academic researchers, as well as government agencies, regarding the implementation and effectiveness of automated red light enforcement systems. In addition, we spoke with officials from the courts, law enforcement, and other local government agencies, and drew upon data we collected from various jurisdictions that operate automated red light enforcement systems in San Mateo and Los Angeles Counties.

***1. How effective are red light cameras at reducing accidents and enhancing public safety? Is there a way to determine if red light cameras have increased public safety?***

Over the years, numerous studies have been performed to assess the impact of automated red light enforcement systems on public safety. Our preliminary review indicates that the findings of these studies are mixed. Some studies found an overall reduction in the number of accidents occurring at intersections with automated red light enforcement systems. For example, a study conducted in 1998 by the San Francisco Department of Parking and Traffic found a 9 percent decline in accidents caused by red light violations after automated enforcement systems were implemented in San Francisco. Similarly, in 2002, the Bureau of State Audits (BSA) found an overall 10 percent decline in accidents caused by individuals driving past red traffic signal lights in certain local jurisdictions that use automated enforcement. Other studies found reductions for certain types of accidents (such as "T-bone" collisions that involve a car hitting the side of another car) that were generally offset by increases in other types of accidents (such as rear end collisions). For instance, a University of California at Irvine study of automated red light enforcement systems in San Diego found: (1) a 60 percent reduction in accidents attributable to red light violations at intersections where such automated sys-

tems were installed and (2) a 140 percent increase in rear-end collisions at these same intersections.

*2. Have the issues raised by the 2002 audit been addressed?*

As part of its 2002 audit of several different automated red light enforcement systems in California, BSA recommended a series of steps to increase the efficiency of such systems. For example, BSA recommended that cities and counties (1) conduct more rigorous oversight of the private vendors that install and monitor automated red light enforcement systems (such as by establishing criteria for how vendors should screen violators), (2) consider whether certain engineering measures (such as extending the yellow light interval) would be more effective at improving traffic safety than installing an automated enforcement system, and (3) improve their ability to track program revenues and expenditures. In addition, BSA recommended that the Legislature clarify various issues in statute, such as whether photographs taken by automated red light enforcement systems can be used for other law enforcement purposes.

In February 2003, BSA released a follow-up report to its 2002 audit, *Implementation of State Auditor's Recommendations*, that discussed automated red light enforcement systems. (Enclosed is a copy of this follow-up report.) In it, BSA discussed the steps that each local jurisdiction identified in the audit has taken to implement the above recommendations. In general, most jurisdictions took some form of corrective action.

We would also note that soon after the 2003 follow-up report was released, the Legislature enacted Chapter 511, Statutes of 2003 (AB 1022, Oropeza), to statutorily implement many of BSA's recommendations. Specifically, Chapter 511 made the following changes:

- ***Role of Private Vendors in Operations.*** Chapter 511 clarified which operational responsibilities for automated red light enforcement systems can be delegated to private vendors and which must remain in the hands of government agencies.
- ***Evidentiary Rules.*** The legislation changes state law to specify that photographs taken by automated red light enforcement systems can be used only for traffic enforcement and cannot be used in other types of criminal proceedings.
- ***Increased Local Government Oversight.*** In addition, Chapter 511 placed in statute nearly all of the recommendations made by BSA for increased local government oversight. For example, the legislation required agencies to safeguard and properly destroy confidential data after six months, as well as to ensure that automated red light enforcement systems are regularly calibrated and inspected.

*3. Are there any, and if not should there be, statewide red light traffic camera standards in place that specify requirements for local government approval, installation, camera accuracy and calibration, statewide consistency, etc.?*

Vehicle Code Section 21455.5 specifies an extensive list of statewide standards that governmental agencies utilizing automated red light enforcement systems must follow. Some of the key standards are:

- A local jurisdiction can only operate an automated red light enforcement system in cooperation with a law enforcement agency. Moreover, only citations that have been reviewed and approved by law enforcement can be delivered to violators.
- Each local jurisdiction must (1) develop uniform guidelines for processing citations and (2) ensure that the equipment is properly installed, regularly inspected, and operating effectively.
- The automated red light enforcement system must be clearly identified from all directions with signs, or by signs at major entrances to the city where the system is located.

*4. Are there issues with accuracy and calibration when using the red light cameras?*

Like other pieces of technology, automated red light enforcement systems are subject to error. For example, citations issued by such systems are sometimes overturned in court due to concerns about system accuracy. However, it is unclear at this time whether these errors are widespread or limited to certain jurisdictions or types of equipment. Moreover, as noted above, Vehicle Code Section 21455.5 requires that automated red light enforcement systems be regularly inspected to ensure that they are operating properly.

*5. How have local governments and the state of California benefited financially from the operation of red light cameras?*

In general, both local governments and the state have received significant amounts of *gross* revenues from red light violations identified by the more than 600 automated enforcement systems in California. Since all such revenue is collected at the county level and is not necessarily accounted for separately from revenue from red light violations caught by a county sheriff or police officer, actual data on the amount of revenue collected from automated red light enforcement systems is currently not available. Based on data that we obtained from selected jurisdictions, however, we estimate that hundreds of millions of dollars in revenue may be collected annually from automated red light violations. These funds are allocated among cities, counties, and the state.

The actual amount that cities or counties receive in revenue depends on various factors, such as whether the citation was issued by a city or county law enforcement offi-

cer. For example, of the revenue collected from each red light violation issued by a city, roughly 30 percent is allocated to the city issuing the citation, about 25 percent to the county, and 45 percent to the state. As we discuss in more detail below, cities do not have statutory restrictions on their use of the revenue. However, most of the county and state revenues are distributed to a myriad of special fund accounts to support specific activities as required by current laws. For example, about \$40 collected from each violation is used to support state and local DNA forensic laboratories. In addition, some of these revenues are offset by increased costs incurred by local governments to (1) review and authorize automated red light enforcement violations and (2) pay a vendor to monitor the system on an ongoing basis. The 2002 BSA audit found that some local jurisdictions were operating automated enforcement systems near the breakeven point or even at a net loss.

In order to assess the fiscal impact of automated red light enforcement systems in San Mateo and Los Angeles Counties, we contacted various cities in these counties to obtain detailed information regarding the cost of operating such systems, as well as the amount of fine revenue received from automated red light violations. Figure 1 summarizes the information that we were able to obtain from selected cities in San Mateo and Los Angeles Counties. As shown in the figure, many of the cities we contacted received revenues that exceeded their costs for operating automated red light enforcement systems. For example, the revenues received by the City of Beverly Hills exceeded its costs by more than \$1 million in 2008-09. However, the City of San Carlos' costs exceeded its revenue collections. (We note that San Carlos city officials informed us that the city plans to discontinue its automated enforcement system.)

**Figure 1**  
**Fiscal Impact of Automated Red Light Enforcement Systems on Selected Cities in San Mateo and Los Angeles Counties<sup>a</sup>**

City	Gross City Revenue	System Costs <sup>b</sup>	Net Revenue
Beverly Hills	\$2,100,000	\$1,034,000	\$1,066,000
Hawthorne	735,200	270,200	465,000
City of Commerce	911,500	664,600	246,900
Long Beach	485,400	380,100	105,300
Menlo Park	320,000	141,500	178,500
Millbrae	418,800	309,700	109,100
Montebello	594,000	444,000	150,000
Santa Clarita	605,600	533,600	72,000
San Carlos	59,400	86,000	-26,600

<sup>a</sup> Data come from various recent fiscal and calendar years.  
<sup>b</sup> Includes payments to vendors to operate and monitor systems, as well as costs to review violations.

**6. How is the revenue collected from the red light camera program distributed?**

The total amount paid for red light violations generally consists of the following four major components:

- A *base fine* of \$100 for each violation.
- *Assessments* which are generally derived off of the base fine (such as \$5 for every \$10 or fraction thereof in a base fine) and generally used to support various activities at the state and county level (such as DNA laboratories). Examples include the State Penalty Assessment and the Conviction Assessment.
- A *state surcharge* of 20 percent of the base fine.
- *Fees*, such as for court security (\$30 for each violation) and night court (\$1 for each violation).

When all of these components are added together, traffic violators often can pay over \$400 in total for a single citation. Figure 2 illustrates an example how the total amount paid for a red light violation could be calculated. The actual amount paid for such a violation can vary depending on several different factors, including (1) the circumstances and location of the violation, (2) whether the driver chooses to attend traffic violator school, and (3) judicial discretion. For example, if the violation caused physical harm, the base fine increases to \$220, and can be increased more if the motorist had previously harmed someone in a similar type of violation.

<b>Charge</b>	<b>Amount</b>
Base fine	\$100
Assessments	315
State surcharge	20
Fees	31
<b>Total</b>	<b>\$466</b>

As previously mentioned, existing law allocates revenue collected from most traffic violations (including red light violations identified with automated enforcement systems) among a myriad of special fund accounts based on a variety of factors, including where the violation took place and which law enforcement agency issued the citation. Thus, the distribution of the revenue can vary across cities and counties. For example, existing law specifies a different distribution of the base fine among the county and each of the cities in the county. In addition, if the citation is issued by county personnel, such as a sheriff's deputy, rather than by a city employee, the county will receive all of the base fine revenue. Most of the revenue that counties receive from red light violations is required to be spent on activities related to public safety. For example, a portion



of the revenue received by the county must be deposited in the county's DNA Identification Fund to support various DNA-related activities.

The state's share of revenue from red light violations is deposited both in the General Fund and in various special funds, including the Trial Court Improvement Fund, the state's DNA Identification Fund, and the State Court Facilities Construction Fund. The revenue is also deposited in the State Penalty Fund, which is then subsequently allocated across nine special funds generally related to public safety as well as the General Fund.

*7. Is the amount charged for a ticket by a camera appropriate for the crime committed?*

The amount paid for citations issued by automated red light enforcement systems is the same as that paid for officer-issued citations. Whether that amount is appropriate is fundamentally a policy decision for the Legislature. Although higher fines could create additional revenue for the state and local governments and provide a greater incentive for motorists to follow traffic laws, an excessive increase in fines could increase the number of individuals who fail to pay the fines or contest their fines in court.

*8. What financial and workload impact has the red light camera program had on local courts?*

Our analysis indicates that automated red light enforcement systems have generally created additional workload for the superior courts in San Mateo and Los Angeles Counties. For example, the San Mateo Superior Court reports roughly 31,000 citations were issued by automated enforcement systems in its jurisdiction in 2009, representing almost one-fifth of all of the court's traffic filings. Similarly, the Administrative Office of the Courts (AOC) reports that the Los Angeles Superior Court processed roughly 160,000 citations issued by automated enforcement systems in 2008. This represents about one-tenth of all traffic infractions filed in Los Angeles County.

The additional filings from the use of automated systems typically increase the number of individuals appearing in traffic court, as well as the number going to court to pay their citations and sign up for traffic school. Additional filings can also increase phone calls and correspondence from individuals who have received citations that require attention from court staff. Based on the data we received from the AOC, we estimate that each traffic infraction results in an average of around 40 minutes of workload.

These systems also have various other financial impacts on court systems. For example, some courts may be required to pay traffic case management vendors to process traffic citations. San Mateo Superior Court is charged \$4.81 for each citation processed by its traffic case management vendor. As discussed above, the courts also receive a significant amount of revenue from each citation. Specifically, the courts generally receive about 17 percent of the revenue collected from each red light violation, although this amount varies by jurisdiction. However, under existing state law most of these

funds are deposited into special fund accounts unrelated to processing traffic infractions (such as accounts for court construction projects). In other words, only a tiny fraction of these revenues is likely to be made available to help offset the costs of processing red light citations.

*9. Are there any privacy concerns associated with the red light camera program?*

In the course of our research, we came across several news articles describing the public objections to the installation of an automated red light enforcement system in neighborhoods because of privacy concerns. However, at the time this letter was prepared, we were unable to identify any legal challenges against jurisdictions operating automated enforcement systems in California on the basis that they violate individual privacy. Moreover, existing state law does contain provisions to help ensure that the information collected is only used for the enforcement of signal device laws. For example, as previously mentioned, Vehicle Code Section 21455.5 states that (1) each agency operating an automated enforcement system must develop uniform guidelines for storing confidential information, (2) photographic records may only be made available to governmental and law enforcement agencies for the purposes of enforcing offenses related to traffic devices or to the individual involved in the citation, and (3) confidential information obtained from the Department of Motor Vehicles may only be used for enforcement purposes.

*10. Should red light cameras be used to issue right turn-on-red tickets?*

Whether automated enforcement systems should be used to issue citations for right turns while the signal light is red is fundamentally a policy call for the Legislature based primarily on whether such action would improve traffic safety. Currently, there is limited data available to shed light on this issue.

*11. Does the LAO have any recommendations regarding California's red light camera program?*

As you know, as part of the January 2010 special session related for the state's budget shortfall, the Governor proposed statutory changes to (1) authorize local government to use automated enforcement systems to identify individuals driving greater than the posted speed limit and (2) establish new and different penalties for drivers caught speeding by such systems. Under the Governor's proposal, many of the roughly 600 automated red light enforcement systems that currently exist throughout the state could be modified to also identify speeding violations. In our January 2010 policy brief, *The 2010-11 Budget: Automated Speed Enforcement Merits Authorization*, we recommended that the Legislature approve the Governor's proposal but modify it to (1) establish fines identical to existing speeding fines, (2) deposit the state's share of the revenues to the General Fund, and (3) increase oversight of fine collections. We would note that—in comparison to the mixed research findings on automated red light enforcement systems discussed above—the available research indicates that automated speed enforcement

systems have generally led to varying levels of reductions in traffic violations and accidents. Given the potential to increase traffic safety, the state's severe fiscal problems, and the difficult choices ahead, we continue to recommend the adoption of the above approach.

Over the years, our office has also expressed concerns that the reliance upon statutory percentages to distribute penalty assessment revenue to various programs could result in an inefficient allocation of the state's financial resources which, in turn, could restrict the ability of certain programs to fulfill their legislative mandates. Thus, the present regimented system of allocation of these revenues limits the Legislature's ability to oversee and set priorities for the expenditure of state funds. Accordingly, we have recommended in the past that legislation be enacted to (1) eliminate the percentage allocation requirements and (2) transfer penalty assessment revenue to the General Fund for allocation to programs on the basis of a review of program needs through the annual budget process, to the extent legally possible.

I hope this information addresses your questions. Please feel free to contact Drew Soderborg of my staff at 319-8346 or [drew.soderborg@lao.ca.gov](mailto:drew.soderborg@lao.ca.gov) if you have any further questions.

Sincerely,



Mac Taylor  
Legislative Analyst

Enclosure