



**CITY OF HAYWARD**  
**STAFF REPORT**

AGENDA DATE 06/20/2007

AGENDA ITEM \_\_\_\_\_

**TO:** Council Technology Application Committee

**FROM:** Chief of Police

**SUBJECT:** Red Light Photo Enforcement Program

**RECOMMENDATION:**

It is recommended that the Committee review and comment on this report.

**DISCUSSION:**

In response to inquiries from the City Council, staff has investigated the feasibility of implementing a photo enforcement program for red light traffic violations. Based on a decision that photo enforcement was feasible and desirable in Hayward, staff issued requests for proposals (RFP) in February, 2007. In March, 2007, the city received responses to the RFP from two companies: Redflex Traffic Systems and American Traffic Solutions, Inc.

The goal of a Red Light Photo Enforcement program is to improve the safety of the community for vehicular, bicycle, and pedestrian traffic by reducing the incidence of vehicles failing to stop for red traffic signals. Photo enforcement programs have a proven record for reducing collisions in jurisdictions where similar programs have been initiated.

During the course of evaluating the program for Hayward, staff met with three potential service providers and made site visits to San Leandro, Capitola, and Millbrae where the major two service providers have operational photo enforcement systems. Staff evaluated the installations, the quality of photographic and video evidence collected by the systems, and the "user friendliness" of the computer for law enforcement personnel, court personnel, and members of the public. During the site visits, staff had the opportunity to view random samples from the violations captured by the systems and submitted to the police for review, and found significant differences in the quality of photographic evidence between the major vendors.

We anticipate that the system will cover over ten intersection approaches when it is fully implemented<sup>A</sup>. (See Endnote A for a list of intersections under review.) Consideration will be given to those locations throughout the city where photo enforcement will have the greatest positive impact. In addition to the use of accident statistics for the city's intersections gathered by the police department, each potential installation will be sampled to obtain actual violation counts. Sampling is accomplished by actual photographic monitoring of a selected intersection approach through the temporary installation of a vendor supplied camera system. The photographic data is analyzed for activity including total vehicle counts and the number and frequency of red light violations for traffic traveling straight through the intersection, as well as traffic making controlled left-hand and right-hand turns. The sampling is used to further assess

the feasibility for the use of Red Light Photo Enforcement at the sampled location in reducing collisions and improving community safety.

Hayward is somewhat unique in the application of a photo enforcement system due to the large number of CalTrans controlled signals in the city. These CalTrans intersections all require permits from CalTrans. This permit process is coordinated by the vendor and our public works folks working, in part, to assure CalTrans that the City is not using CalTrans' electricity to power the system, not making any connections directly to their signal controller, or not interfering with the induction loops or video controls used for signal activation and control. It is not a difficult process, but does add significant time to the process.

Therefore, it was important to also look for a vendor with substantial experience working with the local CalTrans district officials. Additionally, the vendor will be required to work the Alameda County Superior Court where traffic violation citations are handled.

Description of the System – The Camera System uses digital media that produces still images and full motion digital video technology. Each monitored intersection approach requires the installation of two camera systems and high-speed synchronized flash units to capture the required photographic evidence used to prosecute red light violations. The digital evidence is transported over secure high-speed data links to the vendor where vehicle registration information is collected and assembled with the photographic evidence.

The combined information and evidence are returned electronically to the Police Department where an employee reviews the evidences and makes the determination of whether or not the violation should be forwarded for prosecution. If a prosecution decision is positive, the vendor generates and mails a citation to the violator and forwards all pertinent information to the courts.

When the violator receives the citation in the mail, they are provided the still images of the violation and the photograph of the driver. They are provided with a web site address and unique PIN to access both the still photographs and the video clip for their review. If the violator does not have Internet access, they will be able to come to the police facility and review the evidence against them prior to having to appear in court.

Recommended Vendor – Two vendors submitted responses to the City's Request for Proposal and those have been evaluated by staff at the Police Department and the Finance Department. Based on the evaluation of the RFP responses and the data gathered through the above site visits to other cities with operational Red Light Photo Enforcement programs, staff is prepared to forward a recommendation to City Council to award the contract for the implementation of the Hayward program to Redflex.

Fiscal Impact – Although there is an identified cost to the City, the overall impact is cost neutral. Installation costs are absorbed by the vendor. Depending on the selected vendor and contract negotiations, the vendor's fee per monitored approach is \$5,000 to \$6,000 per month based on the complexity of the intersection design, and is inclusive of all services, equipment, and training. Under the current revenue distribution formula for moving violations in Alameda

County<sup>1</sup>, an intersection approach that generates an average of two prosecutable citations per day more than pays the monthly fee. And, if the total revenue for all monitored approaches is less than the total fee for the system, the city has no obligation to pay the vendor the difference.

Based on the successful installation of at least 10 intersection approaches generating at least 15 violations per day, first year net revenues would be approximately \$3,800,000. Assuming the second year's operation of the system at a 60% reduction in the number of violations detected, revenues and expenses would approximate \$1,400,000. The annual citation volume and resulting revenue in the third and subsequent years, is projected to be about the same as the second year.

Implementation of the system will require the assignment of two full-time staff to review the violations submitted by the vendor, to assist the public in viewing the photographic evidence for violations, and to provide courtroom testimony for contested violations. Assuming for the moment that both positions are uniformed officers and it is unclear if such will be required; the cost to the City would be \$300,000 a year. This cost will lower the above estimated net revenue levels by \$300,000 each to \$3.5 M and \$1.1 M, respectively.

It should be noted that revenue from this system may not be reflected in the City's income stream until late into FY 2007-2008. HPD staff estimates that it will take 6-8 months from the time Council approves the selected vendor and the time actual citations are being written and processed for full enforcement. This includes a warning period for motorists before citations are actually issued.

Prepared by:



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Robert Weldon  
Community Policing Lieutenant

Recommended by:



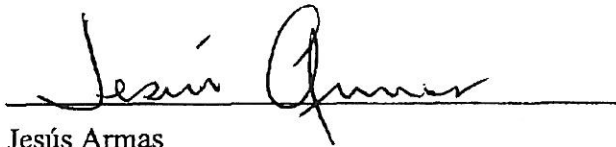
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Lloyd Lowe  
Chief of Police

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<sup>1</sup> The current fine for a red light violation in Alameda County is \$350. Under the revenue distribution formula in Alameda County 40% of the revenue from a red light citation (\$140) goes to the city, with the balance going to the state and county. Therefore, the monthly gross revenue for the City assuming an average of two citations per day would be \$8,400.

Approved by:



Jesús Armas  
City Manager

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<sup>A</sup> Intersections under Review for Photo Enforcement

A. Short-term

1. Mission – Tennyson
2. Santa Clara – West Jackson
3. Foothill – City Center
4. West A – Hwy 880
5. Mission – A
6. Mission – Fletcher
7. Grand – D
8. West Winton – Southland
9. West Tennyson – Patrick
10. West Tennyson – Calaroga
11. Hesperian – West A
12. Industrial Parkway West – Huntwood
13. West Tennyson – Huntwood

B. Long-term (depending on the outcome of the mini-loop proposal)

14. Mission – Foothill – Jackson
15. Foothill – D
16. Foothill – C
17. Foothill