



Memorandum

TO: TRANSPORTATION AND ENVIRONMENT COMMITTEE

FROM: Robert L. Davis

SUBJECT: RED LIGHT RUNNING CAMERAS

DATE: 10-6-08

Approved

Date

9/29/08

COUNCIL DISTRICT: City-Wide

RECOMMENDATION

It is recommend that the Transportation and Environment Committee (T&E) accept this report on red light running (RLR) camera systems and approve staff's recommendation to cease consideration of an automated RLR program.

OUTCOME

Acceptance of this report will provide direction to staff to terminate any further exploration into the procurement and utilization of a RLR camera system.

BACKGROUND

On March 18, 2008, the City Council accepted a report provided to the T&E Committee at their March 3, 2008 meeting on the Residential Traffic Calming Community Meetings. In addition to requesting that staff develop an updated traffic calming policy, staff was directed to research the feasibility of RLR camera systems for the purpose of evaluating a possible pilot program in San José.

The Police Department was also asked to provide data regarding red light running crash rates, the effectiveness of its enforcement efforts, and a list of equipment and technological advances that could enhance their traffic enforcement service delivery.

ANALYSIS

A RLR violation, CVC 21453(a), occurs when a vehicle crosses the established limit line at an intersection after the traffic signal turns red. Vehicles that are in the intersection (over the limit line) when the signal turns red, are not in violation of this section.

In response to the direction provided by the City Council and City Manager's Office, the Police Department and the Department of Transportation (DOT) conducted a limited review of the crash data at the City's 18 highest crash locations (which was provided by the Department of Transportation.) The review was intended to show the difference between the RLR crash rate when the Traffic Enforcement Unit (TEU) is in service, conducting their regular enforcement duties in those crash zones, compared to the hours during which there is no regular enforcement.

Additionally, the SJPD's Research and Development Unit and the Systems Development Unit were consulted regarding the types of equipment and technology items that could possibly be purchased to enhance the Police Department's traffic enforcement service delivery.

Crash Rate Comparison

In order to maximize TEU's impact during the morning and evening commute times, as well as the school drop-off and pick-up times, the TEU deploys its enforcement teams from Monday through Friday from 6:00 a.m. to 8:00 p.m. The six (6) enforcement teams are each assigned one crash zone; each crash zone has three (3) of the City's 18 highest crash locations within its boundaries. The crash zone data is provided by the DOT on an annual basis.

During the first three (3) quarters of fiscal year 2007-08, there were 13 total crashes attributed to red light running at the 18 highest crash locations during the days and times the TEU's enforcement teams were on-duty. The enforcement teams are on-duty for approximately 66 hours per week. The two (2) swing shift teams, which cover the hours from 4:00 p.m. to 8:00 p.m. at the end of their shift, do not work on Fridays. Depending on staffing levels, the enforcement teams are comprised of 35 officers and six (6) sergeants.

Conversely, there were 22 total crashes attributed to red light running at the same locations while the TEU was off-duty. On average, the TEU's enforcement teams are off-duty, not conducting enforcement approximately 96 hours per week. This does not take into account the number of hours lost each week to court attendance and other types of authorized leaves (vacation, military, sick, training, and disability, as well as earned, compensatory time-off). During the same period, of the possible and approximate 65,000 hours enforcement personnel were technically eligible to work, they were absent for approximately 23,250 hours (more than a third of the time) for the aforementioned reasons.

The evaluation period (7-1-07 through 3-31-08) was approximately 39 weeks. During those 39 weeks, the overall red light running crash rate at the 18 highest crash locations was as follows:

- During enforcement hours: **0.3 crashes per week**
- Outside enforcement hours: **0.6 crashes per week**

The DOT provided additional Citywide data for intersections with the highest rate of red light running crashes. The list included 18 intersections, eight (8) of which were within the TEU's targeted enforcement zones. The analysis did not include the times the TEU was on or off duty; it was simply comprised of raw crash data. The intersection with the highest, or worst, red light running crash rate – nine (9) – was Eleventh and Keyes. The red light running crash rate at this intersection was as follows:

- From 7-1-07 to 3-31-08: **0.2 crashes per week**

Staffing Issues

The majority of cities which employ RLR camera systems use a blend of civilian and sworn staffing. Five (5) of the previously surveyed cities manage their programs with one (1) or two (2) full-time officers. With the Department's current sworn and non-sworn staffing shortages, having enough officers available to staff beats within the four (4) Patrol divisions is challenging. It is unlikely that the Police Department would be able to provide adequate staffing.

Although the Mayor has allocated three (3) additional TEU motor officers for the current fiscal year, these officers will be committed to the School and Neighborhood Enforcement (SNE) Program. The SNE Program was designed to help fill the void that was left when the DOT ended the NASCOP program, and it addresses neighborhood and school requests for enforcement that are not addressed through the TEU's crash zone operations. These officers will be added to the teams that are currently conducting SNE operations. The Police Department does not feel it would be prudent to reduce staffing levels – for the sake of staffing a RLR camera program – from these teams that are attempting to address all of these requests.

The TEU's Special Events Team (SET) is one of the few potential teams that could be considered to take on such a task. It is staffed with one (1) sergeant, three (3) full-duty officers, and one (1) Exempt Officer Equality Program (EOEP); however, this team is currently understaffed and has difficulty keeping up with all of their duties. During the last quarter of the current fiscal year, the SET dedicated approximately 4,400 hours to meetings, planning, and preparation of the City's many special events (the Tour of California, Rock-and-Role Half Marathon, the Holiday Parade, Operation Safe Passage, DUI checkpoints, Cinco de Mayo, etc).

Some of the surveyed cities use civilian staff to process citations and complete other administrative duties. The Operations Support Services Division (OSSD) has the Police Department's largest pool of civilian staff, but they are severely understaffed. Because utilizing a non-sworn, civilian staff member would require the hiring of another employee, the Police Department does not support this possible option; especially in light of the fact there are already

many other vacant civilian positions and many others that have been eliminated over the last few years due to budget cuts.

Finally, the implementation of a new RLR program would require staff time for the development of performance criteria and specifications, management and oversight of procurement, and training and development of applicable policies. Procedures with the courts would need to be established with the assistance of the City Attorney's Office; contractors would have to be sought, the contract would have to be administered and oversight of the contractor would further strain already limited staff resources. Additionally, the current effectiveness of the TEU's enforcement strategy and efforts must also be factored into the decision as to whether or not a program to further reduce red light running crashes is necessary.

Effectiveness of Enforcement Strategy

Through coordination with the DOT, the TEU's current enforcement strategy has proven to be very effective. As the population of San Jose has continued to rise, the traffic collision rate has been steadily declining over the last three (3) years. Although the TEU's staffing is currently what it was in 1986, through effective strategies and the deployment of its officers at the highest crash zones, it appears as though these efforts have had their desired affect.

During Fiscal Year 2007-08, the TEU dedicated approximately 20,835 personnel hours to crash zone enforcement and issued 27,485 citations during those enforcement operations. Citywide, during the same fiscal year, the TEU issued 36,651 citations – 11,212 more than it did the previous year. As outlined in their City Service Area (CSA) measurements, the TEU tracked the crash rate at the pre-determined, mandated ten highest crash locations (the TEU tracks and conducts enforcement at an additional eight (8) locations). The crash rate at the same locations was 19% lower in 2007-08 than it was in 2006-07, and from fiscal year 2005-06 to 2007-08, the Citywide crash rate fell from 13,228 to 11,462. Finally, in fiscal year 2007-08, the national injury crash rate per thousand residents was 5.96; in San Jose it was 3.0 – nearly half.

Given the City's current budget situation and the Mayor and Council's emphasis on maximizing the number of sworn personnel performing enforcement duties, it would not be prudent to add or divert personnel to administer a RLR program based on the available crash data. Based on the effectiveness of the TEU's current enforcement efforts, both at the identified highest crash locations and through the newly launched SNE Program, it is the opinion of the Police Department that any financial expenditures regarding traffic safety would be better allocated by placing more uniformed officers in the City's neighborhoods and crash zones, with the specific task of enforcing traffic laws.

Other Equipment and Technological Needs

The Police Department continues to search for funding to purchase essential equipment and technology that will assist with traffic enforcement service delivery. It is the opinion of the

Police Department that any funds that could be used for start-up and maintenance fees for a RLR camera program would be better spent in other areas where the need is greater.

The following is a list of additional equipment and technology that would be of great benefit to traffic enforcement efforts:

- License Plate Readers to be utilized in marked patrol and radar cars: These readers automatically capture the license plates of stolen vehicles and alert the officers. They are also used to capture and document the location of all vehicles within view and are extremely useful in criminal investigations. The Department currently has four (4) but needs to purchase many more, which cost \$23,000 per device.
- Electronic Citation (E-Cites) Devices: These devices are used for the issuance of vehicle and criminal citations. They allow officers to issue citations electronically and download the information to the courts. This technology has dramatically reduced the return (amendment and dismissal) rate of traffic citations. They will also, eventually, allow officers to write DUI and crash reports and document vehicle tows and impounds. Another valuable component will be the ability for officers to document field interviews into a database that will be immediately accessible to investigators once the machines are docked at the end of the user's shift. The Department currently has 219 devices and will need to purchase approximately 200 additional units for adequate deployment, which cost \$5,300 per device.
- Project I.D. Box Software for E-Cite Devices: This upgrade in E-Cite software will allow officers to enter a predetermined code for the tracking of special events such as: downtown events and enforcement operations (Cinco de Mayo, Mardi Gras and Entertainment Zone activities); festivals and sporting events, and traffic enforcement efforts in the SNE and crash zone areas – \$10,500 for the software upgrade.
- Lidar Units for Patrol: The Patrol Division is still using outdated Radar units for speed enforcement. These units, because of their age, often require expensive repairs and calibration. Outfitting Patrol with the latest technology will enhance their ability to enforce speed laws. The Department will also need additional units for the substation – \$1,750 per device.

This list of items is an example of items the Police Department is in need of. The costs are approximate, and additional information can be provided if necessary.

EVALUATION AND FOLLOW-UP

RLR cameras would address the DOT's and TEU's traffic calming measures; however, it is the opinion of the Police Department that the TEU's enforcement strategies and programs are working effectively to achieve this performance measure. With the additional staffing the Mayor and Council allocated to replace the NASCOP, the TEU expects to further improve its traffic

October 6, 2008

RE: Red Light Running Systems

Page 6 of 6

calming performance. The aforementioned data in this document was gathered at the direction of the T&E Committee and the City Manager's Office.

PUBLIC OUTREACH/INTEREST

This memorandum will be posted on the City's Web site for the October 6, 2008, T&E Committee agenda.

COORDINATION

This memorandum has been coordinated with the Department of Transportation, City Manager's Office, and City Attorney's Office.

CEQA

CEQA: Exempt



ROBERT L. DAVIS
Chief of Police

RLD:JS

For additional information, please contact Lt. Jeff Smith at 277-4525.