



# *CITY COUNCIL AGENDA REPORT*

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**MEETING DATE:** September 1, 2009

**ITEM NUMBER:**

**SUBJECT:** NESTOR RED LIGHT CAMERA ENFORCEMENT PROGRAM REVIEW

**DATE:** AUGUST 22, 2009

**FROM:** POLICE DEPARTMENT- SUPPORT SERVICES DIVISION, TRAFFIC SAFETY BUREAU

**PRESENTATION BY:** Sergeant Rob Sharpnack, Police Department, Traffic Safety Bureau

**FOR FURTHER INFORMATION CONTACT:** Sergeant Rob Sharpnack 714-754-4963

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## **RECOMMENDED ACTION:**

That Council review and provide direction to staff.

## **BACKGROUND:**

This Agenda Report is in response to the direction by the Council at the June 16, 2009 City Council meeting to bring forward for review the red light camera system.

The red light camera program was approved by City Council in 2001 and began operation in June 2003. Nestor Traffic Systems (NTS) has been the vendor since the inception of the program. The stated purpose of the program at adoption was to enhance traffic safety at selected intersections controlled by red light traffic signals. The costs of the red light camera program were intended to be offset by the revenues generated through fines resulting from citations for motorists captured on camera running the red light in violation of the California Vehicle Code.

Over the past six years, there have been four amendments to the original NTS contract. Two of the four amendments have included language which addressed the contract's fee structure. As agreed in the initial contract, twenty approaches were to be installed over the course of 3 phases. Phases 1 and 2 were completed within the designated time period. However, Phase 3 has yet to be installed. On June 3, 2008, the third amendment was approved by City Council. This amendment provided additional flexibility with regard to the City's operational obligations and fees. In addition, the agreement extended the term for existing approaches three years from December 1, 2008. For the proposed new intersections, the third amendment established installation dates and five-year terms for these approaches once they become operational. Lastly, the amendment established November 1, 2008, as the date by which all cameras would be upgraded from analog to digital. A fourth amendment was approved by City Council on January 20, 2009 addressing a so called "cost neutral" provision in the Agreement,

which was suspended. The current agreement provides for a performance and financial review of the program annually, with the first such review to occur in November 2009. If the City determines, based on that review, that revisions are necessary to ensure that the program is effective in maintaining public safety, then the City would negotiate with Nestor to determine whether and how to revise the program to maximize its public safety benefits. If the changes proposed are not sufficient to maximize those benefits in the reasonable view of the City, the agreement may be terminated with thirty days' notice.

### **ANALYSIS:**

Under this section, traffic safety and operational issues are analyzed. Contractual issues are addressed under the Legal Review section, and the costs and revenue issues are addressed under the Fiscal Review section.

#### **Traffic safety issues:**

Of primary concern in enhancing traffic safety is reducing the volume of injury collisions; of secondary concern is reducing the volume of non-injury collisions. Collisions at intersections controlled by red light traffic signals generally fall into two categories: (1) broadside collisions (where the at-fault motorist runs a red light and collides into the side of another vehicle entering the intersection with the green light) and (2) rear end collisions (where the at-fault motorist does not stop in time for the red light and collides with the vehicle directly in front in the same lane who has stopped for the red light). Of these two categories of collisions, the broadside collision usually results in greater number of injuries or more serious injuries than rear end collisions. Further, greater injury and property damage is typically caused by these broadside and rear end collisions for traffic travelling straight through the intersection or making a left hand turn in the intersection as opposed to less serious collisions involving motorists making a right hand turn. Therefore, it was decided that the red light cameras would record only violations related to straight through travel and left hand turns and not red light violations related to right hand turning maneuvers.

To provide a gauge of the effectiveness of the red light camera program, two intersections that utilize the red light camera are compared to four intersections that do not. The two intersections using the red light camera system are Harbor Blvd/Adams Ave and Bristol St/Anton Blvd. These two intersections were selected as being most representative of a red light camera program that is generally functioning properly: both intersections have operated with the fewest problems for the longest period of time and have produced the greatest number of citations. The four intersections in this comparison with no red light cameras used are Harbor Blvd/Gisler Ave, Harbor Blvd/South Coast Dr, Bristol St/Baker St, and Bristol St/Redhill Ave. These four intersections were selected as being generally similar in terms of traffic volume and intersection configuration to the two red light camera monitored intersections.

All intersections are compared from 2001 through 2003 before the red light cameras were fully operational against the most recent years of 2006 through 2008. The following tables compare total collisions, injury collisions, broadside collisions, and rear end collisions, combining the totals for the two red light monitored intersections and the totals of the four intersections without the red light camera:

**Intersections with installed Red Light Camera**

<b>Years</b>	<b>Total collisions</b>	<b>Injury collisions</b>	<b>Broadside collisions</b>	<b>Rear end collisions</b>
<b>2001 to 2003 prior to red light camera installation</b>	136	55	43	59
<b>2006 to 2008 after red light camera installation</b>	154	47	30	71
<b>% Change</b>	13%	-15%	-30%	20%

**Intersections with no installed Red Light Camera**

<b>Years</b>	<b>Total collisions</b>	<b>Injury collisions</b>	<b>Broadside collisions</b>	<b>Rear end collisions</b>
<b>2001 to 2003 prior to red light camera installation</b>	237	87	77	104
<b>2006 to 2008 after red light camera installation</b>	225	89	71	94
<b>% Change</b>	-5%	2%	-8%	-10%

The results at these two red light monitored intersections are typical of red light camera programs in general. Broadside collisions typically decrease over time as fewer motorists run the red light, which in turn, reduces the number of injury collisions. Rear end collisions usually increase due to some motorists braking quickly in anticipation of the red light camera activation, while the motorist directly behind does not react in time. The increase in rear end collisions accounts for the increase in total collisions.

In recent years the number of citations issued for red light camera violations has decreased. For example, for calendar year 2007, total citations for red light camera violations dropped from 8,159 to 6,908, a 15% decrease. In calendar year 2008, total red light camera citations dropped from 6,908 to 5,704, a 17% decrease.

Two possible explanations for the decrease are greater compliance by motorists at those intersections and motorists using alternate routes to avoid those intersections.

### Operational Issues:

Currently, the Police Department dedicates approximately 30 hours per week of civilian personnel time to fulfill the requirements of the red light camera system. These requirements include viewing and processing violations, holding citizen viewing of violations, issuance of citations, processing of affidavits and civil assessments, court preparation, appearance and testimony, and frequent follow up with NTS related to system and equipment problems. The Police Department assigns three Community Service Specialists (CSS) to perform these requirements as part of their full time duties. In addition, training of new CSS personnel to perform these duties requires approximately 40 hours of training. The hours dedicated to training and performing the requirements associated with the red light camera program directly reduces the number of hours available for the CSS's to perform front desk and field duties including taking police reports, enforcing parking, and other related assignments designed to provide greater patrol time to sworn officers in the field.

The Police Department has frequently encountered a range of problems with the red light camera system, including the following:

Over the last six months, the Costa Mesa red light camera Program Administrator has called NTS on average two to three times per week to address problems with the system including performance issues, billing errors, inaccurate record keeping, yellow phasing problems and computer network issues. It has been increasingly more difficult to speak to a live person at NTS as the company has decreased the size of its staff.

NTS had three different program managers over the last five years. This management changeover appears to have resulted in an internal breakdown of communication within NTS when responding to some complaints raised by Police Department staff. One problem involved two approaches on Newport Blvd that were not being enforced as required by the red light camera contract. When one NTS program manager was advised of the problem, the Police Department staff was informed the approaches were functioning properly. However, this response by NTS was not supported by the monthly billing statements so Police Department staff requested NTS investigate further. After raising the complaint with the successor program manager, NTS admitted the approaches were not functioning as required by the red light camera contract. NTS is in the process of refunding the money collected for the two non-operational approaches.

The inability to obtain a clear driver image at the red light camera intersections has resulted in numerous citations being dismissed by NTS, the CSS(s), and Harbor Justice Center. This problem was supposed to be corrected by NTS upgrading the analog cameras with digital cameras. This upgrade was outlined in the red light camera contract as well as the installation deadline. NTS missed the deadline by five additional months, causing an indeterminate amount of additional citations being dismissed and revenue lost. The upgrade has now been completed and the image quality has improved, but there continues to be a problem with the focus and flash functions.

Each red light camera uses a flash to illuminate the violator's vehicle and driver. The flash activates when the vehicle first enters the intersection.

Since this image is captured at the furthest distance from the camera, the image is often out of focus or too dark for a successful identification. NTS said the red light cameras would not recharge quick enough to activate the flash a second time.

In January 2009, NTS was asked to change the flash timing on the red light cameras so they would capture a photograph later in the sequence, thereby photographing the vehicle when it is closer to the camera. NTS has been unsuccessful in accomplishing this request. Because of this issue of clearly identifying the driver, traffic officers have been directed to enforce red light violations independent of the red light camera system when they observe a violation at red light camera monitored intersections. Being able to testify based on their first-hand observations, traffic officers eliminate the identification issues associated with the red light cameras and achieve a greater conviction rate.

Since December 2008, Police Department staff has found numerous billing errors in the NTS monthly statements. The errors include billing for approaches not being monitored, approaches that were down due to construction, and for secondary approaches when only the primary approach was functional. These errors were rectified only after staff brought them to the attention of NTS.

The courts regularly dismiss red light camera citations when the registered owner refuses to complete an affidavit identifying the driver at the time of the violation. Staff spoke to Harbor Justice Center Commissioner Max DeLima regarding red light camera citations. Commissioner DeLima said the burden of proof to identify the driver does not rest on the registered owner. DeLima said if the registered owner is not the person in the photograph, he dismisses the citation. This is another reason why traffic officers are encouraged to issue citations at red light camera intersections when the officer witnesses the violation, instead of relying of the red light camera system.

NTS did not meet the contractual deadline for implementing the new intersection approaches itemized in the third amendment. NTS has no projected installation date for the remaining approaches due to their recently announced placement in receivership (a state action comparable to bankruptcy).

### **ALTERNATIVES CONSIDERED:**

1. Maintain status quo and continue with current NTS contract.
2. Terminate the NTS contract and seek out a new vendor for the red light camera program.
3. Terminate the NTS contract, dissolve the red light camera program, and use existing traffic officers to enforce red light violations. Recently, the Traffic Safety Bureau implemented a strategic approach called Target Area Enforcement. The purpose is to enhance traffic safety at intersections with the highest number of injury and non-injury collisions. Weekly, data from the Crossroads Collision Database is analyzed to determine the locations and times of highest traffic collisions. Traffic officers daily target those locations during those times. In this respect, Target Area Enforcement has greater flexibility than the red light camera program with its fixed equipment in addressing changing traffic collision trends. Unlike red light camera-monitored intersections, Target Area Enforcement promotes traffic safety by enforcing all vehicle code violations, not just red light violations.

This greatly increases the number of traffic stops with officers enforcing all moving violations, equipment violations, and registration violations. Every available Traffic officer participates daily not only to enforce against violating motorists, but to provide a high visibility to gain the attention of passing motorists as well to encourage safe driving habits.

The efficacy of Target Area Enforcement is illustrated in the following table comparing the total number of collisions at two intersections during the same 6 month period of 2007 and 2008. During January through June 2007, Target Area Enforcement was not in effect, but during January through June 2008 Target Area Enforcement was in effect at 17<sup>th</sup> St./Newport Blvd. and at Harbor Blvd./Wilson St. Neither intersection was monitored by a red light camera system. Total collisions dropped 59% at 17<sup>th</sup> St./Newport Blvd. and 48% at Harbor Blvd./Wilson St. during Target Area Enforcement.

<b>17<sup>th</sup> St / Newport Blvd – (no red light camera)</b>			
<b>January – June</b>	<b>2007 Target Area Enforcement <u>NOT</u> in effect</b>	<b>2008 Target Area Enforcement in effect</b>	<b>Percent change decrease in total collisions</b>
<b>Total Collisions</b>	27	11	59%

<b>Harbor Blvd/Wilson St – (no red light camera)</b>			
<b>January – June</b>	<b>2007 Target Area Enforcement <u>NOT</u> in effect</b>	<b>2008 Target Area Enforcement in effect</b>	<b>Percent change decrease in total collisions</b>
<b>Total Collisions</b>	23	12	48%

**FISCAL REVIEW:**

As shown on the attached fiscal analysis of the Red Light Camera Program since inception, the City has collected approximately \$5.7 million in revenue while paying approximately \$6.0 million to the contract vendor - Nestor, resulting in a net cost to the City of approximately \$300,000. Recent changes to the contract regarding amounts paid to Nestor, have affected the monthly revenue to expenditure comparison to the City's benefit.

Also attached, is a letter from the Superior Court of California - County of Orange dated March 9, 2009 detailing the distribution of the Red Light Camera Fine. The total Red Light Camera citation fine amount is \$436, with the City receiving \$165.71 of that fine amount.

**LEGAL REVIEW:**

Police Department staff have raised a number of issues relating to compliance by Nestor with the provisions of its contract. The appointment of a receiver to take charge of Nestor's assets has also caused staff some concern as well as complicating the legal landscape. The Council could request an accelerated review of the program due to the issues with NTS compliance identified above. Should the City Council determine that it wishes to move forward with accelerated review of the program or consideration of terminating the Nestor contract, the City Attorney would recommend agendaing such action for a future council meeting so that appropriate noticing and analysis of the legal implications of such action can be conducted.

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DISTRIBUTION: City Manager  
City Attorney  
Finance Director  
City Clerk

ATTACHMENTS: 1 [Red Light Camera Fiscal Analysis](#)  
2 [Letter from the Superior Court of California dated March 9, 2009 regarding the current distribution of the red light camera citation fine](#)