



**CITY OF SANTA CLARITA
AGENDA REPORT**

NEW BUSINESS

CITY MANAGER APPROVAL: _____

DATE: March 24, 2015

SUBJECT: RED-LIGHT PHOTO ENFORCEMENT PROGRAM

DEPARTMENT: Public Works

PRESENTER: Andrew Yi

RECOMMENDED ACTION

City Council receive report and discuss alternatives for the City of Santa Clarita's Red-Light Photo Enforcement Program.

BACKGROUND

With traffic fatalities in the City of Santa Clarita (City) reaching an all-time high of 12 in 2002, City staff investigated various safety measures, including establishing a Red-Light Photo Enforcement Program in the City. In November 2003, the City implemented a Red-Light Photo Enforcement Program and awarded a five-year contract to Redflex Traffic Systems, Inc., to provide and maintain red-light photo enforcement equipment.

City staff and the Los Angeles County Sheriff's Department selected five intersections for red-light photo enforcement based on collision history and red-light enforcement issues. The cameras started operation in July 2004 at the intersections of Soledad Canyon Road/Whites Canyon Road, Bouquet Canyon Road/Seco Canyon Road, McBean Parkway/Magic Mountain Parkway, McBean Parkway/Newhall Ranch Road, and Lyons Avenue/Orchard Village Road. The program was expanded in August 2006 to include three additional intersections at Valencia Boulevard/McBean Parkway, Bouquet Canyon Road/Newhall Ranch Road, and Soledad Canyon Road/Sierra Highway.

In December 2008, the five-year contract was renewed. In April 2009, the Soledad Canyon Road/Sierra Highway location was removed due to low levels of red-light running at the approach and the need for photo enforcement was no longer merited.

At their March 25, 2014, meeting, City Council extended the contract term on a month-to-month basis for up to one year and directed staff to further evaluate the Red-Light Photo Enforcement Program and report back within 12 months. The current contract expires March 31, 2015.

The Red-Light Photo Enforcement Program is just one tool the City and Los Angeles County Sheriff's Department utilize to enhance intersection safety. The City also employs other methods of traffic engineering improvements such as: (1) signal timing that includes synchronization, phasing improvements, and longer all-red cycles to better accommodate pedestrian and traffic patterns, (2) installation of protected left-turns to reduce vehicle/pedestrian conflicts, (3) installation of additional signal heads and roadway striping modifications to improve visibility, and (4) ongoing collision analysis to identify intersection collision patterns and implement solutions to prevent those patterns.

The City maintains a collision database derived from reported collisions by the Los Angeles County Sheriff's Department's Santa Clarita station. A before/after collision analysis was conducted (includes all collisions within 150 feet of an intersection) using collision data three years prior (2001-2003) and the most recent seven years after the implementation of the red-light cameras (2007-2013). The chart below shows the yearly average of total collisions in each category at the seven red-light camera intersections. Citywide intersection statistics were also viewed for comparison purposes.

Collision Analysis	Seven Red-Light Camera Intersections (Yearly Average)			Citywide Excluding Red-Light Camera Intersections (Yearly Average)		
	Before	After	% Chg	Before	After	% Chg
Primary Collision Factor						
Red-Light Running	14.0	4.6	-67%	93.7	85.7	-9%
Collision Severity	Before	After	% Chg	Before	After	% Chg
Property Damage Only	60.3	46.4	-23%	500.0	441.6	-12%
Injury	27.0	23.3	-14%	299.0	297.8	0%
Fatal	0.3	0.0	-100%	2.7	1.9	-30%
Collision Type	Before	After	% Chg	Before	After	% Chg
Broadside Collisions	30.7	12.6	-59%	341.0	306.5	-10%
Rear-End Collisions	35.3	39.9	13%	238.7	225.7	-5%
Other Collision Types	21.7	17.2	-21%	222.0	209.1	-6%
Total Collisions	87.7	69.7	-21%	801.7	741.3	-8%

The analysis showed a 67-percent reduction in the average number of yearly collisions caused by red-light running, 59-percent decrease in broadside collisions, 14-percent decrease in injury collisions, and a 21-percent decrease in total collisions. One category, rear-end collisions, did see a 13-percent increase. With the exception of rear-end collisions, the red-light camera intersections had larger declines compared to citywide statistics.

In 2012, the State adopted new standards for pedestrian timing at signalized intersections. The new standard decreased the average pedestrian walking speed from 4 to 3.5 feet per second to accommodate an aging population and those with mobility issues. The new standard added up to an additional 12 seconds of pedestrian timing at some intersections. Initially, the new pedestrian timing was inserted within the City's existing 120-second cycle. Therefore, when a pedestrian crossed an intersection, green signal time was reduced for other signal phases creating a variable

amount of green signal time. This resulted in an upward trend of motorists receiving red-light camera violations. After identifying this trend as shown in the attached table, staff worked on resynchronizing signal corridors and implemented a new 132-second cycle citywide in 2013. This signal cycle better accommodated new pedestrian timing without the need for shortening the green-light phase. After implementation, red-light violations decreased by 50 percent at red-light camera intersections.

Yellow-light timing is based on State standards published in the California Manual of Uniform Traffic Control Devices (MUTCD). The City has always complied with State minimum standards and often exceeds State minimums. While standards for yellow-light timing for through approaches are specific based on speed, there was limited guidance on protected left-turn yellow-light times. In early 2014, the California Traffic Control Devices Committee recommended changes to State standards and guidance for yellow-light timing. These recommendations have since been incorporated into the latest version of the California MUTCD released in November 2014. While additional guidance (viewed as accepted practice) was added to protected left-turn yellow-light timing, it stopped short of posting specific criteria and left judgment to local agencies.

In response, staff initiated two projects in mid-2014. First, staff started an evaluation in providing a longer protected left-turn yellow-light time/phase from 3.5 to 4.0 or 4.5 seconds at four red-light camera intersections. The objective was to analyze what effect it would have on driver behavior, red-light violations, and signal operation. Second, the City hired an independent consultant to conduct a comprehensive review of yellow-light timing for protected left-turns. The purpose of the study was to establish a policy for protected left-turn yellow-light timing based on scientific justification, consistent with the changes in the MUTCD.

Since the revised yellow-light timing was implemented, red-light running has dropped approximately 50 percent overall at the four intersections. In most recent months, the trend has continued to hold with no noticeable increase in red-light running. The consultant study was completed in early 2015. The consultant recommended a protected left-turn yellow-light timing policy based on posted speed and length of turn pocket. The proposed policy will result in an upward adjustment for yellow time at many protected left turns. Over the next several months, staff will implement the consultant's recommended policy citywide. It is anticipated this will result in further reductions of red-light running.

Historically, the Red-Light Photo Enforcement Program has been a violator-funded program. In other words, the fines collected from tickets paid for the full cost of the program. During the last five fiscal years (Fiscal Year 2009-10 to Fiscal Year 2013-14), yearly expenses averaged \$581,287 and revenues averaged \$658,962 for an average yearly net revenue of \$77,675. The cost of the program includes Redflex equipment/maintenance, data communications, Sheriff personnel for citation processing/court appearances, and City Attorney fees. See attached table.

During Fiscal Year 2014-15 (through January 2015), program expenses have been \$353,345 while revenues were \$231,511 for a net revenue loss of \$121,834. Based on current trends, Fiscal Year 2014-15 costs are expected at \$605,000 and revenues at \$395,000 for a net subsidy of \$210,000. Revenues have not fully covered expenses of the program for 15 straight months (since November 2013). Citations issued in Fiscal Year 2013-14 are 45 percent lower than Fiscal

Year 2012-13. This drop is directly attributed to fewer red-light violations due to the implementation of longer signal cycles and yellow-light times. The number of citations issued in the first seven months of Fiscal Year 2014-15 is 2,694. Based on current trends, the number of red-light citations is expected to be 4,620 in Fiscal Year 2014-15. See attached table.

Besides the total number of citations, there are two other factors that affect overall revenue. First, citations issued have been subject to increased challenges through the court system. Second, the compliance rate of violators paying their ticket has decreased. The State sets a base fine schedule that the Los Angeles County Superior Court is supposed to adhere to. In addition to the base fine, the State legislature and County of Los Angeles have the authority to add fees and penalty assessments to the base fine, which they have done. These fees and penalty assessments end up more than quadrupling the original base fine. The fine amount for a red-light ticket is the same, whether it originated from a camera or a Sheriff Deputy in the field. The \$490 fine is distributed to three agencies: the State receives \$270 (55 percent), the City receives \$150 (30 percent), and the County receives \$70 (15 percent). Per State law, camera vendors are not permitted to receive a percentage of ticket revenue. The camera vendor has a contract with the City and is paid a flat monthly fee regardless of the number of tickets issued.

Red-Light Photo Enforcement Program offers 24-hour/7-days-a-week coverage at seven intersections. The visible cameras make drivers more cognizant and cautious when driving through an intersection. The locations are fixed and resources cannot be easily moved based on changing patterns. State statute only authorizes the Red-Light Photo Enforcement Program to issue citations for red-light violations or disobeying directions of official signs/traffic control devices. For comparison purposes, a traffic enforcement motor officer costs \$246,000 annually and can issue citations for red-light violations or any traffic infraction. However, for the same cost as covering seven intersections with the Red-Light Photo Enforcement Program, only 2-3 intersections will be covered with motor officers and coverage will not be 24-hour/7-days-a-week.

Red-Light Photo Enforcement is able to capture violations simultaneously and transmit data to Sheriff personnel at the station who review the evidence and issue a citation at a later date. A motor officer has to witness a violation, pull over the violator (a challenge when traffic is present) and issue the citation. This process takes time away from the motor officer actively enforcing the intersection. However, with a motor officer, a violator is notified immediately with a citation issued in the driver's name. As indicated earlier with Red-Light Photo Enforcement, Sheriff personnel reviews evidence from the violation and uses the license plate in the photo to find the registered owner in the Department of Motor Vehicles database. However, the registered owner is not always the driver. In California, the driver is responsible for a traffic violation, not the registered owner. While all attempts are made to identify the driver, six percent of violations are rejected because a positive identification cannot be made.

Finally, increased activity in judicial decisions regarding red-light photo tickets and continuous proposed legislative changes could threaten the sustainability of agencies operating red-light camera programs in the future.

ALTERNATIVE ACTION

The current contract with Redflex Traffic Systems, Inc., expires March 31, 2015. The following alternatives are presented for City Council discussion and to provide direction to staff.

1. Continue Red-Light Photo Enforcement Program and negotiate contract extension with Redflex Traffic Systems, Inc. Bring item back to City Council to approve new contract.
2. Suspend Red-Light Photo Enforcement Program for a minimum of 24 months to assess red-light violation and collision rates. Bring item back to City Council to either reestablish or discontinue Red-Light Photo Enforcement Program.
3. Allow expiration of the current contract with Redflex Traffic Systems, Inc., and discontinue the Red-Light Photo Enforcement Program. Authorize final payment for fees owed to Redflex Traffic Systems, Inc., through contract expiration.

FISCAL IMPACT

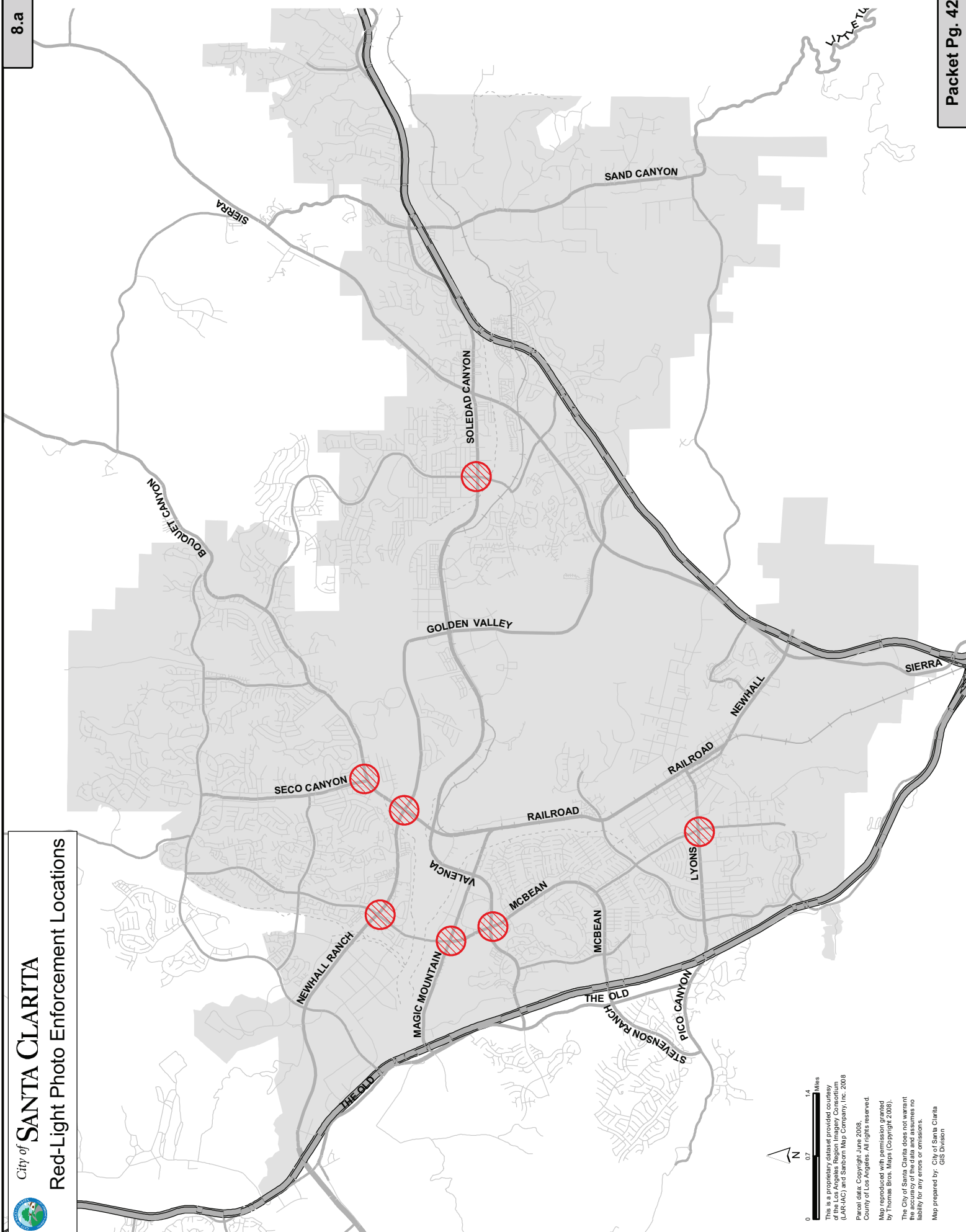
Sufficient budget is available in account 14400-5161.001 for the existing contract period. The current estimated annual cost to operate the City's Red-Light Photo Enforcement Program is \$605,000 and is funded from the General Fund. The current estimated revenue is \$395,000.

ATTACHMENTS

Red-Light Photo Enforcement Locations

Red-Light Photo Summary of Expenditures and Revenues

Contract for Redflex Traffic Systems, Inc. (available in the City Clerks' Reading File)



0 0.7 1.4 Miles
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Red-Light Photo Program Summary of Expenditures and Revenues

Red Light Photo Enforcement Program	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15 (YTD 1/15)
Expenditures	\$ 558,414	\$ 588,508	\$ 573,271	\$ 595,833	\$ 590,410	\$ 353,345
Revenue	\$ 680,946	\$ 618,805	\$ 527,406	\$ 885,475	\$ 582,179	\$ 231,511
Net Revenue	\$ 122,531	\$ 30,297	\$(45,866)	\$ 289,641	\$ (8,232)	\$(121,834)
Citations Issued	5,947	5,491	7,104	10,157	5,555	2,694

Attachment: Red-Light Photo Summary of Expenditures and Revenues (1181 : RED-LIGHT PHOTO ENFORCEMENT PROGRAM)