

# AGENDA REPORT

## City Council

---

**MEETING DATE:** December 11, 2019

**PREPARED BY:** Abraham Bandegan,  
City Traffic Engineer

**DEPARTMENT DIRECTOR:** Brenda Wisneski, AICP

**DEPARTMENT:** Development Services

**CITY MANAGER:** Karen P. Brust

---

**SUBJECT:**

Report on Red Light Photo Enforcement.

**RECOMMENDED ACTION:**

Receive report on Red Light Photo Enforcement (RLPE) operation and direct staff to return before April 2020 to extend the contract.

**STRATEGIC PLAN:**

This project aligns with the Strategic Plan goals for Public Safety, by creating a safe and secure environment.

**FISCAL CONSIDERATIONS:**

There is no direct impact associated with the staff recommendation. The current contract of \$ 10,200 per month is fully funded through May 2020. If the City Council elects to renew the contract in April 2020, costs are expected to be consistent with the current contract which is approximately \$122,400 annually. Additional program costs are incurred for Sherriff's Department and Attorney fees. Total program costs are approximately \$208,824 annually. As detailed in Table 2 and Figure 2, program revenue has historically exceeded program costs.

**BACKGROUND:**

In February 2004, in an effort to reduce the number of vehicles running red lights, the City entered into a contract with Redflex to operate red light camera systems at designated City intersections. Red light cameras have been operational at the intersections of El Camino Real/Encinitas Boulevard and El Camino Real/Olivenhain Road since June 2004 and November 2005, respectively. At the El Camino Real and Encinitas Boulevard intersection, cameras monitor the two eastbound left turn lanes and two eastbound through lanes on Encinitas Boulevard, including the shared right turn lane. In the southbound direction, the cameras monitor the two left turn lanes and two inside through lanes on El Camino Real. The red light cameras at El Camino Real/Olivenhain Road-Leucadia Boulevard monitor the two westbound left turn lanes on Olivenhain Road.

The current contract with Redflex expires in May 2020. During the August 22, 2018 meeting, Council expressed interest in revisiting the program and directed staff to return after a year with an analysis of accident trends on similar intersections.

## ANALYSIS

Since the start of the program in 2004, periodically both the Traffic and Public Safety Commission (Commission) and City Council have reviewed informational reports on the red light camera program. These reports included a review of historic data, including citations, collisions, revenues and expenditures.

Currently, the base fine for failing to stop at a red light is \$100. Added to the base fine is a penalty assessment and surcharge of \$310, a court operations fee of \$40, a criminal conviction fee of \$35, an emergency medical program fee of \$4 and a night court fee of \$1 for a total cost of \$490. Traffic school is approximately an additional \$52, if the defendant chooses to attend. The court does provide financial assistance in the form of:

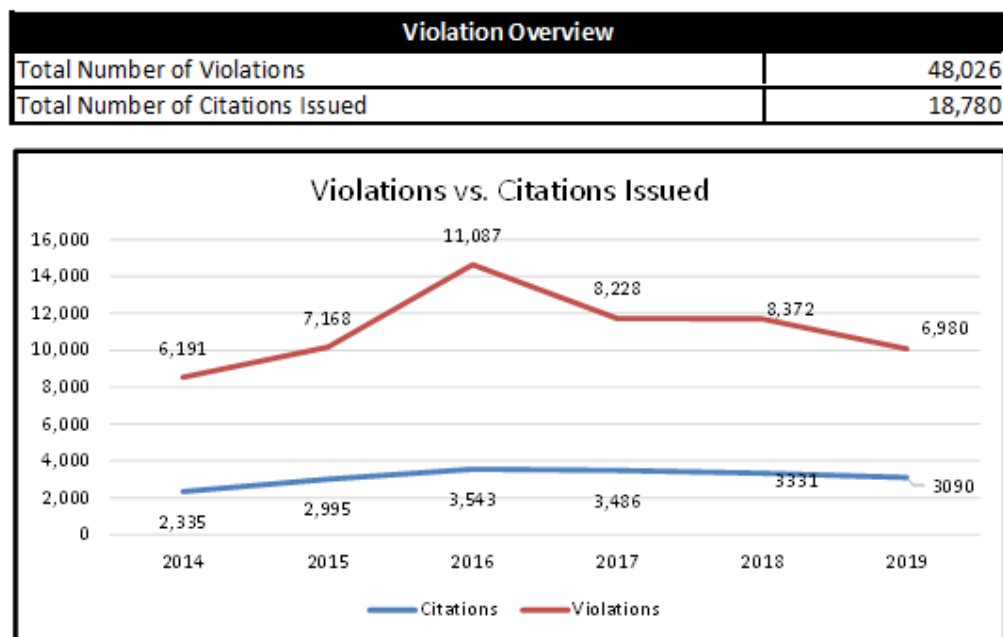
- Payment plan with a one-time administrative fee of \$30.
- Reduced fine for financial hardship
- Community service in lieu of the fine.

While the use of red light cameras provides little or no effect to the operation of a signalized intersection, they do provide an enforcement tool to discourage and identify potential violators. As discussed below, the current program is generally fiscally neutral and, as indicated by the Sheriff's Department, has been successful in citing individuals violating the law with minimal impact to staff resources. Therefore, it is recommended that the program be extended. If directed to do so, staff will return before April 2020 to extend the contract.

### Operation

Nearly one million vehicle movements are detected by the cameras, monthly and approximately 0.05 percent, or 500, of those are flagged as red light violations. Following review of each violation, approximately one third are confirmed violations and receive a citation. Various factors may rule out a justified violation, such as the vehicle is within the intersection for only a fraction of a second or the vehicle stops soon after crossing the stop bar of the intersection, or the driver's face is not clearly shown in the picture. Figure 1 depicts the violations detected by the cameras as compared citations issued since 2014.

**Figure 1**  
**Violation Trend**



During the past 5 years, 81 percent of the violations were issued to non-residents and only 19 percent were issued to Encinitas residents. Additionally, Ninety-nine percent of the notices were issued to first-time violators and only 1 percent had multiple violations on their records. The lack of repeat violators may be considered a measure of program's effectiveness. Meaning, after being detected by the system and receiving their first notice, most have not repeated the violation at these locations.

During the past 6 fiscal years the average number of citations issued monthly is as follows.

**Table 1  
Average Monthly Citations**

Fiscal Year	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Average # of citations issued per month	200	293	325	346	329	376

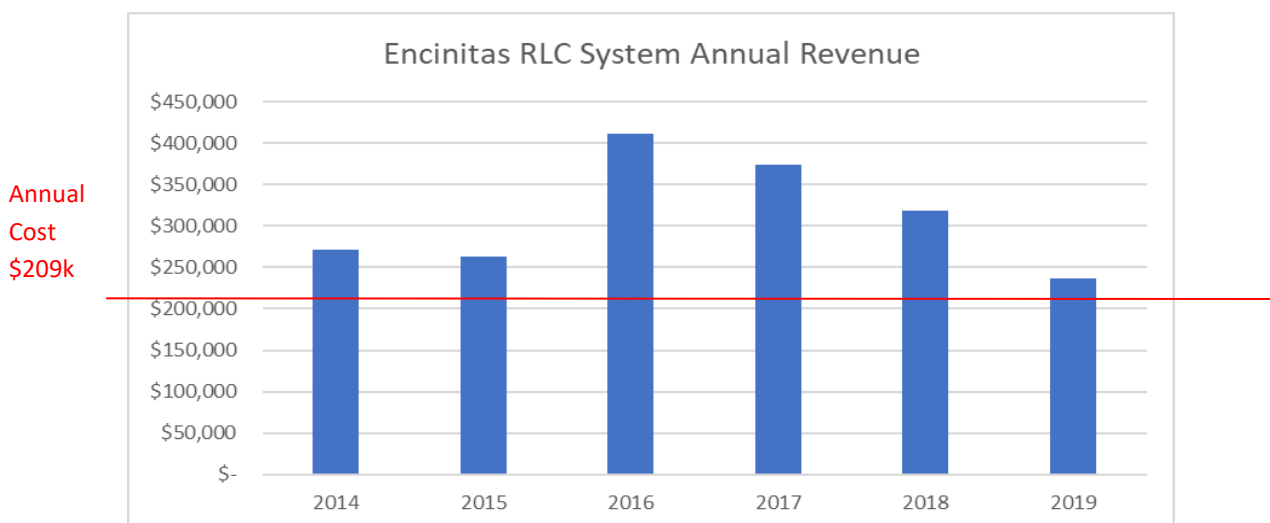
**Revenue/Expenditure**

Total costs to operate the program is approximately \$208,824 annually, as outlined in the Table 2. During the life of the program, operating cost have been less than the revenue generated from ticket receipts. Program costs and revenue are compared in Figure 2. It should be noted that the costs associated with CSOs increases by 5% every year.

**Table 2  
Program Costs**

Expense	Monthly Cost	Annual Cost
Operating the 3 cameras by the contractor	\$10,200	\$122,400
Community Service Officers (CSO) processing fee	\$3,697	\$44,364
Attorney fees for processing subpoenas	\$3,350	\$40,200
Communication fee	\$155	\$1,860
<b>Total</b>	<b>\$17,402</b>	<b>\$208,824</b>

**Figure 2  
Annual Program Revenue**



## Collision History

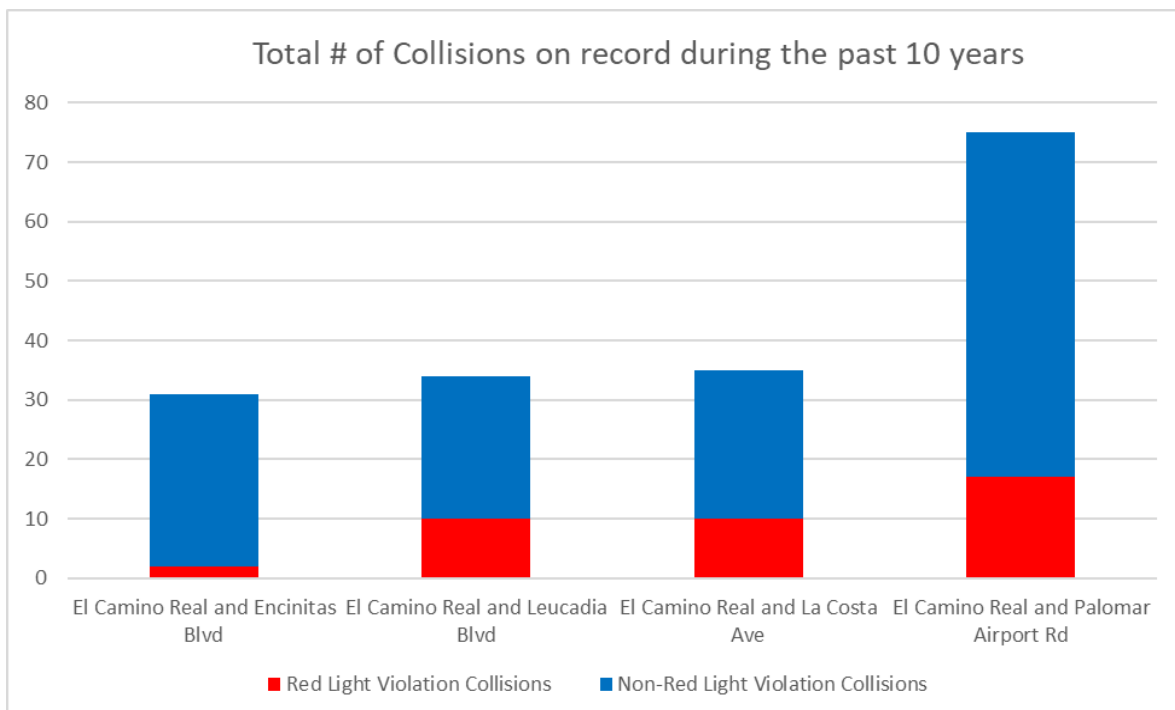
The City Council directed staff to compare the collision rates of the red light enforcement intersections with similar intersections without red light enforcement. Staff compared the volume and patterns of traffic and lane configurations at several other intersections along El Camino Real in Encinitas and in Carlsbad to select the most similar intersections for the purpose of analyses. The selected intersections were La Costa Ave/El Camino Real and Palomar Airport Road/El Camino Real. The combined average daily traffic volume at these intersections are shown in Table 3.

**Table 3**  
**Red Light Related Collisions vs. Other Collisions (10 Years)**

Intersection	El Camino Real and Encinitas Blvd	El Camino Real and Leucadia/Olivenhain Rd	El Camino Real and La Costa Ave	El Camino Real and Palomar Airport Rd
Red-Light System	Yes	Yes	No	No
Average Daily Traffic Volume	65,000	78,000	69,000	78,000
Red Light Collisions vs. Collision	2 of 31	10 of 33	10 of 34	17 of 74
% of Collisions Related to Red Light	6.5%	30.3%	29.4%	30.0%

Staff evaluated 10 years of recorded traffic collisions data from January 1, 2009 through December 31, 2018 at each intersection. As can be seen, the number of collisions at the intersection of El Camino Real and La Costa are very close to Encinitas Intersections with the RLPE system, while the Palomar Airport Road intersection shows nearly double the number of collisions. Higher speeds and the larger footprint of the intersection at Palomar Airport Road can be contributing factors to this higher collision rate at this intersection.

**Figure 3**  
**Red Light Related Collisions vs. Other Collisions (10 Years)**



The El Camino Real and Encinitas Blvd intersection shows the lowest number of collisions associated with Red Light Violations. That can be an indication of existing RLPE system effectiveness. However, the intersection of El Camino Real that has a RLPE system, shows very similar collision patterns and trends with the intersection of El Camino Real and La Costa Ave where no RLPE system exists. It should be noted that at the El Camino Real and Leucadia Blvd intersection, the RLPE system only detects and covers violations of one approach. The coverage at the intersection of El Camino Real and Encinitas Blvd is for four approaches.

### **Review by Traffic and Public Safety Commission**

Information on the RLPE program operation, citation process, statistics and effectiveness of the City's RLPE program was presented to the Traffic and Public Safety Commission on December 9, 2019. The Commission's input will be presented to City Council.

### **ENVIRONMENTAL CONSIDERATIONS:**

The action being considered by the City Council is exempt from the California Environmental Quality (CEQA) because it is not a "project" per Section 15378(b)(5) of the CEQA Guidelines. The action involves an organizational or administrative activity of government that will not result in the direct or indirect physical change in the environment.

This item is not related to the Climate Action Plan.