CATHEDRAL CITY POLICE DEPARTMENT

## MEMORANDUM

To: Members of Council and City Staff
From: Charles Robinson, Captain
Date: May $5^{\text {th }}, 2016$

## Subject: Analysis and Fiscal Impact of Red Light Safety Camera Program

## Analysis:

The Red Light Camera Program has been operational for the past nine (9) years, which provides us with a good historical perspective on the functionality and success of the system. As a result of the data, it is clear that drivers are getting the message to stop on red in Cathedral City. The community's recidivism rate is only $6 \%$, which means $94 \%$ of all violators who receive a ticket do not get another violation. The low rate of repeat behavior, dating from March 2006 through April 2015, indicates a positive change in driver behavior (see below).


It should be noted that vehicles registered in Cathedral City are the recipients of $31 \%$ of all violations since the program's inception, which indicates that the majority of violators are not Cathedral City residents.


The average number of vehicles that pass through the three Red Light Safety Camera Program intersections on a daily basis is approximately 159,234 vehicles per day, which is up approximately $8 \%$ from the 2013 CVAG ADT Count (see below).


- Date Palm \& Ramon Road average 56,199 vehicles per day.
- Vista Chino \& Date Palm average 51,336 vehicles per day.
- Ramon \& Landau average $51,699 v e h i c l e s ~ p e r ~ d a y . ~$
** CVAG began bi-annual Traffic Count Studies in 2012, which is why ADT numbers are listed for 2013 and 2015.

The following three graphs identify the number of red light violations by intersection:

## Date Palm and Ramon Road



When comparing March 2009 to March 2015, there was approximately a 50\% decrease in red-light safety camera violations. While there are occasional spikes in violation rates, the downward trend has been fairly consistent, which is what we expected to see.

## Ramon Road and Landau Blvd.



When comparing the first full month of camera operation March 2009 to March 2015, there was an approximate $85 \%$ decrease in red-light safety camera violations. This is a positive statistic due to the fact that this particular intersection had a highest rate of straight through red light violations of any intersection we surveyed in the City prior to implementation of the camera in 2009.

## Vista Chino and Date Palm Dr.



When comparing the first full month of camera operation March 2009 to March 2015, there was an approximate $79 \%$ decrease in red-light safety camera violations.


Even with the decrease in red light runners over time, the total number of citations for 2013 was still 1237, taking into consideration that the camera at Date Palm and Ramon was inactive from June $10^{\text {th }}, 2013$-November $7^{\text {th }}, 2013$, and the camera at Ramon and Landau was inactive from July $24^{\text {th }}, 2013$ - November 5 th, 2013 due to City road construction. Otherwise, the numbers for 2013 would have been approximately $30 \%$ higher based on the average monthly violation rate.

When examining the reported traffic collisions at the three monitored intersections, the pre-system rate in 2005 was 67 collisions. The post-system rate of the three intersections in 2014 was 17 collisions, which is an approximate decrease of $75 \%$ in traffic collisions (see below).


The Red Light Safety Camera Program has also brought a public safety value that extends beyond the intersection. Cathedral City Detectives and Officers have requested red light safety camera videos approximately 30 times over the past six years to assist in investigating robberies, homicides, shootings, and other serious criminal acts. As an example, when the video is used to reconstruct a traffic crash scene or provide another view of investigative incidents at intersections, we reduce personnel time and costs by not having to reconstruct an incident from a limited amount of evidence and/or statements, which provides an added benefit to the citizens by freeing up officer time.

It should also be noted that there are reports and findings from several different sources demonstrating that once red light cameras are no longer enforced, driving behavior begins to revert back to pre-camera numbers. For example, an Old Dominion University Study in Virginia from 2013 stated, "Our findings suggest red-light running reductions are likely to recidivate quickly and certainly within a year, once cameras go dark," citing a four hundred percent increase in red light running within one year of the cameras being turned off. In a 2010 Texas Transportation Institute White Paper, the City of Garland, Texas removed red-light cameras from two intersections and within 22 months after the camera removal, total intersection crashes increased by about 64 percent, red light running crashes were over three times as frequent, and total injuries increased by 29 percent.

## Fiscal Impact:

The previous Professional Services Agreement with ATS cost the City $\$ 4,990.00$ per camera per month for a total annual cost of $\$ 179,640.00$. by late 2013, there were growing concerns that the costs of the program were outpacing the revenues, which raised concerns about the cost neutrality of the system. Since we are fiscally aware of the cost neutrality basis for the continuation of the program, we negotiated a new Professional Services Agreement with ATS in early 2014 not to exceed the monthly maximum service charge of $\$ 3,500$ per camera. The total annual cost of the program was reduced to $\$ 126,000.00$ per year for all three intersections, which is a reduction and savings of $\$ 53,640.00$ from the original program cost.

Overall during the past nine years the program has been in operation, the system has generated revenues of approximately $\$ 576,803$ more than the professional service agreement costs. Therefore, over the lifetime of the program, the system has covered the operating costs with an average annual revenue of approximately \$64,000.


It should be noted that for calendar year 2014, the program had a revenue of approximately \$52,964. Thus far in first quarter of 2015 (January-March), there has been a positive revenue of approximately $\$ 48,114$.


| Fund Name / <br> Source | Full Account <br> Number | Amount | Budget <br> Oper/Capital | Budget <br> Existing/ <br> New |
| :---: | :---: | :---: | :---: | :---: |
| Traffic Safety <br> Fund | $2334523-8801$ | $\$ 126,000$ | Capital | New |

## Conclusion:

Residents and commuters alike know the Red Light Safety Cameras are present in Cathedral City and slow down and stop on red. The Red Light Safety Camera Program is a 24 hour -7 days a week - 365 days a year operation that has successfully reduced the number of traffic collisions by approximately $75 \%$ over the life of the program, and provided a public safety benefit to the citizens and motoring public alike.

The cost of the system has been successfully negotiated to a sustainable level that ensures cost neutrality while providing the same level of professional services.

