

STAFF REPORT*CITY OF OCEANSIDE*

DATE: March 15, 2006

TO: Honorable Mayor and City Councilmembers

FROM: Community Development and Transportation Department

SUBJECT: UPDATE REGARDING PHASE 1 OF THE RED LIGHT CAMERAS ENFORCEMENT PROGRAM (AT THE INTERSECTIONS OF OCEANSIDE BOULEVARD AT COLLEGE BOULEVARD AND MISSION AVENUE AT CANYON DRIVE), AND APPROVAL TO CONTINUE WITH PHASE 2 OF THE RED LIGHT CAMERA ENFORCEMENT PROGRAM

SYNOPSIS

Phase 1 of the Red Light Camera Enforcement Program concluded on January 10, 2006 with favorable safety improvement results. Staff recommends that the City Council approve the Phase 2 Red Light Camera Enforcement Program.

BACKGROUND

The Red Light Camera Enforcement demonstration project employs the use of cameras at high incident intersections to enhance traffic safety operation and reduce the running of red lights. The cameras would be installed at the approaches and departures to the intersections to photograph vehicles running the red light. Red light camera systems have become an effective way to reduce traffic accidents at intersections with traffic signals. It has been documented that statistically the use of red light cameras will reduce intersection collisions because they change the behavior of the driver.

In December 2003, the City Council approved the implementation of a Phase 1 pilot demonstration red light camera enforcement project. For the demonstration project, the City Council approved the installation of red light camera enforcement for only two intersections. They were:

- College Blvd at Oceanside Boulevard
- Mission Avenue at Canyon Drive

The City's Transportation Division completed a comprehensive analysis of the Citywide signalized intersections and ranked the ten highest accident locations. The investigation was completed in November 2003. The intersections with the highest incidents were the following:

1. Oceanside Boulevard at College Boulevard
2. Oceanside Boulevard at El Camino Real
3. Mission Avenue at Canyon Drive
4. Vista Way at El Camino Real

5. Highway 76 at College Boulevard
6. College Boulevard at Mesa Drive
7. College Boulevard at Barnard Drive/Waring Road
8. College Boulevard at Frazee Road
9. Oceanside Boulevard at Melrose Drive
10. Oceanside Boulevard at Crouch Street

These intersections were the highest incident locations in 2003 based on a three-year (2000-2003) accident history. In addition to the accident history, staff reviewed and analyzed traffic data, speed surveys, signal timing plans and record drawings for each of the ten locations. A field review was also conducted to check each location for any additional enhancements.

As of 2005, the review of accident locations identifies the following ten highest intersections for accidents. They are the following:

1. College Blvd @ Oceanside Boulevard
2. Douglas @ North El Camino Real
3. El Camino Real @ Vista Way
4. Douglas Drive @ State Route 76
5. El Camino Real @ Mission Avenue
6. College Boulevard @ Olive Drive
7. College Boulevard @ SR 76
8. College Boulevard @ Lake Boulevard
9. Mission Avenue @ Canyon Drive
10. Barnard @ Haymar Drive

ANALYSIS

Phase 1 authorized the City's Transportation Division to identify two intersections based upon an engineering investigation and analysis for safety enhancements. Staff was to return after one year of operation to receive authorization for eight additional intersections based upon a proven experience with the program.

The Transportation Division identified Mission Avenue at Canyon Drive, and College and Oceanside Boulevards as locations suitable for a Phase 1 evaluation. Enforcement commenced January 10, 2005 following a 30-day warning period. During the year, evaluation enforcement cameras captured 11,460 signal violations. Of these, 5,466 violations were rejected by Redflex Traffic Systems (RTS) for uncontrollable factors, 2,608 were rejected following Police Department review, and 3,380 notices of violation or citations were issued by the Police Department.

The program experienced a reduction in violations issued from May to October due to substandard photo quality. Traffic Court Commissioners expressed concern for their inability to conclusively identify drivers based upon photographic evidence. In September, RTS introduced new cameras capable of capturing higher quality photos that significantly improved driver identification. In November and December, the volume of violations issued, although lower than February, March and April, were more representative of a typical volume of monthly violations.

Broadside collisions have declined at both intersections. College Boulevard at Oceanside Boulevard recorded 6 collisions from 2000-2003, 2 in 2004 and 1 in 2005. Mission Avenue at Canyon Drive recorded 14 collisions from 2000-2003, none in 2004 and 1 in 2005.

Rear-end collisions increased. College Boulevard at Oceanside Boulevard recorded 12 collisions from 2000-2003, 9 in 2004 and 12 in 2005. Mission Avenue at Canyon Drive recorded 8 collisions from 2000-2003, 2 in 2004, and 5 in 2005.

Other types of accidents within a 500-foot radius were vehicle and pedestrian, sideswipe and head-on. These types of accidents also improved. There were a total of 5 accidents inclusive from 2000-2003, 3 in 2004 and 1 in 2005 at or near the intersection of College Boulevard and Oceanside Boulevard. At or near the intersection of Mission Avenue at Canyon Drive there were 4 accidents from 2000-2003, 0 in 2004 and 3 in 2005.

There was a reduction in the total number of injuries. Between the years 2000 and 2003, College Boulevard at Oceanside Boulevard experienced 18 injuries. In 2004 the injuries increased to 22, but in 2005 they dropped to 12. Mission Avenue at Canyon Drive experienced 27 injuries between the years 2000-2003, 2 injuries in 2004 and 2 injuries in 2005. The injuries recorded were within 500 feet of the intersection.

Broadside collisions pose greater risk to public safety than do rear-end collisions. The increase in minor injury rear-end collisions was anticipated and reflects the national trend when introducing Red Light Photo Enforcement. As motorists become accustomed to the presence of Photo Enforcement, rear-end collisions have shown a declining trend.

It is important to remember that there are accidents that the City cannot control and those types of accidents can include driving under the influence, falling asleep at the wheel, drivers who didn't put their parking brake on so their vehicle drifted causing a collision, etc. Between the two intersections there were 8 DUIs in 2000-2003, 4 in 2004 and 7 in 2005.

When reviewing the causes for rear-end collision, broadside collisions or other collisions within the 500 feet radius, unsafe speeds and DUIs ranked first and second. Other causes for collisions were unsafe lane changes and improper turning movements.

Regionally, Red Light Photo Enforcement is on the rise as agencies that operate RTS Systems are experiencing enhanced traffic safety through citywide collision reduction.

<u>City</u>	<u>Approach</u>	<u>Status</u>	<u>Traffic Collisions</u>
Vista	7	adding 1	22 percent collision reduction
Escondido	8	recently authorized up to 20	29 percent collision reduction
Encinitas	3	recently added 1	50 percent collision reduction
Solana Beach	3	no plans to increase	78 percent collision reduction
Poway	5	no plans to increase	50 percent collision reduction
El Cajon	10	recently added 2	23 percent collision reduction

In analyzing the red light camera enforcement program, the engineering approach reviewed the safety improvements to the two intersections. Staff completed a detailed engineering analysis of the two intersections to determine the increase in safety and decrease in accidents. The following tables show the safety improvements based on the reduction of broadside accidents within the intersections.

FISCAL IMPACT

Personnel Costs (One CSO to review violations)	(\$ 40,462.66)
RTS Fees (through December 2005)	(\$212,977.00)
Fines Collected (through December 2005)	<u>\$192,615.02</u>
Cost of Program	\$ 60,824.64

COMMISSION OR COMMITTEE REPORT

The Police and Fire Commission approved the continuation of Phase 2 on February 16, 2006 and at its meeting on Tuesday, February 21, 2006, the Transportation Commission also approved the continuation of Phase 2.

CITY ATTORNEY ANALYSIS

Does not apply.

RECOMMENDATION

Staff recommends that the City Council approve the continuation of the Phase 2 Red Light Photo Enforcement Program to enhance intersection safety.
City Council for approval

PREPARED BY:



Frank T. Watanabe
Community Development and
Transportation Director

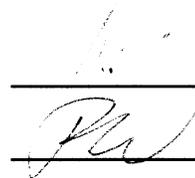
SUBMITTED BY:



Steven R. Jepsen
City Manager

REVIEWED BY:

Michelle Skaggs-Lawrence, Assistant to the City Manager



 Frank McCoy, Police Chief

Exhibit A – Table

Number of Collisions by Year

Broadside and Rear-end Collisions

	2000-2003	2004	2005
Broadside Collisions			
College Blvd @ Oceanside Blvd.	6 (2/year)	1	0
Oceanside Blvd. @ College Blvd.		1	1
Mission Ave. @ Canyon Drive	14 (5/year)	0	1
Canyon Drive @ Mission Ave.		0	0
Total	7	2	2
Rear-end Collisions			
College Blvd @ Oceanside Blvd.	12 (4/year)	6	8
Oceanside Blvd. @ College Blvd.		3	4
Mission Ave. @ Canyon Drive	8 (3/year)	2	4
Canyon Drive @ Mission Ave.		0	1
Total	7	11	17
Driving Under the Influence			
College Blvd @ Oceanside Blvd	5 (2/year)	0	2
Oceanside Blvd @ College Blvd.		1	1
Mission Ave. @ Canyon Drive	3 (1/year)	1	2
Canyon Drive @ Mission Ave.		1	0
Total	3	3	5
Totals without DUI	11	10	14

2005 Red Light Photo Enforcement

Fees \$212,977.00 Vs. Fines \$192,615.02

■ Fines ■ Fees

