

**CITY OF ENCINITAS
TRAFFIC COMMISSION
AGENDA REPORT
Meeting Date: November 26, 2012**

TO: Traffic Commission

VIA: Glenn Pruum, Director of Engineering/Public Works *Prum*

FROM: *RB* Rob Blough, Traffic Engineer

SUBJECT: Review of Red Light Camera Operation

BACKGROUND:

In an effort to reduce the number of vehicles running red lights, the City entered into a contract with Redflex, Inc. on February 9, 2004 to operate red light cameras at City intersections. Red light cameras have been operational at the intersection of El Camino Real/Encinitas Boulevard since June 9, 2004. These 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 have been operational at the intersection of El Camino Real/Olivenhain Road-Leucadia Boulevard since November 12, 2005. These cameras monitor the two westbound left turn lanes on Olivenhain Road. The current contract was signed on February 8, 2011 with Redflex, Inc. and costs \$3,802 per month for each of the three camera system approaches. The contract is for a period of seven years plus three consecutive one-year extensions at the City's option.

ANALYSIS:

Exhibit 1 shows the number of citations issued at each intersection per month along with the cost and revenue of the system for the time period from June 9, 2004 to April 30, 2012. During this period, there have been 17,007 citations issued at the intersection of El Camino Real/Encinitas Blvd and 5,285 citations issued at the intersection of El Camino Real/Olivenhain Rd.-Leucadia Blvd.

The traffic collision history has been reviewed at these two intersections prior to and after installation of the cameras. The collision history is from January 1, 2000 through December 31, 2011. All traffic collision reports were individually reviewed and the types of collisions were documented. Of particular interest is the number of collisions involving red light running before and after the cameras were installed and any rear end collisions that may have been the result of drivers stopping early on the yellow (induced by fear of the red light camera).

Exhibit 2 shows a graph of the collision history at the intersection of El Camino Real/Encinitas Blvd. This intersection had a total of 39 collisions in the 4.5 year period prior to the camera. Of these, 9 were red light running collisions. In the 7.5 year period after the camera, there were a total of 41 collisions. Of these, 3 were red light running and 4 were rear ends due to a driver stopping early on the yellow. Standardized per year, the above data reflects 8.7 accidents per year prior to camera installation versus 5.5 accidents per year after. This is a 37 percent reduction in the total number of accidents. The red light running accidents were reduced from a rate of 2 accidents per year to 0.4 accidents per year, an 80 percent reduction. Exhibit 3 shows the severity of injury accidents for each year at this intersection.

Exhibit 4 shows a graph of the collision history at the intersection of El Camino Real/Olivenhain Rd.-Leucadia Blvd. This intersection had a total of 54 collisions in the 5.9 year period prior to the camera. Of these, 11 were red light running collisions. In the 6.1 year period after the camera, there were a total of 43 collisions. Of these, 7 were red light running and 2 were rear ends due to a driver stopping early on the yellow. Standardized per year, the above data reflects 9.2 accidents per year prior to camera installation versus 7 accidents per year after. This is a 24 percent reduction in the total number of accidents. The red light running accidents were reduced from a rate of 1.9 accidents per year to 1.1 accidents per year, a 42 percent reduction. Exhibit 5 shows the severity of injury accidents for each year at this intersection.

In summary, the camera system has been in operation for approximately 8.5 years and is located at the intersections of El Camino Real/Encinitas Boulevard and El Camino Real/Olivenhain Rd.-Leucadia Blvd. The City has seen a positive safety benefit as there has been a 30 percent reduction in the total number of collisions and a 60 percent reduction in the red light running collisions at both of these intersections combined since the cameras were installed. In addition, the system has not been a financial burden on the City's finances as its revenues cover expenditures.

RECOMMENDATION:

It is recommended that the Traffic Commission receive this report as it is for informational purposes.

EXHIBIT 1 - Red Light Camera Data Since Inception

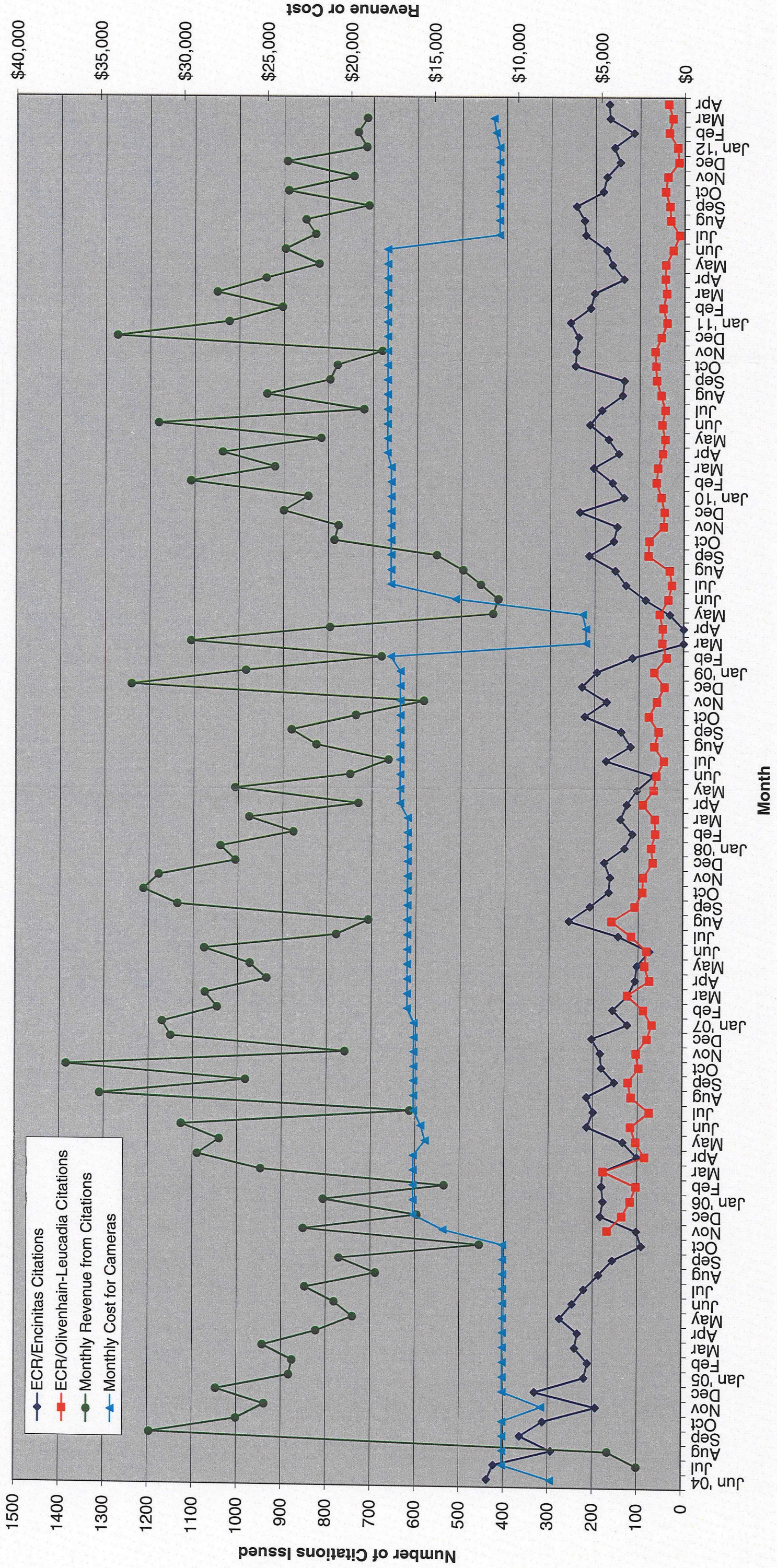
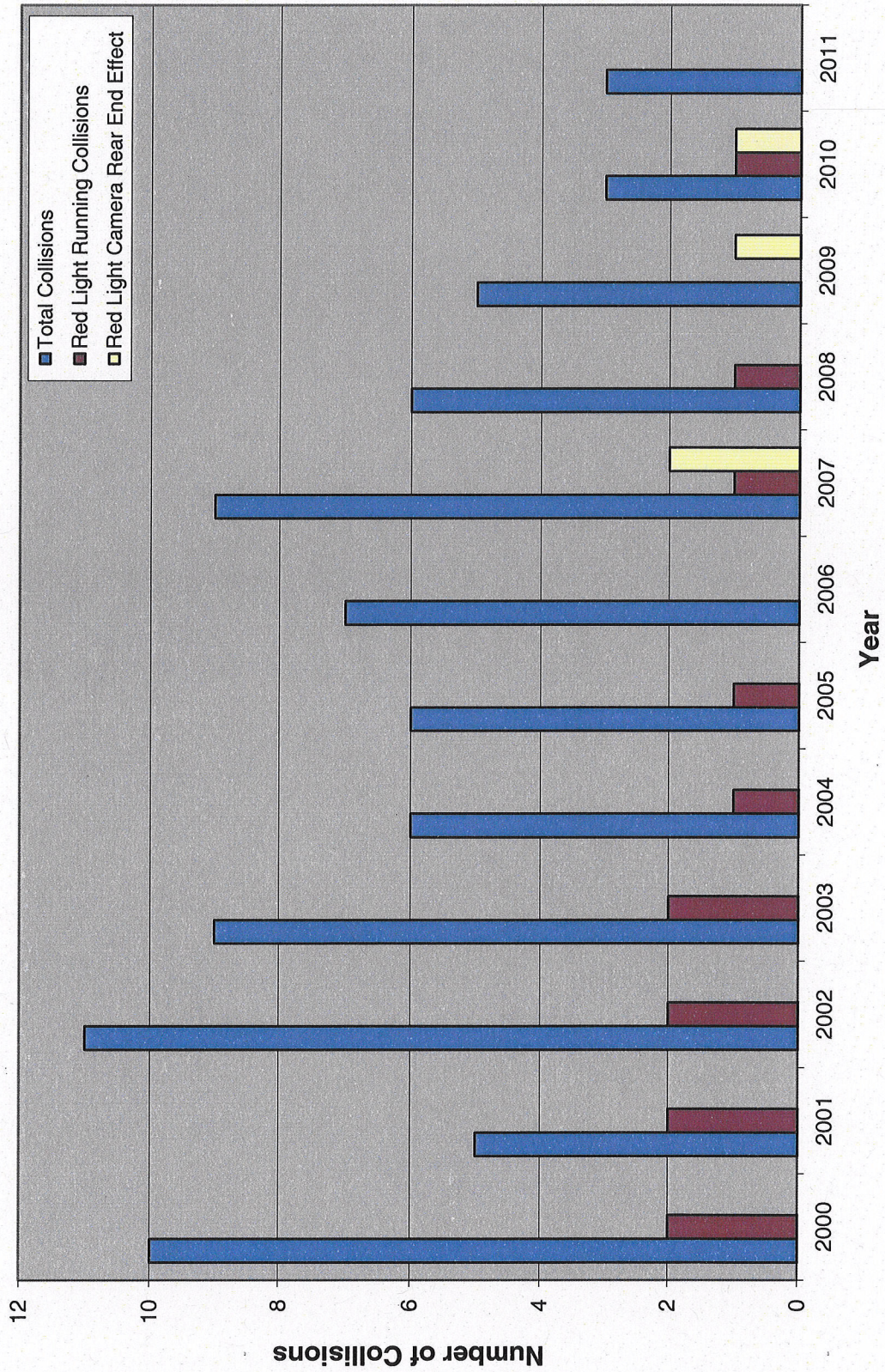


EXHIBIT 2 - Encinitas Blvd/EI Camino Real Collisions



6A-4

Note: Camera was installed on June 9, 2004 for southbound and eastbound movements. There were 6 accidents in 2004, 4 before and 2 after camera was installed. The 1 red light running accident was before the camera was installed. AR1070T

EXHIBIT 3 - Encinitas Blvd/EI Camino Real Severity of Collisions

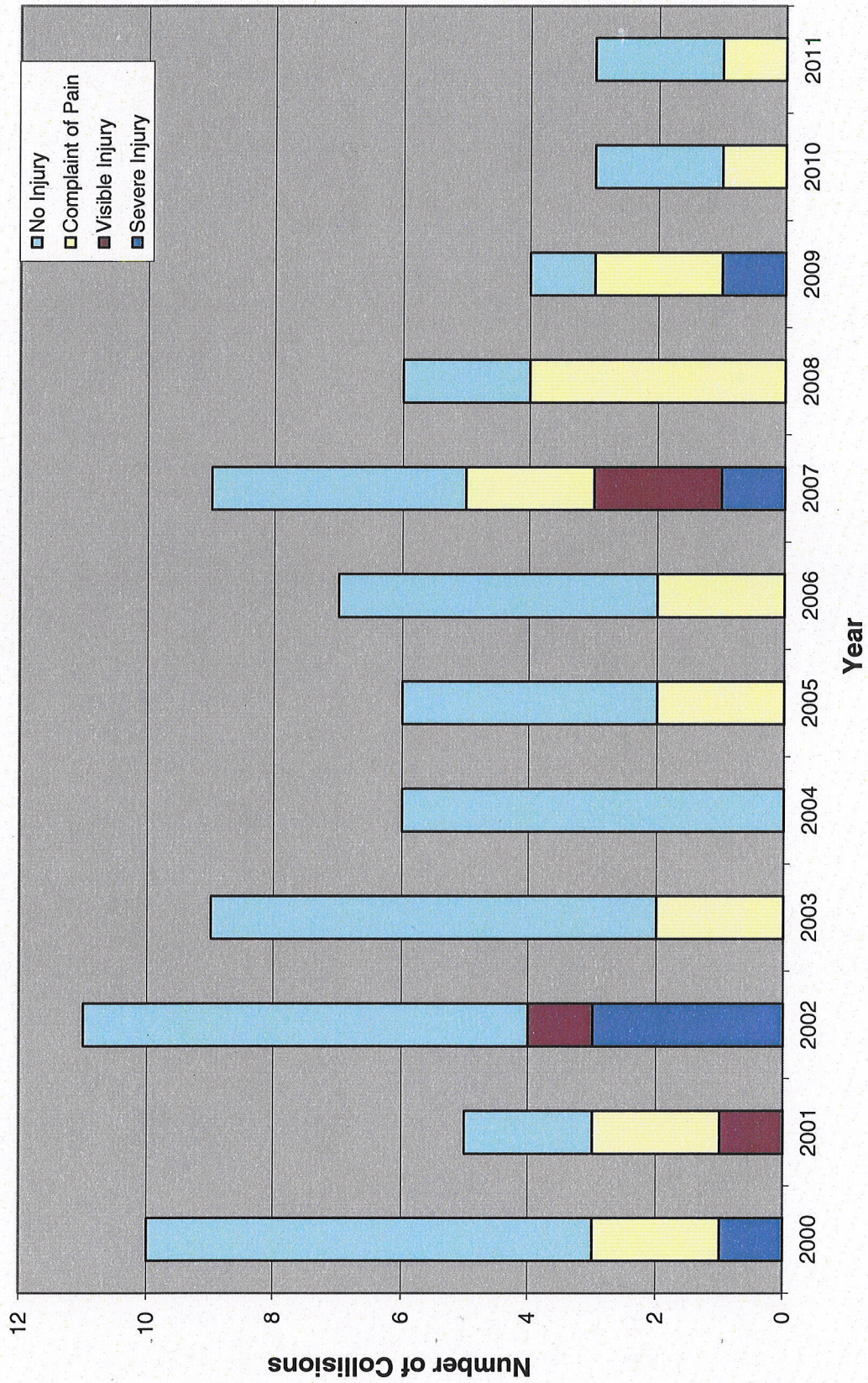
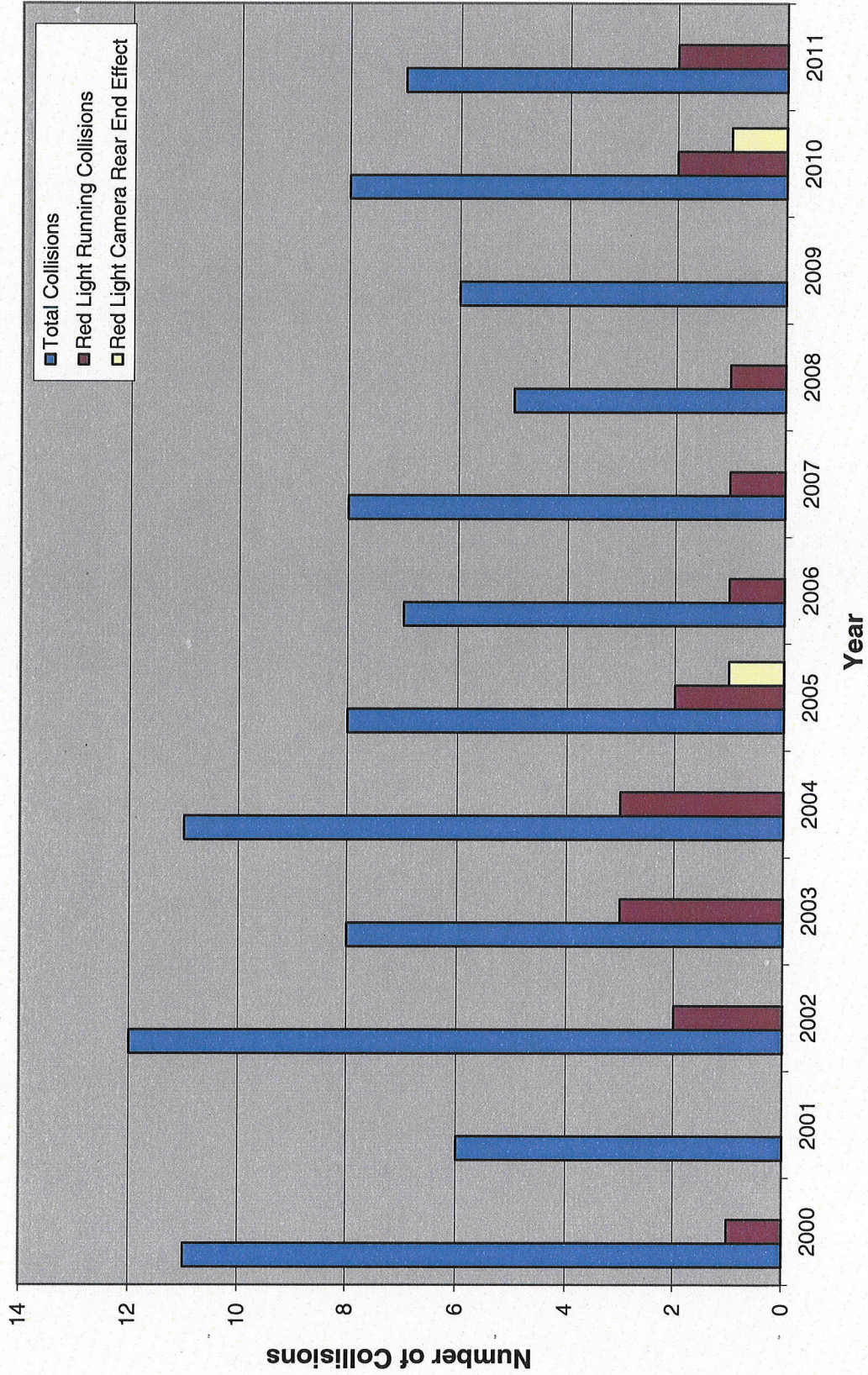


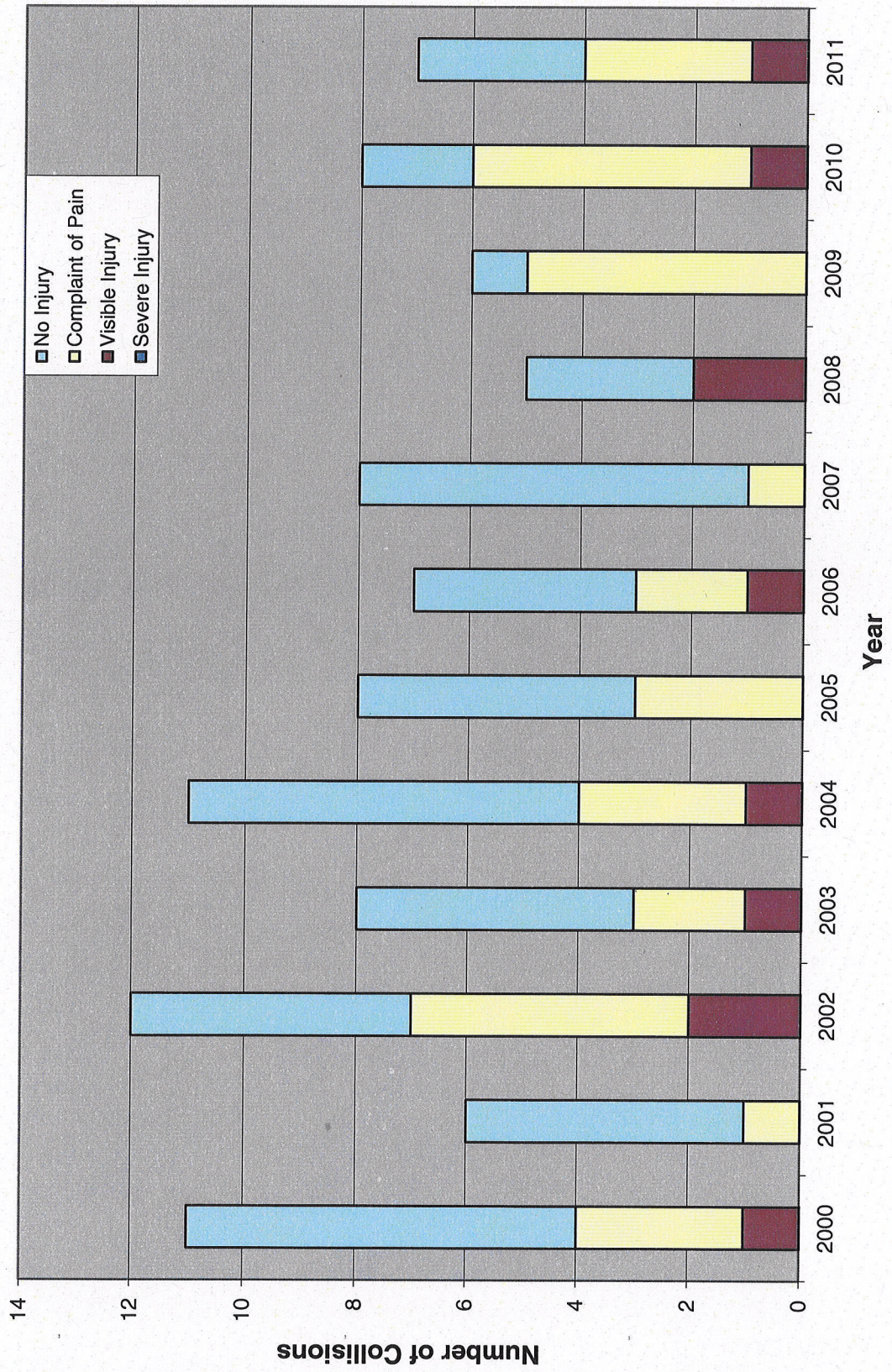
EXHIBIT 4 - El Camino Real and Leucadia Blvd/Olivenhain Rd Collisions



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Note: Camera was installed on Nov. 12, 2005 for westbound left turn. There were 8 accidents in 2005, 6 before and 2 after camera was installed. Both of the red light running accidents were before the camera was installed. AR1070T

EXHIBIT 5 - El Camino Real and Leucadia Blvd/Olivenhain Rd Severity of Collisions



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