



DATE OF CITY COUNCIL MEETING: March 18, 2008

TO: GARY KEEFE, City Administrator

FROM: TIMOTHY L. DABNEY, Chief of Police
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SUBJECT: FEASIBILITY REPORT ON RED LIGHT CAMERAS PLACED AT CENTRAL AVENUE AND “H” STREET.

Recommendation: that the City Council:

Receive this staff report on the feasibility of red light cameras to be placed at Central Avenue and “H” Street and provide direction to staff.

Background:

The City of Lompoc first considered the implementation of automated traffic enforcement or red light cameras in June of 1998. Staff reports were submitted to the City Council on June 2, 1998, July 6, 1999 and October 3, 2000. Potential vendors were contacted to present the cost of red light camera installation and costs associated with running an automated enforcement program. In May of 2001, the City Engineering Department engaged ATD Northwest, Inc. to complete a survey of red light violations occurring at the intersection of Central Avenue and “H” Street (Hwy 1). The results of this survey indicated that 99 potential violations occurred at the intersection in a 16-hour period (0600 to 2200) on Tuesday, May 1, 2001. Only one approach, the left turn from eastbound Central Avenue onto northbound “H” Street, rose above the threshold to make the installation and operation of an automated traffic enforcement program fiscally viable with 37 violations. A summary of that survey appears below:

APPROACH	DIRECTION	TRAFFIC VOLUME	VIOLATIONS
Central Ave. Left Turn	Westbound	2,178 Vehicles	12
Central Ave. Straight Through	Westbound	2,599 Vehicles	0
Central Ave. Left Turn	Eastbound	5,094 Vehicles	37
Central Ave. Straight Through	Eastbound	2,820 Vehicles	0
“H” Street Left Turn	Southbound	2,966 Vehicles	18
“H” Street Straight Through	Southbound	7,018 Vehicles	9
“H” Street Left Turn	Northbound	2,147 Vehicles	11
“H” Street Straight Through	Northbound	7,323 Vehicles	12
TOTALS		32,145 Vehicles	99

Mr. Kaylor, who conducted this survey, included the following statement in his report: “One has to examine the potential for reducing accidents caused by red-light running violators with the financial costs to accomplish such reductions. For this intersection in the City of Lompoc, only one approach appears to present a financially viable possibility. In order to have a successful campaign for a financial standpoint, four or five additional approaches will need to be identified.”

The following graph represents a history of traffic collision reports completed by officers over the past five years. (Alliance Data)

YEAR	COLLISION REPORTS
2003	573
2004	721
2005	579
2006	520
2007	520

The traffic collisions represented above include all collisions from parking lot fender benders to fatal collisions. By way of comparison, the most recent collision data maintained by the California Highway Patrol in their State Wide Integrated Traffic Reporting System (SWITRS) web-site indicates that in 2005 the City of Lompoc had two fatal collisions, 118 collisions that involved some type of injury, and 374 non-injury or property damage only traffic collisions in 2005, for a total of 494 traffic collisions that occurred on City streets. Local statistics indicate that 579 traffic reports were completed in the 2005 calendar year. Therefore, roughly 85 traffic collision reports were generated from events occurring on private property and/or parking lots.

By way of comparison, SWITRS reported that the City of Santa Maria recorded 11 fatal collisions, 440 injury traffic collisions and 1,097 collisions that involved property damage only, for a total of 1,548 during the 2005 calendar year.

The City of Lompoc Engineering Department provided their most recent collision data specifically for the intersection of Central Avenue and North “H” Street for collisions occurring between January of 2006 and June of 2007 (18 Months).

Traffic Collisions Occurring Within 100 Feet
of the Intersection of Central Avenue and “H” Street. 18

Traffic Collisions Resulting in Injury 6

Primary Collision Factors (Violations preceding collision)

Drunk Driving	2	Improper Passing	1
Right of Way Violation	3	Traffic Signal Violation	1
Improper Turning Movement	4	Unsafe Starting	2
Speeding	4	Not indicated	1

Discussion:

There are several vendors who provide red light camera installation and programmatic operation. Many jurisdictions maintain a violation rate that sustains the cost of installation and operation of these systems. The current fine for violation of California Vehicle Code Section 21453(a) (Traffic signal violation) is \$391. The City of Lompoc receives approximately \$154.80 of traffic fines collected by the court. This means that approximately \$154.80 per violation would be available to support the automated enforcement system.

In May of 2007 the City of Santa Maria entered into a five-year contract with Nestor Traffic Systems for 10 red light cameras. One camera is designated for each “approach”. In the case of Central Avenue and “H” Street eight cameras would be needed to cover every approach. These cameras were installed at no cost to the City. Further Nestor provides maintenance for the life of the contract. In exchange for this service, Nestor collects \$4,300 per camera, per month. Nestor gets the lesser amount if the revenue generated from citations does not meet the \$4,300 threshold. At present the City of Santa Maria has cameras deployed for two approaches at the intersection of Betteravia and Miller. The cameras were installed on May 21, 2007 and citations were issued following a 30-day grace period. The City of Santa Maria has collected fines over the past 34 weeks (8.5 months) for 267 violations of Vehicle Code Section 21453(a).

Revenues:	267 Violations X \$391 = \$104,397 X .30% = \$31,319
Costs:	2 Cameras X \$4,300 X 8.5 months = \$73,100

These figures do not take into account those citations that are not verified and forwarded to the court, citations which are dismissed or fines reduced by the court, or violators who refuse to pay their fine.

In addition to operating costs of automated traffic enforcement systems the City is required to erect and maintain the appropriate signage as required by the California Vehicle Code and an officer must verify a facial view of the driver on each photograph and inspect each citation before it is forwarded to the court.

Studies from other jurisdictions such as Oxnard, Phoenix and San Diego have yielded very positive results. Statistics indicate that traffic signal violations are reduced as much as 40% after automated traffic enforcement systems are implemented. This enhanced enforcement tool is effective in reducing traffic signal violations and traffic collisions at intersections where red light cameras are present.

The intersection of Central Avenue and North “H” Street is part of the California State Highway System. All intersections within the City of Lompoc that are part of Highway 1 or Highway 246 are controlled by California Department of Transportation (Cal-Trans).

In prior years, the City evaluated the feasibility of installing red light cameras at the intersection of Central Avenue and North “H” Street but did not proceed to the point of requesting the engineering or approval process for such an installation from Cal-Trans.

Again, we contacted the City of Santa Maria and inquired about their experience with the installation of red light cameras on a State highway. The City of Santa Maria has been attempting to negotiate the conditions of red light camera installation on Broadway since May of 2007. Cal-Trans has a number of requirements that have frustrated the City's efforts to install the equipment, which to date have not been resolved.

Other alternatives to reduce red light violations and the number of collisions at the intersection of Central Avenue and North "H" Street include:

1. Increasing the diameter size of red lights at traffic signals to make them more visible and psychologically pronounced.
2. Increasing the duration of the yellow light cycle when the signal is in transition from green to red.
3. Increasing the time delay between red and green lights for traffic that is stopped from one second to two or three seconds.
4. Placing decoy cameras and signs at designated intersection to facilitate greater compliance with traffic signals.

Conclusion:

Red light violations always present a hazard to the motoring public and the Lompoc Police Department will continue to deploy traffic resources, as available, to enforce traffic laws at the intersection of Central Avenue and North "H" Street.

Automated traffic enforcement systems or red light cameras are good tools to augment, but not replace, traditional enforcement methods. Red light cameras have reduced violators and traffic collisions at troublesome intersections nation wide. However, our limited research into the topic indicates that the volume of traffic must be significantly high to support these systems. Automated Traffic Systems also require the dedication of sworn staff to review the violations and verify them for the court. The officer assigned to these duties are also required to appear in court and testify as to the validity or verification of the citation should the violator choose to contest it.

If the City Council wishes to pursue the implementation of red light cameras at the intersection of Central Avenue and North "H" Street, the following steps are recommend and/or required:

- Direct the City Engineering Department to conduct a more current red light violations study at the intersection and evaluate the practicality of installation based upon the results of the study.

- If the above-mentioned study indicates that red light cameras are a practical option, direct the City Engineering Department to begin negotiating the conditions of installation of red light cameras on a State highway with the California Department of Transportation.
- Direct City Police Department and Purchasing Department staff to construct a Request for Proposal to be distributed to various automated traffic enforcement system vendors.

Summary:

The Lompoc Police Department welcomes any additional resources that will further our central goal of making Lompoc a safer community. Red light cameras have that potential. However, without an accurate survey of potential red light violations at the intersection of Central Avenue and North “H” Street it is difficult to speculate whether or not an automated traffic enforcement system would be fiscally viable.

Respectfully submitted,

TIMOTHY L. DABNEY
Chief of Police

APPROVED FOR SUBMITTAL TO CITY COUNCIL:

GARY KEEFE
City Administrator

Attachments:

1. Staff report dated June 2, 1998
2. Staff report dated July 6, 1999
3. Staff report dated October 3, 2000
4. Photo Red Light Automated Enforcement Needs Assessment Survey for the City of Lompoc, California by Kenneth Kaylor, ATD Northwest, Inc.
5. California Vehicle Code Sections 21455.5, 21455.6 and 21455.7 providing the guidelines for municipalities to implement automated enforcement systems.