Red Light Camera Increases Safety

Issue

Are photo enforcement red light cameras in Redwood City effective as traffic safety devices?

Background

Several cities throughout San Mateo County, including Menlo Park, Millbrae, Redwood City, and San Mateo, are currently using photo enforcement red light cameras (cameras). The Grand Jury chose to study one city, Redwood City.

Cameras are automated traffic safety devices that record the license plate of any vehicle that has entered an intersection on a red light in violation of the California Vehicle Code Section 21453 (Code). A Redwood City police officer reviews the recording to determine whether there has been a vehicle code violation. If a violation has been recorded, the officer issues a citation via mail to the registered owner of the vehicle. Subject to a modification by a court, the current penalty set by the State of California is $378.50 plus a point against the vehicle owner’s record, who is presumed to be the driver, unless the citation is contested.

After a traffic light changes to red, a vehicle crossing the limit line of an intersection is in violation of the Code. A citation for this type of violation is issued if the following four photos are captured: the driver’s face; the vehicle traveling through the intersection; the vehicle and the signal light; and the rear license plate of the vehicle. (Attachment 1)

Various newspaper articles have suggested that cameras have been installed as a revenue source for cities. The General Fund of Redwood City receives approximately 34% of the fine. The fine is currently $378.50.

Redwood City has 85 intersections controlled by traffic signal lights. Redwood City has exclusive jurisdiction over 58 of the intersections. Caltrans has jurisdiction over the remaining 27 intersections, because of placement along State routes (e.g., Woodside Road and El Camino Real).
The Redwood City Police Department (RWCPD) compiled data of the number of collisions that occurred at those intersections over a five-year period from January 1, 2001 through December 31, 2005. The data also included the number of collisions involving vehicles that entered the intersections in violation of the red light traffic laws. The data was presented to the Redwood City City Council (Council) with the request to install cameras. Since public safety is of paramount importance to the Council, it granted approval in 2007. (Attachment 2)

The RWCPD installed a camera at one intersection under its exclusive jurisdiction. The camera is located in the eastbound direction of Whipple Avenue at Veterans Boulevard. During the five-year period mentioned above, there were 76 collisions, of which 64 involved vehicles traveling eastbound on Whipple Avenue. The camera started capturing violations in February 2008. Violators were given warnings for 30 days prior to citations being issued, complying with the Code.

Investigation

To conduct its investigation, the 2008-2009 San Mateo Civil Grand Jury interviewed officials from the Redwood City City Council and the Redwood City Police Department. The Grand Jury reviewed the minutes of the Redwood City City Council; read newspaper articles published in the San Mateo Daily News, the Oakland Tribune, San Francisco Examiner, and the San Mateo Daily Journal; reviewed California Codes relating to photo enforcement red light camera citations, specifically the Government, Penal, and Vehicle Codes; read articles posted on public websites; and visited the intersection to note configuration and signage.

Consideration as to the potential financial stream from the fines paid for these violations was considered. However, due to insufficient data related to the program’s income and expenses, discussion was limited solely to whether the photo enforcement camera increased traffic safety at the one intersection in Redwood City.

Findings

The 2008-2009 San Mateo County Civil Grand Jury found that:

- Redwood City currently has one camera. The RWCPD also requested approval from Caltrans for installation of cameras at three Caltrans intersections which have a history of frequent collisions involving red light violations.

- Currently, there is no photo enforcement notification sign alerting traffic traveling eastbound on Whipple Avenue towards Veterans Boulevard. There are signs posted at all major entry points into Redwood City, as well as, southbound Veterans Boulevard before and after the intersection at Whipple Avenue. There is a pole on eastbound Whipple Avenue that appears to have sufficient space for the addition of a sign notifying drivers that the intersection is monitored by a camera.
• The RWCPD initiated notification to the public of the installation of the camera through a press release that was issued on February 14, 2008 to the Redwood City Daily News, the San Mateo County Times, and the San Francisco Examiner. It was also distributed to television stations.

• The citation sent to the address of the registered vehicle owner contains the necessary information as seen in Attachment 1, and an internet site URL with a personal password allowing the vehicle owner to view the film clip of the violation.

• There is no public educational material on the RWCPD website related to the red light photo enforcement program.

• In the initial six months of the photo enforcement red light traffic camera’s (camera) operation, the RWCPD confirmed there were 527 red light violations issued, and only one collision on eastbound Whipple Avenue. Prior to the camera installation, there was an average of six accidents every six months from 2001 through 2005.

Conclusions

The 2008-2009 San Mateo County Civil Grand Jury concludes that:

• The Redwood City City Council decision to install the camera on the eastbound direction of Whipple Avenue was supported by data collected by the RWCPD.

• The RWCPD technically has complied with the California Vehicle Code by posting the required photo enforcement signage at major entry points to Redwood City. However, drivers heading eastbound on Whipple Avenue are not being warned that the intersection is monitored.

• The RWCPD provided sufficient notification to the public of the installation of the camera.

• In spite of the fact that drivers who violate the traffic light law are not stopped immediately after the violation, the drivers are given clear evidence documenting the violation.

• The RWCPD does not provide on its web page a link providing general information to the public about the red light photo enforcement program. Such information would be beneficial in helping the public understand the program.

• In the six months since the operation of the photo enforcement red light camera, the number of collisions that occurred at the intersection of Whipple Avenue and Veterans Boulevard has decreased.
Recommendations

The 2008-2009 San Mateo County Civil Grand Jury recommends that the Redwood City City Council:

1. Continue to move forward with the installation of photo enforcement red light cameras in accordance with the Redwood City Police Department’s (RWCPD) analysis of the number of collisions that support the installation of these lights.

2. Install a photo enforcement camera notification sign alerting traffic traveling eastbound on Whipple Avenue approaching Veterans Boulevard.

3. Continue the practice of widespread public notice of activation of new automated red light photo enforcement cameras at intersections.

4. Continue to provide clear evidence to registered vehicle owners being cited for photo enforcement camera violations.

5. Consider expanding the RWCPD web-site to include public education about the photo enforcement camera notification system.

6. Develop an annual review process which compares the number of collisions pre- and post-installation of the photo enforcement camera. Determine whether the equipment is serving as an effective deterrent and whether additional safety features should be implemented.
Attachment #1 – Sample Ticket

NOTICE to APPEAR

Redwood City Police Department

NOTICE TO APPEAR Automated Traffic Enforcement  (CITATION NO)

DATE OF VIOLATION  TIME

NAME (FIRST, MIDDLE, LAST)

ADDRESS

CITY  STATE  ZIP CODE

DRIVER LIC. NO.  STATE  CLASS  COMMERCIAL  AGE  BIRTH DATE

SEX  HAIR  EYES  HEIGHT  WEIGHT

VEH. LIC. NO.  STATE

YR. OF VEH.  MAKE  BODY STYLE

REGISTERED OWNER OR LESSEE

ADDRESS

CITY  STATE  ZIP CODE

CODE AND SECTION  DESCRIPTION

LOCATION OF VIOLATION  City/County of Occurrence

At  Menlo Park / San Mateo

IF VIOLATION WAS NOT COMMITTED IN MY PRESENCE, THE ABOVE IS DECLARED ON INFORMATION AND BELIEF AND IS BASED ON PHOTOGRAPHIC EVIDENCE.

I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THE FOREGOING IS TRUE AND CORRECT.

DATE ISSUED  DECLARANT  ID NO.

YOU MUST RESPOND TO THE COURT ON

WHEN:  Date:  at 8:30 AM

Chief's Office Hours  Monday - Friday

8:30 AM - 5:00 PM

WHAT TO DO: FOLLOW THE INSTRUCTIONS ON THE REVERSE

WHERE:  Juvenile Traffic Court County of San Mateo

222 Paul Goold Drive

San Mateo, CA 94402

Phone: 650-312-6667

Judicial Council of California Fees

Rev. 08-26-03  (Veh. Code, § 42106)

SEE REVERSE

TR-115

Certificate of Mailing

I, (name of maker), of Redline Traffic Systems Inc. 15020 North 7th Street, Scottsdale, Arizona certify that I am over 18 years old and not a party to the above entitled case. On (Print: Date) Motions to Appear in an envelope addressed to the registered owner or lessee as shown above, deposited the envelope in a United States Postal Service receptacle located at the Airport United Service office at Scottsdale, Arizona. In the ordinary course of business, the envelope is sealed, properly postaged and sealed. I declare under the penalty of perjury under the laws of the State of the foregoing is true and correct.

Date:

Signature of Maker

(Code of Civil Procedure 1013)
Important - Read Carefully

THIS CITATION IS BASED ON PHOTOGRAPHIC EVIDENCE
The vehicle identified on the front was photographed in violation of a traffic signal. You may see the photographs and video. Contact Redwood City Police 650-765-7179. If you were not driving the vehicle at the time of the violation either contact the Redwood City Park Police Department or complete the enclosed "Affidavit of Non-Liability" form to identify the driver and return as requested.

WHAT TO DO
You have been issued a citation that charges you with a traffic infraction. You must respond by following one of the procedures below by the date on the front (see "WHEN"). If you do not, you may lose your license to drive, and your money penalties may increase.

1. If you do NOT contest the violation
   a. (Pay the bail amount) (See "BAIL INFORMATION" below) Your bail will be forfeited to the court. You will not have to appear in court. You will be convicted of the violation, and it will appear on your record at the Department of Motor Vehicles (DMV). A point count will be charged to your DMV record for this offense and your insurance may be adversely affected.
   b. (Traffic school) You may be able to avoid the point count and adverse affect on your insurance by attending traffic school. Contact the court to request traffic school. You must pay the bail amount, and you may have to pay other fees.

2. If you contest the violation (select one)
   a. (Cite the bail amount) Send a certified or registered letter postmarked not later than five days prior to the appearance date, or come to the court by the appearance date to request a court trial on a future date when an officer and witnesses will be present. You will be required to submit the bail amount. You will be given a date for your trial.
   b. (Trial by written declaration) Send a certified or registered letter postmarked not later than five days prior to the appearance date, or come to the court on or before the date on the front and request a trial by written declaration. Submit the bail amount. You will be given forms to allow you to write a statement and submit other evidence without appearing in court. An officer will also submit a statement. The judicial officer will consider all of the evidence at the same time and decide the case.

WRITING TO THE COURT
If you write to the court, always write the citation number and your driver license number on your letter. Use of certified or registered mail is required. Be sure send your copy of this citation. Keep it for your own records.

BAIL INFORMATION
The "bail" is the amount you must pay or deposit for the charged violation.

Bail Amount: You will receive a courtesy notice from the San Mateo Superior Court with the bail amount and further instructions. If you do not receive this notice within 21 days please contact the court.

Make the check or money order payable to the Clerk of the Court. Write the citation number and your driver license number on your check or money order. You may deposit the bail in person or by mail or the email address listed below.

MIGHT COURT TRIALS are not available for this citation.

JUVENILES
If you are under 18, you must be accompanied by your parent or guardian when you appear in court. Bring this citation and your driver license.

ONLINE INFORMATION
You may obtain additional information at:
http://www.sanmateocourt.org
### HIGHEST REPORTED ACCIDENT INTERSECTIONS – ALL TYPES

<table>
<thead>
<tr>
<th>INTERSECTION</th>
<th>All Traffic Accidents</th>
<th>Red Light Violation Accidents</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Injury</td>
<td>Non-injury</td>
</tr>
<tr>
<td>Woodside - Broadway</td>
<td>47</td>
<td>70</td>
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<tr>
<td>Woodside – Middlefield</td>
<td>36</td>
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<tr>
<td>Veterans – Whipple</td>
<td>30</td>
<td>46</td>
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<tr>
<td>El Camino – Jefferson</td>
<td>29</td>
<td>42</td>
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<td>El Camino – Brewster</td>
<td>26</td>
<td>36</td>
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<tr>
<td>El Camino – Whipple</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Woodside – Veterans</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>Jefferson – Hudson</td>
<td>15</td>
<td>12</td>
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</table>

### TOP 5 INTERSECTIONS WITH RED LIGHT VIOLATION ACCIDENTS

<table>
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<th>Red Light Violation Accidents</th>
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<td>Jefferson – Hudson</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Winslow – Brewster</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Total number of red light violation citations issued from 1/1/01 to 12/31/05: 2,169
Total number of accidents from 1/1/01 to 12/31/05: 7,654
Total number of those accidents that resulted in non-fatal injuries: 2,038
Total number of those accidents that resulted in fatal injuries: 13
Total number of those that were non-injury: 5,603
Total number of accidents from 1/1/01 to 12/31/05 caused by red light violations: 304
Total number of accidents resulted in non-fatal injuries: 198
Total number of those accidents that resulted in fatal injuries: 1
Total number of those that were non-injury: 105
Total percentage of red light violation accidents from 1/1/01 to 12/31/05: 4%
May 19, 2009

Honorable George A. Miram
Judge of the Superior Court
Hall of Justice
400 County Center; 2nd Floor
Redwood City, CA 94063

Dear Judge Miram,

On March 12, 2009, the Redwood City Council received the San Mateo County Civil Grand Jury report titled “Red Light Camera Increases Safety.” The report contained six “findings” and six “recommendations.”

The Redwood City Council was requested to submit comments within 90 days to your Honor. Specifically, Council was requested to submit the following:

For the six “findings,” Council was to indicate one of the following:

1. Council agrees with the finding.
2. Council disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed, and shall include an explanation of the reasons therefore.

Additionally, for the Grand Jury’s “recommendations,” Council was requested to report one of the following actions:

1. The recommendation has been implemented, with a summary regarding the implemented action.
2. The recommendation has not yet been implemented, but will be implemented in the future, with a time frame for implementation.
3. The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a time frame for the matter to be prepared for discussion by the officer or director of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This time frame shall not exceed six months from the date of publication of the Grand Jury report.
4. The recommendation will not be implemented because it is not warranted or reasonable, with an explanation therefore.

The City Council has authorized me to present the City’s response to the Court. The Redwood City Council at its meeting of May 18, 2009 approved the responses to the findings and recommendations.

FINDINGS

Finding #1
Redwood City currently has one camera. The RWCPD also requested approval from Caltrans for installation of cameras at three Caltrans intersections which have a history of frequent collisions involving red light violations.

Response
The City agrees partially with the finding. The police department has requested approval for two additional camera systems at Caltrans intersections. The department is planning to add a third camera system at a non-Caltrans intersection.

Finding #2
Currently, there is no photo enforcement notification sign alerting traffic traveling eastbound on Whipple Avenue towards Veterans Boulevard. There are signs posted at all major entry points into Redwood City, as well as, southbound Veterans Boulevard before and after the intersection at Whipple Avenue. There is a pole on eastbound Whipple Avenue that appears to have sufficient space for the addition of a sign notifying drivers that the intersection is monitored by a camera.

Response
The City agrees partially with the finding. There is no sign alerting traffic traveling eastbound on Whipple Avenue towards Veterans Boulevard. There are signs posted at all major entry points into Redwood City, including, at a minimum, freeways, bridges, and state highway routes (16 total), as well as on southbound Veterans Boulevard north of Whipple Avenue.

The sign on Veterans Boulevard south of Whipple Avenue was removed as it was originally placed there in error. It has been moved to westbound Whipple Avenue east of Veterans Boulevard.
21455.5 (a) (1) of the California Vehicle Code states that the governmental agency may maintain an automated traffic enforcement system if it identifies the system by signs that clearly indicate the system's presence and are visible to traffic approaching from all directions, or posts signs at all major entrances to the city, including, at a minimum, freeways, bridges, and state highway routes.

Council agrees that there is a pole on eastbound Whipple Avenue that appears to have sufficient space for the addition of a sign notifying drivers that the intersection is monitored by a camera. However, the law does not require a sign at that location.

Finding #3
The RWCPD initiated notification to the public of the installation of the camera through a press release that was issued on February 14, 2008 to the Redwood City Daily News, the San Mateo County Times, and the San Francisco Examiner. It was also distributed to television stations.

Response
The City agrees with the finding.

Finding #4
The citation sent to the address of the registered vehicle owner contains the necessary information as seen in Attachment 1, and an internet site URL with a personal password allowing the vehicle owner to view the film clip of the violation.

Response
The City agrees with the finding.

Finding #5
There is no public educational material on the RWCPD website related to the red light photo enforcement program.

Response
The City agrees with the finding.

Finding #6
In the initial six months of the photo enforcement red light traffic camera's (camera) operation, the RWCPD confirmed there were 527 red light violations issued, and only one collision on eastbound Whipple Avenue. Prior to the camera
installation, there was an average of six accidents every six months from 2001 through 2005.

Response
The City agrees partially with the finding. RWCPD was in error when it reported 527 citations issued during the first six months of operation. There were actually 526 citations issued. In addition, prior to the camera installation, there was an average of seven accidents every six months from 2001 through 2005 at that intersection.

The City agrees there was only one collision on eastbound Whipple Avenue because of a red-light violation during the first six months of the camera’s operation.

RECOMMENDATIONS

Recommendation #1
Continue to move forward with the installation of photo enforcement red light cameras in accordance with the Redwood City Police Department’s (RWCPD) analysis of the number of collisions that support the installation of these lights.

Response
The recommendation is being implemented. The city is moving forward with the installation of Photo Red Light Enforcement Systems at three additional approaches/intersections based on analysis of the number of collisions at those approaches/intersections. The City expects the systems to be installed by the end of calendar year 2009.

Recommendation #2
Install a photo enforcement camera notification sign alerting traffic traveling eastbound on Whipple Avenue approaching Veterans Boulevard.

Response
The recommendation will not be implemented because it is not warranted.

21455.5 (a) (1) of the California Vehicle Code states that the governmental agency may maintain an automated traffic enforcement system if it identifies the system by signs that clearly indicate the system’s presence and are visible to traffic approaching from all directions, or posts signs at all major entrances to the city, including, at a minimum, freeways, bridges, and state highway routes.
There are signs posted at all major entry points into Redwood City, including, at a minimum, freeways, bridges, and state highway routes (16 total).

**Recommendation #3**  
Continue the practice of widespread public notice of activation of new automated red light photo enforcement cameras at intersections.

**Response**  
The recommendation is not yet implemented, but will be implemented in the future as additional systems are activated. Three more systems are expected to be installed by the end of calendar year 2009.

**Recommendation #4**  
Continue to provide clear evidence to registered vehicle owners being cited for photo enforcement camera violations.

**Response**  
The recommendation has been implemented. As indicated in Finding #4, a citation sent to the address of the registered vehicle owner contains the necessary information as seen in Attachment 1 of the Grand Jury report, and an internet site URL with a personal password allows the vehicle owner to view the film clip of the violation.

**Recommendation #5**  
Consider expanding the RWCPD web-site to include public education about the photo enforcement camera notification system.

**Response**  
The recommendation has not been implemented, but will be implemented in the next 60 days.

**Recommendation #6**  
Develop an annual review process which compares the number of collisions pre-and post installation of the photo enforcement camera. Determine whether the equipment is serving as an effective deterrent and whether additional safety features should be implemented.
Response

The recommendation has not been implemented. However, steps will be put into place within the next 30 days that will allow an annual review to take place.

On behalf of the Redwood City Council, I would like to thank the Grand Jury for their interest and work on this report. If there is additional information that I can supply, please do not hesitate to ask.

Sincerely,

[Signature]

Louis A. Cobarruviaz
Chief of Police