



**CITY OF RICHMOND**

REPORT TO COMMITTEE

**TO:** Public Works and Transportation Committee

*To PW&T - September 7, 2000*

**DATE:** August 15, 2000

**FROM:** Gordon Chan, P. Eng.  
Manager, Transportation

**FILE:** 6450-08

**RE: INTERSECTION SAFETY (RED-LIGHT) CAMERA PROGRAM – PROPOSED EXPANDED IMPLMENETATION AND MONITORING OF EXISTING APPLICATIONS**

STAFF RECOMMENDATION

1. That Council endorse the expansion of the Intersection Safety (Red-Light) Camera Program by including the following intersections in the program:
  - No. 4 Road and Cambie Road;
  - No. 4 Road and Alderbridge Way; and
  - No. 3 Road and Francis Road.
  
2. That staff submit a follow-up report to Council to present the impact of the expanded Intersection Safety Camera Program in terms of frequency of motor vehicle crashes and level of compliance with the traffic signal control regulations after one year of operation at these new locations.

Gordon Chan, P. Eng.  
Manager, Transportation

FOR ORIGINATING DIVISION USE ONLY		
<b>ROUTED TO:</b>	<b>CONCURRENCE</b>	<b>CONCURRENCE OF GENERAL MANAGER</b>
R.C.M.P. (cont.) .....	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	

STAFF REPORTORIGIN

At the July 13, 1998 Council meeting, a proposal submitted by the Provincial Government to allow the testing of intersection safety cameras at signalized intersections in Richmond was approved. Subsequently, the intersection of No. 4 Road and Westminster Highway was chosen as a test site based on the following criteria: accident history, the potential for drivers running red lights, and favourable physical conditions for the installation of the equipment. The intersection safety camera at this location was activated in August, 1998. A second intersection safety camera was installed at No. 4 Road and Steveston Highway in July, 2000.

The result of the test program indicated that there were a significant number of frequent violators of the traffic signal control regulations at the test site. The equipment was also found to be capable of capturing the requisite evidence to identify the vehicles travelling through the intersection following the signal having turned red.

At the December 14, 1998 Council meeting, the Transportation Department and the Richmond RCMP Traffic Section were directed to develop a prioritized list of intersections where the further deployment of intersection camera equipment would contribute to the reduction of fatalities, injuries, and property damage caused by drivers disobeying red lights.

The purpose of this report is to present the "before" and "after" accident statistics at the No. 4 Road/Westminster Highway test site and to propose a number of potential locations for the expansion of the Intersection Safety Camera Program.

ANALYSIS**1. Accident History at the Test Site (No. 4 Road/Westminster Highway Intersection)**

The following is a summary of motor vehicle accidents at the No. 4 Road/Westminster Highway intersection from 1996 to the current year. Information regarding the accident statistics at Steveston Highway and No. 4 Road will be forwarded to Council in a future report.

<b>Summary of Accident Statistics at No. 4 Road/Westminster Highway</b>		
<b>Year</b>	<b>No. of Vehicle Crashes</b>	<b>No. of Injuries</b>
1996	29	15
1997	31	13
1998 (Camera activated in August)	13	8
1999	11	6
2000 (January – May)	0	0

The red light violation statistics for the period January 1, 2000 to May 31, 2000 are summarized as follows:

- A total of 719 vehicles activated the intersection camera;
- 76 % of the incidents occurred within two seconds of the light turning red; and
- 41% of the vehicles were travelling in the 0 – 29 km/h range. This would indicate the vehicles were already in the intersection and completing a turning movement.

The intersection safety camera at this location only monitors traffic in the eastbound direction on Westminster Highway. However, the placement of advance warning signs at the intersection and the presence of camera hardware itself help to raise driver awareness of the requirement to respect traffic control devices. The reduction in the number of motor vehicle crashes since the installation of the camera in August, 1998 indicates that the program has had a positive impact on driver behaviour.

## 2. Proposed Additional Intersection Camera Locations

After consultation and discussion with the Richmond RCMP Traffic Section, it was agreed that the Intersection Safety Camera Program should be expanded to include the following locations:

- No. 4 Road and Cambie Road (eastbound);
- No. 4 Road and Alderbridge Way (westbound); and
- No. 3 Road and Francis Road (southbound).

These intersections were selected because they were consistently in the top 25 list for accidents at intersections. Furthermore, the type of accidents that were recorded at these locations were of the type consistent with red light infractions. Significant incidents of drivers running red lights were also observed at these sites. These locations also have favourable physical conditions for the installation of the equipment. If approval is given by Council, the additional cameras can be installed immediately once the design drawings have been completed.


It is noted that there is the potential for funding of a fourth intersection safety camera location should another municipality not make use of all allocated resource in their jurisdiction. If this funding becomes available, the No. 1 Road/Blundell Road intersection would be the recommended location.

### FINANCIAL IMPACT

There is no financial impact on the City. ICBC and the Intersection Safety Camera Program (Provincial Government) will fund all costs associated with this program including: intersection physical plant improvements, equipment installation, and City staff and contractor time.

### CONCLUSION

The Intersection Safety Camera Program is designed to monitor and enhance enforcement of red light violations. This method of enforcement is intended to influence better driver behaviour and raise the level of respect for the red light sequence, resulting in the reduction of motor vehicle crashes. The accident statistics recorded at the No. 4 Road and Westminster Highway test site indicates that the Intersection Safety Camera Program is an effective means in terms of enhancing traffic safety and raising compliance of traffic signal control regulations. Three additional locations are recommended for inclusion in the Intersection Safety Camera Program. A further submission will be made to Council to report the "before" and "after" motor vehicle accident statistics recorded at the proposed intersections.

  
Robert Gilchrist  
Traffic Technician II

RBG:lce