



CITY OF RICHMOND

REPORT TO COMMITTEE

TO: Public Works and Transportation Committee

TO PW&T - APRIL 4, 2001
DATE: March 19, 2001

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

FILE: 6450-09

**RE: ICBC/CITY OF RICHMOND ROAD SAFETY IMPROVEMENT PROGRAM -PROPOSED
JOINT STUDIES FOR 2001/2002**

STAFF RECOMMENDATION

1. That the list of proposed road safety studies potentially eligible for funding contributions from the ICBC 2001/2002 *Road Safety Improvement Program*, as described in the attached report, be endorsed.
2. That staff be directed to report back to Council on the findings of the studies and the status of the ICBC funding contributions towards the identified eligible projects.

Gordon Chan, P. Eng.
Manager, Transportation

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CONCURRENCE OF GENERAL MANAGER

STAFF REPORT

ORIGIN

Since 1994, City staff have been working with the Insurance Corporation of British Columbia (ICBC) on the joint City/ICBC *Road Safety Improvement Program*, which seeks to improve traffic safety for all road users. Under this program, comprehensive traffic safety audits and reviews are conducted each year on selected corridors and intersections in Richmond. The primary objectives of a traffic safety study are to identify contributing factors to vehicular accidents and develop a set of remedial transportation initiatives such as roadway improvements and traffic management measures. The study locations are identified via:

- a review of the City's traffic accident inventory to identify locations with historically high accident rates;
- suggestions from the Traffic Safety Advisory Committee (TSAC); and
- City initiatives.

Based on the results of the studies and input from TSAC and other stakeholders, a list of potential projects is then developed for inclusion in the *Road Safety Improvement Program*. Past funding from ICBC has contributed to the implementation of projects such as the Blundell Road and No. 2 Road intersection improvements, the installation and upgrading of numerous traffic signals, the system-wide upgrade of various traffic control signs and other traffic safety education and enforcement initiatives.

A previous staff report, presented at the January 3, 2001 meeting of the Public Works & Transportation Committee, outlined the projects to be implemented in 2000/2001 under the joint City/ICBC *Road Safety Improvement Program* and identified future initiatives for the program. This report describes future joint City/ICBC traffic safety studies for 2001/2002, which could result in road safety projects, which are eligible for potential funding contributions from the City/ICBC *Road Safety Improvement Program*.

ANALYSIS

For each of the following potential studies, ICBC would engage a traffic consultant to conduct a traffic safety study of the site or area in question to identify measures to improve safety for all road users. Recommended improvements will become eligible for cost-sharing with ICBC under the joint City/ICBC *Road Safety Improvement Program*. The City's portion of potential improvements would be funded from either 2001 or future Capital Programs (subject to Council approval).

1. Garden City Road Extension

The proposed study will comprise a traffic safety audit of the project to extend Garden City Road between Sea Island Way and Bridgeport Road. The Garden City Road extension will provide full directional movements at both the Garden City Road/Sea Island Way and Garden City Road/Bridgeport Road intersections. The traffic safety audit will review the functional designs of the intersections and identify possible design modifications to enhance traffic safety.

2. Local Area Intersection Traffic Control Review

Local area (i.e., within a subdivision) intersection traffic control practices differ widely across municipalities within the Lower Mainland. The proposed study will review existing local area traffic control practices in the Lower Mainland in order to determine the appropriate traffic control requirements particularly for uncontrolled intersections within a residential subdivision. This review may include the selection of two local areas for a comparative pilot study of alternative traffic control devices.

3. Cambie Road and No. 5 Road Intersection Improvements

This intersection has one of the highest recorded traffic accident rates in the City. The proposed study will involve an operational review of the intersection and an examination of pedestrian and cyclist safety at the location. The study will investigate the possible contributing factors to vehicle accidents, such as the lack of left-turn bays on all four legs of the intersection, and identify potential corrective roadway changes and traffic management measures to improve traffic safety.

4. Hollybridge Way and River Road Intersection Improvements

This T-intersection has recorded a number of off-road accidents (i.e., vehicles leaving the road to the right or left). The proposed study will include an operational review of the intersection and an analysis of pedestrian and cyclist safety at the location. The study will investigate the possible contributing factors to the vehicle accidents, such as the curvature of the road, roadside obstacles or intersection geometry, and identify potential remedial road and intersection improvements to enhance traffic, cyclist, and pedestrian safety.

5. Video Monitoring of Intersection – Pilot Project

The proposed study involves the selection of one intersection for the test installation of a video monitor to record traffic movements at the intersection. Staff would review the videotape to elicit information on the need for any changes in signal timing to enhance traffic flow efficiency and to identify potential contributing factors to any recorded traffic accidents. This information will help staff to better understand the causes of accidents and identify the remedial actions necessary to improve traffic safety.

6. Garden City Road and Cambie Road Intersection Improvements

This is a joint traffic safety audit to be carried out by ICBC and staff on the functional design for the re-alignment of the left-turn bays on Garden City Road and the introduction of left-turn arrows for northbound and southbound traffic on Garden City Road. These respective improvements will rectify the existing offset of the left-turn bays, thus improving the sightlines for vehicles turning left, and reduce conflicts between through traffic and vehicles turning left. The traffic safety audit will determine the safety benefit of the improvements and the appropriate ICBC funding contribution to the project.

7. Sidewalk/Walkway Improvements for School Zones

Some of the streets in the vicinity of a number of schools in the City do not have sidewalks or walkways for use by schoolchildren and other pedestrians. ICBC recognizes the traffic and pedestrian safety benefits of the provision of sidewalks or walkways in these areas. Staff will prioritize a list of locations to be provided with sidewalk or walkway improvements based on existing needs, pedestrian volumes, accident history, etc. A preliminary list of locations includes:

- west side of Shell Road between Caithcart Road and Bridgeport Road, which forms part of the route of a walking school bus for Tait Elementary School;
- north side of Odlin Road between Garden City Road and No. 4 Road, which is in the vicinity of Tomsett Elementary School;
- west side of Heather Street between Dixon Avenue and Dolphin Avenue, which is in the area of DeBeck Elementary School; and
- west side of Smith Crescent between Westminster Highway and Gilley Road, which is in the vicinity of Hamilton Elementary School.

8. Crosswalk Enhancement on Arterial Roads

This project involves a City-wide review of the type of pedestrian crosswalks on arterial roads in order to develop an overall program to upgrade the existing crosswalks to a higher standard (i.e., overhead lights with yellow flashers). As this is potentially a multi-year project, staff will prioritize the approximately 35 locations based on existing needs, pedestrian volumes, traffic accident history, etc.

FINANCIAL IMPACT


There is no financial impact to the City for any ICBC-approved joint City/ICBC studies, as ICBC will fund their total cost. The City contributes towards the joint undertaking of these studies by providing traffic statistics and other pertinent information and staff time. Any remedial measures identified as a result of these studies could be funded from the City's future capital programs (subject to Council review and approval) while the Garden City Road extension will be funded from the 2001 Major Capital Works Program.

With respect to the three proposed minor traffic safety improvement projects (Garden City Road/Cambie Road intersection improvements, sidewalk/walkway provision at selected school zones and upgrade of pedestrian crossings on arterial roads), the City's share of these improvements could potentially be funded from the 2000/2001 Minor Capital Program, if funding from ICBC is approved.

CONCLUSION

Staff have identified a number of locations to be considered for the undertaking of comprehensive traffic safety audits and reviews as part of the joint City/ICBC *Road Safety Improvement Program*. These studies involve the analyses of high accident rate locations to identify potential remedial actions to improve traffic safety, a local area traffic control review and a traffic safety audit of the Garden City Road extension project. Other potential initiatives proposed in the program include the introduction of left-turn arrows and the re-alignment of the left-turn bays on Garden City Road at Cambie Road, the provision of sidewalks or walkways in selected school zones, and the City-wide upgrade of pedestrian crossings on arterial roads to a higher standard with overhead lights and yellow flashers. These traffic safety study proposals may result in improvements that would be eligible for funding contributions from ICBC through its annual *Road Safety Improvement Program*.

At this time, staff recommend that Council endorse the list of study proposals outlined in this report to be submitted to the ICBC 2001/2002 *Road Safety Improvement Program*, and that staff report back on the findings of the studies as well as the status of ICBC funding contributions towards the identified projects.



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