



To: Community Safety Committee **Date:** October 24, 2018
From: Will Ng, Superintendent **File:** 10-6450-09-01/2018-
 Officer in Charge, Richmond RCMP Detachment Vol 01
Re: **River Road – Report Back on Richmond RCMP Enforcement Activities**

Staff Recommendation

That the report titled “River Road – Report Back on Richmond RCMP Enforcement Activities” dated October 24, 2018 from the Manager, RCMP Administration be received for information.

Will Ng, Superintendent
 Officer in Charge, Richmond RCMP Detachment
 (604-278-1212)

Att. 1

REPORT CONCURRENCE		
ROUTED TO: Transportation	CONCURRENCE <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: WJ	APPROVED BY CAO

Staff Report

Origin

At the February 21, 2018 Public Works and Transportation Committee meeting, discussion occurred regarding the implementation of potential road safety measures along River Road between No. 6 Road and Westminster Highway. As a result, the following referral was made:

- (1) *That consideration of public consultation on road safety measures on River Road between No. 6 Road and Westminster Highway be deferred pending police enforcement through the end of the summer and staff report back on its effectiveness.*

This report responds to the referral with the outcome of the enforcement activities undertaken since February 2018 and also provides a status update on the implementation of selected road safety measures.

This report supports Council's 2014-2018 Term Goal #1 A Safe Community:

Maintain emphasis on community safety to ensure Richmond continues to be a safe community.

Background

Fatal Motor Vehicle Incidents on River Road

From January 2010 to September 2018, there were 55 fatal Motor Vehicle Incidents (MVI) in the City of Richmond. Six fatal MVIs occurred on River Road between No. 7 Road and Westminster Highway (11% of the total). This percentage is disproportionately high considering that this section of River Road is a very small fraction of the total road area in the City of Richmond. Furthermore, the percentage of MVIs resulting in a fatality is very high compared to other MVI locations. The cause of death in three of the MVIs was from drowning. Speed was a factor in all of these MVIs. The cause of death in the remaining three incidents included two collisions between a vehicle and a structure and one collision between a vehicle and a cyclist.

2018 River Road Project

In February 2018, a number of residents who live on and around the eastern portion of River Road expressed increased concern with road safety issues in their neighbourhood to both the Community Safety Committee and the Public Works and Transportation Committee. Their primary concerns were identified as speeding vehicles and vehicles and cyclists not sharing the road.

Richmond RCMP was directed by Committee to implement a project through Summer 2018 to monitor and address these issues and report back in Fall 2018. The project aimed to reduce the speed of drivers and to encourage the sharing of the road between vehicles and cyclists. A number of initiatives were implemented in collaboration with various City departments including speed enforcement, bicycle enforcement, Speed Watch, public education, media outreach, and collaboration with the City of Richmond Transportation Department and Community Bylaws parking enforcement.

Analysis

Education and Safety Awareness Campaigns

As directed by Committee, Richmond RCMP created enhanced awareness of safety concerns on River Road by highlighting the issue in media releases and through social media posts. Richmond RCMP used social media to promote road safety on eight separate occasions on Twitter; three of these were specifically regarding River Road. These tweets received a wide audience through dissemination on other social media platforms including Facebook and Reddit.

On May 17, 2018, two digital sign boards with messages were deployed one at each end of River Road (Figure 1). The digital sign boards were left in place 24 hours a day for a total of 28 days. The signs were visible during the day and illuminated at night.

Initially, the sign boards displayed the following message:

"Police Check Zone. Drivers watch your speed. Cyclists share the road"



Figure 1: Digital Sign Board

These messages were updated on May 29, 2018 to read:

"Police Check Zone. 250 tickets so far in 2018. Are you next?"

Speed Watch Deployments

Richmond RCMP Community Policing Volunteers were instrumental in education and public safety awareness campaigns and provided 306 volunteer hours to Speed Watch deployments. RCMP members also contributed 102 hours to this initiative. Speed Watch is a joint initiative with ICBC which promotes safe driving habits by alerting drivers of their speed. Trained volunteers are equipped with radar and a Speed Watch reader board which gives drivers instant feedback on their speed. When drivers are not respecting the posted speeds, a letter is sent to the registered vehicle owner with information on the safety risks associated to the observed behaviour and the applicable fines. Speed Watch data is provided for information. Data analysis was not conducted on the percentage of notices issued as the primary focus of this report is to identify if increased enforcement activities lead to a reduction in speeding.

The following data was collected from February to September 2018:

- 34 Speed Watch deployments occurred
- 5,148 vehicles went through a Speed Watch deployment
- 691 notices were sent to drivers

Cyclist Engagement

An important component of the River Road project was to engage with cyclists to deter unsafe cycling practices, including *Motor Vehicle Act* violations. The Richmond RCMP Bike Unit engaged with local cycling groups, including HUB Cycling, Richmond Active Transportation Committee and several privately affiliated cycling clubs. The Bike Unit was also deployed to

River Road on overtime in June 2018 to observe cyclists and encourage cycling safety and etiquette.

No large groups of cyclists were observed committing *Motor Vehicle Act* offences during any of the police speed enforcement operations, Bike Unit operations or volunteer Speed Watch deployments. No violation tickets were issued to cyclists as no offences were observed during the deployment. Police regularly engaged with numerous cyclists riding in smaller groups and encouraged safe cycling practices. The cyclists were appreciative of the positive police engagement. The common message received from cyclists is that they share the concern of speeding vehicles on River Road.

Community Engagement

During speed enforcement operations, motorists and cyclists engaged with police officers and expressed appreciation for conducting enforcement. Many were local residents or individuals who commuted regularly along River Road. The communication with local residents was positive and they expressed appreciation for speed enforcement in the area. Officers also spoke to drivers while issuing violation tickets, explaining that River Road was a priority due to the number of fatalities along that stretch of road. Some of drivers apologized for their speed and acknowledged the risk in their driving behaviour.

Increased Enforcement

In February 2018, Richmond Detachment launched an enhanced Traffic Enforcement Initiative on River Road between No. 7 Road and Westminster Highway, which concluded at the end of September 2018. This project included speed enforcement operations by Richmond RCMP Road Safety Unit on regular shifts and overtime shifts, Richmond RCMP General Duty patrols, Richmond RCMP SPAT (Special Attention) dispatch tracking, Richmond RCMP Bike Unit patrols, and joint operations with Richmond RCMP and City of Richmond Bylaws. As these road safety concerns are multi-jurisdictional, the Lower Mainland Integrated Road Safety Unit was also deployed to conduct speed enforcement in the area.

A total of 34 operations and patrols were documented on River Road for this project. Six of the operations were conducted by three officers on overtime, for a total of 180 hours of overtime. Richmond RCMP also conducted regular patrols which are not documented in this project. Resources were redirected from other RCMP initiatives to this project to ensure results.

Enforcement was mostly conducted in the 22,000-block of River Road, which is approximately 600 metres west of the CN Rail bridge. This area is straight, with no residences on the road and is typically where the fastest speeds are observed. This area is also close to the location of several of the fatal MVIs.

During this eight-month period, police issued 446 Violation Tickets, 365 for speeding offences and 81 for other *Motor Vehicle Act* offences. In addition, 19 vehicles were impounded for excessive speed (91 km/h and higher). Of note is that several of the drivers issued speeding tickets are residents on River Road.

Richmond RCMP will continue to work with City departments on public engagement and regular enforcement. However, the intensity of concentrated effort in a single stretch of road

cannot be sustained over the long term without either impacting other initiatives or requesting additional resources.

Enforcement of Truck Weight Limit

Richmond Bylaws issued 19 municipal violations to commercial vehicles when conducting joint operations. Police did not observe many overweight vehicles during the project. Truck traffic was confined mostly to dump trucks and large farming vehicles with legitimate reasons to travel the weight restricted section of River road in order to access farm land and rural lots.

Calls for Service / MVIs / Public Complaints

During the duration of this project, Richmond RCMP received two complaints regarding cyclists. Both were from the same resident who has made previous complaints on the same issue. No further complaints have been received. This coincides with the deployment of the digital sign boards, as well as the City's alterations to the signage and painted lines on River Road. One serious MVI occurred where a driver lost control and skidded off the road into the Fraser River. There were no injuries and speed was a factor.

Summary of Richmond RCMP Findings

Richmond RCMP conducted enhanced road safety enforcement along River Road for an eight-month period. The 365 speeding tickets issued represent 15 per cent of all speeding tickets issued in Richmond during this period. In contrast, the 446 total violation tickets issued on River Road represent only five per cent of total violation tickets written. Throughout the project police did not note any change in driving behaviour or reduction in speed along River Road, despite increased enforcement.

Enforcement and Speed Watch operations continued throughout the 28-day period where the digital sign boards were activated, with no noticeable reduction in speed. Several drivers admitted to observing the digital sign boards, while being issued speeding tickets. On September 28, 2018 Richmond RCMP conducted the final overtime speed enforcement operation of the project. On this date 22 speeding violation tickets were issued, including five excessive speed impounds. Police did not note any incidents of cyclists riding alone or in groups cycling in an unsafe manner or committing *Motor Vehicle Act* infractions.

HUB Cycling Assessment Report

HUB Cycling is a charitable organization that works to make cycling better through education, events, and collaboration. The Richmond/YVR Local Committee (the Committee) is one of HUB Cycling's 11 volunteer committees that encourages cycling for all ages and abilities (AAA) in municipalities across Metro Vancouver.

In March 2018, the Committee undertook an assessment ride of River Road between No. 6 Road and Westminster Highway to evaluate the safety, connectivity and opportunity to improve the current cycling infrastructure. Its findings were summarized in a report that was delivered to staff in September 2018 following implementation of the road safety measures outlined in Attachment 1. The road safety measures were implemented in Spring-Summer 2018 and operational by late August 2018 per direction given to staff at the March 21, 2018 Public Works

and Transportation Committee meeting. Table 1 outlines the Hub Cycling Committee’s recommendations and City staff’s responses.

Table 1: HUB Cycling Committee Recommendations and Staff Responses

HUB Cycling Committee Recommendation	Staff Response
Stronger enforcement of 50 km/h speed limit	<ul style="list-style-type: none"> Undertaken by Richmond RCMP
Driver and cyclist education to share the road	<ul style="list-style-type: none"> Undertaken by Richmond RCMP
Install “sharrows” (bike stencil with chevrons) and single file signage along entire length	<ul style="list-style-type: none"> Not appropriate as this roadway section is not a designated cycling route
Install continuous white edge line at constant lane width and allow shoulder width to vary	<ul style="list-style-type: none"> A varying shoulder width would require cyclists to weave across the white edge line (i.e., in the shoulder when it widens and in the travel lane when the shoulder is narrow or non-existent) Weaving is contrary to safe cycling behaviour that includes riding predictably in a straight line The white edge line would be maintained at the asphalt edge and refreshed where required
Convert double yellow centreline to single dashed centreline where appropriate	<ul style="list-style-type: none"> Completed in Summer 2018
Regular street sweeping and maintenance	<ul style="list-style-type: none"> Increased frequency to be considered as part of 2019 Operating Budget process
Widen road where possible to create paved mini pull-outs to allow vehicles to pass cyclists	<ul style="list-style-type: none"> Limited potential for widening road Recent conversion of centreline allows vehicles to safely pass cyclists

Before and After Travel Speed Data

Two speed reader boards were installed in late August 2018 on River Road in the vicinity of Valmont Way (approximately 1 km east of No. 6 Road) where it was possible to install the signage without impacting the dike (Figure 2). Installation of the remaining two pairs of locations for speed reader boards further east would impact the dike and thus is pending approval of the provincial Deputy Inspector of Dikes and anticipated in 2019.

The existing speed reader boards in the vicinity of Valmont Way display the following formats of vehicle speeds (the posted speed limit is 50 km/h):

- Below 50 km/h: vehicle speed shown in normal amber colour
- Between 50-70 km/h: vehicle speed shown in flashing amber
- Over 70 km/h: vehicle speed shown in flashing red



Figure 2: Speed Reader Board for Eastbound Traffic

Initially, the devices collected data for one week while appearing blank to motorists in order to establish the “before” conditions. After this first week, the devices then displayed vehicle speeds

to motorists in order to capture “after” conditions. As shown in Table 2, the “before” data and two sets of “after” results are reported: one set when there was no RCMP presence in the area and one set when RCMP enforcement was active.

Table 2: Speed Reader Board Data

Study Period (Pre or Post Speed (Reader Board Display))	85 th Percentile ⁽¹⁾		% Traffic Travelling at ≥ 69 km/h	
	Westbound	Eastbound	Westbound	Eastbound
Pre: Aug 30-Sep 6	69 km/h	67 km/h	15.4%	12.7%
Post: Sep 13-20 (without RCMP Enforcement)	66 km/h (-4.3%)	66 km/h (-1.5%)	9.2% (-40%)	8.9% (-30%)
Post: Oct 18 & 22 (with RCMP Enforcement)	65 km/h (-5.8%)	64 km/h (-4.5%)	7.3% (-53%)	5.8% (-54%)

(1) Travel speeds are expressed in terms of the 85th percentile (i.e., 85% of vehicles are travelling at or below that speed), which is typically used to determine the prevailing travel speed of a particular roadway.

For both westbound and eastbound traffic, the results indicate that the speed reader boards are effective in reducing the number of drivers travelling at an excessive speed of 69 km/h or higher (i.e., 40% and 30% reduction, respectively). The signs have a modest effect in decreasing the travel speeds of the majority of drivers (i.e., the 85th percentile speeds).

Based on these results, particularly with respect to reducing excessive travel speeds, City staff will proceed with installation of the remaining two additional pairs of locations for speed reader boards in 2019 and periodically rotate a total of four reader boards amongst the six locations. At this time, the Transportation Department recommends that the implementation of any speed humps will be deferred until the effectiveness of the full complement of speed reader boards is determined. City staff and Richmond RCMP would continue to monitor the results on the speed reader boards and report back, if necessary, on any further potential road improvements.

Financial Impact

None.

Conclusion

Richmond RCMP will continue to respond to complaints and conduct speed enforcement efforts on River Road as driving behaviour has remained unchanged. Increased enforcement has not led to a notable change in driver behaviour. Richmond RCMP recommends the consideration of traffic calming and speed limiting features to this section of River Road in order to reduce speeds to enhance safety to all road users.

The City's Transportation Department has identified that speed reader boards have resulted in positive reductions in excessive travel speeds. RCMP and Transportation staff will continue to monitor the results and report back if any further potential road improvements are recommended.




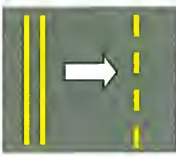





Ed Warzel
Manager, RCMP Administration

Att. 1: Status and Locations of Road Safety Measures Implemented

Status and Locations of Road Safety Measures Implemented



LEGEND

	Conversion of double yellow centreline to single dashed centreline	
	Installation of shoulder-mounted delineator posts along curve	
	"Caution" Signage (4 signs in each direction)	
	2 Speed Reader Boards (1 in each direction at Valmont Way)	