



City of Richmond

Report to Committee

To: Public Works and Transportation Committee

Date: March 17, 2025

From: Lloyd Bie, P.Eng.
Director, Transportation

File: 10-6450-09-01/2025-
Vol 01

Re: River Road - Traffic Assessment

Staff Recommendation

That the staff report titled "River Road – Traffic Assessment" dated March 17, 2025 from the Director, Transportation, be received for information.

Lloyd Bie, P.Eng.
Director, Transportation
(604-276-4131)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Engineering	<input checked="" type="checkbox"/>	
RCMP	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO

Staff Report

Origin

At the July 17, 2024 Public Works and Transportation Committee, staff received direction to:

That the presentation from John McKendry regarding traffic safety along River Road and Westminster Highway be referred to transportation and community safety staff to review the situation as it currently stands, including enforcement and possible other steps for improvement, especially from a safety point of view.

This report addresses this referral.

This report supports Council's Strategic Plan 2022-2026 Focus Area #1 Proactive in Stakeholder and Civic Engagement:

Proactive stakeholder and civic engagement to foster understanding and involvement and advance Richmond's interests.

This report supports Council's Strategic Plan 2022-2026 Focus Area #3 A Safe and Prepared Community:

Community safety and preparedness through effective planning, strategic partnerships and proactive programs.

Analysis

Background

River Road between No. 6 Road and Westminster Highway is classified as a Minor Arterial Road approximately 8.5 km in length. The corridor is primarily industrial in the west, agricultural in the middle, and residential/industrial in the east. The road is used by local residents as well as large truck operators and employees accessing industrial properties. On weekdays, some commuters may use the route to avoid traffic congestion on Highway 91 and Westminster Highway while on weekends the roadway is a popular destination for cyclists, particularly cycling clubs with larger groups of cyclists.

Over the past 15 years, a number of traffic safety enhancements have been implemented along this corridor including:

- Installation of digital driver feedback sign (2).
- Addition of "Single File" and "Caution Watch for Cyclists" signage.
- Construction of an asphalt walkway with concrete barrier between No. 6 Road and Burdette Street.
- Installation of six speed humps in the 18,000-block of River Road where a 30 km/h speed zone is in effect.
- Implementation of a 9-tonne load limit and 30 km/h speed limit for trucks is in effect between No. 7 Road and Westminster Highway.

Previous Consultations (2017)

In 2017, in response to speeding concerns, area residents and businesses were engaged to seek their feedback regarding the proposed installation of 20 speed humps along River Road between No. 7 Road and Westminster Highway. Based on the lack of support from the engagement process, speed humps were not implemented.

Current Conditions on River Road

Speed Study and Crash History

Table 1 provides a summary of the collision data and vehicle speeds on River Road.

Table 1: Results of River Road Traffic Assessment

Road Section	Collisions	Collisions involving Cyclists	85th Percentile Speed (km/h)
No. 6 Road/River Road	21	-	58
Between No. 6 Road and No. 7 Road	43	2	68
No. 7 Road and River Road	17	1	77
Between No. 7 Road and No. 8 Road	4	1	76
No. 8 Road and River Road	8	-	76
Between No. 8 Road and Nelson Road (existing speed humps and 30 km/h zone)	-	-	45
Between Nelson Road and Westminster Highway	18	-	73
Westminster Highway and River Road	21	1	65
Total	132	5	67 km/h average

During the five-year period of 2019 to 2023 (the most recent available crash data from ICBC), a total of 132 crashes were recorded on River Road between No. 6 Road and Westminster Highway. None of the incidents were identified to result in a fatality. Of the 132 crashes, approximately 61% occurred between No. 6 Road and No. 7 Road (including 21 crashes at No. 6 Road). 39% of the total collisions occurred between No. 7 Road and Westminster Highway (including 21 crashes at Westminster Highway).

The locations of the collisions are predominantly at the intersections along this corridor. The intersections of River Road and No. 6 Road and River Road and Westminster Highway experience the highest number of collisions with each having an average collision rate of four collisions per year. To be considered a collision prone intersection, a minimum frequency of 25 collisions per year¹ would have to be reached. Although, the data demonstrates the presence of speeding and collisions, River Road is not considered a collision prone area.

¹ Transportation Association of Canada Canadian Guide to In-service Road Safety Review (TAC Road Safety Review Guide)

Existing Speed Humps - 18,000 Block of River Road

There are six existing speed humps along the section of River Road between No. 8 Road and Nelson Road. The technical assessment confirmed the effectiveness of these speed humps as there are no recorded collisions in the latest 5-year crash data along this section. The vehicle speeds in this section are lower (45 km/h) compared to the rest of River Road, where the 85 percentile speeds range from 58 km/h to 77 km/h.

Potential Speed Management Options

Based on the technical assessment and road geometry, a potential traffic calming plan targeting speeding at the collision locations was developed (Attachment 1).

To address the majority of collisions (61%) occurring on the 1.5 kilometre section of River Road from No. 6 Road to No. 7 Road, five speed cushions with a minimum spacing of 400 metres were proposed. This data driven approach aims to address the conflicts between cyclists and the relatively higher volumes of trucks accessing the industrial businesses along this section of River Road.

For the remaining seven kilometres east of No. 7 Road, comprising 39% of the total collisions, four speed cushions, spaced no closer than one kilometre apart, were proposed.

The traffic calming plan with the options of speed cushions (9 total) and/or a reduced posted speed limit along the entire 8.5 kilometre stretch of River Road (Attachment 1), was presented to area residents and businesses for feedback.

Consultation on Proposed Speed Mitigation Options

Community Meeting

A meeting with area residents was held on December 5, 2024 at the Cambie Community Centre. The results of staff's technical assessment along with potential traffic calming measures were presented for feedback (Table 2).

Table 2: Results of Community Meeting

Attendees	Purpose	Feedback/Outcome
20	<ul style="list-style-type: none"> Present staff's technical assessment. Discuss concerns and options for traffic calming measures. 	<ul style="list-style-type: none"> Speeding was identified as the primary concern for residents. Majority of attendees supported no road changes with a preference instead for increased enforcement. 6 attendees indicated that they wanted speed cushions. 3 attendees indicated that they wanted 30km/h speed limit reduction.

Results of Resident Survey

From January 16, 2025, to February 7, 2025, residents were surveyed to determine the level of support for the proposed traffic calming measures. A total of 184 surveys were mailed out to each discrete address, with 37 responses received for a 20% response rate.

Of the 37 respondents, 23 (62%) did not support any traffic calming measure or speed limit reduction on River Road. Four respondents (11%) supported lowering the speed limit and 10 respondents (27%) supported the speed cushions (Figure 1).

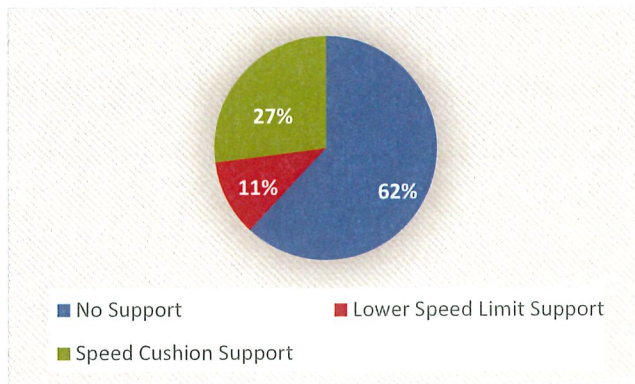


Figure 1: Results of Community Responses

As the results of the survey did not support any traffic calming on River Road to address speeding, staff do not recommend the implementation of the nine speed cushions. Of the respondents who were not in favour of installing speed cushions, the most commonly cited concern was the inconvenience to residents. Increased enforcement was indicated by several respondents as a preferred solution to mitigate speeding.

The City also received correspondence via email from residents expressing opposition to any traffic calming on River Road.

Speed Enforcement

Resident feedback indicates a preference for increased enforcement on River Road in lieu of physical changes to the roadway.

Richmond RCMP

In 2024, Richmond RCMP issued a total of 29 tickets on River Road. This included a total of 15 tickets for speeding, and one for excessive speeding.

The Richmond RCMP advises that targeted enforcement with high visibility presence on River Road occurs when the opportunity affords. The RCMP is also committed to other higher priority “hotspots” in the city, identified as a result of higher collision statistics through intelligence led data analysis that they prioritize.

Automated Speed Enforcement

Automated enforcement is an important tool to remind drivers to slow down and drive safely. These programs utilize a camera for enforcement and have an advantage over traditional enforcement as they can operate 24 hours per day, seven days per week.

This would benefit River Road. The automated speed enforcement programs are within provincial jurisdiction and operated by ICBC. Letters to the Province requesting additional automated enforcement technology in Richmond have previously been sent by the City. A response received from the Province in 2023, indicated the Province's focus on monitoring and evaluating the existing cameras and exploring different approaches to maximize road safety. To date, the Province has not increased the number of locations with automated enforcement in the City.

Staff believe these cameras are an effective enforcement tool and will continue to work with the Province to encourage the implementation of more safety cameras within Richmond.

Future Dike

The majority of River Road between No. 6 Road and Westminster Highway sits on top of the existing dike. The City's Dike Master Plan Phase 4 identifies this section for future dike raising to enhance flood protection. As plans for dike upgrades progress, options to improve road safety will also be considered.

Financial Impact

None.

Conclusion

A presentation for speed mitigation and traffic safety was received from a resident of River Road. A traffic study confirmed speeding on River Road between No. 6 Road and Westminster Highway. Traffic calming measures to address speeding were presented to area residents and businesses. Comments received at an open house and responses from a survey demonstrated a lack of support for any physical changes to this roadway. 62% of the survey responses were opposed to any traffic calming measures on River Road. This negative outcome is consistent with the 2017 consultation results when residents opposed the installation of 20 speed humps along River Road.

Without adding any physical traffic calming measures, speed compliance on River Road will rely on enforcement. Staff will also continue to advocate for increased automated enforcement locations in Richmond with the Province.



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SH:ck

Att. 1: Review of Potential Traffic Calming Options on River Road

Review of Potential Traffic Calming Options on River Road

