



**To:** Public Works and Transportation Committee      **Date:** April 19, 2024  
**From:** Lloyd Bie, P.Eng.  
 Director, Transportation      **File:** 10-6450-00/Vol 01  
**Re:** 2024 Road Safety Initiatives

**Staff Recommendation**

That the road safety initiatives, as outlined in the staff report titled “2024 Road Safety Initiatives” dated April 19, 2024 from the Director, Transportation, be received for information.

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

Att. 2

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Community Bylaws	<input checked="" type="checkbox"/>	
Fire Rescue	<input checked="" type="checkbox"/>	
RCMP	<input checked="" type="checkbox"/>	
Corporate Communications	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
<b>SENIOR STAFF REPORT REVIEW</b>	<b>INITIALS:</b> 	<b>APPROVED BY CAO</b> 

## Staff Report

### Origin

Road safety is a shared responsibility that involves collaboration and engagement with multi-disciplinary partners and all levels of government. The City implements and supports a number of proactive mitigation measures throughout the year to improve road safety outcomes, particularly for vulnerable road users such as pedestrians and cyclists. As part of road safety planning and intervention development, the City's Traffic Safety Advisory Committee creates a co-operative partnership between City staff, community groups and other agencies, to enhance traffic, pedestrian and cycling safety in Richmond. This report presents an overview of the on-going and planned road safety initiatives for 2024 and highlights the activities undertaken 2023.

This report supports Council's Strategic Plan 2022-2026 Focus Area #2 Strategic and Sustainable Community Growth:

*Strategic and sustainable growth that supports long-term community needs and a well-planned and prosperous City.*

*2.4 Enhance Richmond's robust transportation network by balancing commercial, public, private and active transportation needs.*

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.*

*3.2 Leverage strategic partnerships and community-based approaches for comprehensive safety services.*

### Analysis

#### Traffic Safety Advisory Committee

Council endorsed the establishment of the Traffic Safety Advisory Committee (TSAC) in 1997. As part of the planning and review of road safety projects, quarterly meetings with the Committee facilitate input on corrective measures and collaborate on road safety education and events. To improve road safety from a multi-disciplinary perspective, TSAC includes representatives from the following groups:

- Insurance Corporation of BC (ICBC)
- Richmond School District 38
- Richmond District Parents Association
- Vancouver Coastal Health
- Richmond RCMP and Richmond Fire-Rescue
- City Transportation and Community Bylaws staff

Representatives of the Richmond Poverty Reduction Coalition (RPRC) have been participating at TSAC meetings since March 2023 to provide input from this stakeholder's perspective.

#### Highlights of 2023 Road Safety Activities

In 2023, the City responded to traffic safety concerns at a number of schools and from local residents. Attachment 1 provides an overview of the implemented traffic calming measures to address speed-related concerns where warranted and supported. Highlights of other transportation system upgrades to enhance road safety and the 2023 education and enforcement efforts are also summarized in Attachment 1.

#### 2024 Road Safety Initiatives

The City undertakes road safety initiatives that can be grouped into three categories (3E's); Engineering, Education and Enforcement to promote safer streets in Richmond with a focus on reducing vehicle speeds.

##### *Engineering Initiatives - Road Design and Operational Enhancements*

To design safer streets, collision prone areas and high volume places are assessed for engineering measures to enhance the operational and geometrical attributes of a street.

**School Zone Safety:** Develop physical interventions to address traffic safety-related issues within school zones and adjacent roadways. School zone safety initiatives include revisions to vehicle parking and circulation layout, enforcement of school zone traffic violations, introducing new walkways and crosswalks as well as upgrading crosswalks to improve pedestrian safety.

Principals of all 38 public elementary schools in Richmond have been engaged to discuss their specific concerns. Attachment 2 provides a catalogue of the traffic safety measures implemented in school zones. The in-street delineator signs have been a highly requested safety measure by schools. The application of the in-street signs creates a uniform environment in school zones, encouraging drivers to slow down when entering the area.

Locations for potential implementation of raised crosswalks and speed humps to slow traffic on streets fronting the following schools are currently being reviewed:

- McKinney Elementary School
- Choice School
- Bridge Elementary

**Walk to School Plan for Youth:** Three engagement sessions will occur this year with youth groups at City Community Centers. The purpose of these sessions is to encourage and promote walking, cycling and transit trips to school, while also gathering feedback from students regarding their current travel habits. The insights provided by students will inform active transportation plans and initiatives aimed at fostering more sustainable transportation options for trips to school. In April, outreach sessions were conducted with youth groups at Thompson and West Richmond Community Centres. Additional youth outreach sessions are planned in fall 2024.

**Traffic Calming:** In response to resident requests or identified speeding issues, staff perform an assessment, consult with the community, implement and monitor road safety and traffic calming measures where warranted in local neighbourhoods. A dedicated webpage will be created on the City’s website to provide the public with information regarding the process to request traffic calming on local residential roads.

To date in 2024, the following speed reduction interventions have been implemented or are currently being reviewed:

- Hamilton Area: Delineators installed on Westminster Highway for traffic calming in front of Cranberry Children’s Centre (Figure 1).
- Interactive and inclusive engagement with residents on Second Avenue to seek feedback and foster ideas to develop road safety upgrades.
- Reporting back to Council on the findings of the asphalt speed cushion pilot project on Kittiwake Drive in July 2024.
- Speed studies have been conducted on Springfield Road and Dyke Road in response to speeding related concerns expressed by residents. Consultation with area residents will occur this spring.



Figure 1: Westminster Hwy Delineators

**Road Network Safety Screening Study:** In 2019, Council approved improvements to address the top 20 most collision prone intersections in the City. The design of the following projects have been completed in 2024, with construction completion by late-2024 and early-2025 respectively.

- No. 5 Road and Cambie Road Intersection Upgrade: The project introduces dedicated left turn lanes in all directions and upgrades the existing sidewalk along the north side of the intersection to a multi-use pathway.
- No. 5 Road and Westminster Highway Intersection Upgrade: The project involves removing one channelized right-turn island and the removal of merge lanes.

**Removal of Channelized Right-Turn Islands to Improve Road Safety:** In September 2022, Council approved the removal of channelized right-turn islands at several intersections within City jurisdiction. The upgrade to a standard intersection configuration with 90-degree right-turn geometry will slow vehicle speeds and improve safety between motorists and pedestrians/cyclists crossing the intersection.

Three intersections have been modified with the removal of channelized right-turns and eight locations are approved for construction through the City’s Capital Budget:

- Garden City Road and Alderbridge Way
- Cooney Road and Westminster Highway
- Cooney Road and Granville Avenue
- No. 4 Road and Alderbridge Way
- No. 2 Road and Westminster Highway
- Railway Avenue and Granville Avenue
- Cambie Road and St. Edwards Drive

- No. 5 Road and Westminster Highway

#### Traffic Signal Program:

- **New Signal Infrastructure:** A new traffic signal will be designed this year for the intersection of No. 5 Road and Granville Avenue. Special crosswalks are planned for implementation at No. 2 Road and Kittiwake Drive and at Ash Street and Granville Avenue.
- **Illuminated Street Name Signs:** Illuminated LED street name signs are implemented to enhance visibility and legibility for drivers over the typical aluminum street signs. The locations of these signs are prioritized on major, gateway and high-volume intersections. Approximately 12 intersections will be enhanced this year with illuminated street name signs.
- **Audible Pedestrian Signal (APS):** Based on consultation with representatives of the visually impaired community, the City has installed audible pedestrian pushbutton systems at signalized intersections. APS pushbuttons facilitate pedestrian priority at intersections and include verbal wayfinding, audible tones and braille features. In 2023, the City installed audible pedestrian signals at 30 intersections. This year 30 more are projected to be installed.

**Discouraging Vehicle Speeding:** A traffic study and consultation with Hamilton area residents took place in 2023 and recommendations for Council consideration were brought forward in Q1 2024. Lowering speed limits to 30 km/h on local streets in Hamilton, as approved by Council, will commence in Q2 2024.

#### *Education Initiatives*

Under this initiative, the City supports a variety of road safety campaigns and education to develop knowledge skills that enable pedestrians, cyclists and drivers to use the road safely.

**Pedestrian and Traffic Safety Education and Campaigns:** Continue to support and participate in on-going multi-agency efforts to increase the level of pedestrian and traffic safety, such as the annual campaigns held by ICBC and Richmond RCMP in various locations. Annual campaigns include pedestrian safety, school zone safety and distracted driving.

**Bicycle Education for Students:** The City will facilitate cycling education courses to all Grade 6 and 7 elementary school students over a two-year period (i.e., approximately 19 schools per year). Students will learn the rules and responsibilities of riding on City streets and bike paths and receive hands-on practice with fundamental cycling skills on school grounds and local neighbourhood streets. In March 2024, the City received the Cycling Education Champion award for continuous support of HUB Cycling's education courses in local elementary schools.

**E-Scooter and E-Bike Safety Campaign:** Activities to encourage and promote the safe use of e-scooters in compliance with the City's regulations are an integral part of the E-Scooter Pilot Project. Staff regularly post messaging on the City's social media channels to deploy safety and education regarding the use of e-scooters.

A blitz campaign is planned for spring 2024, combining social media videos, interspersed with static posts and other communication materials. In collaboration with ICBC, RCMP, Richmond Fire Rescue, Lime and HUB Cycling, an e-scooter skills-based event will be held in June. This event will help the public learn about the rules and regulations and how to safely ride e-scooters.

*Enforcement Initiatives*

Active enforcement helps to shape road user behaviour and encourages compliance with the traffic regulations. Studies suggest that increased observance of the road rules is achieved if people believe that not obeying them will result in outcomes such as tickets and fines.

- Richmond RCMP continue to conduct speed enforcement on major roads as well as enhanced enforcement at specific locations when requested. Between January 1, 2024 and April 1, 2024, the Richmond RCMP enforcement activities have included 527 tickets issued for speeding and 24 excessive speed charges (at least 40 km/h over the posted speed limit).
- Community Bylaws and Richmond RCMP regularly provide coordinated enforcement in school zones. Other typical on-going measures include the deployment of Speed Watch volunteers.
- ICBC - Intersection Safety Cameras (ISC): Most crashes in British Columbia happen at intersections. To reduce injuries and save lives, the Province has implemented intersection safety cameras where crashes occur most often. There are nine red light cameras and one speed enforcement camera located in Richmond. The camera located at the intersection of Garden City Road and Cambie Road includes automated speed enforcement capabilities. Figure 2 provides data from these cameras on the number of red light and speed camera violation tickets issued in Richmond since 2020.

	2020	2021	2022	2023
Red Light Violations	1107	1367	1776	1732

Garden City Road at Cambie Road	2020	2021	2022	2023
Speed Violations	2048	527	671	607

Figure 2: ICBC Intersection Camera Red Light and Speed Violations

The net traffic fine revenues from the intersection safety cameras are included with all other traffic fine revenues minus provincial recovery costs and distributed to municipalities in accordance with the province’s Traffic Fine Revenue Sharing Agreement.

Over 2,300 automated tickets were issued last year in Richmond. Staff believe these cameras are an effective enforcement tool and will continue to work with ICBC to encourage the implementation of more Intersection Safety Cameras within Richmond.

**Financial Impact**

None.

## Conclusion

The ongoing and planned road safety initiatives for 2024 will continue efforts to further encourage safer use of the transportation network for vehicles, pedestrians and cyclists in Richmond. These will include implementing a range of proven safety mitigation measures encompassing engineering, education and enforcement activities.

The Traffic Safety Advisory Committee, a multi-agency forum, dedicated to enhancing pedestrian and traffic safety within Richmond will provide input on and support of various traffic safety improvements and programs throughout the year.

The City's road safety projects, programs and policies are aligned with the recommended strategies of the Vision Zero safety movement. The City's annual road safety initiatives support reducing the frequency of collisions through the implementation of a wide range of speeding countermeasures directed at making travelling around Richmond more safe and comfortable.

As the Richmond School District is an essential partner in the delivery of the school zone traffic safety program, a copy of this staff report will be forwarded to the Richmond Council-School Board Liaison Committee for information.



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- Att. 1: 2023 Overview of Road Safety Highlights  
2: Catalogue of Traffic Calming Measures around Schools

## 2023 Overview of Road Safety Highlights

Safety Initiatives	Intervention	Location/Description
Engineering	School Zone Safety - Walkway Improvements	<ul style="list-style-type: none"> <li>Talmei Elementary School</li> <li>Walter Lee Elementary School</li> </ul>
	Traffic Calming	<ul style="list-style-type: none"> <li>Installation of in-street delineator signs at all crosswalk locations on Dover Crescent.</li> <li>Installation of raised crosswalks at: <ul style="list-style-type: none"> <li>Jessie Wowk Elementary School</li> <li>Tomsett Elementary School</li> <li>Walter Lee Elementary School</li> </ul> </li> <li>Asphalt speed cushions on Kittiwake Drive.</li> <li>Removal of all 60 km/h speed zones on roads within City jurisdiction.</li> <li>Curb Extensions with delineators near Bridge Elementary.</li> </ul>
	Speed Reader Boards	<ul style="list-style-type: none"> <li>Tomsett Elementary School</li> </ul>
	Top 20 Collision-Prone Intersections Improvements	<ul style="list-style-type: none"> <li>Progressed detailed design of the following intersections, with design completed in early 2024: <ul style="list-style-type: none"> <li>No. 5 Road and Westminster Highway</li> <li>No. 5 Road and Cambie Road</li> </ul> </li> </ul>
	Discouraging Vehicle Speeding	<ul style="list-style-type: none"> <li>Council endorsed Traffic Bylaw No. 5870 amendments to remove all 60 km/h speed zones. All roads within City jurisdiction now have a maximum posted speed limit of 50 km/h consistent with the default speed limit in the BC Motor Vehicle Act.</li> </ul>
	Traffic Signal Program	<ul style="list-style-type: none"> <li>Installation of Special Crosswalk: <ul style="list-style-type: none"> <li>Granville Ave / Mayflower Dr</li> <li>Williams Rd / Leonard Rd</li> <li>Moncton Ave (4500 Block)</li> </ul> </li> </ul>
Education Initiatives	Richmond-ICBC Safety Campaigns	<ul style="list-style-type: none"> <li>Road safety campaigns took place in 2023 including: <ul style="list-style-type: none"> <li>Pedestrian Safety: From October to November 2023, several events supported by Richmond RCMP and RCMP Volunteers occurred to promote pedestrian safety. These included a Seniors Expo at Minoru Centre for Active Living and WALK Richmond events. Over 2000 reflectors were handed out at outreach events at Brighthouse Station, Lansdowne Mall and other community centres.</li> <li>Distracted Driving: In September 2023, there were eight outreach events in Richmond with police and community police volunteers. Think of Me outreach at schools (Cook &amp; Westwind Elementary) where Richmond youth created one of a kind illustrations on what driver's should think about when they are entering a school zone.</li> </ul> </li> </ul>
	Cycling Safety	<ul style="list-style-type: none"> <li>Bike to School Education for Students: 1,801 students from 18 elementary schools received hands-on practice with fundamental cycling skills on school grounds and local neighbourhood streets.</li> </ul>
	E-Bicycle and E-Scooter Safety	<ul style="list-style-type: none"> <li>Staff regularly posted messaging on the City's social media channels to deploy safety and education regarding the use of e-bicycles and e-scooters, focused on raising awareness of the e-scooter pilot project, bylaws and the safe operation of e-scooters.</li> </ul>
Enforcement Initiatives	Speed Management	<ul style="list-style-type: none"> <li>Richmond RCMP enforcement activities in 2023 included 1,405 tickets issued for speeding and 3,529 tickets for all traffic related infractions.</li> </ul>
	Intersection Safety Camera Program	<ul style="list-style-type: none"> <li>The Province's Intersection Safety Camera Program includes nine red light cameras located in Richmond and one speed enforcement camera located at the Garden City Road &amp; Cambie Road intersection. 607 speed violations were registered at this intersection in 2023.</li> </ul>



**Catalogue of Traffic Calming Measures around Schools**

Measure	School	
<p>In-Street Marker</p> 	<ul style="list-style-type: none"> <li>• Anderson</li> <li>• Blair</li> <li>• Bridge</li> <li>• Brighthouse</li> <li>• Cook</li> <li>• DeBeck</li> <li>• Diefenbaker</li> <li>• Errington</li> <li>• General Currie</li> <li>• Gilmore</li> </ul>	<ul style="list-style-type: none"> <li>• Hamilton</li> <li>• Homma</li> <li>• Thomas Kidd</li> <li>• Maple Lane</li> <li>• Mckinney</li> <li>• Spul'u'kwuks</li> <li>• Manoah Steves</li> <li>• Tomsett</li> <li>• Westwind</li> <li>• Quilchena</li> <li>• Cambie High School</li> </ul>
<p>Speed Hump</p> 	<ul style="list-style-type: none"> <li>• Diefenbaker</li> <li>• Dixon</li> <li>• Homma</li> <li>• Thomas Kidd</li> </ul>	
<p>Raised Crosswalk</p> 	<ul style="list-style-type: none"> <li>• Anderson</li> <li>• Homma</li> <li>• Manoah Steves</li> <li>• Walter Lee</li> <li>• Tomsett</li> <li>• Jesse Wowk</li> </ul>	
<p>Pick-Up/ Drop-Off Area</p> 	<ul style="list-style-type: none"> <li>• McKinney: on-street loading zone on Wallace Rd</li> <li>• Quilchena: on-street loading zone on Moresby Dr</li> <li>• Thompson: off-street parking area on Forsyth Cr</li> </ul>	
<p>Curb Extensions at Crosswalk</p> 	<ul style="list-style-type: none"> <li>• General Currie: on General Currie Road</li> <li>• McKinney: on Lassam Road</li> <li>• McNeill: on Garry Street</li> <li>• Spul'u'kwuks: on Blanshard Dr</li> <li>• Bridge: Leonard Road at Ryan Road</li> </ul>	
<p>Speed Reader Board</p> 	<ul style="list-style-type: none"> <li>• Thomas Kidd</li> <li>• Jesse Wowk</li> <li>• Tomsett</li> </ul>	