



Public Works and Transportation Committee Electronic Meeting

Council Chambers, City Hall 6911 No. 3 Road

Wednesday, May 22, 2024 Immediately following the Planning Committee meeting

Pg. # ITEM

MINUTES

PWT-4 Motion to adopt the minutes of the meeting of the Public Works and Transportation Committee held on April 17, 2024.

NEXT COMMITTEE MEETING DATE

June 19, 2024, (tentative date) at 4:00 p.m. in the Council Chambers.

AGENDA ADDITIONS AND DELETIONS

PLANNING AND DEVELOPMENT DIVISION

1. **2024 ROAD SAFETY INITIATIVES** (File Ref. No. 10-6450-00) (REDMS No. 7640972)

PWT-9

See Page **PWT-9** for full report

Designated Speaker: Sonali Hingorani

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.

2. ICBC-CITY OF RICHMOND ROAD IMPROVEMENT PROGRAM – 2024 UPDATE

(File Ref. No. 10-6460-01) (REDMS No. 7605882)

PWT-18

See Page **PWT-18** for full report

Designated Speaker: Beata Ng

STAFF RECOMMENDATIONS

- (1) That the proposed road safety improvement projects, as described in Attachment 2 of the staff report titled "ICBC-City of Richmond Road Improvement Program – 2024 Update," dated April 19, 2024 from the Director, Transportation, be endorsed for submission to the ICBC 2024 Road Improvement Program for consideration of cost-share funding; and
- (2) That should the above applications be successful, the Chief Administrative Officer and General Manager, Planning and Development, be authorized to execute the cost-share agreements on behalf of the City, and that the Consolidated 5 Year Financial Plan (2024-2028) be amended accordingly.

ENGINEERING AND PUBLIC WORKS DIVISION

3. CAMBIE ROAD AND NO. 5 ROAD INTERSECTION UPGRADE, NO. 2 ROAD MULTI-USE PATHWAY AND ACTIVE TRANSPORTATION IMPROVEMENT PROGRAM 2022 – PROJECT UPDATE (File Ref. No. 10-6000-01) (REDMS No. 7618994)

PWT-25

See Page **PWT-25** for full report

Designated Speaker: Kevin Roberts & Beata Ng

STAFF RECOMMENDATIONS

- (1) That the increase in project budgets for the Cambie Road and No. 5 Road Intersection Upgrade, No. 2 Road Multi-Use Pathway and Active Transportation Program 2022 be approved as presented in the report "Cambie Road and No. 5 Road Intersection Upgrade, No. 2 Road Multi-Use Pathway and Active Transportation Improvement Program 2022 –Project Update" dated April 24, 2024 from the Director, Transportation and Director, Engineering; and
- (2) That the 5 Year Financial Plan (2024-2028) be amended accordingly.

4. MANAGER'S REPORT

ADJOURNMENT



Minutes

Public Works and Transportation Committee

Date:	Wednesday, April 17, 2024
Place:	Council Chambers Richmond City Hall
Present:	Councillor Michael Wolfe, Vice-Chair Councillor Chak Au Councillor Kash Heed Councillor Alexa Loo
Absent:	Councillor Carol Day
Also Present:	Councillor Andy Hobbs Councillor Bill McNulty
Call to Order:	The Vice-Chair called the meeting to order at 4:00 p.m.

MINUTES

It was moved and seconded That the minutes of the meeting of the Public Works and Transportation Committee held on March 20, 2024, be adopted as circulated.

CARRIED

AGENDA ADDITIONS AND DELETIONS

It was moved and seconded

That Designated Parking for People with Disabilities at Minoru Centre for Active Living be added to the Public Works and Transportation Agenda as Item No. 5A.

PLANNING AND DEVELOPMENT DIVISION

1. SECOND AVENUE TRAFFIC CALMING

(File Ref. No. 10-6450-09-01) (REDMS No. 7584183)

In reply to queries from Committee, staff noted that (i) based on resident feedback in Steveston, there is not a need for other streets to implement traffic calming or speed reduction measures and data collected indicates that there are no present safety or operational issues, (ii) public consultation for traffic calming and speed mitigation measures are obtained through surveys, and (iii) turn arounds in Steveston would not achieve the safety benefits that speed humps would due to the already established narrow roadways.

Alex Sagert, Richmond resident, spoke on the increase in speeding and vehicular accidents along Second Avenue noting that Second Avenue is a straight thoroughfare and that installing speed humps along with lowering the speed limit will improve safety. The delegate also noted his petition of 25 residents that live along Second Avenue stating that all support the traffic calming measures recommended.

Discussion ensued regarding the potential of expanding traffic calming and speed mitigation measures and/or introducing a pilot program in Steveston and if the recommendations brought forward for Second Avenue would prompt an increased public mandate for instigating more safety measures. Staff reiterated that traffic calming consultation is done through surveys when issues are brought forward from the public and presently there are no other traffic calming measures being considered in Steveston except for Second Avenue.

It was moved and seconded

- (1) That Option 2 to implement two speed humps on Second Avenue, as described in the staff report titled "Second Avenue Traffic Calming", dated March 18, 2024, from the Director, Transportation, be endorsed;
- (2) That Option 3 to reduce the posted speed limit on Second Avenue to 30 km/h, as described in the staff titled "Second Avenue Traffic Calming", dated March 18, 2024, from the Director, Transportation, be endorsed; and
- (3) That Traffic Bylaw No. 5870, Amendment Bylaw No. 10543, to revise the posted speed limit of Second Avenue from Steveston Highway to Chatham Street to 30 km/h, be introduced and given first, second and third reading.

As a result of the discussion, the following **referral motion** was introduced:

It was moved and seconded

That staff further examine and engage the public's desire for expanded traffic speed mitigation in Steveston proper.

The question on the referral motion was not called as a brief discussion ensued in regards to expanding traffic calming measures in Steveston proper.

The question on the referral motion was then called and it was **DEFEATED** with Cllrs. Au and Loo opposed.

2. PROPOSED AMENDMENTS TO TRAFFIC BYLAW NO. 5870 FOR SPEED LIMIT REDUCTIONS IN HAMILTON

(File Ref. No. 10-6450-15-01) (REDMS No. 7606657)

It was moved and seconded

That the Traffic Bylaw No. 5870, Amendment Bylaw No. 10554, be given first, second and third readings.

CARRIED

ENGINEERING AND PUBLIC WORKS DIVISION

3. **CLOTHING AND TEXTILE WASTE**

(File Ref. No. 10-6000-01) (REDMS No. 7277586)

It was moved and seconded

- (1) That Option 3, as outlined in the staff report titled "Clothing and Textile Waste", dated March 5, 2024, be endorsed;
- (2) That a letter be written to the Honourable George Heyman, Minister of Environment and Climate Change Strategy, to request the establishment of an extended producer responsibility program for post-consumer textile waste in British Columbia; and
- (3) That one-time funding of \$60,000 from the General Waste and Recycling Provision for the Clothing and Textile Waste expenditures be approved, and that the Consolidated 5 Year Financial Plan (2024-2028) be amended accordingly.

4. RECYCLING AND SOLID WASTE MANAGEMENT – REPORT 2023: BACK TO BASICS

(File Ref. No. 10-6370-01) (REDMS No. 7605510)

It was moved and seconded

- (1) That the report titled "Recycling and Solid Waste Management Report 2023: Back to Basics", dated March 11, 2024, from the Director, Public Works Operations, be endorsed.
- (2) That the "Recycling and Solid Waste Management Report 2023: Back to Basics" be made available to the community on the City's website and through various communication tools including social media channels and as part of community outreach initiatives.

CARRIED

5. PUBLIC ELECTRIC VEHICLE CHARGING NETWORK – USE OF PROCEEDS FROM LOW CARBON FUEL STANDARD (LCFS) CREDITS

(File Ref. No. 10-6125-01) (REDMS No. 7502514)

In reply to queries from Committee, staff advised that there are two ways to sell the Low Carbon Fuel Standard Credits noting they can be sold directly through staff or by an aggregator and that there is a market for these credits.

It was moved and seconded

That, as described in the report titled "Public Electric Vehicle Charging Network – Use of Proceeds from Low Carbon Fuel Standard (LCFS) Credits", from the Director, Sustainability and District Energy and Director, Public Works Operations, dated April 17, 2024:

- (1) Staff be authorized to sell LCFS carbon credits at the highest value to the City;
- (2) Revenue from the sale of LCFS carbon credits be put into the City's Carbon Tax Provision account and be reserved for capital and operating costs related to the installation and maintenance of new electric vehicle charging stations;
- (3) The Chief Administrative Officer and General Manager, Finance and Corporate Services, be authorized to enter into an agreement for the sale, aggregation and/or contract to sell LCFS carbon credits; and
- (4) Staff report back in three years updating Council on use of revenue generated from the sale of LCFS carbon credits to expand the City's EV charging infrastructure.

5A. DESIGNATED PARKING FOR PEOPLE WITH DISABILITIES AT MINORU CENTRE FOR ACTIVE LIVING

(Verbal Report)

In reply to queries from Committee, staff advised that the design concept is complete and installation of the four accessible stalls is forthcoming.

6. MANAGER'S REPORT

(i) Capital Projects Open House

Staff highlighted that the Capital Projects Open House was held Wednesday, April 17, 2024, which showcased upcoming and ongoing capital projects in Richmond. The event was held in person at City Hall or viewed online through Lets Talk Richmond and social media.

(ii) Intersection at No. 5 Road and Cambie Street

In reply to queries from Committee, staff advised that the project is under tendering and pricing is anticipated at the end of April when the tender is closed.

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (4:33 p.m.).*

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Public Works and Transportation Committee of the Council of the City of Richmond held on Wednesday, April 17, 2024.

Councillor Michael Wolfe Vice-Chair Andrea Mizuguchi Legislative Services Associate



Report to Committee

То:	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 Fire Rescue RCMP Corporate Communications Engineering	고 고 고 고	Wayne log		
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO		

Staff Report

Origin

Road safety is a shared responsibility that involves collaboration and engagement with multidisciplinary 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 ongoing 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 wellplanned 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.

- 4 -

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.



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 escooters 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.

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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

	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

of red light and speed camera violation tickets issued in Richmond since 2020.

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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Sonali Hingorani, P.Eng. Manager, Transportation Planning and New Mobility (604-276-4049)

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Att. 1: 2023 Overview of Road Safety Highlights2: Catalogue of Traffic Calming Measures around Schools

Safety	Intervention	Location/Description
Initiatives		
	School Zone Safety - Walkway Improvements	Talmey Elementary SchoolWalter Lee Elementary School
Engineering	Traffic Calming	 Installation of in-street delineator signs at all crosswalk locations on Dover Crescent. Installation of raised crosswalks at: Jessie Wowk Elementary School Tomsett Elementary School Walter Lee Elementary School Asphalt speed cushions on Kittiwake Drive. Removal of all 60 km/h speed zones on roads within City jurisdiction. Curb Extensions with delineators near Bridge Elementary.
	Speed Reader Boards	Tomsett Elementary School
	Top 20 Collision-Prone Intersections Improvements	 Progressed detailed design of the following intersections, with design completed in early 2024: No. 5 Road and Westminster Highway No. 5 Road and Cambie Road
	Discouraging Vehicle Speeding	 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.
	Traffic Signal Program	Installation of Special Crosswalk: Granville Ave / Mayflower Dr Williams Rd / Leonard Rd Moncton Ave (4500 Block)
Education Initiatives	Richmond-ICBC Safety Campaigns	 Road safety campaigns took place in 2023 including: 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 Brighouse Station, Lansdowne Mall and other community centres. 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 & 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.
	Cycling Safety	 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.
	E-Bicycle and E-Scooter Safety	 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.
	Speed Management	 Richmond RCMP enforcement activities in 2023 included 1,405 tickets issued for speeding and 3,529 tickets for all traffic related infractions.
Enforcement Initiatives	Intersection Safety Camera Program	 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 & Cambie Road intersection. 607 speed violations were registered at this intersection in 2023.

2023 Overview of Road Safety Highlights

Attachment 2

Measure	iffic Calming Measures around Schools School			
In-Street Marker	 Anderson Blair Bridge Brighouse Cook DeBeck Diefenbaker Errington General Currie Gilmore Hamilton Homma Thomas Kidd Maple Lane Mckinney Spul'u'kwuks Manoah Steves Tomsett Westwind Quilchena Cambie High School 			
Speed Hump	 Diefenbaker Dixon Homma Thomas Kidd 			
Raised Crosswalk	 Anderson Homma Manoah Steves Walter Lee Tomsett Jesse Wowk 			
Pick-Up/ Drop-Off Area	 McKinney: on-street loading zone on Wallace Rd Quilchena: on-street loading zone on Moresby Dr Thompson: off-street parking area on Forsyth Cr 			
Curb Extensions at Crosswalk	 General Currie: on General Currie Road McKinney: on Lassam Road McNeill: on Garry Street Spul'u'kwuks: on Blanshard Dr Bridge: Leonard Road at Ryan Road 			
Speed Reader Board	 Thomas Kidd Jesse Wowk Tomsett 			

Catalogue of Traffic Calming Measures around Schools



То:	Public Works and Transportation Committee	Date:	April 19, 2024
From:	Lloyd Bie, P. Eng. Director, Transportation	File:	10-6460-01/2024-Vol 01
Re:	ICBC-City of Richmond Road Improvement Progra	m – 2024	4 Update

Staff Recommendations

- 1. That the proposed road safety improvement projects, as described in Attachment 2 of the staff report titled "ICBC-City of Richmond Road Improvement Program 2024 Update," dated April 19, 2024 from the Director, Transportation, be endorsed for submission to the ICBC 2024 Road Improvement Program for consideration of cost-share funding; and
- 2. That should the above applications be successful, the Chief Administrative Officer and General Manager, Planning and Development, be authorized to execute the cost-share agreements on behalf of the City, and that the Consolidated 5 Year Financial Plan (2024-2028) be amended accordingly.

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

Att. 2

REPORT CONCURRENCE				
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER		
Finance Engineering	Image: Second se	Wayne Cog		
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO		

Staff Report

Origin

At the May 23, 2023 Council meeting, Council endorsed a number of proposed joint ICBC-City of Richmond road safety improvement projects for 2023. This report summarizes the projects implemented in 2023 with funding from ICBC and presents a list of projects proposed to be implemented with funding contributions from ICBC as part of the 2024 ICBC-City of Richmond Road Improvement Program partnership.

This report supports Council's Strategic Plan 2022-2026 Strategy #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.

3.4 Ensure civic infrastructure, assets and resources are affectively maintained and continue to meet the needs of the community as it grows.

This report supports Council's Strategic Plan 2022-2026 Strategy #4 Responsible Financial Management and Governance:

Responsible financial management and efficient use of public resources to meet the needs of the community.

4.1 Ensure effective financial planning to support a sustainable future for the City.

4.4 Work with all levels of governments for grant and funding opportunities.

Analysis

ICBC Road Improvement Program

ICBC initiated the Road Improvement Program in 1990 to help fund the implementation of road safety engineering measures to reduce the frequency and/or severity of crashes at high-risk locations, reduce claims costs and reduce the potential for crashes.

The City has partnered with ICBC in the Road Improvement Program since 1994. This partnership enables the City to undertake more traffic safety enhancements with available funding and helps expedite the delivery of road safety improvement projects. Each year, a list of Council-approved road improvement projects eligible for funding through the Road Improvement Program is compiled for submission to ICBC.

Completed ICBC-City of Richmond Road Improvement Projects

The City was awarded \$215,500 through the 2023 ICBC Road Improvement Program for the implementation of twelve bundles of road improvement projects, as identified in Attachment 1.

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Projects include the installation of traffic signals, special crosswalks, overhead LED street name signs and pedestrian and cycling improvements. Figure 1 shows the installation of a traffic signal that received funding through the 2023 ICBC Road Improvement Program.



Figure 1: Installation of a New Traffic Signal at St. Albans Road and Bennett Road

Over the past 5 years, ICBC has contributed over \$1.1 million towards road improvement projects within Richmond. These contributions helped facilitate improvements to the top 20 collision-prone intersections within the City, the installation of 32 video detection cameras, four new traffic signals, 53 LED overhead street name signs, 11 special crosswalks, 17 marked pedestrian zones at schools and 44 uninterrupted power supplies at intersections.

Proposed 2024 ICBC-City of Richmond Road Improvement Projects

Twelve bundles of projects are proposed to be included in the 2024 Road Improvement Program submission to ICBC for funding contribution, as detailed in Attachment 2. The projects align with the objectives of the City and ICBC to improve safety for road users and reduce crashes and injuries. Projects include the removal of channelized right-turn islands at two locations, upgrades to four Top 20 Collision Prone Intersections, installation of new traffic and pedestrian signals and installation of special crosswalks, including the first three solar-powered special crosswalks within the City.

ICBC's funding contribution towards each project will be determined through review of historical crash rates at these locations, the estimated reduction in ICBC claim costs resulting from the proposed improvements, project eligibility in relation to the funding guidelines and the total funding availability.

The outcome of ICBC's review of all submitted projects will be reported back as part of the 2024 update of the ICBC-City of Richmond Road Improvement Program.

Should a project be approved for funding by ICBC, the City will be required to enter into a funding agreement with ICBC.

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The agreement is provided by ICBC and generally includes an indemnity in favour of ICBC. Staff recommend that the Chief Administrative Officer and General Manager, Planning and Development, be authorized to execute any such funding agreements on behalf of the City.

Financial Impact

The total estimated cost of all the projects identified in Attachment 2 is \$17,711,500. All projects are fully funded through previously approved Capital Budgets. Should any submitted projects receive funding from ICBC exceeding the original budgeted external contribution, staff recommend that the excess external grants be used to reduce the previously approved City funding sources, and that the Consolidated 5 Year Financial Plan (2024-2028) be amended accordingly.

Conclusion

ICBC is a long-time partner working with the City to promote traffic safety in Richmond. The traffic safety initiatives jointly implemented by ICBC and the City have resulted in safer streets for all road users in Richmond. Staff recommend that Council endorse the various local road safety improvement projects for submission to the 2024 joint ICBC-City of Richmond Road Improvement Program.

Beata Ng, P. Eng. Manager, Transportation Development and Design (604-247-4627)

BN:kw

hilton

Kevin Whitmarsh Project Leader, Transportation (604-204-8703)

Att. 1: 2023 Road Improvement Program Projects receiving ICBC Funding Att. 2: Proposed 2024 City-ICBC Road Improvement Program Projects

Attachment 1

2023 Road Improvement	Progra	m Projects	receiving	ICBC Funding

Project Description	mprovement Program Projects receiving ICE Location	ICBC Contribution	Estimated Total Cost ⁽¹⁾
Installation of Special Crosswalk	 Granville Ave / Mayflower Dr Williams Rd / Leonard Rd Moncton Ave (4500 Block) 	\$10,500	\$246,000
Installation of Traffic Signal	St Albans Rd / Bennett Rd	\$49,500	\$350,000
Installation of UPS (Uninterruptible Power Supply) at Intersections	 No 1 Rd & Westminster Hwy No 1 Rd & Granville Ave Railway Ave & Granville Ave Railway Ave & Blundell Rd Railway Ave & Francis Rd Railway Ave & Williams Rd No 1 Rd & Chatham St Oval Way & River Rd Elmbridge Way & Westminster Hwy Minoru Blvd & Westminster Hwy Kwantlen St & Alderbridge Way 	\$27,500	\$200,000
Construction of New Multi-Use Pathway	Steveston Hwy Phase 1 (Shell Rd-Mortfield Gt)	\$16,000	\$6,600,000
Installation of Traffic Video Cameras	 No 5 Rd / Bridgeport Rd Sweden Way / Bridgeport Rd No 5 Rd / Cambie Rd 	\$33,000	\$90,000
Installation of Overhead LED Street Name Signs	 St Albans Rd & Blundell Rd No 3 Rd & Williams Rd No 3 Rd & Francis R No 3 Rd & Blundell Rd Cooney Rd & Cook Rd Cooney Rd & Saba Rd Cooney Rd & Ackroyd Rd Hazelbridge Way & Alexandra Rd Hazelbridge Way & Leslie Rd Hazelbridge Way & Browngate Rd Garden City Rd & Francis Rd Garden City Rd & Blundell Rd Garden City Rd & Blundell Rd Garden City Rd & Lansdowne Rd Garden City Rd & Lansdowne Rd Garden City Rd & Odlin Rd 	\$48,000	\$240,000
Construction of Pedestrian Pathways	Westminster Hwy (Muir Rd-150m east)	\$7,000	\$190,000
Bike Lane Protection Project	Garden City Rd – Granville Ave to Sea Island Way	\$17,000	\$300,000
Traffic Calming: Raised Crosswalks	Walter Lee School Tomsett School Jessie Wowk School Kittiwake Dr Bardmond Ave	\$5,000	\$45,000
Installation of Pedestrian Zone Markers	Dover Neighbourhood Park	\$2,000	\$16,000
Total		\$215,500	\$8,277,000

⁽¹⁾ Actual total project costs are being compiled and are unavailable at the time of this report.

Attachment 2

Proposed 2024 ICBC-City of Richmond Road Improvement Program Projects	Estimated Total Cost
Removal of Channelized Right-Turn Island:	
St. Edwards Dr & Cambie Rd	\$830,000
Westminster Hwy & Cooney Rd	
Construction of Intersection Safety Improvements:	
Westminster Hwy & No 5 Rd	
Cambie Rd & No 5 Rd	6,960,000
Cambie Rd & No 4 Rd	
Westminster Hwy & No 2 Rd	
Installation of special crosswalk:	
Shell Rd Trail and Granville Ave	
 Shell Rd Trail and Blundell Rd 	
No. 2 Rd and Kittiwake Dr	\$455,000
Williams Rd and Elkmond Rd	\$100,000
No. 4 Rd and Dennis Pl	
Heather St & Granville Ave	
Other locations to be determined ⁽²⁾	
installation of full traffic signal:	
 Great Canadian Way and Beckwith Rd. 	\$350,000
 Other locations to be determined⁽²⁾ 	
Installation of pedestrian signal:	
 No. 3 Road-Saunders Road (upgrade from existing special crosswalk) 	\$180,000
Other locations to be determined ⁽²⁾	
Installation of traffic video cameras:	
No. 4 Rd and Francis Rd	
No. 4 Rd and Blundell Rd	\$90,000
No. 4 Rd and Granville Ave	
Other locations to be determined ⁽²⁾	
Installation of overhead LED street name signs	
Great Canadian Way and Van Horne Way	
Great Canadian Way and River Rd	
• No. 4 Rd and Williams Rd.	
No. 4 Rd and Granville Ave	
No. 4 Rd and Alderbridge Way	
 No. 4 Rd and Odlin Rd 	
No. 4 Rd and Cambie Rd	\$180,000
 No. 4 Rd and Blundell Rd 	
 Aberdeen Mall and Cambie Rd 	
Hazelbridge Way and Cambie Rd	
Sexsmith Rd and Cambie Rd	
Gilbert Rd and Granville Ave	
Other locations to be determined ⁽²⁾	
Traffic calming measures: Raised crosswalks	
Bridge Elementary School	\$20.000
McKinney Elementary School	\$30,000
Choice School Choice School	
Other locations pending results of traffic studies ⁽¹⁾	
Installation of stop signs via stop-sign infill program	0 45 500
 91 locations across the City 	\$45,500

Proposed 2024 ICBC-City of Richmond Road Improvement Program Projects		
Installation of UPS (uninterruptible power supply)		
 No. 1 Rd and Williams Rd 		
 No. 1 Rd and Osmond Rd 		
 No. 1 Rd and Blundell Rd 		
Garden City Rd and Williams Rd		
Garden City Rd and Francis Rd	¢000.000	
Railway Ave and Moncton St	\$200,000	
Garden City Rd and Lansdowne Rd		
No. 8 Rd and Westminster Hwy		
No. 2 Rd and Blundell Centre		
Alderbridge Way and Westminster Hwy		
• Other locations to be determined ⁽²⁾		
Construction of pedestrian pathway:		
St. Edwards Drive (350m east of Cambie Rd-Bird Rd)	\$600,000	
Other locations to be determined ⁽²⁾		
Construction of multi-use pathway:		
 Steveston Hwy Ph 2 (Mortfield Gate to No 2 Rd) 		
 Garden City Rd (Williams Rd to Francis Rd) 	\$7,800,000	
 No 2 Rd (Steveston Hwy to Williams Rd) 		
Other locations to be determined ⁽²⁾		
Total	\$17,720,50	

Proposed 2024 City-ICBC Road Improvement Program Projects

Implementation is subject to consultation with and support from affected residents. Additional locations may be identified for submission to ICBC prior to its annual program deadline.

(1) (2)



Report to Committee

То:	Public Works and Transportation Committee	Date:	April 24, 2024
From:	Milton Chan, P.Eng Director, Engineering	File:	10-6000-01/2024-Vol 01
	Lloyd Bie, P.Eng Director, Transportation		
Re:	Cambie Road and No. 5 Road Intersection Upgrade, No. 2 Road Multi-Use Pathway and Active Transportation Improvement Program 2022 – Project Update		

Staff Recommendations

- That the increase in project budgets for the Cambie Road and No. 5 Road Intersection Upgrade, No. 2 Road Multi-Use Pathway and Active Transportation Program 2022 be approved as presented in the report "Cambie Road and No. 5 Road Intersection Upgrade, No. 2 Road Multi-Use Pathway and Active Transportation Improvement Program 2022 – Project Update" dated April 24, 2024 from the Director, Transportation and Director, Engineering; and
- 2. That the 5 Year Financial Plan (2024-2028) be amended accordingly.

Milton Chan, P.Eng Director, Engineering (604-276-4377)

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

Att. 1

REPORT CONCURRENCE				
ROUTED TO: CONCURRENCE		CONCURRENCE OF GENERAL MANAGER		
Finance	V	Juling		
SENIOR STAFF REPORT REVIEW	INITIALS:	APPROVED BY CAO		
	CE)	Gerer.		

Staff Report

Origin

The Cambie Road and No. 5 Road Intersection Upgrade Project, No. 2 Road Multi-Use Pathway Project and Active Transportation Improvement Program 2022 were approved by Council as part of the 2020, 2021 and 2022 Capital Budget respectively. This report provides an update on these projects and seeks Council's authorization to increase the project budgets to reflect additional grant funding received and accommodate updated project costs.

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 wellplanned 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.

3.4 Ensure civic infrastructure, assets and resources are effectively maintained and continue to meet the needs of the community as it grows.

This report supports Council's Strategic Plan 2022-2026 Focus Area #4 Responsible Financial Management and Governance:

4.3 Foster community trust through open, transparent and accountable budgeting practices and processes.

4.4 Work with all levels of governments for grant and funding opportunities.

Analysis

Project Background and Construction Update

Cambie Road and No. 5 Road Intersection Upgrade

This project introduces dedicated left turn lanes in all directions of the intersection and upgrades the existing sidewalk along the north side of the intersection to a multi-use pathway (MUP). The project will improve road safety, reduce traffic congestion and improve comfort and accessibility for pedestrians and cyclists. Detailed design has been completed. The project involves land acquisition and this process is anticipated to be completed by May 2024. Proposals for construction of this project have been solicited through a public, competitive process and construction is anticipated to be complete before the end of the year.

No. 2 Road Multi-Use Pathway Project

This project provides a new paved multi-use pathway along the east side of No. 2 Road between Steveston Highway and Williams Road. The project enhances connectivity in the City's pedestrian and cycling network, making it easier for people to walk, ride or roll throughout the City. Design has been completed. The project involves land acquisition and this process is anticipated to be completed by Q2 2024. Proposals for construction of this project have been solicited through a public, competitive process and construction is anticipated to be complete by early 2025.

Active Transportation Improvement Program 2022

This program includes three projects that implements walking, cycling and rolling improvements throughout the City. These include:

- Garden City Road Cycling Protection: This project involves implementing a delineated buffer along the existing bicycle lanes on Garden City Road between Granville Avenue and Sea Island Way. This project has been completed.
- Francis Road and McCutcheon Place Cycling Improvement: This project introduces a new special crosswalk at the Francis Road and McCutcheon Place intersection to improve connectivity through the Mid-town Neighbourhood Bike Route. Design has been completed and construction is anticipated to be complete by early 2025.
- Garden City Road MUP: This project upgrades the existing paved MUP along Garden City Road between Francis Road and Williams Road. The scope of work includes widening and resurfacing the existing pathway and construction of new pedestrian lighting along the pathway. Design has been completed and construction is anticipated to be complete before the end of the year.

Funding Update

Translink, ICBC and the Province of BC provide a number of cost-share and grant funding opportunities to support the implementation of road safety and active transportation improvements. Consistent with Council's Strategic Plan Focus Area #4, the City works proactively with these organizations to secure external funding for infrastructure upgrades. Projects are typically approved by Council before they are included in grant or cost-share applications. As such, the exact amount of external funding available may be unknown at the time of project approval.

Subsequent to Council's approval of these three projects, the City has secured additional external funding beyond what was originally estimated. Table 1 summarizes the grant funding that has been secured for each project compared to the original budget. A detailed breakdown of these grants is presented in Attachment 1.

		No. 5 Road and Cambie Road Intersection Upgrades	No. 2 Road Multi-Use Pathway	Active Transportation Improvements Program 2022
Approved Budget	City Funding*	\$2,070,000	\$1,200,000	\$750,000
	Estimated External Funding	\$690,000	\$1,200,000	\$0
	Total Budget	\$2,760,000	\$2,400,000	\$750,000
Secured E	External Funds	\$1,380,000	\$1,949,750	\$767,066
Additional External Funds Secured		\$690,000	\$749,750	\$767,066

*City funding sources are 94.05% from Roads Development Cost Charges and 5.95% from Capital Reserve (Revolving Fund)

Staff have updated cost estimates for these projects based on finalized designs, pricing received through the procurement process and updated land costs. The costs are higher than originally anticipated and exceed current budgets. These increases are largely due to uncertainties within the construction market, industry volatility as a result of the COVID-19 pandemic, supply chain restrictions and high levels of inflation. Because of these increases, the projects cannot be completed within the current budgets.

Staff have assessed the feasibility of amending the project scope to fit within existing budgets. This approach is not recommended for the following reasons:

- Cambie Road and No. 5 Road Intersection Upgrades: All upgrades included within the project scope are integral to achieving the intended safety and traffic improvements. Reductions in scope such as installation of left-turn bays on two legs of the intersection instead of the proposed four would reduce project benefits at marginal cost savings, cause similar traffic disruptions and may impact the project's eligibility for secured external funding.
- No. 2 Road MUP: Constructing a shortened section of MUP would not provide the connectivity that was envisioned for the project and may impact the project's eligibility for secured external funding. If the project does not proceed, \$1,949,750 of external grants would be lost.
- Active Transportation Improvement Program 2022: Eliminating the Francis Road and McCutcheon Place Cycling Improvement project would not be sufficient to resolve the funding variance. In order to remain within approved budgets, the Garden City Road MUP project would be cancelled and \$500,000 of secured external funding would be lost.

Pedestrian lighting would not be provided along this MUP and the deteriorated surface would not be repaired.

The additional external funds secured, in addition to the previously approved budget amounts, provide sufficient funding to complete these projects. Amending the budgets to fully utilize the secured grants will allow the projects to be completed as intended with no impact to City funding. Staff recommend that project budgets be increased to reflect the additional grants secured.

If project budgets are not increased to utilize the secured grants, there would be insufficient funding to complete the projects. The projects would not proceed and roadways will be left in their current conditions. Any external funding secured for these projects would be lost.

Financial Impact

Staff recommend that an increase to the capital projects' budgets, funded by external contributions with no additional City funding required, in the amounts as outlined in Table 2 be approved, and that the Consolidated 5 Year Financial Plan (2024-2028) be amended accordingly.

Project	Cambie Road and No. 5 Road Intersection Upgrade (CR00101)	No. 2 Road Multi- Use Pathway (CT00034)	Active Transportation Improvements Program 2022 (CR00138)
Approved Budget	\$2,760,000	\$2,400,000	\$750,000
Additional External Funding Secured	\$690,000	\$749,750	\$767,066
Amended Project Budget	\$3,450,000	\$3,149,750	\$1,517,066

Table 2: Financial Impact Summary

Contractor pricing has been received for the Cambie Road and No. 5 Road Intersection Upgrade Project and No. 2 Road Multi-Use Pathway Project. Should Council approve the budget increase recommended in this report, staff will proceed with awarding the construction contracts for these projects. The Cambie Road and No. 5 Road project would be scheduled for completion by the end of 2024, and the No. 2 Road project by early 2025.

The Active Transportation Improvements Program is planned to be constructed by City Forces. Should Council approve the recommended budget increase, this project would be scheduled for completion by early 2025.

Conclusion

The Cambie Road and No. 5 Road project improves safety and relieves traffic congestion for road users. The No. 2 Road Multi-Use Pathway and the Active Transportation Improvement Program 2022 improves comfort, safety and connectivity for those who walk, cycle or roll within the City. These projects improve the City's transportation network and were approved by Council as part of prior Capital Budgets.

While costs have increased due to inflation and volatility in the construction market, the City has been successful at securing approximately 50 per cent of project costs through external funding sources. Due to this increased external funding, these projects can continue to be delivered with no additional City funding. Staff recommend that project budgets be increased to reflect external funding secured. Should Council endorse this recommendation, tender award and construction will commence over the coming months and all projects are anticipated to be completed by early 2025.

Kevin Roberts, P.Eng. Senior Project Manager, Engineering Design & Construction (604-204-8512)

Beata Ng, P.Eng. Manager, Transportation Development and Design (604-247-4627)

Att 1: Summary of External Funds Secured

Attachment 1

Project		External Funding Source	Amount	Project Total
Cambie Road and No. 5 Road Intersection Upgrade		Translink - Major Road Network and Bike Program, Walking Infrastructure to Transit Program	\$1,380,000	\$1,380,000
No. 2 Road Multi-Use Pathway		Translink - Major Road Network and Bike Program, Bicycle Infrastructure Capital Cost-Sharing Program	\$1,499,500	\$1,949,750
		Province of BC - Active Transportation Grant Program	\$450,250	
Active Transportation Improvement	Garden City Road Cycling Protection	Translink - Bicycle Infrastructure Capital Cost- Sharing Program	\$46,066	\$767,066
Program 2022		ICBC - Road Safety Improvement Program	\$17,000	
	Francis Road and McCutcheon Place Cycling Improvement	Translink - Bicycle Infrastructure Capital Cost- Sharing Program	\$204,000	
	Garden City Road MUP	Translink - Major Road Network and Bike Program	\$500,000	

Summary of External Funds Secured