



To: Public Works and Transportation Committee

Date: January 23, 2020

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

File: 01-0150-20-ICBC1-
01/2019-Vol 01

Re: ICBC-City of Richmond *Road Improvement Program – 2020 Update*

Staff Recommendation

1. That the list of proposed road safety improvement projects, as described in Attachment 2 of the staff report titled “ICBC-City of Richmond *Road Improvement Program – 2020 Update*,” dated January 23, 2020 from the Director, Transportation be endorsed for submission to the ICBC 2020 *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 (2020-2024) be amended accordingly.

Donna Chan, P. Eng., PTOE
Acting Director, Transportation
(604-276-4126)

Att. 2

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

Staff Report

Origin

At the April 23, 2019 Council meeting, Council endorsed a number of proposed joint ICBC-City of Richmond road safety improvement projects for 2019. This report summarizes the projects implemented in 2019 with funding from ICBC and presents a list of projects proposed to be implemented with funding contributions from ICBC as part of the 2020 ICBC-City of Richmond *Road Improvement Program* partnership.

This report supports Council's Strategic Plan 2018-2022 Strategy #1 A Safe and Resilient City:

Enhance and protect the safety and well-being of Richmond.

1.2 Future-proof and maintain city infrastructure to keep the community safe.

This report supports Council's Strategic Plan 2018-2022 Strategy #6 Strategic and Well-Planned Growth:

Leadership in effective and sustainable growth that supports Richmond's physical and social needs.

6.3 Build on transportation and active mobility networks.

Analysis

The City has been in partnership with ICBC in the *Road Improvement Program* since 1994. This partnership is an important component of the City's traffic safety program as it enables the City not only to undertake more traffic safety enhancements than it could alone, but also to expedite some of these road safety improvement projects. Each year, a list of potential eligible capital projects is developed for inclusion in the *Road Improvement Program* based on community requests and input from the Traffic Safety Advisory Committee and other stakeholders.

Completed 2019 ICBC-City of Richmond Road Improvement Projects

A total of nine groups of City projects fully or substantially completed in 2019 (Attachment 1) will receive a total of \$200,000 from ICBC's 2019 *Road Improvement Program* (sample of completed projects shown in Figures 1 and 2).



Figure 1: Special Crosswalk at Garden City Road-Saunders Road



Figure 2: Speed Hump and Stop Sign on Diamond Road at Barmond Road

CNCL - 94

Over the past five years, ICBC has contributed a total of \$1,084,390 towards the City’s transportation projects (Figure 3).

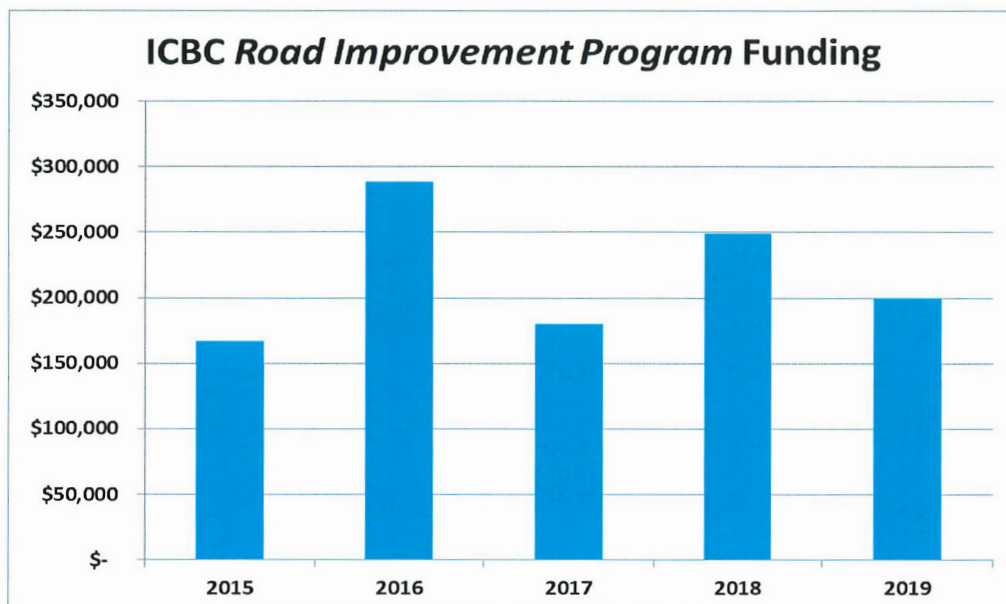


Figure 3: Annual ICBC Road Improvement Program Funding received by City

Proposed 2020 ICBC-City of Richmond Road Improvement Projects

Attachment 2 lists 16 groups of projects proposed for submission to the 2020 *Road Improvement Program* for funding contribution from ICBC, all of which draw from approved Capital Budgets. The projects align with the objectives of the City and ICBC to improve the safety of all road users by implementing new infrastructure improvements to reduce crashes and injuries. ICBC’s potential funding contribution to these projects will be determined by historical traffic crash rates at these locations and the estimated reduction in ICBC claim costs resulting from the proposed traffic safety improvements, project eligibility vis-à-vis the funding guidelines, and the total funding available, which varies from year to year. The outcome of ICBC’s review of the projects will be reported back as part of the 2021 update of the *City-ICBC Road Improvement Program*.

Upon approval of a project by ICBC, the City will be required to enter into a funding agreement with ICBC. 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 on behalf of the City to execute the funding agreements for the approved projects and that the consolidated 5 Year Financial Plan (2020-2024) be amended accordingly to reflect the receipt of external grants. Should any submitted projects receive funding from ICBC, the City’s portion of the total capital cost would be reduced accordingly.

Financial Impact

The total estimated cost of all the projects identified in Attachment 2 is \$12,936,000. As indicated in Attachment 2, the City’s estimated portion of the costs of the projects (\$7,885,410)

is fully funded with the funding sources having been previously approved by Council as part of past or current Capital Budgets.

Conclusion

ICBC is a significant long-time partner working with the City to promote traffic safety in Richmond. The traffic safety initiatives jointly implemented by ICBC and the City, including various road and traffic management enhancements, educational efforts and enforcement measures, have resulted in safer streets for all road users in Richmond. Therefore, staff recommend that Council endorse the various local road safety improvement projects for submission to the 2020 joint ICBC-City of Richmond *Road Improvement Program*.



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Att. 1: 2019 Road Improvement Projects receiving ICBC Funding

Att. 2: Proposed 2020 City-ICBC Road Improvement Projects

2019 Road Improvement Projects receiving ICBC Funding

Project Description	Location	ICBC Contribution	Estimated Total Cost
Installation of Special Crosswalk	<ul style="list-style-type: none"> Garden City Road-Saunders Road No. 4 Road-Mortfield Road 	\$5,000	\$180,000
Full Traffic Signal with LED Overhead Street Name Signs	<ul style="list-style-type: none"> No. 5 Road-Vulcan Way Railway Avenue-Garry Street 	\$33,500 \$7,500	\$325,000 \$350,000
Installation of LED Overhead Street Name Signs	<ul style="list-style-type: none"> Railway Avenue-Williams Road Railway Avenue-Francis Road Railway Avenue-Blundell Road Railway Avenue-Granville Avenue Shell Road-Bridgeport Road Shell Road-Cambie Road Shell Road-Alderbridge Way Kwantlen Street-Alderbridge Way Hazelbridge Way-Alderbridge Way No. 4 Road-Cambie Road No. 5 Road-Bridgeport Road Simpson Road-Bridgeport Road St. Edwards Drive-Bridgeport Road 	\$29,000	\$195,000
Installation of Video Detection Cameras	<ul style="list-style-type: none"> No. 1 Road-Francis Road Railway Avenue-Francis Road Railway Avenue-Steveston Highway Gilbert Road-Lansdowne Road No. 3 Road (3,600-block) Buswell Street-Granville Avenue Garden City Road-Williams Road 	\$42,000	\$280,000
Installation of UPS (Uninterruptible Power Supply) at Intersections	<ul style="list-style-type: none"> Westminster Highway-Lynas Lane Russ Baker Way-Cessna Drive Russ Baker Way-Ingليس Drive No. 2 Road-Granville Avenue No. 2 Road-Blundell Road 	\$12,500	\$100,000
Construction of Multi-Use Pathway	<ul style="list-style-type: none"> Alderbridge Way (Shell Road-No. 4 Road): Phase 1 (Fisher Drive-No. 4 Road) No. 6 Road (Cambie Road-Bridgeport Road) 	\$7,500	\$1,200,000 \$500,000
Installation of Speed Reader Boards	<ul style="list-style-type: none"> River Road (No. 6 Road-Westminster Hwy) Shell Road (10,000-block at Kidd Elementary School) McLean Avenue (22,000-block at playground) Westminster Highway North (20,000-block at Choice School) Steveston Highway (8,800-block) No. 5 Road (9,500-block) 	\$30,000	\$100,000
Neighbourhood Stop Sign Infill & Traffic Calming (16 stop signs & 25 speed humps)	Monds Neighbourhood (bounded by Francis Road, No. 1 Road, Williams Road, West Dyke)	\$27,000	\$80,000
Installation of Pedestrian Zone Markers	<ul style="list-style-type: none"> Blanshard Drive (Spul'u'kwuks Elementary School) Kingfisher Drive (Westwind Elementary School) Fourth Avenue (Manoah Steves Elementary School) 	\$6,000	\$10,000
Total		\$200,000	\$2,720,000

Proposed 2020 City-ICBC Road Improvement Projects

Proposed 2020 ICBC-City of Richmond Road Improvement Program Project	Estimated Total Cost	Source & Amount of City Funds ⁽¹⁾		External Funding: TransLink ⁽²⁾
Installation of special crosswalk (all side-mounted): <ul style="list-style-type: none"> Shell Road-Maddocks Road Van Horne Way-River Road Shell Road Trail-Granville Avenue Shell Road Trail-Blundell Road Other locations to be determined⁽⁴⁾ 	\$60,000 \$60,000 \$60,000 \$60,000	2018 Special Crosswalk Program	\$240,000	-
Installation of full traffic signal: <ul style="list-style-type: none"> Blundell Road-Moffat Road No. 5 Road-King Road Other locations to be determined⁽⁴⁾ 	\$350,000 \$325,000 -	2020 Traffic Signal Program 2019 Traffic Signal Program	\$350,000 \$325,000	-
Installation of pedestrian signal: <ul style="list-style-type: none"> Westminster Hwy-Westminster Hwy North (upgrade from existing fire signal) Other locations to be determined⁽⁴⁾ 	\$100,000	2020 Traffic Signal Program	\$100,000	\$50,000 (Pending)
Installation of traffic video cameras: <ul style="list-style-type: none"> Oval Way-River Road No. 3 Road-Granville Avenue Great Canadian Way-River Road Great Canadian Way-Van Horne Way No. 3 Road-Saba Road No. 3 Road-Leslie Road No. 3 Road-Capstan Way No. 3 Road-Williams Road No. 3 Road-Yaohan Entrance No. 3 Road-Cambie Road No. 3 Road-Browngate Road No. 3 Road-Ackroyd Road Other locations to be determined⁽⁴⁾ 	\$360,000 (\$30,000 per intersection)	2020 Traffic Video and Communication Program	\$360,000	-
Installation of fibre optic cable: <ul style="list-style-type: none"> Westminster Hwy (No. 6 Road-Fraserwood Pl) 	\$75,000	2020 Traffic Video and Communication Program	\$75,000	-
Installation of pedestrian zone markers in various locations pending results of traffic studies ⁽³⁾	\$10,000	2020 Traffic Calming Program	\$10,000	-
Traffic calming measures in various locations pending results of traffic studies ⁽³⁾	\$290,000	2020 Traffic Calming Program	\$290,000	-
Installation of UPS (uninterruptible power supply): <ul style="list-style-type: none"> No. 2 Road-Francis Road No. 2 Road-Williams Road Gilbert Road-Westminster Hwy Railway Avenue-Steveston Hwy No. 2 Road-Steveston Hwy Gilbert Road-Steveston Hwy No. 5 Road-Horseshoe Way Other locations to be determined⁽⁴⁾ 	\$140,000 (\$20,000 per intersection)	2018 Traffic Signal Program 2020 Traffic Signal Power Backup System (UPS)	\$40,000 \$100,000	-
Cambie Road-No. 5 Road intersection upgrade: <ul style="list-style-type: none"> left-turn lanes on all four legs multi-use pathways on Cambie Road at intersection multi-use pathways on No. 5 Road (Cambie Road-Thorpe Road) 	\$2,760,000	2020 Roads DCC Program	\$1,380,000	\$1,380,000 (Pending)

Proposed 2020 City-ICBC Road Improvement Projects

Proposed 2020 ICBC-City of Richmond Road Improvement Program Project	Estimated Total Cost	Source & Amount of City Funds ⁽¹⁾		External Funding: TransLink ⁽²⁾
Construction of pedestrian pathway:				
• River Road (No. 6 Road-Burdette Ave)	\$350,000	2018 Arterial Roadway Improvement Program	\$350,000	-
• St. Edwards Drive (350m east of Cambie Road-Bird Road)	\$300,000	2020 Arterial Roadway Improvement Program	\$300,000	-
• Westminster Hwy (Muir Road-150m east)	\$190,000	2020 Neighbourhood Walkway Program	\$95,000	\$95,000 (Pending)
• Viking Way (Cambie Road-Bridgeport Road)	\$655,000	2020 Neighbourhood Walkway Program	\$655,000	-
• Other locations to be determined ⁽⁴⁾				
Upgrade of Railway Greenway intersections at:				
• Blundell Road (north and south sides)	\$450,000	2019 Arterial Road Improvement Program	\$168,750	\$281,250 (Confirmed)
• Francis Road (south side)				
• Williams Road (north and south sides)				
Construction of multi-use pathway:				
• Westminster Hwy (Smith Cr-Fraserside Gt)	\$1,100,000	2019 Roads DCC Program	\$550,000	\$550,000 (Pending)
• Garden City Road (Lansdowne Road-Westminster Hwy)	\$1,000,000	2019 Roads DCC Program	\$500,000	\$500,000 (Confirmed)
• Alderbridge Way (Shell Rd- No. 4 Road): Phase 2 (Shell Road-Fisher Drive)	\$1,200,000	2018 Roads DCC Program	\$600,000	\$600,000 (Confirmed)
• Steveston Hwy (Shell Road-Mortfield Gate)	\$2,000,000	2019 Roads DCC Program	\$590,000	\$1,410,000 (Confirmed)
• Charles Street (Sexsmith Road-Bridgeport Station Entrance)	\$350,000	2019 Active Transportation Improvement Program	\$156,660	\$193,340 (Confirmed)
Removal of Channelized Right-Turn Islands:				
• Cooney Road-Westminster Hwy (northeast corner)	\$208,000	2020 Arterial Roadway Improvement Program	\$208,000	-
• Garden City Road-Lansdowne Road (northwest corner)	\$483,000	2020 Arterial Roadway Improvement Program	\$286,000	-
		2020 Active Transportation Improvement Program	\$197,000	-
Top 20 Collision Prone Intersections: Short-Term Improvements	\$500,000	2020 Roads DCC Program	\$500,000	\$104,000 (Pending)
Top 20 Collision Prone Intersections: Preliminary Designs for Medium-/Long-term Improvements	\$600,000	2020 Roads DCC Program	\$600,000	-
Road Safety Studies: locations to be determined ⁽⁴⁾	\$100,000	2020 Transportation Planning, Functional and Preliminary Design	\$100,000	-
Total	\$12,936,000		\$7,885,410	\$2,984,590 (Confirmed) \$2,179,000 (Pending)

- (1) Should the submitted project receive funding from ICBC, the City's portion of the total cost would be reduced accordingly.
- (2) The amount shown represents the maximum funding contribution to be received based on the City's cost estimate for the project. The actual approved amount may be lower than requested. The actual invoiced amount follows project completion and is based on incurred costs. The projects will proceed only if a minimum of 50% external funding is secured.
- (3) Implementation is subject to consultation with and support from affected residents.
- (4) Additional locations may be identified for submission to ICBC prior to its annual program deadline.