



City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** October 10, 2021
From: Lloyd Bie, P. Eng.
Director, Transportation **File:** 01-0154-04/2021-Vol 01
Re: **TransLink 2022 Cost-Share Funding Applications**

Staff Recommendation

That as described in the report titled "TransLink 2022 Cost-Share Funding Applications" dated October 10, 2021 from the Director, Transportation:

- (a) the submission of road, pedestrian, bicycle, and transit facility improvement projects as part of the TransLink 2022 cost-share programs be endorsed and the information be considered in the 2022 Capital Budget process; and
- (b) the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the successful funding agreements.

Lloyd Bie, P. Eng.
Director, Transportation
604-276-4131
Att. 2

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

Staff Report

Origin

Each year, municipalities are invited to submit road, bicycle and transit-related improvement projects for funding consideration from TransLink's cost-share funding programs. This staff report presents the proposed applications from the City to TransLink's 2022 cost-share programs.

This report supports Council's Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

5.4 *Work cooperatively and respectfully with all levels of government and stakeholders while advocating for the best interests of Richmond.*

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

TransLink Cost-Share Programs

TransLink provides cost-share funding to municipalities via the following programs:

- Major Road Network and Bike (MRNB) Upgrade Program: allocated funding for capital improvements to roads that comprise the Major Road Network (MRN) and the construction of bicycle facilities both on and off the MRN.
- Bicycle Infrastructure Capital Cost-Sharing (BICCS) Program: allocated and competitive funding for the construction of bicycle facilities.
- Bicycle Infrastructure Capital Cost-Sharing (BICCS) Recovery Program: competitive funding for the construction of bicycle facilities that can be completed within one year.
- Walking Infrastructure to Transit (WITT) Program: allocated and competitive funding for pedestrian facility upgrades within walking distance of frequent transit stops, stations and exchanges to promote the seamless integration of walking and cycling with transit.
- Transit-Related Road Infrastructure Program (TRRIP): competitive funding for roadway infrastructure facilities required for the delivery of transit services in the region.
- Bus Speed and Reliability (BSR) Program: competitive funding for feasibility studies and capital projects that support improved bus speed and reliability.

- MRN Structures Program: competitive funding for studies and capital projects for the upgrade, rehabilitation and/or replacement of bridges, culverts and retaining walls.

Projects to Receive Funding from 2021 TransLink Cost-Share Programs

Fourteen pedestrian, cycling and road improvement projects in Richmond will collectively receive up to \$5.09 million from TransLink as part of its 2021 cost-share programs, which will support projects with a total estimated cost of \$14.4 million (Attachment 1).

The City also submitted a successful application to TransLink's 2021 MRN Structures Program for the installation of new drainage culverts and associated drainage infrastructure at the Steveston Highway-Gilbert Road intersection to replace the existing ageing road cross-culvert. The estimated project cost is \$762,000 with the City responsible for 50% of the funding. The project was approved by Council as part of the City's 2021 capital program. Staff recommend that the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the agreement.

TransLink Funding Levels for 2022 Cost-Share Programs

Confirmation of funding levels for TransLink's 2022 cost-share programs will not be known until finalization of its new 10-Year Investment Plan, which is anticipated by spring 2022. TransLink is proceeding with the 2022 application process at this time, on the assumption that funding levels in 2022 will be the same as in 2021, in order to maintain the overall timeline for TransLink's evaluation and approval process, and thus timely project delivery.

Should the new 10-Year Investment Plan include 2022 funding levels different than those of 2021, municipalities will have the opportunity to revise their applications to meet the new parameters as necessary. Staff will report back with an update if this scenario occurs.

Projects Proposed for Submission to 2022 TransLink Cost-Share Programs

The following projects are proposed for submission to the 2022 TransLink cost-share programs, which collectively will fully utilize TransLink's anticipated allocated funding for Richmond. TransLink has indicated that the amount of capital cost-share funding available to Richmond for 2022 as noted below.

Major Road Network and Bike (MRNB) Upgrade Program

TransLink's assumed 2022 allocation for Richmond is \$1,852,000 (same as 2021). The City proposes to submit the following projects for consideration (Attachment 2):

- Westminster Hwy-No. 2 Road Intersection Upgrade: The City's network screening study of collision-prone intersections presented to Council in June 2019 ranked this intersection as #3 of the top 20. The scope includes modification of the intersection geometry, modification of the channelized island at the northwest corner, increased size of the pedestrian refuge areas, improving cycling connectivity, access management, and traffic signal operation enhancements. Council approved the project as part of the 2021 Capital Plan. This application is Year 2 of a 2-year accrual (i.e., the City also successfully applied to TransLink

in 2021 for the same project in order to achieve a minimum of 50% external funding over the two-year period).

- Cambie Road-No. 4 Road Intersection Upgrade: Provision of left-turn lanes on all four legs, new boulevard and/or lighting strip, upgraded traffic signals, increased size of the pedestrian refuge areas, widened crosswalks, and overhead street name signs. Council approved the project as part of the 2021 Capital Plan. This application is Year 2 of a 2-year accrual (i.e., the City also successfully applied to TransLink in 2021 for the same project in order to achieve a minimum of 50% external funding over the two-year period).
- No. 2 Road Multi-Use Pathway: Construction of a two-way off-street paved 3.0 m wide pathway for pedestrians and cyclists on the east side of No. 2 Road. The alignment and form of cycling facility is a logical extension of the existing multi-use pathway on the east side south of Steveston Highway and incorporates an existing 170 m length multi-use pathway on the east side at Wallace Road. Council approved the project as part of the 2021 Capital Plan. This application is Year 2 of a 2-year accrual (i.e., the City also successfully applied to TransLink in 2021 for the same project in order to achieve a minimum of 50% external funding over the two-year period).
- Garden City Road Multi-Use Pathway: Reconstruction and enhancement of the existing pathway on the west side between Francis Road and Williams Road due to extensive asphalt failing (e.g., root damage). The rebuilt pathway will be wider and new pedestrian lighting will be added. The project will be included in the 2022 Capital Plan for Council's consideration.
- Westminster Hwy-No. 5 Road Intersection Upgrade: The City's network screening study of collision-prone intersections presented to Council in June 2019 ranked this intersection as #5 of the top 20. The scope includes modification/removal of the existing island at the northwest corner, reduced curb return radius, increased size of the pedestrian refuge areas, and improved pedestrian and cycling connectivity. The project will be included in the 2022 Capital Plan for Council's consideration. This application is Year 1 of a 2-year accrual (i.e., the City will apply to TransLink in 2023 for the same project in order to achieve a minimum of 50% external funding over the two-year period).

Bicycle Infrastructure Capital Cost-Sharing (BICCS) Program

TransLink's 2022 assumed allocation for Richmond is \$894,000 (same as 2021) and the City can apply for up to \$600,000 per project from the competitive-based component. The City proposes to submit the following project for consideration for the allocated component (Attachment 2):

- River Road Multi-Use Pathway: Council approved design funding for a cycling facility on River Road between McCallan Road (northern terminus of Railway Greenway) and No. 2 Road (western terminus of Middle Arm Greenway) as part of the 2020 Capital Plan. This application is for construction of a two-way off-street paved 4.0 m wide pathway including lighting for pedestrians and cyclists on the south side of River Road that will connect the two major greenways. The project will be included in the 2022 Capital Plan for Council's consideration.

- No. 2 Road Multi-Use Pathway: As described above for the MRNB Program.

The City also proposes to submit the following projects for consideration for the competitive component (Attachment 2). Should the applications not be successful, both projects will be deferred and the City will re-apply in 2023.

- Sexsmith Road-Brown Road Bike Route: Through the development application process and City capital projects, cycling facilities have been established on various sections of Sexsmith Road and Brown Road. In addition, the upgrade of the Sexsmith Road-Bridgeport Road intersection to include a pedestrian signal has been secured. This project will fill in the remaining gaps to provide a continuous protected cycling facility along Sexsmith Road and Brown Road between the Bridgeport Canada Line Station and Transit Exchange and the recently completed Odlin Road Neighbourhood Bike Route. The project includes the upgrade of the existing special crosswalk on Cambie Road at Brown Road to a pedestrian signal. The project will be included in the 2022 Capital Plan for Council's consideration.
- Westminster Hwy-No. 5 Road Intersection Upgrade: As described above for the MRNB Program.

Bicycle Infrastructure Capital Cost-Sharing (BICCS) Recovery Program

For 2022, \$2.0 million is assumed available with all funding available on a competitive basis. The City proposes to submit the following project for consideration (Attachment 2):

- Garden City Road (Granville Ave-Sea Island Way): Installation of delineators along both sides of Garden City Road where feasible between Granville Avenue and Sea Island Way (approximate length of 2.3 km in each direction). This project will complement the recent installation of delineators on Granville Avenue (Railway Avenue to Garden City Road) and continue the addition of protection to painted bike lines along a major north-south bike route in the City Centre. The project will be included in the 2022 Capital Plan for Council's consideration.

Walking Infrastructure to Transit (WITT) Program

TransLink's 2022 assumed allocation for Richmond is \$322,000 (same as 2021). The City proposes to submit the following projects for consideration for the allocated component (Attachment 2):

- Westminster Hwy-No. 2 Road Intersection Upgrade: As described above for the MRNB Program.
- Westminster Hwy-No. 5 Road Intersection Upgrade: As described above for the MRNB Program.

Transit-Related Road Infrastructure Program (TRRIP)

For 2022, TRRIP has a total of \$1.0 million available for the entire program (same as 2021); the City's submission is for \$100,000, which is the maximum amount permitted. Projects proposed to be submitted by the City are:

- Bus Stop Upgrades: Continued retrofits to various existing bus stops to provide for universal accessibility (i.e., installation of a landing pad and/or connecting sidewalk for wheelchair users) and construction of connecting pathways to provide access to/from the bus stop. The exact bus stop locations for these upgrades will be determined through feedback from transit users and consultation with Richmond Centre for Disability. The project will be included in the 2022 Capital Plan for Council's consideration.

As of September 2021, Richmond has 723 active bus stops, of which 621 (85.9%) are accessible as compared to the regional average of 81.2%. Based on the experience of past years, staff anticipate that approximately 10 locations will be upgraded with the proposed project in 2022. The project scope will be reduced should the application not be successful.

Bus Speed and Reliability (BSR) Program

For 2022, the BSR Program has \$5.2 million available (compared to \$4.15 million in 2021) with all funding available on a competitive basis. The City proposes to submit the following projects for consideration (Attachment 2):

- Great Canadian Way-Bridgeport Road Intersection Southbound Bus-Only Lane – Implementation: As part of the 2019 and 2020 BSR Programs, the City examined and developed conceptual designs for a potential long-term improvement of a new southbound bus-only lane on Great Canadian Way approaching Bridgeport Road to facilitate buses accessing Highway 99 southbound. As part of the 2021 BSR Program, the functional design for a bus only lane at the intersection was completed. This application will progress the project to implementation, which will support the bus only on-ramp from Bridgeport Road to southbound Highway 99 to be completed in 2022 by the Province as part of the George Massey Crossing Program.

Requested Funding and Estimated Project Costs

The total requested funding for the above 2022 submissions to TransLink's cost-sharing programs is \$4,760,500, which will support projects with a total estimated cost of \$11.2 million (Table 1). For all projects, the City will receive from 50% to 100% of the estimated project cost. The total combined amounts of TransLink funding for 2022 and City funding do not equal the total estimated project costs due to several projects accruing TransLink funding over a two-year period.

Table 1: Projects to be Submitted to 2022 TransLink Cost-Share Programs

Project	TransLink Funding Source		Total TransLink Funding for 2022 ⁽¹⁾	Estimated City Funding & Source ⁽²⁾	Estimated Project Cost
	Program	Amount			
Westminster Hwy-No. 2 Road Intersection Upgrade (Year 2 Accrual)	MRNB Allocated	\$150,000	\$300,000 (Year 1 Accrual in 2021 = \$350,000)	\$650,000 (2021 Capital Program)	\$1,300,000
	WITT Allocated	\$150,000			
Cambie Road-No. 4 Road Intersection Upgrade (Year 2 Accrual)	MRNB Allocated	\$425,000	\$425,000 (Year 1 Accrual in 2021 = \$425,000)	\$850,000 (2021 Capital Program)	\$1,700,000

Project	TransLink Funding Source		Total TransLink Funding for 2022 ⁽¹⁾	Estimated City Funding & Source ⁽²⁾	Estimated Project Cost
	Program	Amount			
No. 2 Road (Steveston Hwy-Williams Road): multi-use path (Year 2 Accrual)	MRNB Allocated	\$633,500	\$727,500 (Year 1 Accrual in 2021 = \$772,500)	\$900,000 (2021 Capital Program)	\$2,400,000
	BICCS Allocated	\$94,000			
Westminster Hwy-No. 5 Road Intersection Upgrade (Year 1 Accrual)	MRNB Allocated	\$143,500	\$315,500 (Year 2 Accrual in 2023: \$284,500)	\$600,000 (2022 Top 20 Collision Prone Intersections Program)	\$1,200,000
	WITT Allocated	\$172,500			
Garden City Road (Francis Road-Williams Road): reconstruct multi-use path	MRNB Allocated	\$500,000	\$500,000	\$500,000 (2022 Active Transportation Improvement Program)	\$1,000,000
River Road (McCallan Road-No. 2 Road): multi-use path	BICCS Allocated	\$800,000	\$800,000	\$800,000 (2022 Capital Program)	\$1,600,000
Sexsmith Road-Brown Road (Beckwith Road-Browngate Road): protected bike lanes	BICCS Competitive	\$562,500	\$562,500	\$187,500 (2022 Capital Program)	\$750,000
Garden City Road (Granville Ave-Sea Island Way): Installation of Delineators	BICCS Recovery	\$280,000	\$280,000	\$25,000 (2022 Active Transportation Improvement Program)	\$305,000
Accessibility upgrades to various existing bus stops	TRRIP	\$100,000	\$100,000	\$100,000 (2022 Transit-Related Road Infrastructure Program)	\$200,000
Great Canadian Way (Beckwith Rd-Bridgeport Road): Southbound Bus Only Lane	Bus Speed & Reliability	\$750,000	\$750,000	\$0	\$750,000
Total⁽³⁾			\$4,760,500	\$4,612,500	\$11,205,000

(1) The amounts shown represent the maximum funding contribution to be requested from TransLink based on the City's cost estimate for the project. The actual amount invoiced to TransLink follows project completion and is based on incurred costs.

(2) The City's portion of the costs for the projects with Year 2 accrual were approved as part of the 2021 Capital Budget. The City's portions of the costs of the remaining projects will be considered during the 2022 Capital Budget process.

(3) The total combined amounts of TransLink funding for 2022 and City funding do not equal the total estimated project costs due to several projects accruing TransLink funding over a two-year period.

Should the submissions be successful, the City would enter into funding agreements with TransLink. Staff will report back should any applications not be successful or cost-share funding levels for 2022 differ from those identified in this report. The agreements are standard form agreements provided by TransLink and include an indemnity and release in favour of TransLink. Staff recommend that the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the agreements and the information be considered in the 2022 Capital Budget process.

Financial Impact

The City's portion of the costs for the projects with Year 2 accrual of TransLink funding (i.e., Westminster Hwy-No. 2 Road intersection upgrade, Cambie Road-No. 4 Road intersection upgrade, and No. 2 Road multi-use path) were approved as part of the 2021 Capital Budget. The City's portions of the costs of the remaining proposed project applications will be considered during the 2022 Capital Budget process and the associated operating budget impacts will be incorporated as part of the upcoming annual budget process. The 2022 BSR Program project costs include direct staff time, which will offset City funding.

Conclusion

A number of road, pedestrian, bicycle route, and transit improvement projects are proposed for submission to TransLink's various cost-sharing programs for 2022 that will support Council's Strategic Plan for 2018-2022 with respect to "Strategic and Well-Planned Growth" as well as the goals of a number of City plans and strategies including the Official Community Plan, the Community Energy Emissions Plan and the Community Wellness Strategy.

In addition to maximizing external funding in implementing local transportation improvements, significant benefits for those using sustainable travel modes in terms of new infrastructure that provides safety and accessibility enhancements will also be achieved should these projects be approved by TransLink and Council.



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Senior Transportation Engineer
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Att. 1: Projects to Receive Funding from 2021 TransLink Cost-Share Programs

Att. 2: Locations of Proposed 2022 Cost-Share Projects

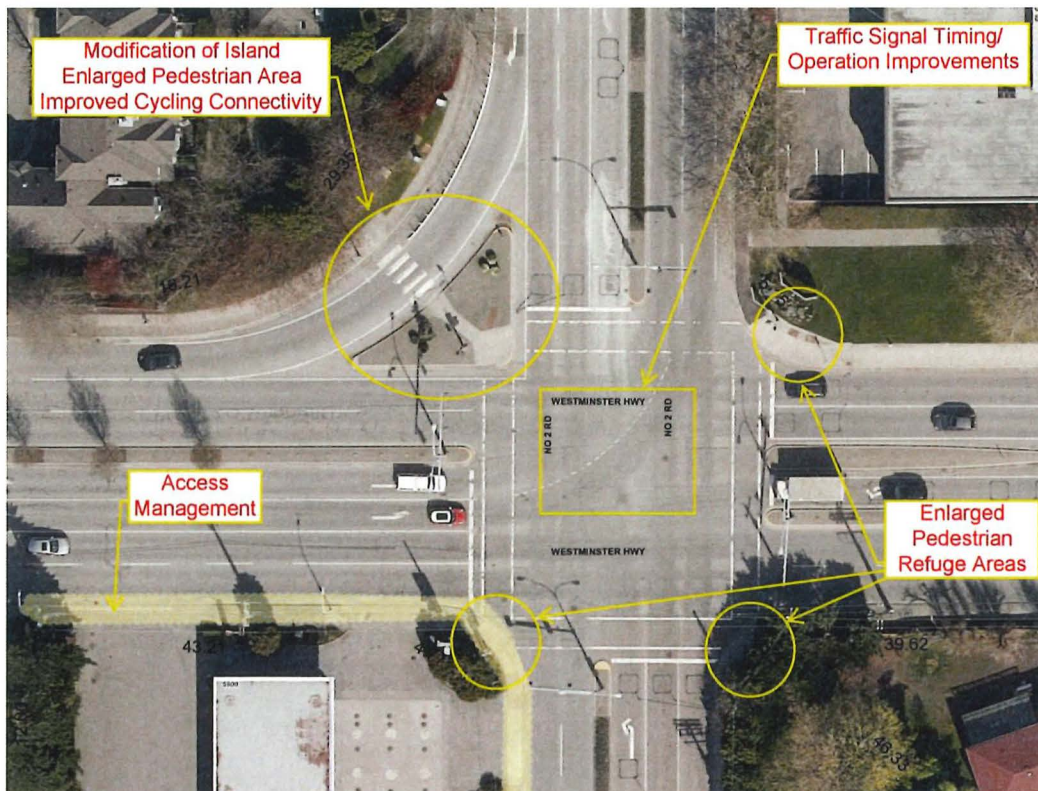
Projects to Receive Funding from 2021 TransLink Cost-Share Programs

Project	TransLink Funding Source		Total TransLink Funding ⁽¹⁾	Estimated City Funding	Estimated Project Cost
	Program	Amount			
Westminster Hwy-No. 2 Road Intersection Upgrades (Year 1 Accrual)	MRNB Allocated	\$28,000	\$350,000 (Proposed Year 2 accrual in 2022 = \$300,000)	\$650,000	\$1,300,000
	WITT Allocated	\$322,000			
Cambie Road-No. 4 Road Intersection Upgrades (Year 1 Accrual)	MRNB Allocated	\$425,000	\$425,000 (Proposed Year 2 accrual in 2022 = \$425,000)	\$850,000	\$1,700,000
Steveston Hwy (No. 2 Road-Mortfield Gate): Phase 2 of multi-use path (Year 2 Accrual)	MRNB Allocated	\$131,000	\$1,625,000 (Year 1 accrual in 2020 = \$1,975,000)	\$2,400,000	\$6,000,000
	BICCS Allocated	\$894,000			
	BICCS Competitive	\$600,000			
No. 2 Road (Steveston Hwy-Williams Road): multi-use path (Year 1 Accrual)	MRN Allocated	\$772,500	\$772,500 (Proposed Year 2 accrual in 2022 = \$727,500)	\$900,000	\$2,400,000
Browngate Road (Hazelbridge Way-No. 3 Road): cycle tracks	BICCS Competitive	\$300,000	\$300,000	\$100,000	\$400,000
Lansdowne Road (Gilbert Road-Pearson Way): multi-use path	MRN Allocated	\$150,000	\$150,000	\$150,000	\$300,000
Shell Road (Alderbridge Way-Hwy 99 Overpass): rebuild of multi-use path	MRN Allocated	\$345,500	\$345,500	\$244,500	\$590,000
Granville Avenue (Garden City Road-Railway Avenue): addition of delineators at bike lane	BICCS Recovery	\$300,000	\$300,000	\$100,000	\$400,000
Steveston Hwy-Gilbert Road: drainage upgrades	MRN Structures	\$381,000	\$381,000	\$381,000	\$762,000
Accessibility upgrades to various existing bus stops	TRRIP	\$88,750	\$88,750	\$88,750	\$177,500
No. 3 Road (Cook Road-River Road): study	Bus Speed & Reliability	\$125,000	\$125,000	\$0	\$125,000
Hot Spot Analysis: left-turns at two intersections	Bus Speed & Reliability	\$50,000	\$50,000	\$0	\$50,000
Bridgeport Road-Knight Street: northbound on-ramp access	Bus Speed & Reliability	\$125,000	\$125,000	\$0	\$125,000
Bridgeport Station Egress: functional design of bus lane	Bus Speed & Reliability	\$50,000	\$50,000	\$0	\$50,000
Total⁽²⁾			\$5,087,750	\$5,864,250	\$14,379,500

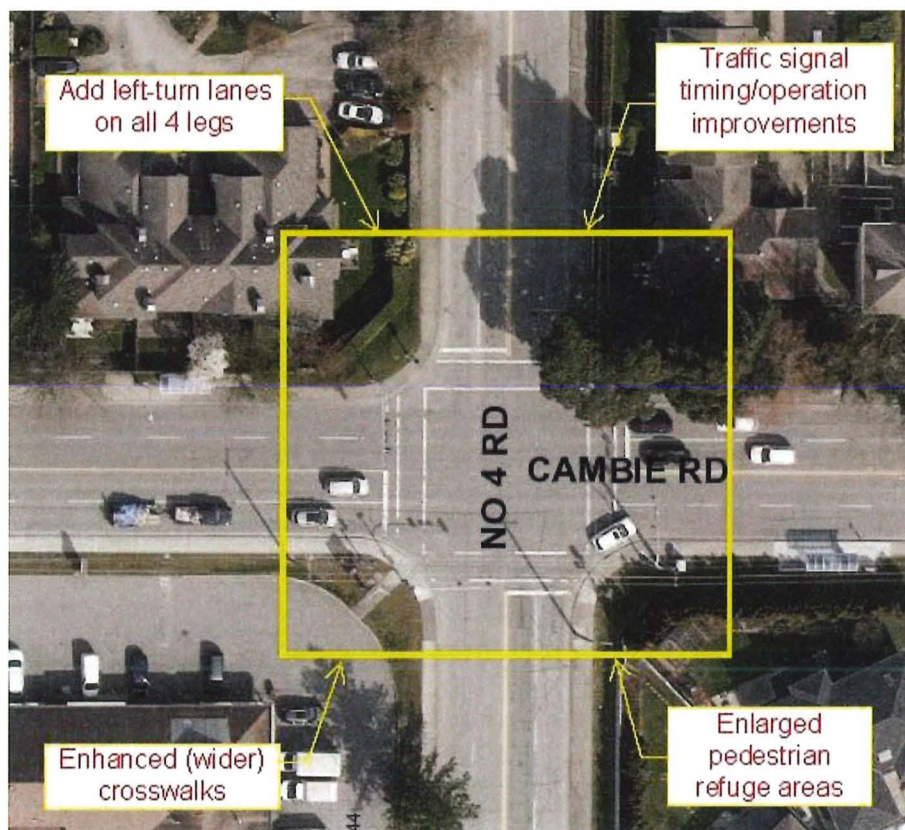
(1) The amounts shown represent the maximum funding contribution to be requested from TransLink based on the City's cost estimate for the project. The actual amount invoiced to TransLink follows project completion and is based on incurred costs.

(2) The total combined amounts of TransLink funding for 2021 and City funding do not equal the total estimated project costs due to projects accruing TransLink funding over a two-year period (either 2020-2021 or 2021-2022).

Proposed 2022 MRNB, BICCS, WITT, and BSR Program Projects



Westminster Hwy-No. 2 Road: Intersection Upgrade: Year 2 of 2-Year Accrual



Cambie Road-No. 4 Road: Intersection Upgrade: Year 2 of 2-Year Accrual

Proposed 2022 MRNB, BICCS, WITT, and BSR Program Projects



No. 2 Road (Steveston Hwy-Williams Road): Multi-Use Pathway (MUP)
Year 2 of 2-Year Accrual



Westminster Hwy-No. 5 Road: Intersection Upgrade

Proposed 2022 MRNB, BICCS, WITT, and BSR Program Projects

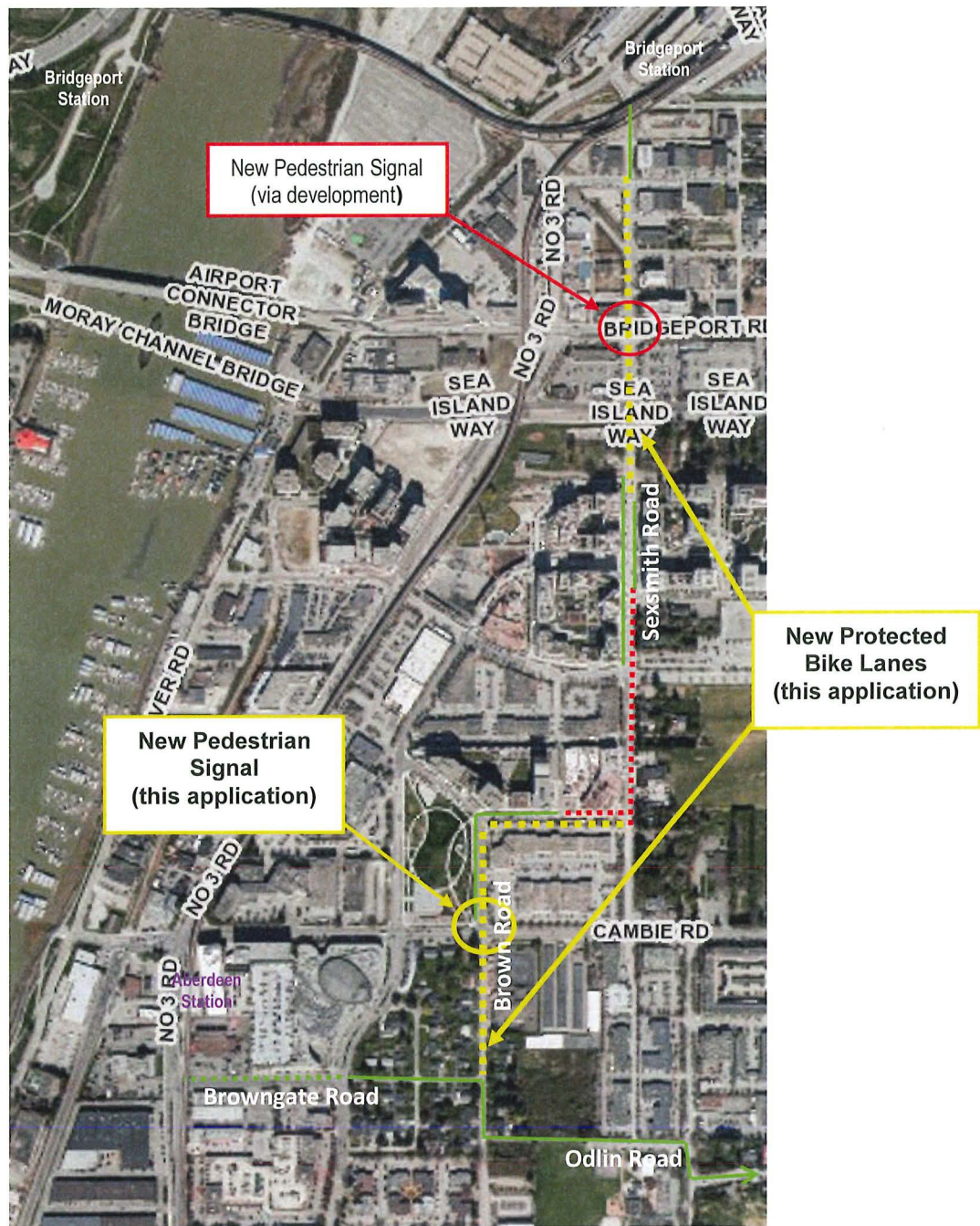


Garden City Road (Francis Road-Williams Road): Reconstruction of Multi-Use Pathway:



River Road (McCallan Road-No. 2 Road): New Multi-Use Pathway

Proposed 2022 MRNB, BICCS, WITT, and BSR Program Projects



Sexsmith Road-Brown Road (Beckwith Road-Browngate Road): Protected Bike Lanes

- New Cycling Facilities (this application)
- Existing cycling facilities
- Planned cycling facilities (City project)
- Planned cycling facilities (secured via development application process)

Proposed 2022 MRNB, BICCS, WITT, and BSR Program Projects



Garden City Road (Granville Ave-Sea Island Way):
Addition of Delineators between Bike Lane and Vehicle Lane

Proposed 2022 MRNB, BICCS, WITT, and BSR Program Projects



Great Canadian Way (Beckwith Road-Bridgeport Road): Southbound Bus-Only Lane