



**City of Richmond**

**Report to Committee**

**To:** Public Works and Transportation Committee      **Date:** November 3, 2008  
**From:** Victor Wei, P. Eng.      **File:** 01-0154-04/2008-Vol 01  
Director, Transportation  
**Re:** **TRANSLINK 2009 CAPITAL PROGRAM COST-SHARING SUBMISSIONS - MAJOR ROAD NETWORK, BICYCLE INFRASTRUCTURE AND TRANSIT-RELATED ROAD INFRASTRUCTURE**

**Staff Recommendation**

1. That the submission of:
  - (a) road and traffic signal improvement projects for cost-sharing as part of the TransLink 2009 Major Road Network (MRN) Minor Capital Program,
  - (b) bicycle facility improvements for cost-sharing as part of the TransLink 2009 Bicycle Infrastructure Capital Cost-Sharing Program, and
  - (c) transit facility improvements for cost-sharing as part of the TransLink 2009 Transit-Related Road Infrastructure Program,

as described in the attached report, be endorsed.
  
2. That, should the above submissions be successful, the General Manager, Planning and Development be authorized to execute the funding agreements.

Victor Wei, P. Eng.  
Director, Transportation (4131)

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ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Engineering .....	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
Parks Planning, Design & Construction.....	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
Law .....	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
Budgets & Accounting.....	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
<b>REVIEWED BY TAG</b>	YES <input checked="" type="checkbox"/> <i>GS</i> <i>AK</i>	NO <input type="checkbox"/>	<b>REVIEWED BY CAO</b>
			YES <input checked="" type="checkbox"/> <i>GD</i>
			NO <input type="checkbox"/>

## Staff Report

### Origin

TransLink provides shared funding for improvements to road, bicycle and transit-related facilities through three capital cost-sharing programs.

- *Major Road Network (MRN) Minor Capital Program*: funding for capital improvements of approximately 2,100 lane-kilometres of major roads across the region that comprise the Major Road Network (MRN). MRN-designated roads provide access to important activity centres in the region and meet funding criteria related to trip length and traffic volumes of automobiles, transit vehicles and trucks.
- *Bicycle Infrastructure Capital Cost-Sharing (BICCS) Program*: funding for the construction of bicycle routes and the removal of existing barriers to cyclists across the region.
- *Transit-Related Road Infrastructure Program (TRRIP)*: funding for roadway infrastructure facilities required for the delivery of transit (bus-based) services in the region.

Each year, municipalities are invited to submit road, bicycle and transit-related improvement projects for 50-50 funding consideration from these programs. This staff report presents the proposed submissions from the City to TransLink's 2009 capital cost-sharing programs.

### Analysis

#### 1. Major Road Network (MRN) Minor Capital Program

##### 1.1 MRN Elements in Richmond

Richmond's share of the MRN consists of 130 lane-kilometres, which represents about 6% of the entire MRN in the region. Richmond's components of the existing MRN are shown in the table below.

Roadway	Between
No. 2 Road and Bridge	Russ Baker Way and Steveston Highway
Steveston Highway	No. 2 Road and Highway 99
Westminster Highway	No. 2 Road and Boundary Road
Alderbridge Way	No. 3 Road and Shell Road
Bridgeport Road	Highway 99 and Knight Street
Knight Street Corridor	Westminster Highway and south end of the Knight Street Bridge
No. 3 Road	Sea Island Way and Westminster Highway
Gilbert Road	Westminster Highway and Dinsmore Bridge

##### 1.2 Capital Cost-sharing Arrangement

TransLink funding available for the 2009 MRN Minor Capital Program is \$20 million as block funding for municipalities. The maximum funding level allocated for each municipality is based on the following criteria:

- the percentage of MRN lane-kilometres in each municipality (50% weight);
- the municipal share of the combined regional population and employment growth over the 1999-2006 period (25% weight); and

- the municipal percentage of the regional travel growth over the 1996-2006 period (25% weight).

Based on these criteria, Richmond is eligible to receive \$1,862,000 in block funding for 2009.

### 1.3 Submissions to 2009 MRN Minor Capital Program

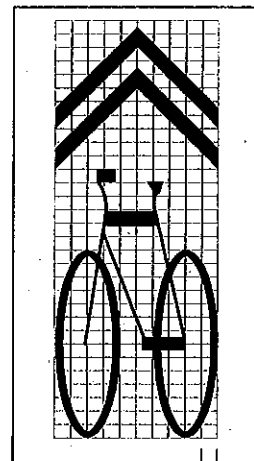
The City proposes to submit the following projects for consideration to be included in the 2009 MRN Minor Capital Program.

- No. 3 Road Restoration: in December 2004, the TransLink Board approved the cost-sharing between TransLink and the City of the restoration of No. 3 Road following construction of the Canada Line based on a conceptual design that estimated the project cost at that time to be \$8 million. The City accrued the \$4 million of TransLink funding via submissions made to the 2005-2007 MRN Minor Capital Programs. Since then, the City has progressed to detailed design for the restoration of No. 3 Road and identified that an additional \$8.8 million for road improvements is necessary to support the Canada Line project, which would be cost-shared between TransLink and the City and has been previously approved by both jurisdictions. This 2009 application is the third and final year of a 3-year funding accrual request for 2007-2009.
- Upgrade of Traffic Signals on MRN: addition of third traffic signal head at intersections where only two heads currently exist to improve traffic signal visibility for both daytime and night time operations. This project will complement a recently completed similar upgrade at intersections not on the MRN that was cost-shared between the City and ICBC.

## 2. Bicycle Infrastructure Capital Cost-Sharing (BICCS) Program

Total TransLink funding available to municipalities under the 2009 BICCS Program is \$2.55 million, of which \$1.7 million is dedicated to allocated funding (based on the municipality's proportion of population in the region) and \$850,000 is reserved for cost-sharing of major projects of regional priority. Richmond is eligible for \$140,640 in allocated funding for 2009 based on its proportion of the GVRD population (8.27%). The following projects are proposed to be submitted by the City for cost-sharing under the 2009 BICCS:

- Great Canadian Way/Van Horne Way: installation of a pedestrian signal at this intersection to facilitate cyclists and pedestrians in crossing Great Canadian Way when on Van Horne Way, the latter which provides connections between the pedestrian-cycling lane on the Canada Line bridge and the bike lanes on No. 3 Road as well as Bridgeport Road.
- Minoru Boulevard: revision of pavement markings and, where necessary, narrowing of the centre median to create bike lanes in each direction between Granville Avenue and Elmbridge Way. The roadway section between Elmbridge Way and Alderbridge Way currently lacks sufficient right-of-way width to create bike lanes, thus pavement markings would be revised to create a wider curb lane and "sharrows" and "Share the Road" signage would be installed in this section.



"Sharrows" Pavement Marking

- (c) Cycling Connection to Massey Tunnel Bike Shuttle: in conjunction with the construction of the southern section of the Shell Road Bike Route (Athabasca Drive to Horseshoe Slough Trail), a cycling connection through Riverside Industrial Park would be created to provide access to the Massey Tunnel bike shuttle stop near the east end of Rice Mill Road. The cycling connection would consist of bike lanes along Hammersmith Gate-Hammersmith Way-Horseshoe Way-Machrina Way and “sharrows” along Rice Mill Road (note there is already an off-street paved pathway on the east side of No. 5 Road between Machrina Way and Rice Mill Road). Introduction of the bike lanes would not displace any on-street parking as all roads within the industrial park are currently signed as “No Parking Any Time”. Notwithstanding, businesses located along the affected streets would be notified of the proposed project.
- (d) Lynas Lane “Sharrows”: enhancements to this existing bike route to increase cycling safety via the addition of “sharrow” pavement markings and “Share the Road” signage, which will raise awareness to motorists of the potential for cyclists on the roadway.

### 3. Transit-Related Road Infrastructure Program (TRRIP)

TransLink funding available for cost-sharing under the 2009 TRRIP is \$3 million. As TRRIP has no block funding formula, there is no allocated amount of eligible funding for the City. Historically, however, the Program has been under-subscribed regionally and thus all eligible projects submitted by municipalities typically have been funded. Projects proposed to be submitted by the City for cost-sharing under the 2009 TRRIP are:

- (a) 4<sup>th</sup> Avenue Walkway: construction of a 2-m wide paved pathway on the west side of 4<sup>th</sup> Avenue to provide pedestrian access to bus stops.
- (b) Special Crosswalk: installation of a new special crosswalk on Granville Avenue at Ledway Road to facilitate pedestrian access to bus stops.
- (c) Bus Stop Upgrades: installation of new bus stops in anticipation of the opening of Canada Line and retrofits to existing bus stops along various routes to make them universally accessible and/or provide shelters and benches.

### 4. Requested Funding and Estimated Project Costs

The total requested funding for the above 2009 submissions to TransLink’s capital cost-sharing programs is approximately \$2.08 million, as summarized in the table below, which will support projects with a total estimated cost of \$26.3 million. Note that some of these projects are to be phased over several years and thus the 2009 submissions may not reflect the total cost of the projects.

TransLink Funding Program	Project Name/Description	City’s Portion & Funding Source	Requested 2009 TransLink Contribution	Est. Total Project Cost
Major Road Network Minor Capital Program	No. 3 Road Restoration	\$2,940,000 Proposed 2009 No. 3 Road Restoration	\$1,816,871	\$25,800,000*
	Upgrade of Traffic Signals on MRN	\$54,871 Approved 2008 Traffic Signal Installation Program	\$45,129	\$100,000
	<b>Subtotal</b>	<b>\$2,994,871</b>	<b>\$1,862,000</b>	<b>\$25,900,000</b>

TransLink Funding Program	Project Name/Description	City's Portion & Funding Source	Requested 2009 TransLink Contribution	Est. Total Project Cost
Bicycle Infrastructure Capital Cost-Sharing Program	Great Canadian Way/Van Horne Way Pedestrian Signal	\$50,000 Proposed 2009 Traffic Signal Installation Program	\$50,000	\$100,000
	Minoru Boulevard Bike & Shared Lanes	\$56,500 Proposed 2009 Cycling Network Expansion Program	\$56,500	\$113,000
	Cycling Connections to Massey Tunnel Bike Shuttle	\$12,200 Proposed 2009 Cycling Network Expansion Program	\$12,200	\$24,400
	Lynas Lane Sharrows	\$4,125 Proposed 2009 Cycling Network Expansion Program	\$4,125	\$8,250
	<b>Subtotal</b>	<b>\$122,825</b>	<b>\$122,825</b>	<b>\$245,650</b>
Transit-Related Road Infrastructure Program	4 <sup>th</sup> Avenue Walkway	\$50,000 Proposed 2009 Neighbourhood Traffic Safety Program	\$50,000	\$100,000
	Special Crosswalk: Granville Ave at Ledway Road	\$20,000 Proposed 2009 Traffic Signal Installation Program	\$20,000	\$40,000
	Existing Bus Stop Upgrades	\$25,000 Proposed 2009 Transit Infrastructure Program	\$25,000	\$50,000
	<b>Subtotal</b>	<b>\$95,000</b>	<b>\$95,000</b>	<b>\$190,000</b>
<b>Total</b>	<b>\$3,212,696</b>	<b>\$2,079,825</b>	<b>\$26,335,650</b>	

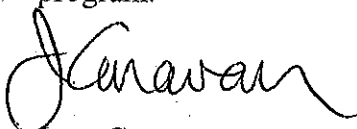
\* In addition to the 2009 funding request from TransLink, this project received funding from other external agencies (e.g., past TransLink cost-share funding, UBCM Innovations Fund grant). Staff are also exploring scope reductions to enable the project cost to remain within the budgeted amount of \$24 million.

### Financial Impact

The City's portion for these proposed projects are either part of the approved 2008 Capital Program or will be incorporated in the City's Major Capital Works Program as part of the 2009 Capital Budget review and approval process, which is subject to Council approval as part of the 2009 Capital Program Plan.

### Conclusion

A number of road, bicycle route and transit-related facility improvement projects are proposed for submission to TransLink's various cost-sharing programs for 2009 to achieve a balanced investment on the City's multi-modal transportation system. This report seeks formal Council support for the submissions in order to secure Richmond's allocations of 2009 funding and proceed with their implementation subject to Council's approval of the City's 2009 capital program.



Joan Caravan  
Transportation Planner  
(4035)