



City of Richmond

Report to Committee

To: PWT Mtg - June 20, 2012

To: Public Works and Transportation Committee **Date:** May 24, 2012
From: Victor Wei, P. Eng.
 Director, Transportation **File:** 10-6360-12-01/2011-
 Vol 01
Re: **PROPOSED ROAD SECTIONS IN RICHMOND TO BE ADDED TO
 TRANSLINK'S MAJOR ROAD NETWORK**

Staff Recommendation

That the map of road sections proposed to be added to TransLink's Major Road Network, as shown in Attachment 1 and described in Table 3 of the report dated May 24, 2012 from the Director, Transportation, be endorsed.

Victor Wei, P. Eng.
 Director, Transportation
 (604-276-4131)

Att. 1

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Roads & Construction Engineering	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
REVIEWED BY TAG SUBCOMMITTEE	INITIALS: 	REVIEWED BY CAO	INITIALS:

Staff Report

Origin

TransLink initiated a review of the management and funding of its Major Road Network (MRN) in 2010. One component of the package of changes, approved by the TransLink Board at its May 2012 meeting, is a process to increase the size of the MRN by up to 10 per cent in lane-kilometres annually based on requests from member municipalities. This report seeks Council endorsement for new road sections in Richmond proposed to be added to the MRN via this process.

Analysis

1. Current Major Road Network

At its founding in 1998, TransLink was unique among North American transportation agencies as having not only a fully integrated transit system across all modes but also responsibility for a network of major arterial roads that connect many of Metro Vancouver's 22 municipalities. While ownership of and operational responsibility for the MRN remains with each municipality, TransLink provides funding for the operations, maintenance and rehabilitation of the MRN, and shares in the cost of eligible capital improvements.

1.1 Richmond Roadway Components of MRN

The current MRN comprises over 2,300 lane-kilometres, including 130.5 lane-kilometres (approximately five per cent) in Richmond as shown in Table 1. It should be noted that Westminster Highway between Knight Street and Nelson Road was removed from the MRN effective January 2012 following the opening of the Highway 91-Nelson Road Interchange.

Table 1: Richmond Roadway Sections in the MRN

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 Knight Street / Nelson 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

At its inception, a roadway was included in the MRN if it:

- provides intra-regional access to pre-defined regional activity centres; and
- carries:
 - minimum 70 per cent of trips longer than 10 kilometres in the peak hour and peak direction and total peak hour, peak direction traffic volume greater than 800 vehicles per hour; or
 - minimum of 10 through buses in the peak hour and peak direction; or
 - minimum of 800 trucks per day; and
- meets an overall check for reasonableness and completeness.

1.2 Existing Funding for MRN

In accordance with TransLink's *2012 Supplemental Plan*, funding available to municipalities for operations, maintenance and rehabilitation (OMR) of the MRN is \$14,355 per lane-km with no requirement for municipalities to provide any proportion of matching funding. In addition, a total of \$20 million has been allocated to support capital upgrades, which are cost-shared 50-50 between TransLink and each municipality. Of the \$20 million, Richmond is eligible to receive up to \$1,849,500 based on the allocation criteria of the percentage of MRN lane-kilometres in the municipality, and the municipal share of population, employment and regional travel growth over the 1999-2006 period. In November 2011, Council endorsed the submission of four (4) road improvement capital projects that, if approved by TransLink, will fully assign Richmond's allocation for 2012.¹

2. Scope of Major Road Network Review

In 2010, TransLink initiated a review of MRN funding criteria with the objective of aligning MRN capital funding with the MRN goals to:

- establish an MRN that facilitates intraregional transportation of people and goods, and provides links to provincial highways and other inter-regional transportation modes;
- establish an MRN that connects designated regional town centres and major trip generators;
- optimize the capacity of the MRN for efficient movement of people and goods; and
- provide travel on the MRN that is safe and reliable.

This work included the completion in 2011 of sub-regional MRN reviews in cooperation with municipal staff (with Richmond forming one sub-region) that included the identification of possible MRN additions and deletions, and the identification and prioritization of future minor and major capital MRN projects. Key issues raised by municipalities during the sub-regional review process included the need for:

- increased operations, maintenance and rehabilitation funding;
- a process to add roads to the MRN to reflect new infrastructure/activity centres and changes in traffic patterns and goods movement;
- greater flexibility in funding guidelines and eligible projects to reflect the varying needs of sub-regions, which differ depending on how "built out" is the MRN within the municipality;
- ensuring continuity across municipal boundaries as well as connections across the MRN, particularly for cyclists and pedestrians; and
- recognition and consideration of non-motorized modes.

The outcomes of the sub-regional MRN reviews are being used to update the criteria that define major roads, funding program criteria and MRN operational and maintenance guidelines. In turn, this work will inform the development of a new long-range MRN plan to be integrated with TransLink's *Transport 2045* plan process.

¹ The four projects are: (1) Westminster Hwy widening (Nelson Rd-McMillan Way); (2) Westminster Hwy pedestrian and bicycle improvements (Gilley Rd-Fraserside Gate); (3) Gilbert Road improvements (Lansdowne Road-30 m south of former CP Rail); and (4) installation of video detection cameras at five MRN intersections.

3. Proposed Changes to MRN Funding Programs

In response to the concerns raised by municipalities regarding the funding levels and flexibility of MRN programs, TransLink is proposing changes to be effective in 2013 that:

- increase the amount of operations, maintenance and rehabilitation funding (i.e., the amount provided per lane-km);
- introduce greater flexibility in the use of pavement rehabilitation funding (i.e., ability to use up to 50 percent of the funds for capital projects provided the municipality provides 50 per cent matching funds);
- allocate a proportionally greater amount of capital upgrade funding to “higher growth” municipalities, which includes Richmond;
- combine the capital upgrade funding for MRN and bicycle infrastructure improvements (BICCS program); and
- keep the overall program envelope the same as the 2012 *Base Plan* with the result being that the total combined amount of funding available for MRN and bicycle infrastructure capital upgrades is reduced.

Table 2 identifies the effect of the proposed changes for Richmond by comparing the existing 2012 and proposed 2013 funding allocations. Note that to ensure direct comparison between the two (2) years, the funding available for capital upgrades assumes a total envelope of \$10 million, which is the original amount identified in the 2012 *Base Plan* (versus the actual \$20 million available this year as a result of the one-time approval of the 2012 *Supplemental Plan*).

Table 2: Impact of Proposed Changes to MRN and BICCS Funding

Category	Existing 2012	Proposed 2013	Change
Operations, Maintenance & Non-Pavement Rehabilitation	\$1,092,938 (\$8,375 / lane-km)	\$1,453,770 (\$11,140 / lane-km)	\$360,833 (+33.0%)
Pavement Rehabilitation	\$780,390 (\$5,980 / lane-km)	\$1,038,780 (\$7,960 / lane-km)	\$258,390 (+33.1%)
Sub-total OMR Funding	\$1,870,718 (\$14,335 / lane-km)	\$2,492,550 (\$19,100 / lane-km)	\$619,223 (+33.1%)
Capital Upgrade MRN Allocation	\$924,750		
Capital Upgrade Bicycle Infrastructure Allocation	\$140,600	\$856,000	-
Sub-total Capital Upgrade Funding	\$1,065,350	\$856,000	-\$209,350 (-19.7%)
Total	\$2,938,678	\$3,348,550	\$409,873 (+14.9%)

The effect of the proposed changes is that Richmond would receive a lower amount of base funding for capital upgrades for the MRN and bicycle facilities, which is more than off-set by increased funding for OMR such that the City would be eligible to receive up to an additional \$410,000 in annual funding under the proposed changes. Moreover, up to 50 per cent of the increased pavement rehabilitation funding (i.e., up to \$519,390) can be used towards capital upgrades. Thus, the City would have the flexibility to increase the proposed lower base amount of capital upgrade funding as desired.

Staff support the proposed funding changes as:

- the net effect is that the City is eligible for up to an additional \$410,000 in annual funding;

- the City has greater flexibility in the allocation of the total funding between capital upgrades and OMR; and
- the increased funding available for OMR is appropriate as Richmond’s MRN roadway sections are approaching ultimate build-out and, as such, a greater proportion of funding will be required to maintain the infrastructure as it ages.

4. Proposed Roadway Sections in Richmond to be Added to the MRN

In the upcoming review of MRN additions to be submitted by municipalities, TransLink proposes that the network could increase by up to 10 per cent in lane-kilometres (i.e., approximately 230 lane-kms) each year based on municipal requests. The criteria for the inclusion of a roadway in the MRN will comprise the existing criteria (as listed in Section 1) plus a new criterion yet to be defined that measures the people moving capacity of the roadway to provide consistency of the collective criteria with the provincial legislation that governs TransLink.

As noted in Section 2, staff identified a number of possible MRN additions as part of the sub-regional MRN review and, in preparation for TransLink’s process for such additions, staff are now seeking formal Council endorsement of the list of proposed roadway sections. Table 3 below identifies each proposed road section and the rationale for its inclusion in the MRN, which typically is related to goods movement and/or transit service. See **Attachment 1** for a map of the proposed additions.

Table 3: Richmond Roadway Sections Proposed for Addition to the MRN

Roadway		Between	Est. Lane-Km	Rationale for Inclusion
Knight St-Hwy 91-Crestwood Loop	Bridgeport Road	Knight Street and No. 6 Road	3.00	<ul style="list-style-type: none"> • high traffic volumes in peak hour and peak direction • connection to Knight Street truck route • access to Crestwood business parks • connection to Highway 91 • eliminate gap in MRN via connection between Knight Street and No. 6 Road
	No. 6 Road	Bridgeport Road and Westminster Hwy	2.50	
	Westminster Highway	Knight Street and No. 6 Road	1.60	
Riverport Industrial Area	Steveston Highway	Highway 99 and No. 6 Road	3.20	<ul style="list-style-type: none"> • high truck traffic volumes • access to industrial land uses (Fraser Wharves and Fraserport)
	No. 6 Road	Triangle Road and Steveston Hwy	0.70	
	Triangle Road	No. 6 Road and east end of roadway	2.20	
Fraserport Industrial Area	Nelson Road	Westminster Hwy and Blundell Road	5.20	<ul style="list-style-type: none"> • high truck traffic volumes • access to industrial land uses (Fraserport) • connection to Highway 91
	Blundell Road	Nelson Road and No. 7 Road	6.90	
Brighthouse Station	No. 3 Road	Westminster Hwy and Granville Ave	3.30	<ul style="list-style-type: none"> • high transit traffic volumes • access to future Brighthouse transit exchange

Roadway		Between	Est. Lane-Km	Rationale for Inclusion
No. 5 Road Institutions	No. 5 Road	Westminster Highway and Steveston Highway	16.00	<ul style="list-style-type: none"> high traffic volumes in peak hour and peak direction access to institutions that are regional destinations
Bridgeport Station	Great Canadian Way	River Road and Sea Island Way	2.60	<ul style="list-style-type: none"> high transit traffic volumes access to Bridgeport transit exchange and park-and-ride access to existing and future bus only lanes on Highway 99 access to industrial riverfront
	River Road	Great Canadian Way and No. 3 Road	0.40	
	No. 3 Road	Sea Island Way and River Road	0.40	
Frequent Transit	Springmont Drive	Williams Road and Steveston Highway	1.80	<ul style="list-style-type: none"> high transit traffic volumes
Connection to Future Hwy99-Blundell Rd Interchange	No. 6 Road	<i>Westminster Hwy and Blundell Road</i>	3.30	<ul style="list-style-type: none"> <i>high traffic volumes in peak hour and peak direction</i> <i>high truck traffic volumes</i> <i>road connections to future Highway 99 / Blundell Road Interchange</i> <i>access to industrial land uses (Fraserport)</i>
	Blundell Road	No. 2 Road and No. 6 Road	23.00	
		No. 6 Road and No. 7 Road	3.30	
	No. 3 Road	<i>Granville Ave and Blundell Road</i>	3.20	
Total Proposed Additional Lane-Kms			49.90	
Total Proposed Additional Lane-Kms upon Completion of Future Road Improvements			32.80	

Note: Roadway sections in italics would be requested to be added upon completion of future road improvements (i.e., Highway 99/Blundell Road Interchange and extension of Blundell Road from No. 6 Road to No. 7 Road).

TransLink is anticipated to initiate the process to consider MRN additions and deletions in Summer 2012. At this time, it is not known when the City may receive approval for any roadway sections requested to be added to the MRN.

Financial Impact

None. Should any requested roadway sections be added to the MRN, the additional funding from TransLink will be reflected in future operating budgets.

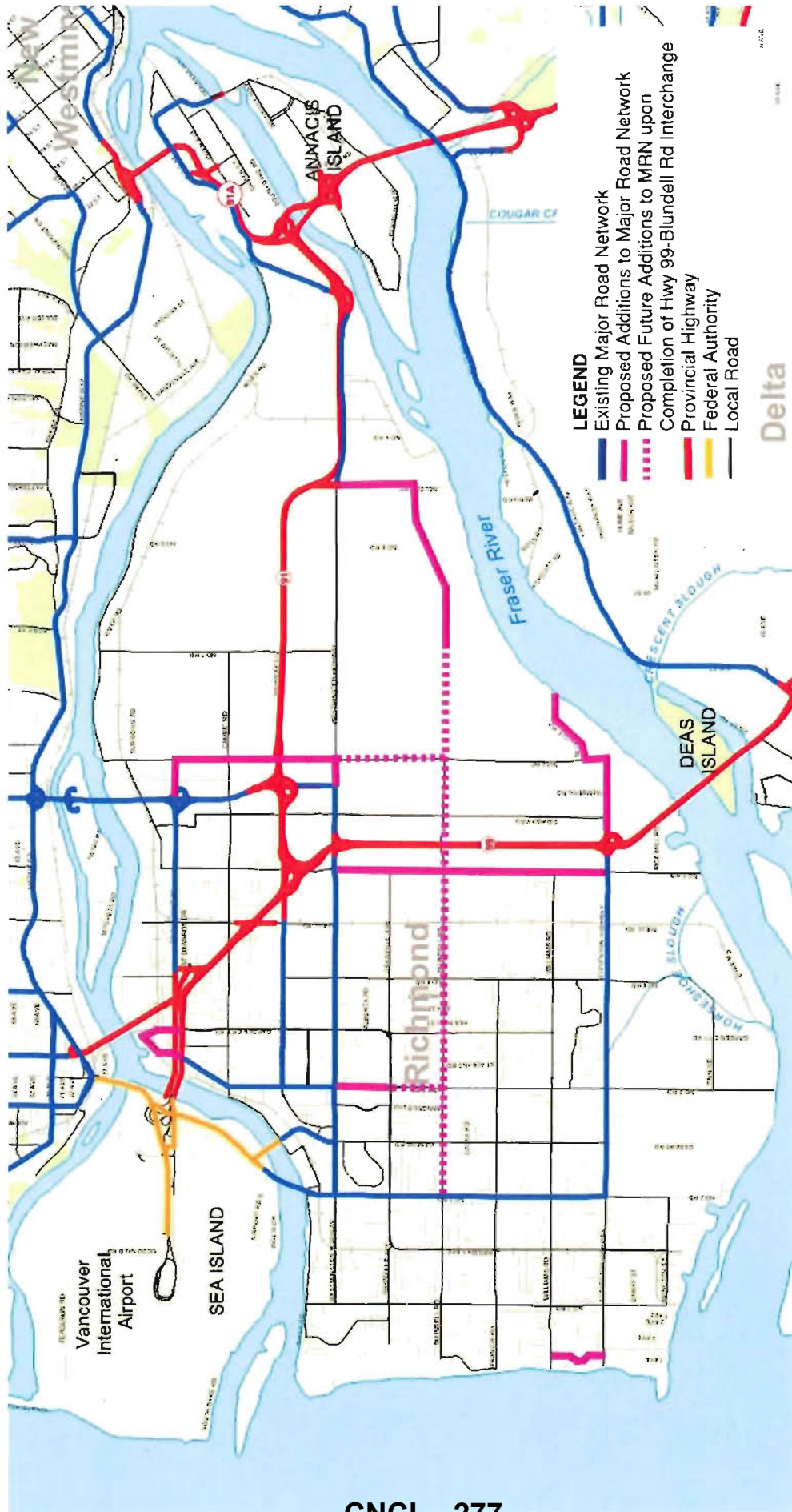
Conclusion

TransLink has approved changes to the management and funding of its Major Road Network (MRN), which include a new process to increase the size of the MRN by up to 10 percent in lane-kilometres annually based on requests from member municipalities. As part of the MRN review process, staff identified a number of new roadway sections to be added to the MRN. To facilitate TransLink's forthcoming process to consider additions to the MRN, staff are now seeking formal Council endorsement of the identified road sections in Richmond for future inclusion in the MRN.



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Existing and Proposed Major Road Network Roadway Sections in Richmond



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