



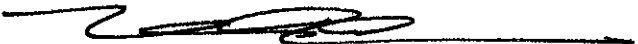
City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** March 26, 2010
From: Victor Wei, P. Eng.
Director, Transportation **File:** 01-0154-04/2009-Vol 01
Re: **TRANSLINK 2010 CAPITAL PROGRAM COST-SHARING SUBMISSIONS -
MAJOR ROAD NETWORK, BICYCLE INFRASTRUCTURE AND TRANSIT-
RELATED ROAD INFRASTRUCTURE**

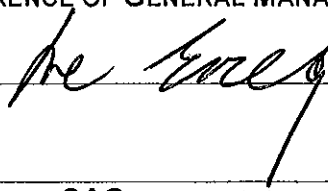

Staff Recommendation

1. That the submission of:
 - (a) road and traffic signal improvement projects for cost-sharing as part of the TransLink 2010 Major Road Network (MRN) Minor Capital Program,
 - (b) bicycle facility improvements for cost-sharing as part of the TransLink 2010 Bicycle Infrastructure Capital Cost-Sharing Program, and
 - (c) transit facility improvements for cost-sharing as part of the TransLink 2010 Transit-Related Road Infrastructure Program,as described in the attached report, be endorsed.
2. That, should the above submissions be successful, the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the funding agreements.
3. That the City send a letter to TransLink requesting that the update of the Richmond Area Transit Plan commence as soon as possible to help guide the City's planning and implementation of transit-related infrastructure improvements.
4. That the additional funds required to construct the Minoru Boulevard Bike Lanes project be sourced from surplus funds in Project No. 41207 (Canada Line Bridge Cycling Connections).



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

Att: 2

FOR ORIGINATING DIVISION USE ONLY					
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"/>				
REVIEWED BY TAG	YES <input checked="" type="checkbox"/> <i>MX</i>	NO <input type="checkbox"/>	REVIEWED BY CAO	YES <input checked="" type="checkbox"/> 	NO <input type="checkbox"/>

Staff Report

Origin

TransLink provides shared funding for improvements to road, bicycle and transit-related facilities through the following 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.
- Transit-Related Road Infrastructure Program (TRRIP): funding for roadway infrastructure facilities required for the delivery of transit (bus-based) services in the region.
- 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.

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 2010 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 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

* As part of the proposed cost-share application for the Nelson Road-Highway 91 Interchange project described further in Section 1.2, TransLink recently approved the removal of Westminster Hwy between No. 6 Road and Nelson Road from Richmond's components of the MRN upon completion of the Nelson Road Interchange by March 31, 2011.

TransLink funding available for the 2010 MRN Minor Capital Program is \$20 million, which is allocated to municipalities based on criteria related to 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. Based on these criteria, Richmond is eligible to receive up to \$1,860,000 in block funding in 2010. However, this annual block funding is anticipated to be reduced by 50% to \$930,000 in 2011 and beyond per TransLink's *10-Year Transportation Plan* approved in November 2009. Any unused allocated funding for municipalities is put towards

cost-sharing of major projects of regional priority; at the time of writing, the amount of funding in the regional needs pool for 2010 is estimated to be less than \$7.4 million.

1.2 Submissions to 2010 MRN Minor Capital Program

The City proposes to submit the following projects for consideration to be included in the 2010 MRN Minor Capital Program.

- (a) Nelson Rd-Highway 91 Interchange: City contribution towards the Nelson Road Interchange including the extension of Nelson Road north of Westminster Hwy and intersection widening at Westminster Hwy and Nelson Road. Due to its significance to the regional transportation system, TransLink staff have advised that, if the application is approved, this project would be funded from the regional needs pool of funds as opposed to the funds specifically allocated to Richmond.
- (b) Steveston Highway Improvements: frontage improvements along Steveston Highway between Highway 99 and No. 5 Road associated with the redevelopment of the former Fantasy Gardens site, including additional westbound right-turn and left-turn lanes.
- (c) Gilbert Road-CP Road Intersection Improvements: new traffic signal and road widening on Gilbert Road associated with the development of the Aspac site bounded by Hollybridge Way, River Road, Gilbert Road, and the CP Road.
- (d) Upgrade of Pedestrian Signal Controller Cabinets on MRN: upgrade of pedestrian signal controllers and cabinets including communications hardware/software at six intersections on the MRN as part of the City's upgrade of its central traffic signal system, which will increase efficiency, reliability and consistency of traffic signal operations by providing the capability to monitor and implement 24-hour signal timing adjustments required to increase roadway capacity.
- (e) Westminster Highway Widening (Nelson Rd-McMillan Way): widening from two to four lanes including bike lanes to match the existing cross-section between McMillan Way and the Highway 91 Interchange. The requested amount is the balance remaining from Richmond's allocated amount for 2010 after accounting for the previous three projects (i.e., items (b) through (d)) and represents Year 1 of an anticipated 4-year accrual process. The total City funding of \$1.29M to be accrued represents the City's share of the total \$6.60M cost to widen Westminster Hwy in this section. The federal government is funding the majority (\$4.04M) of the total cost per the City's successful application to the Asia-Pacific Gateway Corridor Initiative for cost-share funding for the combined widening of Nelson Road (Blundell Road to Westminster Hwy) and Westminster Hwy (Nelson Road to McMillan Way). The deadline for the completion of the two projects is March 2014 and staff will bring forth a separate report proposing the City's funding strategy to support the projects.

2. Transit-Related Road Infrastructure Program (TRRIP)

TransLink funding available for cost-sharing under the 2010 TRRIP is \$1 million. As TRRIP has no block funding formula, there is no allocated amount of eligible funding for the City. Projects proposed to be submitted by the City for cost-sharing under the 2010 TRRIP are:

- (a) Bus Stop Upgrades: retrofits to five existing bus stops along various routes to make them universally accessible (i.e., provide a landing pad for wheelchair users); and
- (b) Arterial Road Crosswalk Upgrades: subject to confirming that an upgrade is warranted, provision of enhanced special crosswalk features including pedestrian-actuated overhead flashing amber lights at the following two existing crosswalks: (i) Steveston Highway and Southport Road; and (ii) Gilbert Road and Mang Road.

Staff note that the first Richmond Area Transit Plan (ATP), jointly developed by TransLink and the City, was approved in September 2000 and had a 5-year time horizon. The lack of an updated ATP since that time that would identify specific transit service improvements for Years 1 to 3 as well as priorities for Years 4 and 5 presents challenges in developing a cohesive plan for transit-related infrastructure improvements. As an update to the ATP is now long overdue, staff recommend that the City send a letter to the Chair of the TransLink Board of Directors requesting that the update of the Richmond ATP commence as soon as possible. As of to date, TransLink has not committed on a start date for updating this Plan.

3. Bicycle Infrastructure Capital Cost-Sharing (BICCS) Program

3.1 Submissions to 2010 BICCS Program

Total TransLink funding available to municipalities under the 2010 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 \$140,600 in allocated funding for 2010 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 2010 BICCS:

- (a) Garden City Road-Granville Ave Intersection Cycling-Pedestrian Improvements: addition of a new pedestrian signal to facilitate the movement of southbound cyclists on Garden City Road across Granville Avenue to continue southbound on Garden City Road or eastbound on Granville Avenue including pavement markings and signage. This project would also incorporate improvements (e.g., construction of paved pathway) to accommodate complementary pedestrian movements through the intersection (see **Attachment 1**). Note that the long-term plan is to reconfigure the entire intersection and the City applied for funding support toward such a project as part of the federal government's Building Canada program in 2009. However, that application was not supported and thus implementation of that larger project is not anticipated within the next five years. This current project therefore represents a cost-effective means of immediately improving the environment for pedestrians and cyclists and facilitating the safe movement of these vulnerable road users through this intersection.
- (b) Continuity of Bike Lanes: revision of pavement markings, addition of signage and/or minor curb work to create through bike lanes at intersections on various existing bike routes throughout the city where the bike lane is currently dropped in order to provide a right-turn only lane. Council endorsed this project as part of the Richmond Community Cycling Committee's initiatives for 2010. **Attachment 2** illustrates the existing condition and potential remedial options.

3.2 Submission to 2009 BICCS Program

In 2008, Council approved the submission of the Minoru Boulevard bike route, which includes revision of pavement markings and, where necessary, narrowing of the centre median to create bike lanes between Granville Avenue and Elmbridge Way and a wider curb lane with “sharrows” and “Share the Road” signage between Elmbridge Way and Alderbridge Way. This project, which had an estimated cost of \$113,000 at that time, was subsequently approved by TransLink for cost-share funding under the 2009 BICCS Program. Since that time, staff have completed detailed design and determined that the project now has an estimated cost of \$190,000, primarily due to further median curb work and pavement restoration being identified.

TransLink staff have confirmed that the additional cost of \$77,000 can be cost-shared. Staff propose that the additional City funding of \$38,500 (i.e., 50% of \$77,000), be sourced from surplus funds in the 2008 Bicycle Lane Program (Project No. 41207).

4. Requested Funding and Estimated Project Costs

The total requested funding for the above 2010 submissions to TransLink’s capital cost-sharing programs is approximately \$3.14 million, as summarized in the table below, which will support projects with a total estimated cost of \$36.1 million.

TransLink Funding Program	Project Name/Description	City's Portion & Funding Source	Requested 2010 TransLink Contribution	Estimated Total Project Cost
MRN Minor Capital Program	Nelson Rd-Highway 91 Interchange	\$1,065,000 ⁽¹⁾ 2010 Nelson Road Interchange	\$1,065,000 ⁽¹⁾	\$24,630,000
	Steveston Highway Improvements (Hwy 99 to No. 5 Road)	\$514,000 DCC Credits ⁽²⁾	\$514,000	\$2,541,000 ⁽³⁾
	Gilbert Road-CP Road Intersection Improvements	\$900,000 DCC Credits ⁽²⁾	\$900,000	\$1,800,000
	Westminster Hwy Widening (Nelson Rd to McMillan Way) – Year 1 Accrual	\$403,500 (to be determined in future report)	\$403,500	\$6,600,000
	Upgrade of Pedestrian Signal Controller Cabinets on MRN	\$42,500 2010 Major Capital – Traffic Signal Installation & Major Upgrades	\$42,500	\$85,000
	Subtotal	\$2,925,000	\$2,925,000	\$35,656,000
TRRIP	Existing Bus Stop Upgrades	\$25,000 2010 Transit Infrastructure Program	\$25,000	\$50,000
	Arterial Road Crosswalk Upgrades	\$50,000 2009 Arterial Road Crosswalk Program	\$50,000	\$100,000
	Subtotal	\$75,000	\$75,000	\$150,000
BICCS Program	Garden City Rd-Granville Ave Intersection Cycling Improvements	\$97,700 2010 Miscellaneous Intersection Improvements & 2010 Cycling Network Expansion Program	\$97,700	\$195,400
	Continuous Bike Lanes at Intersections	\$42,900 2009 & 2010 Cycling Network Improvement Programs	\$42,900	\$85,800
	Subtotal	\$140,600	\$140,600	\$281,200
TOTAL			\$3,140,600	\$36,087,200

- (1) The amount requested from TransLink is based on a 50-50 cost-share of the City's funding contribution of \$2.13 million towards the project.
- (2) The estimated amount of DCC Credits is based on preliminary design. The final amount will be based on final approved engineering drawings and actual construction costs.
- (3) The remaining cost of the project (i.e., \$2,541,00-\$1,090,000) will be funded by the developer.

Should the submissions be successful, the City would be required to enter into funding agreements with TransLink. 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 funding agreements.

Financial Impact

The City's portion for these proposed projects are sourced from the approved 2009 and 2010 Capital Programs, which have been previously approved by Council.

The additional funding of \$38,500 for the Minoru Blvd bike project would be sourced from surplus funds in the 2008 Bicycle Lane Program (Project No. 41207). This account funded the construction of the Canada Line Bridge cycling connection, which is substantially complete. To date, \$245,000 has been expensed to this account and staff estimate that the cost of the remaining work is \$30,000 for a total cost of \$275,000. The City will be receiving cost-share grants from the Ministry of Transportation & Infrastructure (\$132,500) plus TransLink (one-half of the balance of \$275,000 less \$132,500, or \$71,250) towards this project such that the City's share of the project will be approximately \$71,250. Therefore, an estimated surplus balance of \$52,000 (i.e., project budget of \$123,225 less \$71,250) would remain in the account.

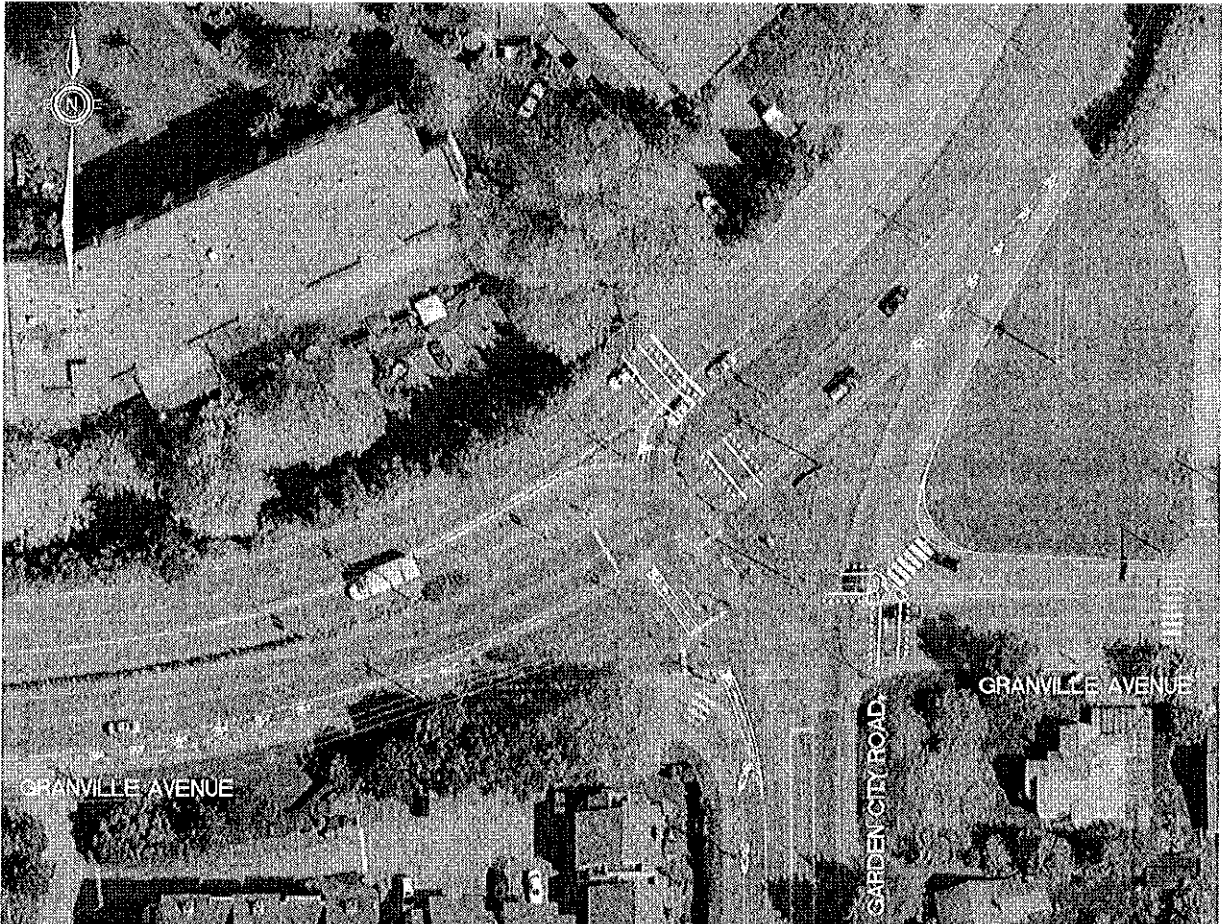
Conclusion

A number of road, bicycle route and transit-related facility improvement projects are proposed for submission to TransLink's various cost-sharing programs for 2010 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 2010 funding and proceed with their implementation and recommends that the City request TransLink to expedite the update of the Richmond Area Transit Plan to facilitate the City's planning of transit-related infrastructure improvements.



Joan Caravan
Transportation Planner
(604-276-4035)

Garden City Road-Granville Ave Intersection: Proposed Pedestrian & Cyclist Improvements



Proposed improvements include:

- new pedestrian signal;
- new crosswalk and crossbike markings;
- new multi-use paved pathway; and
- additional signage and bike stencils to raise the awareness of motorists to the presence of cyclists, particularly at conflict points (e.g., where vehicles cross a bike lane).

**Bike Lanes at Intersections with Right-Turn Lane:
Existing Condition & Options to Facilitate Through Movement of Cyclists**

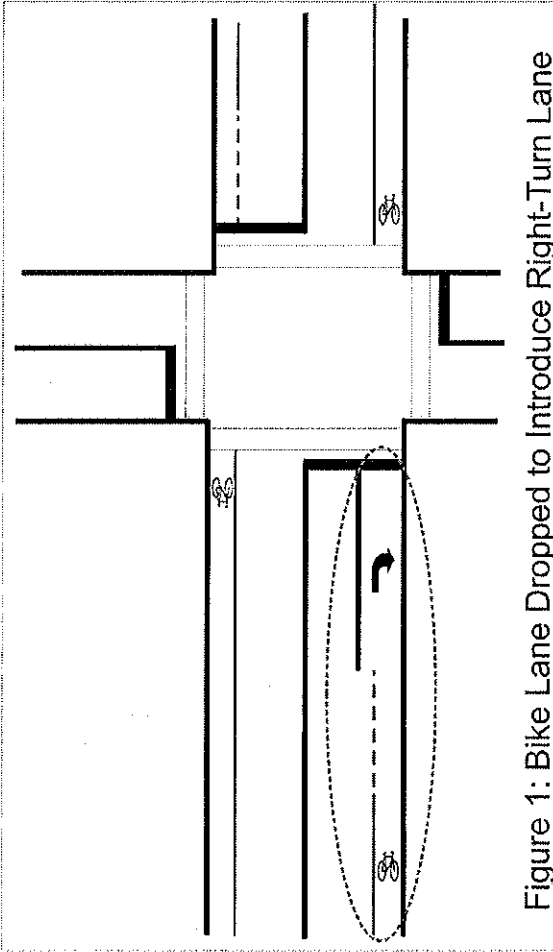


Figure 1: Bike Lane Dropped to Introduce Right-Turn Lane

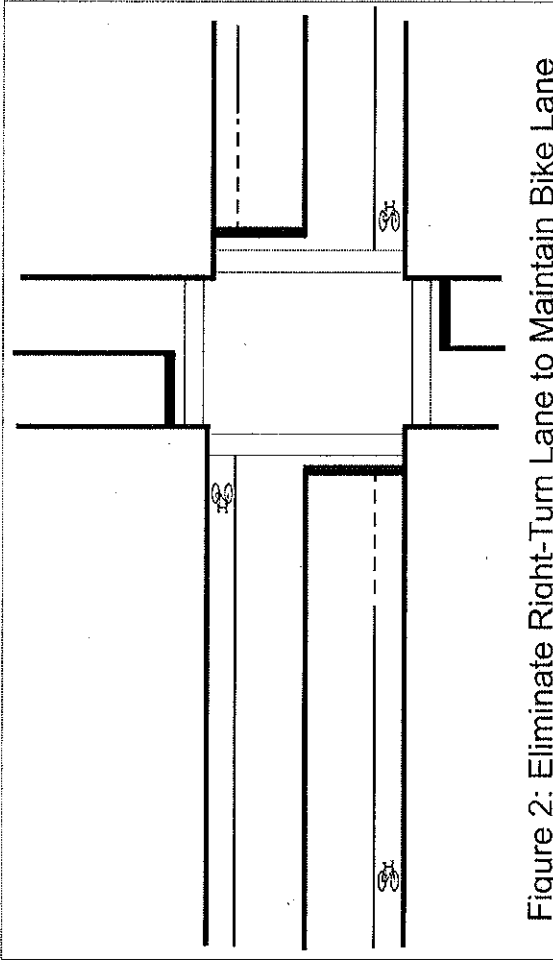


Figure 2: Eliminate Right-Turn Lane to Maintain Bike Lane

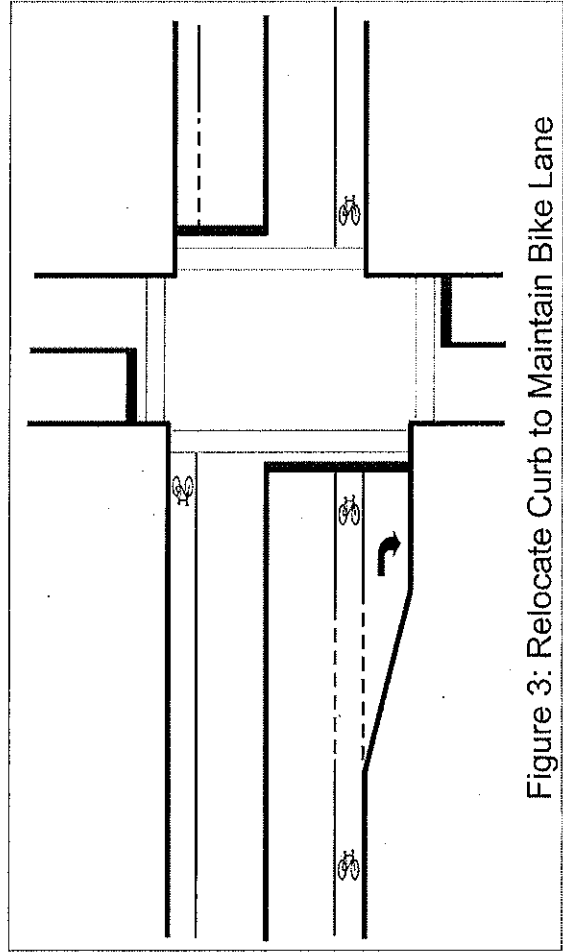


Figure 3: Relocate Curb to Maintain Bike Lane

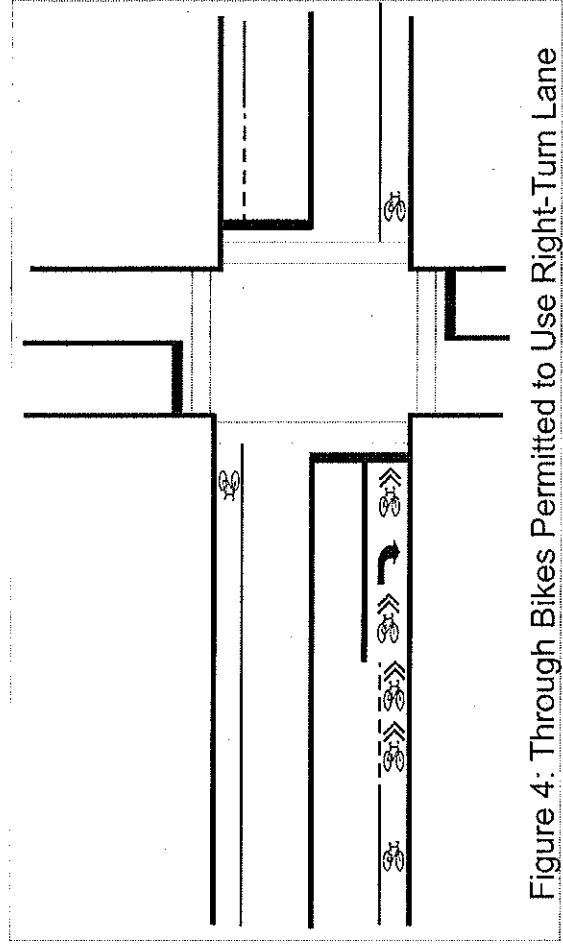


Figure 4: Through Bikes Permitted to Use Right-Turn Lane