



To: General Purposes Committee

Date: June 22, 2009

From: Victor Wei, P. Eng.
Director, Transportation

File: 10-6500-05/2009-Vol 01

Re: **PROPOSED RICHMOND TRANSPORTATION PLAN FOR THE 2010 WINTER OLYMPIC GAMES AND O ZONE**

Staff Recommendation

That the proposed Richmond Transportation Plan for the 2010 Winter Olympic Games and O Zone, as outlined in the attached staff report from the Director of Transportation, be endorsed.

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

Att. 2

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ROUTED TO:	CONCURRENCE		CONCURRENCE OF GENERAL MANAGER
Olympic Business Office	Y	<input checked="" type="checkbox"/> N <input type="checkbox"/>	
Communications	Y	<input checked="" type="checkbox"/> N <input type="checkbox"/>	
Community Bylaws	Y	<input checked="" type="checkbox"/> N <input type="checkbox"/>	
R.C.M.P.	Y	<input checked="" type="checkbox"/> N <input type="checkbox"/>	
Olympic Secretariat.....	Y	<input checked="" type="checkbox"/> N <input type="checkbox"/>	
REVIEWED BY TAG	YES	NO	REVIEWED BY CAO
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Staff Report

Origin

On March 11, 2009, the Olympic & Paralympic Transportation Team¹ (OPTT) for VANOC released the first phase of its 2010 Games-time Integrated Transportation Plan. The plan provides a high level description of the overall Olympic transportation network and outlines how residents, businesses and Games visitors can get around the Greater Vancouver and Whistler areas during the event. In order to support VANOC's goal of staging sustainable games, one of the key messages of the transportation plan is that alternative modes of transportation should be pursued, including walking, cycling, transit, rideshare or carpool, and that public transit would be the most reliable and quickest way to get around.

VANOC is planning to release the next phase of the Integrated Transportation Plan in mid September 2009 and consultation with individual stakeholders and community groups will begin in July 2009. This phase of the plan will also include information pertaining to transportation plans for individual venues, including the Richmond Olympic Oval.

The proposed Richmond Transportation Plan for the 2010 Winter Olympic Games and O Zone (referred hereinafter as the RTP) was developed to ensure consistency with the overall Games-time Integrated Transportation Plan while addressing the common transportation needs for the Oval, the O Zone celebration site and associated activities. To this end, staff have been actively participating in both Oval and O Zone-related joint working teams and the proposed RTP reflects both venues' needs and integration as necessary. VANOC's venue transportation plan for the Oval will thus incorporate elements of the RTP.

This report seeks Council's endorsement of the proposed RTP and upcoming tasks necessary to implement the RTP to support the Oval and O Zone activities during the 2010 Games.

Analysis

1. Oval and O Zone: Site Facts

The site characteristics and planned programming of each venue informed the development of the proposed RTP. Table 1 below identifies the key site facts for each venue.

Table 1. Oval & O Zone Site Facts

Richmond Olympic Oval	O Zone Celebration Site
<ul style="list-style-type: none"> • 33,000 sq m Olympic Speed Skating venue • 400 m speed skating track with 8,000 spectator capacity • venue site for 12 days of Olympic speed skating competition including events such as: 500m, 1000m, 1500m, 3000m, 5000m, and 10000m • situated on banks of the Fraser River's Middle Arm 5 km south of YVR • 20 minute walk from Aberdeen Canada Line Stn • 6 minute walk from closest local transit stop • 15 minute walk to O Zone Celebration Site 	<ul style="list-style-type: none"> • 60 ac Official Celebration Site • features interactive programming, multi media spectacles, headliner entertainment, Holland Heineken House • located at Minoru Park • hours of operation: February 12th to 28th <ul style="list-style-type: none"> ○ Sunday through Thursday: 3pm to 11pm ○ Friday and Saturday: Noon to 11pm • 15 minute walk from Oval • 10 minute walk from Richmond-Brighouse Stn • 25,000 visits per day anticipated over 17 days

¹ The OPTT is comprised of the following member agencies: VANOC, City of Vancouver, Resort Municipality of Whistler, TransLink, BC Transit, City of West Vancouver, City of Richmond, Ministry of Transportation & Infrastructure, Vancouver 2010 Integrated Security Unit.

2. Proposed Richmond Transportation Plan for the 2010 Winter Olympic Games and O Zone

The proposed RTP was developed primarily for the duration of the Oval and O Zone. Using the same principles as the overall VANOC Games-time integrated transportation plan, the RTP was designed with a strong emphasis on utilizing alternative modes of transportation – walking, cycling, public transit, rideshare or carpool – and with public transportation being the primary mode of transportation for visitors travelling to/from both the Oval and O Zone. The key components of the proposed RTP are detailed below.

2.1 Walking

The Oval, O Zone and appropriate Canada Line stations are connected by a network of pedestrian facilities such as sidewalks, paths or trails that are suitable for walking. During the load-in and load-out times of the Oval and O Zone, however, large crowds of visitors are expected that would exceed the capacity of several of the existing pedestrian facilities. As such, enhancements to the following four key pedestrian corridors (**Attachment 1**) have been identified in the RTP linking the appropriate Canada Line stations, Oval and O Zone.

- Aberdeen Station to Oval: with Aberdeen Station being the designated Canada Line station for visitors destined for the Oval, a key pedestrian corridor will be via Cambie Road (from No. 3 Road to River Road) and the Middle Arm dyke trail to the Oval. As the existing south sidewalk along Cambie Road would not be sufficiently wide to accommodate the anticipated volume of pedestrians during the Oval load-in period in mid- and late mornings, it is proposed that the eastbound curb lane be closed to vehicular traffic to accommodate the pedestrian flow.
- Oval to O Zone: after a competition event ends at the Oval typically in mid-afternoon, it is expected that a large number of Oval spectators would visit the O Zone. Again, to accommodate the high volume of pedestrians expected, it is proposed that the following lane closures be implemented along the most direct route between the Oval and O Zone during the Oval load-out period:
 - Hollybridge Way (River Rd to Elmbridge Way): southbound curb lane;
 - Elmbridge Way (Hollybridge Way to Gilbert Road): eastbound curb lane; and
 - Gilbert Road (Elmbridge Way to Azure Road South): southbound curb lane.
- Richmond-Brighouse Station to City Hall: No. 3 Road between Richmond-Brighouse Station and City Hall is anticipated to be a main pedestrian corridor for visitors to the O Zone. As there are existing sidewalks on both sides of No. 3 Road and local buses can unload visitors elsewhere around the O Zone site, this pedestrian corridor is considered adequate without special lane closures during most of the event times. However, in order to accommodate large crowds leaving at the end of a main stage event in the evening, it is proposed that the southbound curb lane on No. 3 Road between Richmond-Brighouse Station and City Hall be closed to vehicular traffic to accommodate pedestrians only on an as-needed basis. This specific movement, like other pedestrian corridors, would be monitored daily.
- City Hall to O Zone: as visitors to the O Zone would be directed to Minoru Park from City Hall, a defined pedestrian corridor would be provided through the City Hall and Richmond RCMP sites and across Minoru Blvd. In order to accommodate large crowds and ensure the safety of pedestrians as they cross Minoru Blvd, it is proposed that both the northbound and

southbound lanes on Minoru Blvd be closed during O Zone hours except for emergency vehicles and public transit in the southbound lanes. Outside of O Zone hours, it is proposed that only the northbound lanes be closed in order to accommodate RCMP requirements for additional vehicle storage, which would be provided in the northbound curb lane, while the southbound lanes would operate for the two directions of traffic, that is, one lane northbound and one lane southbound.

To enhance the safety and walking environment along all the proposed pedestrian corridors, roadside safety barriers and/or barrels would be provided to physically separate the pedestrians from vehicular traffic. In addition, traffic control personnel would be stationed at key locations along the pedestrian corridors to facilitate the safe and efficient movement of pedestrians crossing major intersections while managing conflicting vehicular traffic. Traffic signal timing would also be adjusted as appropriate to minimize impacts on traffic operations and pedestrian movements.

Special Wayfinding & Guidance

Other enhancements may include distinctive wayfinding signage throughout the City Centre area, particularly in areas where hotels are located. For the signage located along the corridors from Aberdeen Station to the Oval and from the Oval to the O Zone, it is proposed that the estimated walking time remaining to the destination be included so that pedestrians are aware of the proximity of the venue. In addition, volunteers are proposed to be stationed at intersections along the four key pedestrian corridors to guide visitors and enhance the overall walking experience. This signage would also add to the Look and Feel of the overall experience as it would be consistent throughout the Games environment.

2.2 Cycling

The RTP identifies cycling as a viable mode of transportation to get to/from the Oval and O Zone. Local cycling routes that serve each venue are:

- Oval: Middle Arm Dyke Trail and Gilbert Road; and
- O Zone: Granville Ave, Gilbert Road, No. 3 Road, and Minoru Blvd.

With respect to the O Zone, existing bike racks are available at Minoru Plaza and Minoru Aquatic Centre. Additional temporary self-serve bicycle racks with weather protection (i.e., tents) are proposed in the following locations at or near both the Oval and O Zone (**Attachment 2**) to support cycling trips and ensure sufficient capacity for end-of-trip facilities:

- Oval: three sites each with a capacity of 100 bikes at the following locations:
 - River Road at Gilbert Road,
 - Middle Arm Dyke Trail at No. 2 Road, and
 - the WorkSafeBC surface parking lot (subject to confirmation).
- O Zone: two sites each with a capacity of 150 bikes at the following locations:
 - Minoru Plaza, and
 - east end of parking lot adjacent to the Gateway Theatre.

Special Wayfinding & Guidance: additional wayfinding signage along the key cycling lanes / trails connecting to both the Oval and O Zone is proposed as well as directional signage to identify the bicycle parking locations.

2.3 Public Transit

As the RTP was developed with a strong emphasis on utilizing public transportation as the main mode of transportation, staff have been working closely with TransLink and Coast Mountain Bus Company staff to ensure adequate service will be provided via the following transit components:

- *Canada Line*: the Canada Line is expected to transport the majority of visitors to/from the Oval and O Zone. TransLink has advised, however, that extension of the operating hours of the Canada Line would not be possible due to nightly maintenance requirements; and
- *Bus Service*: the new/enhanced bus service as part of Coast Mountain Bus Company's Canada Line bus integration plan will include the new C94 community shuttle service between Richmond-Brighouse Station and the Oval and improved frequencies on most local routes, the majority of which serve the City Centre. TransLink will provide an accessible shuttle between Bridgeport Stn and the Oval site for those spectators unable to walk from Aberdeen Stn to the Oval. TransLink staff have also indicated that up to 10 additional buses would be deployed in Richmond to meet additional demand during the Oval and O Zone events. Transit supervisors on site would monitor conditions and dispatch the buses to routes experiencing crowding and passenger pass-ups.

Special Wayfinding & Guidance

TransLink has indicated that it plans to assign Olympic Transit Hosts at the Canada Line stations to offer wayfinding and transit information to passengers during Games-time. Outside the stations, wayfinding signage and volunteers is proposed to direct passengers between transit stops and the Oval and/or O Zone, as noted in Section 2.1. VANOC is working with all its transportation partners in producing a tear off map that will be available for all visitors.

2.4 Special Shuttle Service for Oval-O Zone

As noted in Section 2.1, it is expected that a large number of Oval spectators would set out for the O Zone following the completion of speed skating events at the Oval. While the O Zone is only 1 km (15-minute walk) from the Oval and the majority of attendees are expected to walk, it is recognized that not all attendees may be physically able to walk the distance or may be reluctant to do so if weather conditions are adverse. Therefore, the RTP proposes that a limited number of City-contracted private shuttles be deployed to supplement TransLink's C94 service and transport passengers between the Oval and the O Zone with the following operating characteristics:

- *Pick Up Point*: Lansdowne Road between Hollybridge Way and Gilbert Road;
- *Route*: via Hollybridge Way, Elmbridge Way and Gilbert Road;
- *Drop Off Point*: parking lot adjacent to south side of Gateway Theatre; and
- *Hours of Service*: during event days only for a two-hour period beginning one-half hour before and ending one and one-half hours after the end of an event at the Oval.

Procurement of the shuttle service would be subject to ROBO's O Zone planning / implementation process, sponsorship opportunities and funding availability.

Special Wayfinding & Guidance

Wayfinding signage is proposed to direct exiting Oval spectators to the shuttle stop.

2.5 Park & Ride Lots

Consistent with the VANOC Games-time integrated transportation plan and other venue transportation plans, no venue public parking will be provided at or in close proximity to the Oval or O Zone. To accommodate O Zone visitors needing to drive part of the way, the RTP has identified the need to secure remote park and ride lots that are outside the immediate O Zone area so as to discourage increased traffic volumes in the vicinity of the sites.

The approximate number of stalls required was determined based on the expected daily attendance at the O Zone and estimates for mode split (i.e., percent that will drive versus take transit, bike, walk, etc), the number of passengers per vehicle, and vehicle turnover. Based on these calculations, approximately 3,000 parking spaces would be required. As categorized in Table 2, up to 28 lots have been identified, all of which are on existing transit routes so that O Zone visitors can be transported to/from the park and ride lots via the capacity available on local bus services.

Table 2. Possible O Zone Park & Ride Lots

Potential Park & Ride Site	# of Sites	Weekday Effective Capacity	Weekend Effective Capacity
City Park	3	218	143
Community Centre	6	325	536
Secondary School	9	1,315	1,315
TransLink Park & Ride	2	460	780
Church/Institution	5	586	360
Other Private Lot	3	518	518
Total	28	3,778	4,006

Note: recognizing that the parking lots serve regular daily users, effective capacity was calculated based on the percentage of the total lot capacity estimated to be available for O Zone visitors.

The exact number and locations of the park and ride lots to be provided during the O Zone celebration time is pending future discussion and negotiation with operators and owners. Note that should the City be unable to secure any privately-owned lots (excluding secondary schools), the total number of spaces would still be sufficient to meet expected demand. At this time, the use of privately controlled parking lots would be pursued to provide contingency/overflow demand.

While it is expected that the provision of remote park and ride lots and the removal of venue parking would discourage the majority of visitors from driving to the venue, there may still be some visitors driving to the immediate area of the O Zone that could potentially lead to ad-hoc parking on nearby local residential streets and/or within commercial/mall parking lots. Staff are reviewing means to mitigate this potential issue, from both parking/traffic management and bylaw enforcement perspectives.

Special Wayfinding & Guidance

Advance event promotional information and wayfinding signage is proposed to direct users to the portion of the lot that would be available for the use of O Zone visitors, to the nearest bus stop to the lot and to the nearest alternative park and ride lot, should the lot be full. In addition, volunteers are proposed to be assigned to "regional" lots (i.e., large capacity lots to serve users from outside Richmond) to monitor lot usage and varying capacity during each day. This information is intended to be regularly updated on a web-based communications tool such as TransLink's i-Move website.

2.6 Passenger Loading Zones

As there will be no venue parking for the general public at the Oval or O Zone, passenger loading/unloading zones are proposed to accommodate visitors being dropped off and/or picked up via the designation of selected street for passenger loading/unloading zones as shown in Table 3 (see also **Attachment 2**). The drop-off zones are subject to refinement upon on-going discussion with stakeholders, including VANOC, to ensure that there are no significant negative impacts on the operations. The confirmed locations would be available on the website.

Table 3. Proposed Passenger Pick-up / Drop-off Zones

Mode	Proposed Passenger Loading Zone Location
Private Vehicles	<ul style="list-style-type: none"> • Gilbert Road: east side between Azure Road South and entrance to tennis courts • Granville Ave: north side between No. 3 Road and Gilbert Road • Anderson Road: north side between Buswell St and No. 3 Road • Minoru Blvd: west side between Bay entrance and special crosswalk north of Minoru Gt • Lansdowne Rd (Drop Off Only): south side between Gilbert Rd and Alderbridge Way • Alderbridge Way (Pick Up Only): west side between Lansdowne Rd and Elmbridge Way
Taxis & Limousines	<ul style="list-style-type: none"> • Lansdowne Rd: south side between Hollybridge Way and Gilbert Rd • may also use private vehicle passenger loading zone
Special Oval-O Zone Shuttle	<ul style="list-style-type: none"> • Lansdowne Rd: north side between Hollybridge Way and Gilbert Rd
Private Charter Buses	<ul style="list-style-type: none"> • may use private vehicle passenger loading zone or other off-street parking-lots (subject to further discussion)

Generally, the loading zones would have a time limit of 5 minutes with the exception of the proposed passenger pick up only zone on Alderbridge Way, which would have a time limit of 15 minutes.

Special Wayfinding & Guidance

Temporary signage is proposed to identify the authorized users of each passenger loading zone (e.g., taxis versus private vehicles), the limits of the passenger loading zones and the time limit permitted.

2.7 Taxis and Limousines

The provincial Passenger Transportation Board, which regulates taxicab and limousine licensing in BC, is currently examining means of increasing the availability of taxi and limousine service during the Games period. Options include the temporary removal of licence conditions whereby passenger pick-ups can occur only in specified geographical areas, or issuing a number of new temporary licences, as occurred during Expo 86.

2.8 Traffic Management Measures

To ensure an enjoyable and positive event experience for all visitors as well as provide for the safety, security and convenience of Oval and O Zone spectators and the general travelling public, the RTP proposes a number of special traffic management measures summarized below:

- temporary changes in street use (i.e., lane closures) to create designated pedestrian corridors as noted in Section 2.1;
- temporary on-street loading and unloading zones as noted in Section 2.6;

- required VANOC and VISU (Vancouver 2010 Integrated Security Unit) security and permit check points and associated security road closures in the vicinity of the Oval; and
- temporary local traffic only along Elmbridge Way (Gilbert Road to Westminster Hwy) and River Road (Cambie Road to Gilbert Road) to minimize traffic congestion in the vicinity of the Oval.

The proposed temporary use of roadways is summarized in Table 4 below.

**Table 4. Proposed Temporary Road and Traffic Lane Closures
in Area of Oval and O Zone**

Street/Trail	Section	Type of Closure	Duration of Lane Closure to Traffic
Hollybridge Way	Lansdowne Road to River Road	Total road closure	24/7: February 2-March 1, 2010
	Lansdowne Road to Elmbridge Way	Single lane closure of southbound curb lane	During load-out only from Oval: estimated at 1 hour before and 1.5 hours after end of event*
River Road	No. 2 Road to Hollybridge Way	Total road closure	24/7: February 2-March 1, 2010
Middle Arm Dyke Trail	No. 2 Road to Hollybridge Way	Total closure	24/7: February 4-21, 2010
Cambie Road	No. 3 Road to River Road	Single lane closure of eastbound curb lane	24/7: February 12-28, 2010
Elmbridge Way	Hollybridge Way to Gilbert Rd	Single lane closure of eastbound curb lane	During load-out only from Oval: estimated at 1 hour before and 1.5 hours after end of event*
Gilbert Road	Elmbridge Way to Azure Road South	Single lane closure of southbound curb lane	During load-out only from Oval: estimated at 1 hour before and 1.5 hours after end of event*
No. 3 Road	Richmond-Brighouse Stn to City Hall	Single lane closure of southbound curb lane	During O Zone Hours: on an as-needed basis only
Minoru Blvd	Granville Ave to Minoru Gate	Two lane closure of northbound lanes (Outside O Zone hours)	<u>Southbound Lanes: February 12-28, 2010</u> <ul style="list-style-type: none"> • During O Zone Hours: both lanes except for transit, emergency vehicles and City-related shuttles/coaches • Outside O Zone Hours: open with curb lane for southbound traffic and centre lane for northbound traffic
		Total road closure (During O Zone hours)	<u>Northbound Lanes: February 12-28, 2010</u> <ul style="list-style-type: none"> • 24/7: both lanes with curb lane between Granville Ave and temporary access for RCMP vehicles (immediately south of existing special crosswalk) designated as on-street parking for RCMP vehicles only

* The lane closure may be shortened prior to 1.5 hours after the end of the event if the sidewalks can accommodate the existing pedestrian volumes.

To accommodate the additional traffic demand and changes in street use as noted above, the RTP proposes the following four key categories of traffic management measures (**Attachment 2**):

- notification and signage including variable message boards;
- traffic control personnel and/or RCMP traffic officers (subject to resource availability);

- on-street traffic/parking regulatory, warning and wayfinding signs; and
- traffic signal timing refinement/optimization.

The purpose of these measures is to enhance the safe and efficient operation for all modes of transportation. Further, these traffic management measures would also ensure the effectiveness of the proposed pedestrian corridors and on-street loading/unloading zones, and mitigate the impacts of the road closures, permit checks and changes in traffic operations.

3. Next Steps

The proposed RTP was developed based on the information available to date; however, as more information becomes available (i.e., programming, site lay out, security requirements, etc), the RTP would be refined as necessary. Upcoming next steps include:

- VANOC Venue Transportation Plan Consultation: the RTP would be released to the public in July 2009 with VANOC when it consults with individual stakeholders and community groups;
- VANOC-City Servicing Agreement: the City and VANOC continue to define the scope and terms of the servicing agreement that will identify the responsibilities of each agency;
- Public Open House: it is proposed that the City host one open house in September 2009 to solicit feedback from the public and appropriate stakeholders and refine the RTP as necessary to incorporate the feedback;
- VANOC Integrated Transportation Plan Roll-out: the next phase of VANOC's integrated transportation plan is anticipated in September 2009;
- Procurement of Personnel/Equipment: pursue procurement of required traffic control personnel and related equipment/material necessary to implement the RTP; and
- Refinement of RTP: continue to refine the RTP as necessary to incorporate stakeholder and/or public feedback and as new information becomes available.

Staff anticipate that the planning and design work for the RTP would be finalized by Winter 2009 and the implementation of the RTP would start in late 2009/early 2010 in time for the start of the Games and O Zone. Staff will also continue to report back to Council on any substantial changes to the current scope of the proposed plan prior to its implementation.

Financial Impact

The total cost to implement the RTP is estimated at \$690,000- with \$373,000 (\$195,000 for materials and equipments and \$178,000 for labour) for the Oval-related items and \$317,000 (\$136,000 for materials and equipments and \$181,000 for labour) for the O Zone-related items.

The funding to implement the Oval-component of the RTP is proposed to be from VANOC (through the Servicing Agreement process) and the O Zone-related items from the final budget for the O Zone 2010 Strategic Operational Plan in which over 85% of the above O Zone related transportation costs has been included. The final scope and cost of the RTP will be adjusted if necessary upon determination of the VANOC Servicing Agreement and final budget of the O Zone Strategic Operational Plan.

Upon completion of negotiation with VANOC on the Servicing Agreement, the final cost of traffic management will be presented to Council prior to its implementation.

Conclusion

This report summarizes the key elements of the proposed Richmond 2010 Winter Olympic Games and O Zone Transportation Plan (RTP) developed to support the 2010 Olympic Games and O Zone Celebration site and identifies the key upcoming tasks necessary to implement the RTP in time for the Games.

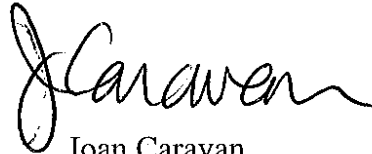
The proposed scope of the RTP seeks to achieve the best balance between ensuring the most positive experience for all visitors to the Games and O Zone as well as all other road users, and the existing available resources and budget.

The RTP would be released to the public with VANOC when it rolls out the next phase of the Integrated Transportation Plan in mid September 2009 and consultation with individual stakeholders and community groups beginning in July 2009. Staff anticipate that the RTP would be refined to incorporate appropriate feedback from the public and stakeholders.

Planning/designing work for the RTP is anticipated to be completed by Fall 2009 with implementation of the RTP starting in late 2009/early 2010 in time for the Games and O Zone.



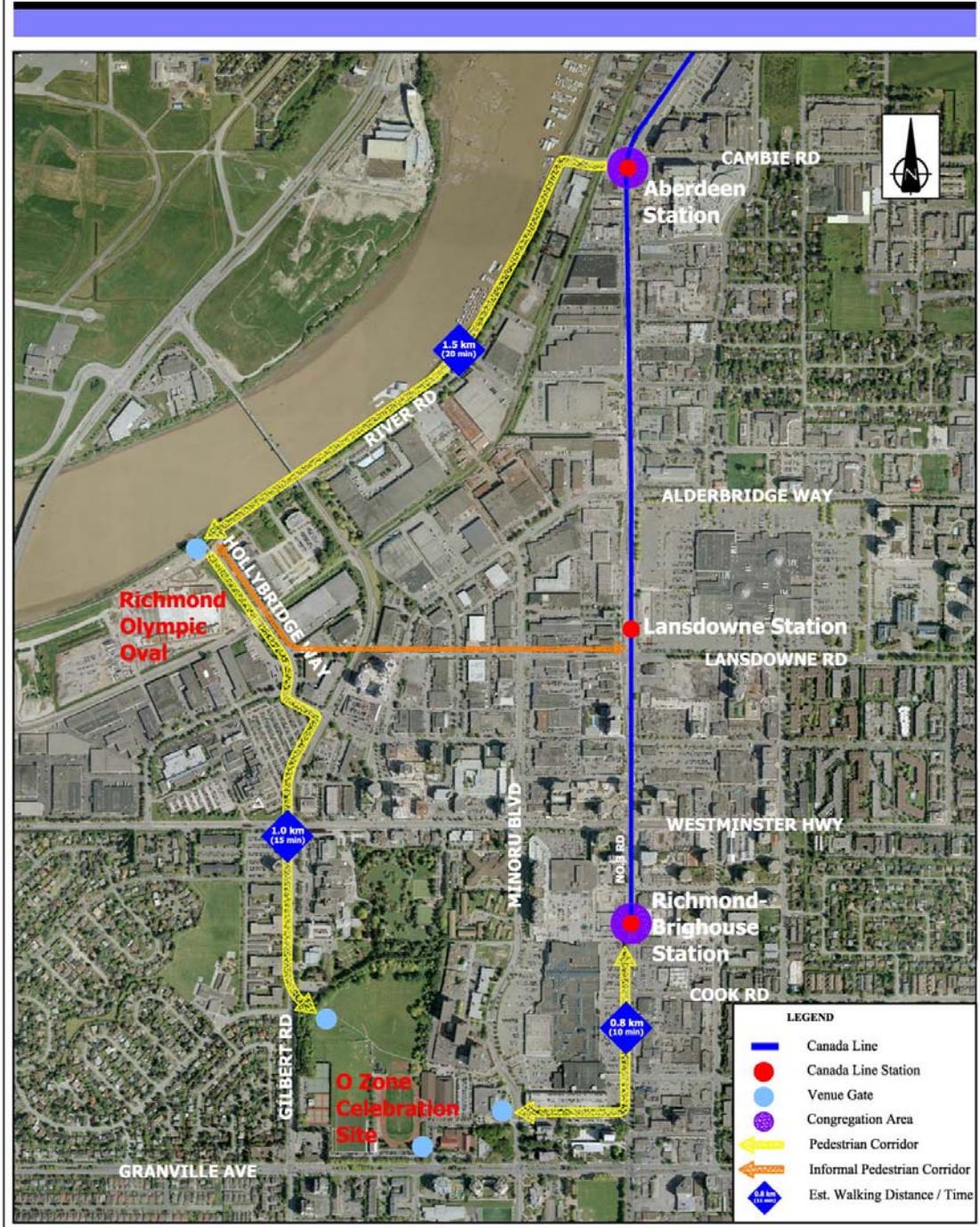
Fred Lin, P. Eng., PTOE
Transportation Engineer
(604-247-4627)



Joan Caravan
Transportation Planner
(604-276-4035)

FL:fl

CITY OF RICHMOND
 TRANSPORTATION PLAN FOR 2010 OLYMPIC GAMES AND O ZONE CELEBRATION SITE
 PEDESTRIAN CORRIDORS



CITY OF RICHMOND
 TRANSPORTATION PLAN FOR 2010 OLYMPIC GAMES AND O ZONE CELEBRATION SITE
 TRAFFIC MANAGEMENT PLAN

