



City of Richmond

Report to Committee

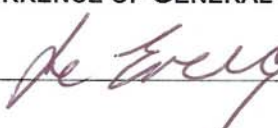
To: Public Works & Transportation Committee **Date:** April 7, 2009
From: Victor Wei, P. Eng.
Director, Transportation **File:** 01-0154-04/2009-Vol 01
Re: **TRANSLINK AND COAST MOUNTAIN BUS COMPANY'S CANADA LINE BUS
INTEGRATION PLAN: COMMENTS FROM THE CITY OF RICHMOND**

Staff Recommendation

1. That TransLink and Coast Mountain Bus Company (CMBC) be advised that the City of Richmond endorses the *Canada Line Bus Integration Plan* in principle and requests that the issues summarized in Section 4 of the attached report from the Director of Transportation be addressed as part of the implementation of the Plan.
2. That the use of sections of Sexsmith Road, Charles Street, Saba Road, and Buswell Street as part of the new routings for bus services to support the *Canada Line Bus Integration Plan*, as described in the attached report, be endorsed.
3. That the proposed transit service plan of the Richmond Skating Oval-Richmond Centre Community Shuttle scheduled for implementation in September 2009 by TransLink and CMBC with the use of sections of Elmbridge Way, Hollybridge Way, River Road, and Lynas Lane, as described in the attached report, as part of the proposed routing of this new community shuttle service be endorsed.
4. That the attached report be forwarded to TransLink and CMBC for their consideration in the finalization of the *Canada Line Bus Integration Plan* for implementation.

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

Att. 2

FOR ORIGINATING DEPARTMENT USE ONLY			
ROUTED TO:		CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Budgets		Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
Engineering		Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
REVIEWED BY TAG	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	REVIEWED BY CAO	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

Staff Report

Origin

On December 10, 2008, Coast Mountain Bus Company (CMBC) staff provided City staff with an overview of the *Canada Line Bus Integration Plan*. As the update of the Richmond Area Transit Plan (ATP) has not yet commenced but is anticipated to begin in Spring 2009, the current proposed *Canada Line Bus Integration Plan* is considered an interim arrangement by CMBC necessary to support the opening of Canada Line in Fall of 2009. The development of the Plan included consultation with the public, including two series of open houses in Richmond, held in April 2008 and January/February 2009.

This report provides comments on the *Canada Line Bus Integration Plan* as well as information on a proposed new community shuttle service to link the City Centre with the Richmond Olympic Oval and Works Yard, which will be introduced upon the opening of the Canada Line in September 2009.

Analysis

1. Canada Line Bus Integration Plan

The proposed *Canada Line Bus Integration Plan* outlines the realignment of bus services to provide access to the Canada Line and maximize the efficiency of both transit modes (see **Attachment 1** for the open house display boards that provide an overview of the Plan). As much of the success of the Canada Line will depend upon convenient access to the train by bus, the Plan is intended to provide a high level of integration of bus facilities into stations to allow for comfortable and convenient transfers. Key elements of the Plan include:

- elimination of redundant bus routes including: #98 B-Line, all express bus services to downtown Vancouver (i.e., #488, #490, #491, #492, #496), the C95 City Centre community shuttle, and the #424, which provides service from Airport Station to the airport;
- re-allocation of the resulting 75,000 annual service hours within Richmond and Vancouver such that virtually all bus routes in Richmond will experience service frequency increases (e.g., from 30-minute to 20-minute mid-day frequency) with only the #404 and the #405 remaining at current service levels given their relatively low ridership; and
- retention of the routing of existing bus services with all local bus routes and some regional services converging in the vicinity of Richmond-Brighouse Station, similar to current operations whereby these same routes converge in the vicinity of Richmond Exchange (i.e., No. 3 Road-Cook Road-Park Road).

While some transit passengers will lose direct service to Vancouver, staff estimate that overall travel times for most customers will improve based on current transit schedules as shown for several sample journeys from Richmond to downtown Vancouver in the following table. Some passengers, however, may experience longer travel times depending on their final destination.

Comparison of Transit Passenger Travel Time
Before and After Canada Line with Bus Integration Plan

Pre Canada Line		Post Canada Line	
Service	Journey Time	Service	Journey Time*
#98 B-Line to Waterfront Stn	45 minutes	Canada Line: Richmond-Brighouse Stn to Waterfront Stn	25 minutes
#488 to Burrard Stn	66 minutes	#401 to Richmond-Brighouse Stn & Canada Line to Waterfront Stn	51 minutes
#492 to Burrard Stn	62 minutes	#402 to Richmond-Brighouse Stn & Canada Line to Waterfront Stn	50 minutes
#496 to Burrard Stn	60 minutes	#410 to Richmond-Brighouse Stn & Canada Line to Waterfront Stn	52 minutes

* - assumes 5 minutes for transfer between bus and the Canada Line, where applicable.

Under the Plan, the local routings and roadways used by bus services in Richmond will remain the same. The only additional roadway sections required for transit service are Saba Road (No. 3 Road to Buswell Street) and Buswell Street (Saba Road to Cook Road) to facilitate bus manoeuvres in the vicinity of the Richmond-Brighouse Station.

2. Public Consultation Feedback in Richmond: January/February 2009

Staff attended all public open houses held in Richmond for the Plan in April 2008 and January/February 2009. CMBC staff also made presentations to the Richmond Chamber of Commerce and to CMBC bus operators based at the Richmond Transit Centre. CMBC provided a summary of the public comments received at the 2009 open houses as highlighted in the table below.

Venue: Brighouse Library Attendance: 420 / Comment Sheets Received: 44	Venue: Steveston Community Centre Attendance: 229 / Comment Sheets Received: 29
Summary of Comments Received	Summary of Comments Received
<ul style="list-style-type: none"> Lack of service over the No. 2 Road Bridge/Dinsmore Bridge to Russ Baker Way and Templeton Station. Improve service on the #410 – especially in the evenings. Increase service to UBC or at least use long buses. Better east/west service is required to reduce or eliminate transfers. Increase service between Steveston and Vancouver/Bridgeport during the evenings. Increase frequency of routes to/from Canada Line stations. 	<ul style="list-style-type: none"> Need to transfer to the train instead of direct bus. Realignment of the bus service penalizes persons with disabilities as transferring is not easy for people with walkers and wheelchairs. Concerned about transferring between bus and Canada Line (i.e., availability of escalators and elevators). The proposed frequency of 12 minutes on the #401 is not enough – it will be full. Improve the frequency of the local routes. Make the C93 more frequent during peak periods.

3. Staff Comments on the Canada Line Bus Integration Plan

Staff provided CMBC staff with preliminary comments on the Plan in January 2009. These comments are summarized here along with the response by CMBC staff and staff's recommendation with respect to the issue.

3.1 Transit Service for Burkeville

With the elimination of the #98 B-Line and all express bus services to downtown Vancouver, there will be a significant loss of transit service for the Burkeville community, as Airport Station will now be served only by the C90 and C92 community shuttle services, both of which will connect to Bridgeport Station. The C90 service will operate only during weekday afternoon peak periods while the C92 service will operate only during weekday morning and afternoon peak periods. Thus, there will be no transit service at Airport Station during mid-days and evenings on weekdays or all day on weekends and holidays.

Response by CMBC: CMBC staff advise that Burkeville residents can access the Canada Line at Templeton Station and that they will monitor service in the area and make improvements if resources are available.

Staff Comments and Recommendation: this station is approximately 1.5 km from Airport Station and it is not clear if a pedestrian connection will be available between Templeton Road and the station. To ensure adequate transit access for Burkeville residents, transit service between Airport Station and Bridgeport Station should be extended to include mid-days and evenings, seven days a week.

3.2 Canada Line Schedules – Late Night and Early Morning

As shown in the table below, a comparison of the schedules for the Canada Line and #98 B-Line between Richmond-Brighouse Station and Waterfront Station indicates gaps in service of up to one hour. To address concerns that #98 B-Line passengers on the first and last buses going to/from Richmond-Brighouse would not have access to transit services when the Canada Line commences operations, staff suggest either:

- (a) extending the train schedules to match the current #98 B-Line schedules (first and last departure/arrivals at Richmond-Brighouse and Waterfront stations); or
- (b) extending the N10 Richmond/Vancouver NightBus schedules to fill the early morning service gaps as shown in the last column of the table.

Station	Canada Line	Existing #98 B-Line	Existing NightBus	Proposed NightBus
Waterfront/ Downtown Vancouver	First Dep: 5:21 am First Arr: 5:45 am	First Dep: 4:51 am First Arr: 4:51 am	First Dep: 2:09 am First Arr: 2:04 am	First Dep: 1:30 am First Arr: 1:45 am
	Last Dep: 1:15 am Last Arr: 1:09 am	Last Dep: 1:12 am Last Arr: 1:44 am	Last Dep: 3:09 am Last Arr: 3:04 am	Last Dep: 3:09 am Last Arr: 3:04 am
Richmond Centre	First Dep: 5:21 am First Arr: 5:45 am	First Dep: 4:15 am First Arr: 5:31 am	First Dep: 1:12 am First Arr: 2:58 am	First Dep: 1:00 am First Arr: 2:58 am
	Last Dep: 12:45 am Last Arr: 1:39 am	Last Dep: 1:07 am Last Arr: 1:50 am	Last Dep: 2:12 am Last Arr: 3:58 am	Last Dep: 2:12 am Last Arr: 3:58 am

Response by CMBC: CMBC staff advise that they propose to extend the N10 service during the early morning period when the Canada Line is not in operation.

Staff Comments and Recommendation: staff support CMBC's response to extend the N10 Night Bus service to cover the period when the Canada Line is not in operation.

3.3 Canada Line Capacity

The Canada Line Richmond-Waterfront branch will provide a headway of 7.5 minutes initially as the concessionaire is permitted to operate at a reduced service level, from the ultimate headway of 6.3 minutes, for up to 24 months from opening. Staff suggest that ridership on the Canada Line be monitored closely to determine whether the full service level should be implemented sooner than the 24 month time period.

Response by CMBC: CMBC staff will forward the comments to TransLink, as CMBC is not responsible for operation of the Canada Line.

Staff Comments and Recommendation: request TransLink and InTransitBC to undertake continuous monitoring of ridership on the Canada Line to determine if the full service level of a 6.3 minute headway between Richmond-Brighouse Station and Waterfront Station should be implemented prior to the end of the 24 month period from opening during which a reduced service level of a 7.5 minute headway will be operated.

3.4 Route #480 to/from UBC

The improved frequency of the #480 UBC service from 6 buses/hr to about 7 buses/hr may not be adequate to accommodate the additional demand including increased demand from Richmond and passengers to/from south of the Fraser River. The passenger loadings on the #480 service should be monitored to determine if the bus frequency should be further enhanced to accommodate the increase in UBC-bound passengers.

Response by CMBC: CMBC staff advise that the proposed service improvements translate to a 29% increase in capacity on opening day. They intend to monitor bus services and collect ridership data through Fall and Winter 2009 for use in fine-tuning bus services in Phase 2 of the Plan to be implemented after the end of the 2010 Winter Olympic Games.

Staff Comments and Recommendation: request TransLink and CMBC to undertake continuous monitoring of all bus routes and collection of ridership data to ensure that scheduled capacity meets passenger demand.

3.5 Timed Transfer Requirement during Off-peak Hours

Personal safety is often cited as a major concern among transit passengers, particularly late evening for passengers transferring from high-frequency train to low-frequency bus service because of the long wait time for the connecting buses. To help address this safety issue, consideration should be given to synchronizing the arrivals/departures of connecting local bus services at the Canada Line stations to meet train arrivals.

Response by CMBC: advise that they intend to coordinate schedules between the two modes as much as possible, particularly at night and other time periods when service frequencies are reduced.

Staff Comments and Recommendation: request TransLink and CMBC to synchronize the arrivals and departures of connecting local bus services and Canada Line train arrivals/departures as much as possible to reduce transfer waiting times.

4. Summary of Concerns and Resulted Recommendations

In summary, based on some of the outstanding issues expressed by Richmond citizens on the proposed *Canada Line Bus Integration Plan* as outlined in the previous section, staff recommend that the City endorses the Plan in principle and requests that the following plan adjustments be made as part of its upcoming implementation:

- (a) extension of transit service between Airport Station and Bridgeport Station to include mid-days and evenings, seven days a week, to ensure adequate transit access for Burkeville residents;
- (b) extension of the N10 Night Bus service to cover the period when the Canada Line is not in operation;
- (c) continuous monitoring of ridership on the Canada Line to determine if the full service level of a 6.3 minute headway between Richmond-Brighthouse Station and Waterfront Station should be implemented prior to the end of the 24 month period from opening during which a reduced service level of a 7.5 minute headway will be operated;
- (d) continuous monitoring of all bus routes and collection of ridership data to ensure that scheduled capacity meets passenger demand; and
- (e) synchronization of arrivals/departures of connecting local bus services and Canada Line train arrivals/departures as much as possible to reduce transfer waiting times.

5. C95 City Centre Community Shuttle and Service to the Richmond Olympic Oval

During early 2009, City staff worked closely with CMBC staff to examine establishing a transit service between City Centre and the Richmond Olympic Oval. At this time, CMBC does not have any spare vehicles to provide a new service to the Oval. However, the existing C95 City Centre community shuttle service will be discontinued per the Plan due to the redundancy of its route with the Canada Line and thus there is an opportunity to re-deploy the C95 as a new regular service for the Richmond Olympic Oval and surrounding neighbourhood.

As part of this process, City and CMBC staff also investigated the option of advancing the discontinuation of the C95 service immediately, which would have enabled transit service for the Oval to begin in April 2009 rather than in Fall 2009 upon opening of the Canada Line. However, as major stakeholders served by the existing C95 route (i.e., River Rock Casino and Kwantlen Polytechnic University) did not support this option and current Oval operations likely would not generate sufficient ridership to justify the switch of areas served, City and CMBC staff jointly determined that the new transit service to the Oval would not commence until the opening of the Canada Line. In the interim, CMBC remains willing to consider supplementary transit service on nearby existing bus routes during special events at the Oval.

The following operating characteristics are proposed for the new community shuttle service connecting the Richmond Olympic Oval and the Canada Line Brighthouse Station.

- Routing: the service would operate between Richmond-Brighthouse Station and the Oval and include service to the City's Works Yard via No. 3 Road, Granville Ave, Minoru Blvd, Elmbridge Way, Hollybridge Way, River Road, Lynas Lane, and Westminster Hwy (see **Attachment 1**).
- Hours of Operation and Frequency: as shown in the table below, the service would operate every 30 minutes from 6:00 am on weekdays, 7:00 am on Saturdays and 8:00 am on Sundays/holidays with service ending at 10:00 pm each night.

Weekdays	Saturdays	Sundays/Holidays
Every 30 minutes 6:00 am - 10:00 pm	Every 30 minutes 7:00 am - 10:00 pm	Every 30 minutes 8:00 am - 10:00 pm

- Road Geometry: the existing geometry of these sections of roadways are adequate to accommodate safe community shuttle operations. CMBC and City staff determined from a field test that the proposed route is feasible from all service and operational considerations.
- Bus Stops: the new service will require the installation of nine new bus stops with landing areas on Minoru Blvd, Elmbridge Way, Hollybridge Way, River Road, and Lynas Lane. Bus stops will be wheelchair accessible where feasible (e.g., lack of required property may prevent provision of an accessible bus stop in the interim).
- Proposed Vehicle Type: the community shuttle will be a fully accessible 24-foot long and 8-foot wide diesel-powered minibus that is equipped with a wheelchair lift and bike rack and has a 24-person capacity (20 seats or 16 seats and two mobility aids plus 4 standees).

6. Update of Richmond Area Transit Plan

The update of the *Richmond Area Transit Plan* (ATP), which will take a broader and longer-term planning perspective of transit service improvements for Richmond, is anticipated to start in Spring 2009. Under the *Canada Line Bus Integration Plan*, the existing routings of all retained transit services will be maintained, which has the effect of directing all local bus services to the Richmond-Brighthouse Station. As part of the ATP update, staff will work with TransLink and CMBC to explore further comprehensive enhancements to the structuring of bus services in Richmond, including addressing any found deficiencies of the *Canada Line Bus Integration Plan* as well as the option of dispersing some of the bus-train transfers to other Canada Line stations to ease bus activity in the vicinity of the Richmond-Brighthouse Station. The outcome of the ATP will be presented to Council under a separate report after the 2010 Winter Games.

Financial Impact

The total cost for the City to construct the nine new bus stops, with minor tie-ins to existing sidewalks, is estimated at \$6,000 and is proposed to be funded from the annual Transit Plan Infrastructure Program as part of the City's 2009 Capital Plan recently approved by Council. These bus stop improvements will also be submitted to TransLink for 50/50 cost sharing under TransLink's 2009 Transit Related Road Infrastructure Program. The provision of the community shuttle bus and the associated annual operating costs will be borne 100% by TransLink.

Conclusion

Staff recommend that TransLink and CMBC be advised that the City supports the *Canada Line Bus Integration Plan* provided that a number of specific areas of concerns are addressed as part of the implementation and monitoring of the Plan. Staff also recommend that the proposed new bus routes to serve the Canada Line Richmond-Brighthouse Station and the routing of the planned new transit service connecting the City Centre with the Richmond Olympic Oval and the Works Yard be approved.


 FOR Joan Caravan
 Transportation Planner
 (4035)

Canada Line - Bus Integration

WHAT IS THE CANADA LINE?

- Rapid transit line 19 kms long featuring 16 stations
 - 9 in Vancouver
 - 4 in Richmond
 - 3 in proximity to the Airport (YVR)
- Total travel time end to end = 24 minutes
- Major transit exchanges at Brighthouse, Bridgeport and Marine Drive stations
- Bridgeport Station includes a park and ride facility
- Opening Fall 2009



Canada Line - Bus Integration

SOUTH OF FRASER PROPOSED CHANGES

- All Highway 99 routes, (#311, 351, 352, 354, 601, 602, 603, 604, 620) terminate at Bridgeport Station
- Bus Only Lane (northbound) on Hwy 99 between Westminster Highway and Bridgeport to by-pass Oak St Bridge queue



Canada Line - Bus Integration

BRIDGEPORT STATION

- Largest station in system
- Park and Ride facility
- Terminus for routes #311, 351, 352, 354, 403, 601, 602, 603, 604, 620, C90, C92
- Additional routes serving the station #407, 430, 480



Canada Line - Bus Integration

RICHMOND PROPOSED CHANGES

- Replace all express routes #488, 490, 491, 492, 496 with improved local services to Canada Line
- Improve existing corridor capacities
- Canada Line will replace 98 B-Line, #424 Airport and C95 River Road/Alderbridge routes



Canada Line - Bus Integration



RICHMOND-BRIGHOUSE STATION

- Bus Loop construction delayed
- Interim on-street facility
- Terminus for routes #301, 401, 402, 404, 430, 480, C96, N10
- Additional routes serving the station: #403, 405, 407, 410



Canada Line - Bus Integration



VANCOUVER PROPOSED CHANGES

- Granville, Oak & Main trolley routes extended to Marine Drive Canada Line station
 - Improved service on #10 Granville
 - #15 Cambie/Marine Drive terminate at Cambie and Broadway (pending reinstatement of #17 service)
 - #17 Oak St to return to original route downtown via Cambie Street Bridge (delayed until reinstatement of trolley wire)
- Improved service on #41, 43



Canada Line - Bus Integration



MARINE - CAMBIE STATION

- Terminus for routes #3, 10, 15, 17, N15
- Additional route serving the station: #100
- Improved service on #10 all days of the week
- Improved service on #100 weekdays



Canada Line - Bus Integration

TRAVEL TIMES

- Anticipated improvements to overall travel times including waits and transfers
- Travel reliability may improve as the Canada Line is not affected by traffic congestion
- Estimated time savings (in minutes):
 - Steveston to Hastings and Howe - 14 min.
 - Richmond Centre to Hastings and Howe - 20 min.
 - White Rock Centre to Hastings and Howe - 4 min.



Canada Line - Bus Integration

NEXT STEPS

- Refinement of bus routes and finalizing of schedules
- Implementation of Canada Line - Bus Integration Plan



