



REPORT TO COUNCIL

TO: Richmond City Council
FROM: Councillor Lyn Greenhill, Chair
Public Works & Transportation Committee
DATE: March 9th, 2000
FILE: 6520-02-01
**RE: BROADWAY/LOUGHEED PHASE II RAPID TRANSIT STUDY - ISSUES
RELATED TO PLANNING OF VANCOUVER-RICHMOND RAPID TRANSIT
LINE**

The Public Works & Transportation Committee, at its meeting held on Wednesday, March 8th, 2000, considered the attached report, and recommends as follows:

COMMITTEE RECOMMENDATION

- (1) ***That in the planning and design of the Broadway/Lougheed Phase II Rapid Transit Project, the City of Vancouver and TransLink be requested to support:***
 - (a) **Adopting a rail technology (Skytrain or LRT) for the Broadway West corridor; and that the link be extended at least to Arbutus Street;**
 - (b) **Making provision in the planning and design of the Broadway West rapid transit line to accommodate future direct rail-to-rail connections with the Vancouver-Richmond rapid transit line on key potential corridors (i.e. Cambie Street and Arbutus Street).**
- (2) ***That the importance of retaining the Arbutus corridor be reiterated as a transportation corridor for the possible future development of a rapid transit line between Vancouver and Richmond.***
- (3) ***That Vancouver City Council and TransLink be requested to involve the City in the planning process for the Broadway/Lougheed - Phase II Rapid Transit Project and on other aspects of the project which may have an impact on the planning and design of the Vancouver-Richmond rapid transit line.***
- (4) ***That the above resolutions be forwarded to the Rapid Transit Project office, TransLink, and Vancouver City Council.***

Councillor Lyn Greenhill, Chair
Public Works & Transportation Committee

Attach.

VARIANCE

Please note that staff recommended the following for Part (4):

- (4) That the above resolutions be forwarded to the Rapid Transit Project office, TransLink, and Vancouver City Council for their consideration.

STAFF REPORT

ORIGIN

In late, 1999, the City of Vancouver, TransLink, and Rapid Transit Project office completed a study of options for the second phase of the Broadway/Lougheed Rapid Transit Project between Commercial Drive and UBC. Over the past two months, the public has been consulted by the City of Vancouver on the rapid transit options being proposed for the Broadway corridor. Vancouver City Council will hear delegations on this issue on March 27, 2000, and will subsequently make a recommendation on the alignment and technology choice for the Broadway rapid transit line extension.

On February 28, 2000, as part of the review of the draft Regional Strategic Transportation Plan, Richmond City Council passed the following resolution (among other staff recommendations related to the Strategic Transportation Plan) regarding the Broadway/Lougheed Rapid Transit Project:

"That staff investigate and report to Council, through the Public Works & Transportation Committee on the status of the "Broadway Corridor Study"; and on a possible course of action with regard to the City's input into the study."

This staff report presents a summary of the rapid transit options being examined for the Broadway corridor west of Commercial Drive. In addition, other aspects of this project, including technology choice, extent of line construction, integration with the future north-south line, corridor protection, etc. are also discussed. These aspects of the Broadway line are expected to have significant implications on the planning, design, and operation of the future Vancouver-Richmond rapid transit line.

ANALYSIS**1. Broadway/Lougheed Phase II Rapid Transit Options**

In June, 1998, the provincial government announced its intention to extend the Skytrain system with a new Broadway/Lougheed line connecting the City of Vancouver with Burnaby and New Westminster. Phase I, which is currently under construction, will extend the existing Skytrain system as far west as the Vancouver Community College. Phase II involves two extensions: one between the Phase I project and the City of Coquitlam, and another between Commercial Drive and UBC. In December, 1999, the City of Vancouver, TransLink, and the Rapid Transit Project office completed a study of the following six alternative rapid transit options for the Broadway corridor.

- Rapid Bus between Commercial Drive and UBC;
- Light Rail (LRT) between Commercial Drive and UBC;
- Skytrain between Commercial Drive and Arbutus Street (Rapid Bus to UBC);
- Skytrain between Commercial Drive and Main Street (Rapid Bus to UBC);
- Skytrain between Commercial Drive and Cambie Street (Rapid Bus to UBC); and
- Skytrain between Commercial Drive and Granville (Rapid Bus to UBC).

2. Comments Received from the Public

Richmond staff have been following the public debate in Vancouver on the various rapid transit options during the recent open house events held by the City of Vancouver. The following is a summary of the comments received:

Rapid Bus - The favoured features of this option include: no transfers are required for travel to UBC relative to the rail options, lower capital costs, less impact on neighbourhood, less severe traffic disruption during construction. However, the public does not like the relatively low potential ridership for Rapid Bus compared to the rail options, the lack of ability to expand capacity, and the environmental impact associated with diesel bus (vs. trolley bus) operation.

Light Rail Transit (LRT) - The positive feedback on this technology includes: integration with north-south transit routes, lower cost estimate over the long term compared to Skytrain, the integration with pedestrian and shopping activities, less impact on neighbourhoods, and the lower crime potential compared to Skytrain. However, the public are concerned with the lack of provincial support for LRT, the impact on other road users, the lack of flexibility to increase capacity, traffic disruption during construction, and the noise level.

Skytrain - The public likes: the efficiency of Skytrain, familiarity of the Skytrain technology, the present and future capacity, service reliability, less traffic disruption during construction, lower levels of noise and air pollution, and segregated right of way. People are concerned with the high costs, the need to transfer for passengers travelling west of the terminus of the new line, lack of "interaction with street-level activity", and potential crime and safety issues.

3. Vancouver-Richmond Rapid Transit Route Options

In 1992, a study was conducted by the former BC Transit (under the direction of a steering committee consisting of representatives from Vancouver, Richmond and other agencies) to identify the preferred route and technology for the Vancouver-Richmond rapid transit line. The study concluded that LRT would be the most appropriate technology for Arbutus Street and that either LRT or Skytrain (underground for a portion of the Cambie corridor) would be appropriate for Cambie Street.

In 1993, as part of the development of Transport 2021, three potential rapid transit lines were examined: Vancouver-Richmond, Broadway-Lougheed, and Coquitlam-New Westminster. The Vancouver-Richmond line was identified as the line with the highest ridership projection (7,200 passengers at the "maximum load point" in the a.m. peak hour) in 2006 among the lines considered.

Based on the recent Strategic Transportation Plan prepared by TransLink, a planning study of the alignment and technology for the Vancouver-Richmond line is proposed to begin in 2001. Given the conclusion of the 1992 study and the substantial ridership projections, it would be prudent to make provisions in the planning and design of the Broadway line to ensure that efficient integration with the future Vancouver-Richmond line can be achieved.

4. The Need to Maintain Full Flexibility for the Integration of the Broadway and Vancouver-Richmond Rapid Transit Lines

The technology options (Rapid Bus, LRT, and Skytrain) and alternative points of terminus (Main Street, Cambie Street, Granville Street, and Arbutus Street) for the Broadway line will soon be considered by Vancouver City Council. In terms of the choice of technology, Richmond City Council is asked to convey its support to Vancouver City Council for the selection of a rail technology (Skytrain or LRT) for the Broadway line extension. Furthermore, it is recommended that the Broadway line should be extended west at least to Arbutus Street with a station at Cambie Street (among other stations along the line), and that the planning and design of the Broadway line should provide for full integration with the future Vancouver-Richmond line. The input from Richmond on the technology choice, extent of line construction, and integration requirement is explained as follows:

Choice of Technology - The Rapid Bus option would require passengers to transfer twice to travel between any point east of Commercial Drive and the Vancouver-Richmond line. This option would also not likely have the capacity to accommodate the anticipated volume of passenger transfers from the future Vancouver-Richmond line. For system integration and capacity reasons, it would be extremely important that a rail technology is adopted for the Broadway line.

Westerly Terminus of the Broadway Line - Four end points for the Broadway line using Skytrain are being examined (Main Street, Cambie Street, Granville Street, and Arbutus Street). It is suggested that any options that involve Skytrain operating short of Arbutus Street would significantly compromise the flexibility for future integration with the Vancouver-Richmond line. The Skytrain options that do not extend to Arbutus Street could require passengers to transfer twice between the east-west and the north-south lines.

Planning and Design Issues - Once a decision is made regarding the technology and extent of construction for the Broadway line, convenient passenger transfers from the Vancouver-Richmond line to the Broadway line will need to be considered in the planning and design phase of the project. High passenger transfer volumes can be expected between the two lines at either Cambie Street or Arbutus Street given the significant trip generation along the Broadway corridor. Provisions should therefore be made to ensure that the design of stations will provide for future convenient direct rail-to-rail connections between the two lines.

Staff Recommendation: *That in the planning and design of the Broadway/Lougheed Phase II Rapid Transit Project, the City of Vancouver and TransLink be requested to support:*

- (a) *Adopting a rail technology (Skytrain or LRT) for the Broadway West corridor, and that the line be extended at least to Arbutus Street;*
- (b) *Making provision in the planning and design of the Broadway West rapid transit line to accommodate future direct rail-to-rail connections with the Vancouver-Richmond rapid transit line on both of the potential corridors of Cambie Street and Arbutus Street.*

5. Retaining the Arbutus Corridor for Transportation Purposes

At the February 7, 2000 meeting, Council passed the following resolution regarding the retention of Arbutus Corridor for transportation purposes:

"That Richmond go on record supporting that the Arbutus Corridor of the CPR rail line be retained for transportation purposes, and that our position be forwarded to the City of Vancouver, TransLink and Canadian Pacific Railway."

The 1992 Vancouver-Richmond Rapid Transit study identified both the Cambie and Arbutus corridors as viable options for the development of a rapid transit line. Removing the Arbutus right-of-way as a transportation corridor at this time would practically eliminate any future possibility of establishing rapid transit services along this alignment. It would be prudent to retain the Arbutus corridor for transportation purposes in order that the full range of viable rapid transit alternatives for the Vancouver-Richmond line is protected and remain viable.

Staff Recommendation: *That Council re-iterate the importance of retaining the Arbutus corridor as a transportation corridor for the possible future development of a rapid transit line between Vancouver and Richmond.*

6. City Involvement in Rapid Transit Planning

To ensure that the most efficient service is achieved on the Broadway line and the future Vancouver-Richmond line and that the full range of options are protected, it is important that the City of Richmond be kept involved in the planning process for the Broadway line and be given the opportunity to provide input on aspects of the project which may have an impact on the future Vancouver-Richmond line.

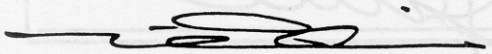
Staff Recommendation: That Vancouver City Council and TransLink be requested to involve the City of Richmond in the planning process for the Broadway/Lougheed - Phase II Rapid Transit Project and on other aspects of the project which may have an impact on the planning and design of the Vancouver-Richmond rapid transit line.

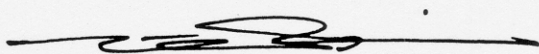
FINANCIAL IMPACT

None at this time.

CONCLUSION

The City of Vancouver will soon be formulating a recommendation regarding the Broadway/Lougheed Phase II rapid transit alignment and technology which will have a major influence on future regional rapid transit network continuity. TransLink is planning to begin the Vancouver-Richmond Rapid Transit Study in 2001. It is recommended that the Vancouver City Council be requested to recommend a rail rapid transit option for the Broadway line extension and that this line be extended at least to Arbutus Street. The choice of a rail technology and extending the line to Arbutus Street will ensure that the full range of options for the Vancouver-Richmond rapid transit line remain available. Making provision in the planning and design of the Broadway line to accommodate future integration with the Vancouver-Richmond line will achieve efficient passenger transfers and meet ridership objectives. Close liaison between Vancouver and Richmond Councils is also encouraged to ensure that efficient integration between the east-west and north-south lines can be achieved.


Victor Wei, P. Eng.
Transportation Engineer


for Tegan Smith, M.C.P.
Transportation Planning Analyst

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