

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE
(TRANSPORTATION AND TRANSIT DIVISION)

HIS WORSHIP, THE MAYOR
AND COUNCILLORS

Re: 1996/97 Annual Service Plan from B.C. Transit

RECOMMENDATIONS:

1. **THAT** Council urge B.C. Transit to proceed expeditiously to implement the transit improvements proposed in the 1996/97 Annual Service Plan.
2. **THAT** a copy of this report be forwarded to Mayor L. Traboulay, Chair, Vancouver Regional Transit Commission and Mr. D. Corrigan, Chair, B.C. Transit.

REPORT

The Traffic and Transportation Committee (Transportation and Transit Division), at its meeting held on 1996 February 14 , adopted the attached staff report evaluating the 1996/97 B.C. Transit Annual Service Plan. Staff advised that the major proposals for service improvements outlined in the 1996/97 Annual Service Plan offer substantial benefits to the transportation system and transit users in Burnaby. The focus of these improvements is directed to upgrading local transit in Burnaby and connections to Vancouver through implementation of the North Burnaby Transit services and a Lougheed Broadway Express Bus service as a precursor to rapid transit.

MEMBERS:

Mrs. Y. Coveney-Boyd
Mr. E. Neumann
Ms. L. Tatangelo
Mr. L. Werden

Respectfully submitted,

Councillor D. Evans
Chairman

: COPY - CITY MANAGER
- DIRECTOR ENGINEERING
- DIR. PLNG. & BLDG.

Councillor J. Young
Member

TO: CHAIR AND MEMBERS 1996 FEBRUARY 12
TRAFFIC AND TRANSPORTATION COMMITTEE
(Transportation and Transit Division)

FROM: DIRECTOR PLANNING & BUILDING OUR FILE: 08.211

SUBJECT: 1996/97 ANNUAL SERVICE PLAN FROM BC TRANSIT

PURPOSE: To advise the Traffic and Transportation Committee of the 1996/97 Annual Service Plan from BC Transit.

RECOMMENDATION:

1. **THAT** the Traffic and Transportation Committee urge B.C. Transit to proceed expeditiously to implement the transit improvements proposed in the 1996/97 Annual Service Plan.
2. **THAT** a copy of this report be forwarded to Mayor L. Traboulay, Chair, Vancouver Regional Transit Commission and Mr. D. Corrigan, Chair, BC Transit.

REPORT

1.0 BACKGROUND

A copy of the draft 1996/97 Annual Service Plan for the Vancouver Regional Transit System is available upon request from the Clerk's Department. Correspondence from BC Transit requests comment from the City of Burnaby by 1996 February 28 in order to be incorporated in the final plan to be submitted to the Commission.

2.0 TRANSIT SYSTEM OUTLOOK

The 1996/97 Annual Service Plan reflects an outlook for the transit system for next year based on three factors:

- ▶ modest growth in employment and work trips,
- ▶ concentration of population and employment growth in the outer suburbs where transit usage is lower,
- ▶ changing age patterns with population growth in the 35-54 age range highly oriented to the automobile.

Based on these trends, the Annual Service Plan forecasts growth in transit ridership of up to 4% in 1996/97. This higher growth is also attributable to completion of the first full year of successful operation of commuter rail service ending in 1996 November, and the introduction of other initiatives part way through the year, including the North Burnaby transit service changes and the Broadway/Lougheed Express Bus.

3.0 GOALS AND OBJECTIVES

The overall goals and objectives of the Annual Service Plan include the following:

- ▶ maintain service quality on existing routes,
- ▶ provide new bus services which are compatible with the private automobile,
- ▶ improve the cost effectiveness of transit services by applying bus priority measures,
- ▶ provide an acceptable level of mobility to the majority of residents in the VRTS,
- ▶ provide new and improved transit services which support the Provincial, regional and municipal transportation and land use goals.

This latter objective would involve new routes which connect regional town centres including Rapid Bus and other express-type services.

4.0 SERVICE IMPROVEMENTS

4.1 North Burnaby Transit Improvements

The implementation of the North Burnaby Transit improvements scheduled for 1995 April was again delayed due to the insufficient number of available hill climbing buses. Introduction of these services is now planned for 1996 September. As BC Transit has recently received 14 new vehicles, further delays to implementation are not anticipated. Appendix A **attached** provides a summary of the North Burnaby service changes.

4.2 Lougheed/Broadway Express Bus Service

The Express Bus service from Lougheed Town Centre to UBC is planned to start in 1996 September. The 1996/97 Annual Service Plan proposes to extend this service from Lougheed Town Centre to Coquitlam Centre along the Lougheed Highway as summarized in Appendix B **attached**. In conjunction with this extended service, bus priority measures would be introduced on the Lougheed Highway including Burnaby. Introduction of the service will not only provide the necessary link from Brentwood Town Centre to Vancouver but is also considered the precursor to rapid transit in the corridor.

4.3 Metrotown to Richmond Centre Bus Route

This proposal identified in the 1995/96 Annual Service Plan is intended to respond to the growing demand for suburb to suburb transit service between Burnaby and Richmond. Appendix C *attached* summarizes the proposal.

4.4 SkyTrain Service

The Annual Service Plan notes that overcrowding has reduced customer satisfaction with peak period service on SkyTrain. Burnaby riders who board at stations midway along the route are often confronted by full or near full trains. The new SkyTrain cars delivered this year are expected to substantially improve service.

The 1996/97 Annual Service Plan makes no provision for the introduction of mini-buses in Burnaby despite a number of representations to BC Transit regarding the need for mini-buses in South Burnaby. Instead, mini-buses are to be applied initially in Surrey and New Westminster.

5.0 CONCLUSION

The major proposals for service improvements outlined in the 1996/97 Annual Service Plan offer substantial benefits to the transportation system and transit users in Burnaby. The focus of these improvements is directed to upgrading local transit in Burnaby and connections to Vancouver through implementation of the North Burnaby Transit services and a Lougheed Broadway Express Bus service as a precursor to rapid transit. The improvements in this Annual Service Plan however must be viewed against the background of difficulties or delays in implementation which have characterized previous Annual Service Plan proposals for Burnaby. In this regard it is recommended that the Traffic and Transportation Committee urge B.C. Transit to proceed expeditiously to implement the service improvements outlined in the 1996/97 Annual Service Plan.


RG/jp

Attachment

copy: City Manager
Deputy City Manager, Corporate Services
Director Engineering


D.G. Stenson, Director
PLANNING & BUILDING

<p>PROPOSED PROJECT:</p>	<p>NORTH BURNABY SERVICE CHANGES</p>
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The North Burnaby service changes were approved by the Commission in the 1994/95 Annual Service Plan. As noted in Section 3.1, they will be introduced in 1996/97 when the required number of hill-climber buses is available.

(I) Concept

The North Burnaby service changes are designed to better meet the transit needs of North Burnaby customers and to support the City of Burnaby's land use policies. The key change is the provision of direct bus service between North Burnaby and downtown Vancouver. Currently, North Burnaby is the only area in the Lower Mainland without direct service to Vancouver. All transit trips between North Burnaby and Vancouver require a transfer at either Kootenay Loop or Boundary Loop, which increases travel times and inconvenience for customers. The service changes proposed for North Burnaby would improve travel times as well as reduce transfers for most customers.

The North Burnaby service changes support two of the Commission's long range service goals:

- **Service Quality:** travel times would be improved and the number of transfers reduced for transit trips between North Burnaby and Vancouver.
- **Regional Role:** local routes in North Burnaby would be restructured to operate north-south, improving transit linkages to destinations within Burnaby including Metrotown and SkyTrain. The service changes also support the City of Burnaby's land use policies.

(II) Product Attributes

The North Burnaby service changes respond to customer demands for improved travel times and convenience (i.e. fewer or no transfers) by:

- providing direct bus service between Simon Fraser University and downtown Vancouver via Hastings Street, to serve the university and downtown Vancouver commuter markets. Since both endpoints of the route are major destinations, this represents optimal route efficiency;
- restructuring local routes to operate north-south within North Burnaby to improve linkages between major activity centres within Burnaby and with SkyTrain.

The marketing program for this project will be targeted to local markets, the SFU community and North Burnaby commuters.

(III) Operational Impacts

To accommodate the North Burnaby service changes, ten additional peak period diesel buses would be required at the Burnaby Depot. Offsetting this would be a savings of five peak trolley buses at the Oakridge Depot, resulting from implementation of the new direct bus route along the Hastings Corridor. Some routes currently originating from the Burnaby Depot may be transferred to other depots due to capacity constraints at Burnaby.

The local portion of the #151 and #152 routes will be extended west from Delta Avenue to Brentwood Mall. As well, stopping procedures for Coquitlam to downtown Vancouver routes will be revised to permit AM pick-up and PM discharge of PNE Park & Ride customers at Hastings and Windermere Street.

(IV) Market Impacts

- increase in market share of the university and commuter markets.
- increase in off-peak ridership resulting from improved access to major shopping and activity centres in Burnaby.

(V) Estimated Impacts

The following impacts assume that the North Burnaby service changes will be implemented in April 1996.

Ridership

Implementation of the North Burnaby changes is estimated to generate 300,000 new riders annually, and 300,000 new riders in 1996/97.

Fare Revenues

Based on the estimated ridership increase and a projected 1996/97 average fare per ride of \$1.30, fare revenues are estimated to increase by \$390,000 in the 1996/97 fiscal year.

Service Hours

The North Burnaby service changes will require a net addition of approximately 10,000 service hours annually. 10,000 additional service hours will be required for fiscal year 1996/97. The overall service changes associated with the North Burnaby Plan will cost approximately 10,000 hours in 1996/97.

Peak Vehicles

Ten additional peak period Hillclimber-type diesel buses will be required at the Burnaby Depot to implement the North Burnaby service changes. There will be an estimated saving of five peak trolley buses at Oakridge Depot.

Operating Costs

The estimated operating cost of the service changes in 1996/97 is \$513,000.

(VI) Summary

The estimated impacts of the North Burnaby service changes are summarized in the following table:

1996/97 CHANGES (From 1995/96 Levels)				
New Ridership	New Fare Revenue	Service Hours	Peak Vehicles	Operating Costs
300,000	\$390,000	10,000	10 buses	\$513,000

<p>PROPOSED PROJECT:</p>	<p>BROADWAY- LOUGHEED EXPRESS BUS</p>
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The Broadway - Lougheed Express Bus service was approved by the Commission in the 1994/95 Annual Service Plan, but deferred due to the shortage of buses available for service expansion. It is now proposed that this service be implemented in September 1996.

(I) Concept

The Broadway - Lougheed Express Bus service will provide customers with a fast, limited stop service between Lougheed Mall and UBC along Lougheed Highway and Broadway. Stops will be limited to 12 to 15 major transfer points in the corridor including Broadway Station, with an average stop spacing of 1.5 to 2 kilometres. The service will be quite frequent, with a bus every 8 to 10 minutes during peak periods and every 10 to 15 minutes in off-peak periods. The proposed hours of operation are approximately 6 a.m. to 8 p.m. on weekdays, and for 10 hours on Saturdays.

The Broadway - Lougheed Express Bus service is to be provided using articulated buses which seat 60 passengers. It is proposed that, in order to speed loading, a proof-of-payment system be used whereby passengers with valid fare receipts (farecards or transfers) could board the bus through all three sets of doors. Fare payment would be enforced using roving fare inspectors.

The service would feature high-quality bus shelters at stops. Subject to reaching agreements with the cities of Vancouver and Burnaby and the Ministry of Transportation and Highways, some priority measures would be implemented along the corridor to speed up the service. These would include designating the curb lanes as bus lanes along Broadway during peak periods, and providing signal priority for buses at some selected intersections along the corridor.

The Broadway - Lougheed Express Bus will offer significant travel time savings to passengers in this major travel corridor: for example, a saving of 10 - 12 minutes for a ride from Broadway Station to UBC compared to the #9 local trolley service. It will also eliminate the transfers currently required at Brentwood Mall and Boundary Loop for customers travelling in the corridor between Lougheed Mall and points west of Boundary Road. The estimated travel time by Express Bus between Lougheed Mall and UBC is 50 - 60 minutes, depending on the extent of bus priority measures in place. The service is therefore highly supportive of the 1996/97 service design objective of decreasing in-vehicle travel times.

This service is part of the Ten Year Development Plan, which calls for the implementation of Rapid Bus service in the Broadway - Lougheed corridor by 1998 as a forerunner to developing a Light Rail Transit (LRT) line in the Broadway - Lougheed - Coquitlam corridor by 2005. The Express Bus service is the first step toward providing a more comprehensive Broadway - Lougheed Rapid Bus service which will feature low-floor articulated buses, on-street ticket machines, advanced customer information and expanded bus priority measures.

(II) Operational Impacts

The Broadway - Lougheed Express Bus service will eliminate the need for the existing #31 Broadway/UBC peak period route between Broadway Station and UBC. Discontinuation of the #31 route will save 4 diesel buses and approximately 4,000 annual service hours. In addition, the #109 route connecting Brentwood Mall and Boundary Loop would be discontinued during peak periods, resulting in a reduction of 2 or 3 peak buses and 2,500 annual service hours.

It is projected that a significant share of passengers using the Broadway - Lougheed Express Bus will be diverted from the existing #9 Broadway trolley route, which will require an adjustment to service levels on this local route. It is proposed that peak

period service on the #9 route would be reduced from the existing 3 to 4 minute frequency to every 5 to 6 minutes and that some service reductions would also be made on Saturdays. This would reduce the trolley requirement on Broadway by 8 - 10 vehicles and save about 12,500 service hours annually over and above the saving realized from the #31 route.

The 15 articulated buses needed for the service would be obtained from the existing fleet of 21 articulated buses, which are currently dedicated to the #160 and #190 suburban express routes between Port Coquitlam and downtown Vancouver. The number of buses required on the #160/#190 will be reduced by six after the implementation of West Coast Express in November 1995.

(III) Market Impacts

A marketing program for the Broadway - Lougheed Express Bus service will be implemented, aimed at developing a unique identity for the service. This will include installation of high-quality bus shelters and special signage at the express stops, and targeted market communications. Key target markets for the service will include UBC students and employees in the Central Broadway urban centre.

(IV) Estimated Impacts

The following impacts are based on the Broadway - Lougheed Express Bus service being introduced in September 1996, part way through the 1996/97 fiscal year.

Ridership

Potential ridership has been estimated by applying the Metropolitan Vancouver Transportation Model. The new service is estimated to carry 3.5 million revenue passengers annually, of which 350,000 will be new transit riders who switch from the automobile. In the 1996/97 fiscal year, the new ridership will be 205,000.

Fare Revenue

Based on the estimated ridership increase and an assumed 1996/97 average fare per ride of \$1.30, fare revenue is expected to increase by \$270,000 in the 1996/97 fiscal year.

Service Hours

The Broadway - Lougheed Express Bus will have an annual net requirement of 30,000 service hours, estimated as follows:

	<u>Annual Service Hours</u>
Broadway - Lougheed Express Bus	49,000
Discontinuation of #31 route	(4,000)
Discontinuation of #109 in peak periods	(2,500)
Adjusted service on #9 route in peak periods	<u>(2,500)</u>
Net Requirement	30,000

The requirement during the 1996/97 fiscal year (seven months of operation) will be 17,500 service hours. In the longer term, there may be opportunities for additional reductions to service levels and hence service hour savings on other routes affected by the Broadway - Lougheed Express route.

Peak Vehicles

The Broadway - Lougheed Express Bus will require 15 articulated buses in peak periods. This will be off-set by reductions of 4 peak diesel buses on the #31 route which will be discontinued, and 3 peak diesel buses on the #109 route which will be discontinued during peak periods. The net requirement will be 8 additional diesel buses in peak periods.

Operating Costs

The estimated increase in operating costs in 1996/97 is \$977,000.

(V) Summary

The estimated impacts of the proposed Broadway - Lougheed Express Bus service are summarized below:

1996/97 CHANGES (From 1995/96 Levels)				
New Ridership	New Fare Revenue	Service Hours	Peak Vehicles	Operating Costs
205,000	\$270,000	17,500	8	\$977,000

<p>PROPOSED PROJECT:</p>	<p>RICHMOND CENTRE TO METROTOWN ROUTE</p>
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(I) Concept

This new peak period bus route would directly link central Richmond to central Burnaby, responding to market demand for faster, more direct transit service in this growing travel corridor. The new route, together with existing intersuburban routes like #410 (Richmond - New Westminster) and #169 (Coquitlam - New Westminster), would play a strategic role in making transit more competitive with the automobile in the fastest growing travel market in Greater Vancouver: suburb-to-suburb travel.

The new route would support two of the Commission's long range service goals:

- Service Quality: travel times would be improved and transfers reduced for transit customers travelling between Richmond and Burnaby;
- Regional Role: the route would help to stimulate transit-friendly growth at two regional town centres - Richmond Centre and Metrotown. This supports one of the goals of the GVRD's proposed Livable Region Strategy which calls for more clustering of population and jobs in the regional activity centres.

(II) Product Attributes

The Richmond Centre - Metrotown bus route would provide local service on its section within Richmond, switching to limited-stop service between the Knight Street Bridge and Metrotown Station. The service would use a standard urban diesel bus, and a two-zone fare would be charged between Richmond and Vancouver/Burnaby. See figure 5.1. Marketing and promotion efforts would be strongly focussed on employers in north Richmond and in the Metrotown area in order to

build awareness and usage of the service by their employees.

(III) Operational Impacts

The new route could be provided by extending the #420 and #421 routes from the current terminus at Knight and Marine to Metrotown Station during peak periods, thereby minimizing additional peak bus requirements and costs.

(IV) Market Impacts

With respect to the market segments it would serve, the new route would:

- provide a faster service for existing transit commuters between Richmond and Burnaby;
- allow transit to increase its current low share of trips between Richmond and Burnaby, which is a significant travel market;
- attract some commuters who now use the automobile.

Transit travel time from Richmond Centre to Metrotown would be reduced by 15-20 minutes over the existing time and would become more competitive with the private automobile.

(V) Estimated Impacts

Ridership

Analysis using the Greater Vancouver Transportation Planning Model estimates that the new Richmond-Burnaby route would attract 320,000 riders annually from other transit routes, chiefly the Richmond suburban express routes, plus 55,000 new riders from the automobile and other modes. By way of comparison, the existing #410 route between Richmond Centre and New Westminster currently carries about 110,000 riders annually.

Fare Revenues

Based on the above estimated new ridership and a projected 1996/97 average fare per ride of \$1.30, fare revenues are estimated to increase by \$72,000 per year.

Service Hours

Assuming that the new route would be created by extending the #420 and #421 routes during the AM and PM peak periods, at a 15 minute headway between Knight & Marine and Metrotown, an estimated 2,800 additional bus service hours would be needed in 1996/97.

Peak Vehicles

It is estimated that the new route, as specified above, would require three additional peak buses.

Operating Costs

Based on an assumed marginal cost for peak period bus service of \$56 per hour, the estimated cost of the new service is \$288,000 per year or \$156,000 for the 1996/97 fiscal year.

(VI) Summary

The estimated impacts of the proposed new intersuburban bus route between Richmond Centre and Metrotown are summarized in the following table.

1996/97 CHANGES (From 1995/96 Levels)				
Ridership	Fare Revenue	Service Hours	Peak Vehicles	Operating Costs
Diverted: 190,000 New: 32,000 Total: 220,000	\$55,000	2,800	3	\$156,000

