



**CITY OF VANCOUVER**

**ADMINISTRATIVE REPORT**

Report Date: October 3, 2006  
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Meeting Date: October 17, 2006

TO: Standing Committee on Transportation and Traffic  
FROM: General Manager of Engineering Services  
SUBJECT: Broadway Corridor Transit Priority

**RECOMMENDATIONS**

- A. THAT Council receive this report for information.
- B. THAT Staff monitor the performance of the bus lanes on Broadway and report the results to Council in the coming year.

**GENERAL MANAGER'S COMMENTS**

Broadway is the region's busiest east-west bus corridor, carrying well over 60,000 transit passengers a day. The priority measures described in this report will be monitored to determine their effectiveness in helping to improve reliability and travel times. Transportation demand on Broadway is, however, fast approaching the ultimate capacity of what can be moved on buses. The extension of the Millennium is urgently needed to further expand capacity.

**COUNCIL POLICY**

The Vancouver Transportation Plan, adopted May 1997, calls for increased transit usage and provides:

- Transit will be given greater priority to meet the needs of increasing demand for transportation across the City, especially in peak times and for journeys to and

within the Downtown. In the future, if required, this may include designating some lanes on some primary arterials for transit only, for all or parts of the day.

In July 2002, Council adopted the Downtown Transportation Plan to improve downtown accessibility and liveability by creating a balanced transportation system.

In June 2005, Council adopted Vancouver UBC Area Transit Plan to improve transit service within and to and from Vancouver and UBC.

## PURPOSE

The purpose of this report is to update Council on progress with regard to implementing transit priority measures on the Broadway Corridor.

## BACKGROUND

The 99 B-Line provides a highly attractive rapid bus service between the Commercial and Broadway Stations of the Millennium and Expo SkyTrain Lines and the University of British Columbia (UBC) bus loop. The service operates along Broadway, between Commercial Drive and Alma Street, and along 10<sup>th</sup> Avenue between Alma Street and UBC.

Broadway is one of the busiest traffic and transit corridors in the Greater Vancouver region. It is also one of the largest trip generators in the region because of the large number of commercial activities located along the route.

On June 29, 2005, Council approved the installation of transit priority measures on the Broadway corridor subject to funding and cost sharing approval. Items included:

1. Installation of bus lanes;
2. Installation of transit signal priority;
3. Introduction of operational improvement measures for Broadway Corridor including all-door loading, improved fare boxes & smart-cards and new scheduling practices;
4. Before and after monitoring for each component to evaluate effectiveness; and
5. Stakeholder consultation prior to implementation.

## DISCUSSION

City staff and TransLink worked cooperatively to move forward on the installation of transit priority measures on the Broadway Corridor. This has involved detailed work on the implementation of bus lanes, signal priority and all-door loading.

### Implementation of Bus Lanes

Bus lanes were proposed on Broadway for use during the am and pm peak hours. These bus lanes are located in the curb lane where parking is currently restricted during peak hours (7 to 9:30 am and 3 to 6 pm). No additional on-street parking was lost and impacts on businesses were minimal. On June 15, 2006, over 7800 letters describing the proposed bus lanes were delivered to residents and businesses along the Broadway Corridor. Staff received 20

responses. Most respondents were seeking clarity on the implementation of the bus lanes. Staff also met with the Mount Pleasant BIA who expressed support for the bus lanes.

The implementation of the bus lanes is estimated to be completed by mid-October.

#### Transit Signal Priority Implementation

Staff are in the process of selecting an appropriate signal system and priority strategy. The time frame for implementation is dependent upon further work by TransLink to review transit priority systems.

#### Articulated Bus All-Door Loading

All-door loading was implemented in 2002 at both terminals on the #99 B-Line route: Broadway Station in the east and UBC Loop in the west. Surveys show that fully loading an articulated bus through the front door takes up to 4.5 minutes whereas all-door loading reduces this to 1.5 minutes. Given the high frequency of service (about every 2 minutes), all-door loading results in a major increase in efficiency.

Coast Mountain Bus Company currently uses auxiliary staff to check fares prior to boarding at both locations. Expanding the all-door concept to additional stops on the #99 B-Line will likely require a 'proof of payment' fare system on the bus. This will give the GVTA the ability to enforce payment through random checking instead of staff having to check every passenger boarding at the stop which is prohibitively expensive. TransLink's new police powers could assist in this. While a specific timeframe has not been identified for expansion of all-door loading on the #99 B-Line, it remains a high priority.

### **MONITORING PERFORMANCE**

Each transit priority measure listed above will be monitored separately to determine its effectiveness in improving transit efficiency along the Broadway Corridor. Key performance indicators for monitoring transit service include headway reliability and transit travel time. Both City Staff and TransLink have developed a set of baseline measurements. Once a priority measure is fully operational and traffic has stabilized, new monitoring will be undertaken to determine its effectiveness. Staff expect the new bus lanes will improve transit operations and reliability, but further data collection is required before any conclusion can be reached.

### **FINANCIAL IMPLICATIONS**

The installation cost for the signs and painting for the bus lanes was estimated to be \$207,000. TransLink will fund the entire cost of the project under its Transit Road Related Infrastructure Program (TRRIP).

## CONCLUSION

City and TransLink staff are working together to introduce transit priority measures on the Broadway Corridor. Together with other projects such as the West Broadway Street Renewal Project and the Broadway/Commercial Transit Village Showcase Project these measures will contribute to enhancing the Broadway corridor for pedestrians and transit users.

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