

CITY OF BURNABY  
TRANSPORTATION COMMITTEE

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*HIS WORSHIP, THE MAYOR  
AND COUNCILLORS*

**SUBJECT: BUS TRAFFIC ON BRIGHTON AVENUE**

RECOMMENDATIONS:

1. **THAT** copies of this report be sent to Ms. Nancy von Euw, 3575 Brighton Avenue; Ms. Judie Robertson, Manager Services Implementation, Coast Mountain Bus Company; Ms. Pura Noriega, Manager Service Planning, Coast Mountain Bus Company; and Mr. Brian Mills, Program Manager Transit Planning, TransLink.
2. **THAT** the City forward ridership data from the next ride-check count of the #110 and #136 to Ms. von Euw, once received from Coast Mountain Bus Company.

REPORT

The Transportation Committee, at its meeting held on 2003 November 17, received and adopted the attached report responding to a letter from Nancy von Euw regarding bus traffic on Brighton Avenue. The report addressed the discrepancy between City traffic counts and those of Mrs. von Euw and explored the service and cost implications of transit service changes proposed by Mrs. von Euw.

The Committee advised that both the #110 and #136 bus routes operating on Brighton Avenue appear to be well utilized because they provide direct service to the Production Way Skytrain Station. The Committee also advised that altering these services through reduced frequencies, smaller vehicles or relocation would have undesirable ridership, cost, and environmental implications.

Respectfully submitted,

Councillor N. Volkow  
Chair

Councillor D. Evans  
Vice Chair

Councillor L. Rankin  
Member

COPY: CITY MANAGER  
DIRECTOR ENGINEERING  
DIRECTOR PLANNING AND BUILDING

**TO:** CHAIR AND MEMBERS  
TRANSPORTATION COMMITTEE

2003 November 06

**FROM:** DIRECTOR PLANNING AND BUILDING

OUR FILE: PL 90100-03

**SUBJECT:** Bus Traffic on Brighton Avenue

**PURPOSE:** To respond to the 2003 June 06 letter from Nancy von Euw regarding bus traffic on Brighton Avenue.

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**RECOMMENDATIONS:**

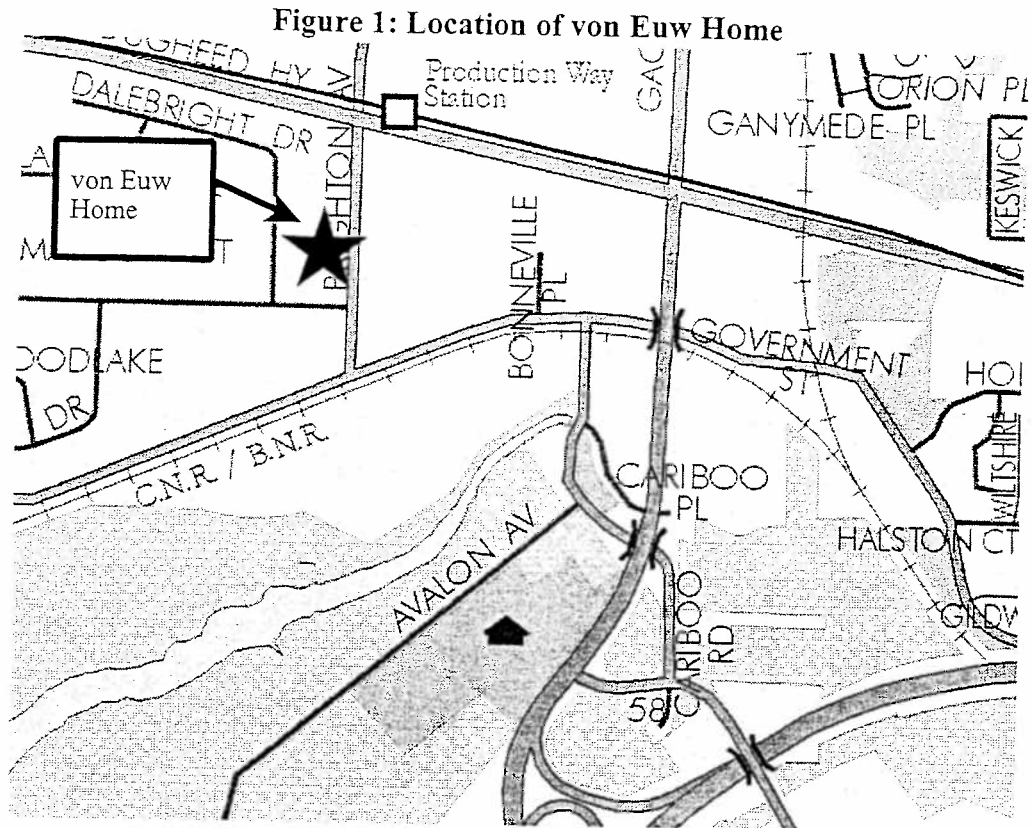
1. **THAT** copies of this report be sent to Ms. Nancy von Euw, 3575 Brighton Avenue; Ms. Judie Robertson, Manager Service Implementation, Coast Mountain Bus Company; Ms. Pura Noriega, Manager Service Planning, Coast Mountain Bus Company; and Mr. Brian Mills, Program Manager Transit Planning, TransLink.
2. **THAT** the City forward ridership data from the next ride-check count of the #110 and #136 to Ms. von Euw, once received from Coast Mountain Bus Company.

**REPORT**

**1.0 BACKGROUND**

On 2002 June 24, Council adopted a report on the Burnaby / New Westminster Area Transit Plan which recommended the use of certain City streets, including Brighton Avenue from Government Street to Lougheed Highway, to accommodate bus integration with the Millennium Line which was then nearing completion. That report included reference to concerns expressed at the time by Nancy von Euw, specifically, "one household on Brighton between Lougheed and Winston was concerned about the cumulative effect of 200 buses a day being introduced to this section of roadway (combined two-way volumes for the #110 and #136)."

The area is illustrated in Figure 1, which also shows the location of the von Euw home. Brighton Avenue is a mixed-use street, with nine homes on the west side and commercial development (primarily a Costco Wholesale outlet) on the east. It provides access to residential and employment areas via Government and Winston Streets.



On 2002 July 10, Ms. von Euw wrote to Council to express her concerns again about the pending route changes. The issues raised in her letter were discussed in a report to Council on 2002 August 12. Among other things, that report indicated that the new buses on Brighton were in the context of “over 12,000 vehicles on a typical weekday” and “a high proportion of truck traffic”. To mitigate the noise concerns, a sign requesting truck drivers to avoid the use of engine brakes was installed on southbound Brighton Avenue, which has a 6% down-grade between Lougheed Highway and Government Street.

On 2002 September 02, the new SkyTrain-oriented bus routes commenced service. This was the most significant overhaul of north Burnaby routes in many years. Prior to this date, the route structure was focussed almost exclusively on major transit exchanges in the town centres. After this date, these major connections were complemented by linkages to the various SkyTrain stations. The re-routings also allowed for new or improved service in previously under-served areas, such as Forest Grove and Lake City.

The new network included a revision of the #110 Lougheed - Metrotown route, and a new #136 Lougheed - Brentwood route. To enhance SkyTrain connectivity, both routes stop at Production Way Station, and both travel on Brighton Avenue between Lougheed Highway

and Government Street. This introduced about 200 buses per weekday onto this section of Brighton Avenue, which previously had none. Weekend bus volumes are on the order of 150 per day.

On 2003 June 06, Ms. von Euw sent an additional letter to Council, questioning some of the information in the 2002 September 02 report and offering three suggestions for reducing bus volumes and/or impact on the subject section of Production Way. The purpose of this report is to respond to her letter.

## 2.0 TRAFFIC VOLUMES

Ms. von Euw indicates that her family conducted their own Production Way traffic counts on 2003 June 03 and 04. Their results indicate daily volumes of 4,750 vehicles (excluding buses), well below the City-counted 12,000. She suggests that the 4,750 figure is actually above-normal, as a result of pavement rehabilitation at the time on Loughheed Highway which, she believes, diverted additional traffic onto Brighton Avenue.

To address the difference between the two counts, the City conducted additional counts in September 2003. These produced average weekday volumes of 11,200. The previously-quoted value of "over 12,000" was from 1994. It appears that weekday traffic on Brighton has declined by about 1,000 vehicles in the last decade. However, the new value of 11,200 is still well above the von Euw estimate of 4,750.

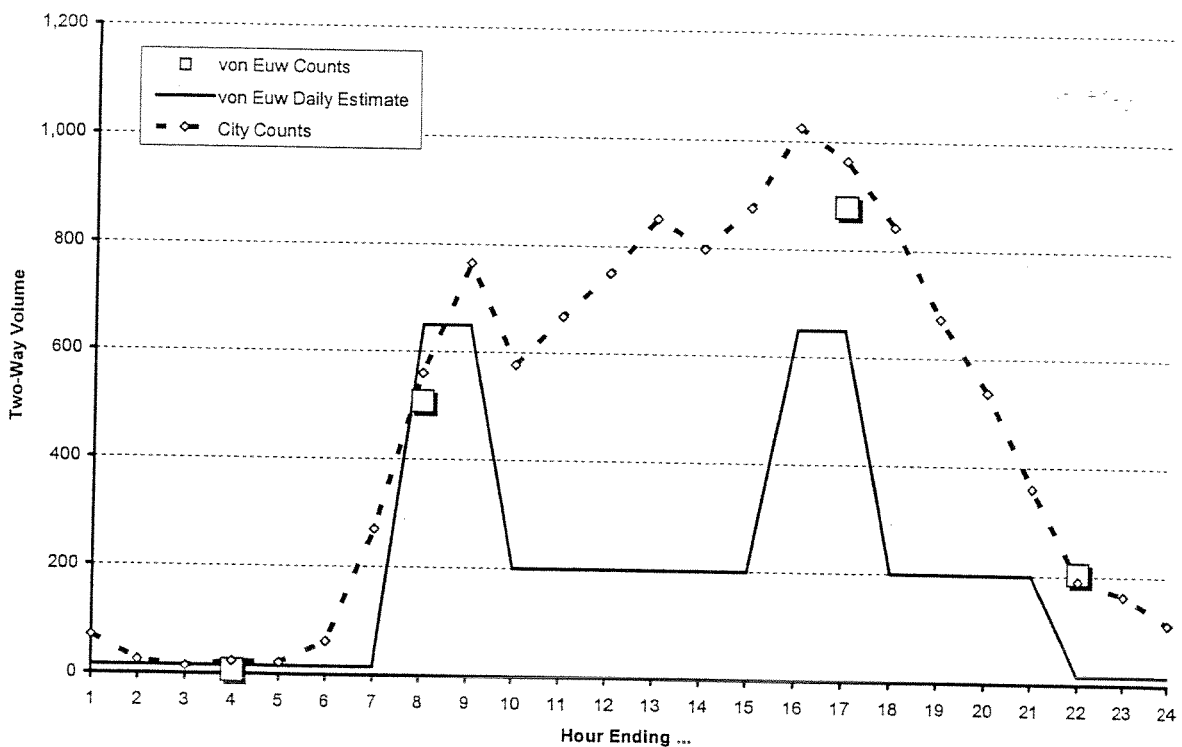
To address this discrepancy, the City reviewed the von Euw counts. A comparison to City results is shown in Figure 2. The von Euw's conducted their counts at four times of day, represented by the four large squares. From this, they inferred the full daily pattern shown by the solid line. The City's all-day count (actually an average of hourly counts from two weekdays) is shown with a dotted line.

Several observations can be made about these counts:

1. **Similar Results.** For the four hours counted by the von Euws, their results are similar to the City counts.
2. **Not Quite the Peak.** The von Euw's "peak hour" counts are off-set slightly from the actual peak hours. As such, they missed the peak traffic loads.
3. **Interpolation.** The von Euws considered that their evening count would be representative of typical mid-day and evening conditions, which it is not. Mid-day and early evening volumes are considerably higher than the estimated 200.

The latest counts by the City included vehicle classification data. It was found that traffic on this section of Brighton Avenue consists of 92% cars, 6% trucks, and 2% buses. Trucks are thus much more numerous than buses. However, as noted by Ms. von Euw, truck traffic tends to be almost exclusively during business hours, whereas bus traffic starts earlier and ends later.

Figure 2: City and von Euw Traffic Counts on Brighton Avenue



### 3.0 TRANSIT RIDERSHIP

Ms. von Euw suggests that the existing bus service is under-utilized. Counts conducted by her family as part of their June vehicle counts indicate average peak-hour loads of 3.5 passengers per bus, and off-peak loads of 1.2. In response, Coast Mountain Bus Company (CMBC) has indicated that:

- They base their planning on “ride-check” counts that encompass the full length of the route, rather than “point-check” counts that are only at one location (such as the von Euw’s counts). This is because a route is not uniformly busy over its entire length, and service levels may be dictated by demands elsewhere on the route.

- They conduct counts primarily in the spring or fall so that counts are less influenced by vacations, school closures, flex days, etc.

They have not conducted counts on the #110 and #136 recently, as they have been waiting for the impacts of U-Pass on North Burnaby travel patterns to become established. They intend to undertake these counts in the spring. This will allow them to review the suitability of the current service.

They do have one “point-check” count for #110. While they caution against taking it as necessarily representing “normal” conditions, it does indicate loads in the range of 22 to 28 passengers, peaking at over 45 passengers on some trips.

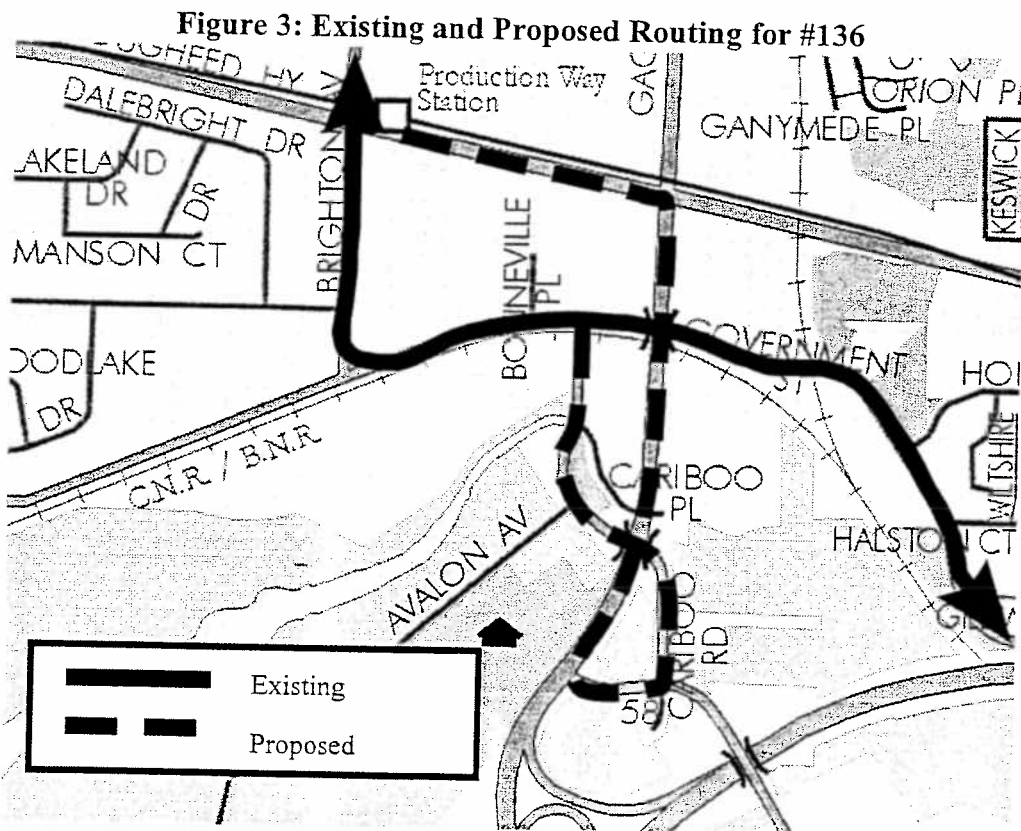
#### 4.0 SERVICE SUGGESTIONS

Ms. Von Euw offers three transit service suggestions to improve the situation for residents of Brighton Avenue. These are discussed below.

1. **Reduced Frequency or Smaller Buses.** Based on her ridership figures, Ms. von Euw suggests that service on the #110 and/or #136 could be provided less frequently, or with smaller buses. CMBC observes that these are long routes (each about 19 kilometres one-way). They cannot reduce frequency of service in this area without reducing frequency on the remainder of the routes. A significant number of patrons would be impacted. These routes are scheduled to meet with other routes at various timing points, and removing these “meets” would result in greater waiting times for patrons. Regarding the suggestion of smaller buses, their limited count data (above) suggest that smaller 24-patron buses could not handle the loads. Greater frequencies would be required, which has cost implications for them.
2. **Reduced Frequency in Early Morning and Late Evening.** The early morning and late evening services are currently operating at 30-minute headways. TransLink Design Guidelines state that “Peak period bus service should provide a service with a minimum frequency of every 30 minutes and midday services should have a minimum frequency of every 30 minutes.” This is considered a very basic level of service. In all of Burnaby, there are only three routes that offer less-frequent service than this. As a result of the relatively low service levels, CMBC has had requests to increase service on these routes.
3. **Re-Route #136.** As shown by the dashed line in Figure 3, Ms. von Euw has proposed that the #136 bus be re-routed via Cariboo Road, Gaglardi Way, and Lougheed Highway. This would not require the elimination of any bus stops, though one stop would have to be relocated slightly.

The extended route would pass primarily next to park lands, as a result of which ridership is unlikely to increase. It would also add approximately 1.2 kilometres to the bus trip in either direction. This adds up to an additional 38,000 vehicle-kilometres per year, so it is not a good solution from the environmental and cost-effectiveness perspectives. CMBC has indicated that this 7% lengthening of the route would add on the order of \$300,000 to their annual operating costs.

In addition, the longer route would add to the travel times for patrons, particularly during peak periods when parts of Cariboo and Gaglardi are very congested. Additional delays would come from needing to cross the mainline of the Burlington Northern Sante Fe railway. The congestion and railway delays would also affect their ability to maintain a reliable, predictable schedule.



## 5.0 CONCLUSION

This report has addressed the discrepancy between City traffic counts and the estimates of the von Euw family. It has also explored the service and cost implications of the transit service changes proposed by Ms. von Euw.

One of the primary objectives of the Burnaby / New Westminster Area Transit Plan was to provide direct and convenient connections to the Millennium Line. Both the #110 and #136 bus routes operating on Brighton Avenue appear to be well-utilized because they provide direct service to the Production Way SkyTrain station. Altering these services through reduced frequencies, smaller vehicles, or relocation would have undesirable ridership, cost, and environmental implications.

The contents of this report have been discussed with Ms. von Euw.



J.S. Belhouse, Director  
PLANNING AND BUILDING

SR/jc

cc: City Manager  
Director Engineering

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