# CITY OF BURNABY

# TRAFFIC AND TRANSPORTATION COMMITTEE (TRAFFIC SAFETY DIVISION)

HIS WORSHIP, THE MAYOR AND COUNCILLORS

# RE: CROSSWALK ON GOVERNMENT STREET AT CARDSTON COURT

#### RECOMMENDATIONS:

- 1. **THAT** Council approve the conversion of the existing overhead illuminated crosswalk on Government Street at Cardston Court to a pedestrian signal at an estimated cost of \$125,000.
- THAT a copy of this report be sent to the Principal and PAC of both Cameron Elementary and Burnaby Mountain Secondary Schools.

#### REPORT

The Traffic and Transportation Committee (Traffic Safety Division), at its meeting held on 2001 February 06, received and adopted the <u>attached</u> report to review pedestrian safety at the crosswalk on Government Street at Cardston Court now that the Burnaby Mountain Secondary School has opened.

The Committee in discussing the report requested that staff be asked to look at alternate sources of funding or reallocation of existing funds so that this project could be undertaken in this calendar year.

Respectfully submitted,

Councillor D. Evans

Chair

Councillor B. Der Vice Chair

Councillor G. Begin Member

:COPY - CITY MANAGER

- DIRECTOR ENGINEERING

- DIRECTOR FINANCE

- DIR. PLNG. & BLDG.

## City of Burnaby

#### **INTER-OFFICE COMMUNICATION**

TO:

TRAFFIC SAFETY COMMITTEE

**DATE:** 2000 11 23

FROM:

ASST. DIRECTOR ENGINEERING,

**FILE:** 55-03-04

TRAFFIC & ENGINEERING SYSTEMS

**SUBJECT:** 

CROSSWALK ON GOVERNMENT STREET AT CARDSTON COURT

**PURPOSE:** 

To review pedestrian safety at the crosswalk on Government Street at Cardston Court

now that the Burnaby Mountain Secondary School has opened.

### **RECOMMENDATIONS:**

- 1. **THAT** the existing overhead illuminated crosswalk on Government Street at Cardston Court be converted to a pedestrian signal at an estimated cost of \$125,000.
- 2. **THAT** a copy of this report be sent to the Principal and PAC of both Cameron Elementary and Burnaby Mountain Secondary Schools.

#### REPORT

#### 1.0 INTRODUCTION

At its meeting of 2000 07 31, Council received a report regarding Burnaby Mountain Secondary and Cameron Elementary Schools Safety and Access Improvements. That report catalogued the various improvement initiatives that were underway, proposed or required further evaluation. The report noted that a crossing warrant review would be conducted on Government to determine whether new demand triggered the need to improve the present crosswalk.

Also discussed was the feasability of relocating this crosswalk south to the intersection of Manchester Drive, as sight lines at the current location offer some area for concern.

## 2.0 BACKGROUND

The existing marked crosswalk on government at Cardston was installed to accommodate movement between the residential enclave in the SE quadrant of the Lougheed/Government intersection and the pedestrian underpass of the Lougheed west of that intersection. Notwithstanding the full signal at Lougheed/Government/Austin the pedestrian underpass is part of the preferred route to the Cameron Elementary School and now the Burnaby Mountain Secondary School as well. The marked crosswalk was installed to marshall pedestrians to one preferred crossing location.

While the present marked crosswalk is at the best possible location on Government, that location is far from ideal. To compensate for alignment difficulties and the nearby signal competing for motorists' attention, the crosswalk has a significantly oversized backlit overhead sign that also provides for additional downlighting of the crosswalk surface. Staff have periodically reviewed the crosswalk in response to concerns expressed (including Committee correspondence). In the past, the crosswalk did not meet warrants for a higher level of protection. Additionally, there was a concern that a pedestrian signal at this location would compromise the operation of the nearby (formerly MOTH) signal on the Lougheed.

# 3.0 CROSSING PROTECTION REVIEW

A recent review of the pedestrian activity at the Cardston Court crosswalk has been completed. The observations included counting pedestrians south of Cardston including jaywalkers and others using the unmarked Manchester crossing. Few of the latter were found. The number of observed pedestrians related to the volume of traffic along on Government Street indicated that a pedestrian signal was warranted as the appropriate level of crossing protection.

Proximity to signalized intersections is an application constraint for locating a pedestrian signal. The Pedestrian Crossing Control Manual of British Columbia specifies the minimum acceptable separation between an existing signalized intersection and a potential pedestrian signal as no less than 200 metres. The preferred minimum separation is indicated as being 400 metres.

In this case, the Cardston Court crosswalk is approximately 120 metres to the south of the Lougheed Highway intersection, while Manchester Drive is an additional 100 metres further south. Applying the requirements for minimum separation, the more appropriate location for a future pedestrian signal along Government Street would be Manchester Drive. However, the Manchester location would not fit with pedestrian desire lines. Furthermore, even at a separation of some 220 metres a tight integration with the Lougheed signal is required.

#### 4.0 COSTS AND FUNDING

Preliminary cost estimates have been completed for the alternative pedestrian signal locations at Cardston and Manchester. The total cost of construction at the Manchester Drive location would be \$150,000. At Cardston Court, the existing crosswalk equipment can be incorporated into a signal conversion. The estimated cost would be \$125,000.

There is insufficient funding available in the Provisional 2001 Capital Budget to undertake construction of this pedestrian signal. It would need to be incorporated in the 2002 Budget.

# 5.0 DISCUSSION AND CONCLUSION

While the location of a pedestrian signal at Cardston is considerably less than ideal so to is the location of a signal at Manchester. The demand for the signal's operation is focussed on school trips and it is believed that its adverse effect on the Lougheed/Government/Austin signal can be further mitigated through tight operational coupling. Notwithstanding the operational concerns the demand for an underpass oriented pedestrian signal cannot be otherwise safely accommodated. Accordingly, staff recommend the conversion of the existing marked crosswalk at Cardston to a pedestrian signal.

P. Liivamagi, P. Eng.

ASST. DIRECTOR ENGINEERING,

PRAFFIC & ENG. SYSTEMS

AE

cc: City Manager

Director Planning & Building



