

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE  
(TRAFFIC SAFETY DIVISION)

*HIS WORSHIP, THE MAYOR  
AND COUNCILLORS*

**RE: TRAFFIC VOLUME AND SPEED ON BURKE STREET**

RECOMMENDATIONS:

1. **THAT** a copy of this report be sent to Mr. Graham Campbell of 4449 Burke Street, Burnaby.

REPORT

The Traffic and Transportation Committee (Traffic Safety Division), at its meeting held on 2000 September 05, received and adopted the *attached* report responding to correspondence regarding traffic volume along Burke Street between Patterson and Willingdon.

Respectfully submitted,

Councillor D. Evans  
Chair

Councillor B. Der  
Vice Chair

Councillor G. Begin  
Member

CC: -CITY MANAGER  
-DIR. ENGINEERING

City of Burnaby

INTER-OFFICE COMMUNICATION

TO: TRAFFIC SAFETY COMMITTEE DATE: 2000 08 03  
FROM: ASST. DIRECTOR ENGINEERING, FILE: 55-01-04  
TRAFFIC & ENGINEERING SYSTEMS  
SUBJECT: Traffic Volume and Speed on Burke Street  
PURPOSE: To respond to correspondence referred to the Committee, concerning vehicle speed and volume along Burke Street between Patterson and Willingdon.

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RECOMMENDATION:

1. THAT a copy of this report be sent to Mr. Graham Campbell of 4449 Burke Street, Burnaby.

R E P O R T

1.0 INTRODUCTION

At the 2000 July 10 meeting of Council, correspondence was received from Mr. Graham Campbell of 4449 Burke Street, Burnaby, voicing concern with the volume and speed of traffic along Burke Street, and the potential hazard for pedestrians. He was especially concerned about the number of children crossing this roadway on route to Inman and Chaffey-Burke Elementary Schools. As a possible solution to the concerns noted above, Mr. Campbell has suggested the City install Speed Humps along Burke Street.

2.0 BACKGROUND

Burke between Willingdon and Patterson is constructed to final standard as a collector street. As the street only has 1.4 km of through continuity (between Willingdon and Boundary) it does not attract commuter "through" traffic. From the limited count history available it

appears that higher traffic volumes on this road are found west Willingdon rather than in the section under discussion. Between Willingdon and Patterson traffic growth has been modest relative to other collector streets (less than 1% per annum since 1991).

In the early 90s, in response to resident concerns a review of control resulted in the conversion of the Patterson/Burke intersection to multi-way stop control (Burke had through priority prior to then). At that time residents were also canvassed to determine whether there was support for an experimental traffic calming initiative. It was proposed that the travelled portion of the roadway be “narrowed” through the introduction of a painted median and/or edge lining. These proposals drew a negative response from the majority of responding residents.

A review of crash history summary records for the 6 years ('93 - '98) at the seven intersections between Patterson and Willingdon indicates 11 occurrences. Most of these were at Barker where entering traffic volumes are highest. However, even at Barker the number of incidents would not warrant further control.

### 3.0 REVIEW

To accurately gauge the level of activity along Burke Street, staff have conducted vehicle volume, speed, and classification counts between Willingdon Avenue and Gilpin Street. Vehicle classification data indicated an overwhelming majority of vehicles as falling within the passenger vehicles category with negligible truck traffic. The combined 24 hour vehicle volume for this roadway is well within the expected range for a Local Collector street. The table below illustrates daily and peak hour vehicle volumes for both the east and westbound directions:

					24 Hour
	AM Peak		PM Peak		
	7:00 - 8:00	8:00 - 9:00	4:00 - 5:00	5:00 - 6:00	
Eastbound	75	108	155	132	1727
Westbound	39	39	39	44	845
Daily	114	147	194	176	2572

Of most interest is the inconsistency in peak hour volumes with respect to direction of travel. Typically, one would expect a concentration of vehicle flow in the westbound direction during the AM peak, with the reverse during the PM peak. As is illustrated in the table above, this is not the case along Burke Street, with a significant majority of traffic travelling in the eastbound direction throughout the day. This probably reflects the restricted exit conditions at Boundary Road.

With respect to recorded vehicle speeds along this section of Burke Street, the data suggests that on average, less than one third of motorists are travelling above the posted speed limit. The tables below illustrate the percentage of vehicles exceeding the posted limit, and the 85th percentile speeds of traffic during peak periods respectively:

	Vehicles exceeding the posted speed limit ( % )				
	7:00 - 8:00	8:00 - 9:00	4:00 - 5:00	5:00- 6:00	24 hour
Eastbound	30	29	31	30	28
Westbound	38	26	33	23	23

	85th Percentile speeds during Peak Periods (Km/H)				
	7:00 - 8:00	8:00 - 9:00	4:00 - 5:00	5:00- 6:00	24 hour
Eastbound	60	59	60	57	59
Westbound	62	58	59	59	57

The 85<sup>th</sup> percentile speeds are not atypical for streets such as this.

#### 4.0 OPTIONS REVIEWED

Staff have looked at a variety of options for resolving the concerns of Mr Campbell. Below are discussions of each resolution considered.

#### **4.1 Speed Humps:**

Given the current designation of Burke Street as a Local Collector within the Burnaby Transportation Plan, the use of Speed Humps would be contrary to the guidelines for Speed Hump installation.

#### **4.2 Additional Stop Sign Control:**

The lack of disruption to traffic flow along the 0.7 km of Burke Street between Patterson and Willingdon Avenue (where there are multi-way controls) may in part explain the current speeds along this section of roadway. Accordingly we reviewed the feasibility and desirability of additional control.

The most obvious location for multi-way stop sign control along this section of Burke Street would be the intersection of Chaffey/Hazelwood given its median location between existing control at Patterson and Willingdon Avenue. The typical installation would include parallel crosswalks on all four legs of the intersection, hence providing a protected crossing point for children on route to an from Chaffey-Burke Elementary school and other neighbourhood pedestrians.

However, the current approach volume on Chaffey/Hazelwood is significantly less than that of Burke Street. Such a low level of crossing traffic would in turn create the potential for motorists on Burke Street to disregard the stop sign completely. The Burke/Chaffey (Hazelwood) intersection also does not meet the multi-way stop warrant in terms of crash history.

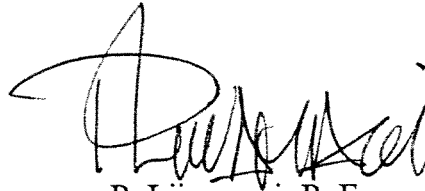
#### **4.3 Speed Enforcement:**

We have passed our traffic speed classification data to the RCMP for consideration relative to enforcement.

### **5.0 CONCLUSION**

Unfortunately a percentage of vehicles travel in excess of the posted limit on almost all streets throughout the city. The data indicates that Burke Street between Patterson and Willingdon Avenue is not exceptional.

With respect to the safety of school children crossing Burke Street staff will be conducting an crosswalk evaluation of in the fall of this year. This would determine the most appropriate location for any additional crossing protection along Burke Street. Should the results of this evaluation warrant action, staff will report back to the Committee prior to implementation.



P. Liivamagi, P. Eng.  
ASST. DIRECTOR ENGINEERING,  
TRAFFIC & ENG. SYSTEMS

AE:

cc: City Manager