

THE CORPORATION OF THE DISTRICT OF BURNABY

TRAFFIC SAFETY COMMITTEE

HIS WORSHIP, THE MAYOR
AND MEMBERS OF COUNCIL

Madam/Gentlemen:

REPORT OF THE TRAFFIC SAFETY COMMITTEE

1. Request for Controlled Pedestrian Crossing -
Intersection of Canada Way and Hardwick Street

Recommendations:

- (a) "THAT the request for a pedestrian operated traffic signal at Canada Way and Hardwick Street be denied.
- (b) THAT C. Kitteringham, President, Board of Management, Rehabilitation and Counselling Services, 3755 Banff Street, Burnaby, B.C., V5G 3Z9 be sent a copy of this report.
- (c) THAT the R.C.M.P. be requested to conduct speed enforcement on that section of Canada Way between Laurel and Woodsworth Streets."

R E P O R T

A letter dated 1982 December 31 was received from C. Kitteringham, President, Board of Management, Rehabilitation and Counselling Services, 3755 Banff Street, Burnaby, B.C., V5G 3Z9 requesting the installation of a controlled pedestrian crossing at the intersection of Canada Way and Hardwick Street.

This matter was referred to the Director Engineering who reported as follows:

"The captioned location has been the subject of a previous report to the Traffic Safety Committee. In response to this most recent request we conducted both manual and automatic traffic counts. During the six hours, 07:00 - 09:00, 11:00 - 13:00, 15:30 - 17:30, we counted 65 persons crossing Canada Way, three of whom were identified as being from the special school, Donald Patterson School. The peak fifteen minute period for pedestrians occurred from 08:00 to 08:15 during which time 10 pedestrians crossed.

This pedestrian count was conducted on 83 02 01 which would probably not include any park users due to the nature of the park. While there exists a playground at the east end of Harwood Park the majority of the park is devoted to organized sports such as soccer and baseball. The relative distances to the Harwood Park playground and the Greentree Village playground shows that the residential area has a reasonable alternative to the crossing of Canada Way to access a playground.

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Also based on the 1981 census data we estimate the number of children between the ages of 6 and 14 resident within the outlined residential area to be approximately 50. Even if the majority of these children were to use the park they would most probably be doing so during periods outside of the 'rush hours'.

We contacted both the Rehabilitation and Counselling Services and the Donald Patterson School to ascertain the number of persons in these facilities who would be using the subject crosswalk on a regular basis. There are only 10 residents at the Rehabilitation and Counselling Services facility and this number is apparently decreasing due to an ongoing community placement program. The use of the crosswalk by these residents is sporadic, 2 - 3 times/week, on Community Access programs, during which time they are usually accompanied by a 'responsible' adult.

The Donald Patterson School has 35 students but only 2 or 3 cross Canada Way on a regular basis. As stated previously 3 persons apparently from the school crossed Canada Way from west to east at approximately 08:45 during our manual traffic count. These three, crossing from the bus stop, did so within the legal crosswalk and without experiencing any noted difficulty while crossing.

The I.T.E. warrant for the establishment of a pedestrian operated traffic signal '...reflects the adequacy of crossing gaps and the frequency of such crossing gaps in relation to the number of pedestrians who may desire to cross.' This warrant requires 600 or more vehicles per hour entering the intersection for each of any eight hours of an average day and for the same eight hours there are 150 or more pedestrians per hour on the highest volume crosswalk crossing the major street. While the first part, vehicle volumes, of this warrant is easily met the second part, pedestrian volumes, is only 6 percent, approximately, met.

In the discussions with the school and the Rehabilitation Centre the main concern is with the speed of traffic on Canada Way. In the eastbound direction there exists two 50 km/h signs west of the intersection and in the westbound direction there is a play-ground ahead warning sign and a 50 km/h. At the direction of the Committee, in response to the previous report, we requested the R.C.M.P. to conduct surveillance of the subject locations.

One of the concerns that we have regarding the installation of a pedestrian actuated signal at a location where the volumes of pedestrian traffic is so low is that the infrequency of actuation could result in an increase in the accident rate, primarily rear-end collisions. The accident rate could also increase if vehicle traffic attempts to use the pedestrian actuated signal as a regular traffic signal. Note the comparison of accident statistics for the seven years at Canada Way and Hardwick and the nine months at Kingsway and Salisbury, a pedestrian actuated signal location. This latter location is, at the request of ourselves, under review by the Ministry of Highways with a view to converting to a full traffic signal.

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Also, a traffic signal of any sort at Canada Way and Hardwick may result in an increase of traffic on Hardwick Street, which was the subject of a 1978 report to Council.

While the aforementioned I.T.E. warrant does provide for consideration of '...modifying influences such as speed of approaching traffic, the age group of pedestrians, the physical characteristics of the intersection, and the distribution of times of the day during which pedestrians wish to cross...' none of these factors, singly or in combination, can compensate for the extremely low volumes of pedestrian traffic. As a result our recommendation is to not install any form of traffic signal at the subject location.

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT the request for a pedestrian operated traffic signal at Canada Way and Harwick Street be denied.
- (ii) THAT C. Kitteringham of the Rehabilitation and Counselling Services be sent a copy of this report.
- (iii) THAT the R.C.M.P. be requested to conduct speed enforcement on that section of Canada Way between Laurel and Woodsworth Streets."

2. Commuter Traffic on Oxford Street

Recommendation:

- (a) "THAT the existing stop signs stopping traffic travelling north and south on the avenues intersecting Oxford Street be removed and that stop signs be installed at alternating intersections on Albert and Oxford Streets from Willingdon Avenue to Boundary Road, stopping traffic travelling in an east/west direction on a trial basis."

R E P O R T

Council on 1983 February 28 adopted the following motion with respect to commuter traffic on Oxford Street:

"THAT the presentation of the delegation be referred to the Traffic Safety Committee for that Committee's consideration of the matter of removal of the existing stop signs stopping traffic travelling north and south on the avenues intersecting Oxford Street and re-locating the stop signs on Oxford Street, whereby traffic travelling in an east/west direction will then be required to stop at each of the intersections."

The Traffic Safety Committee on 1983 March 15 entertained two delegations; Mrs. Pauline Mudrakoff, 3743 Albert Street and Mrs. M. Rivers, 3815 Oxford Street.

Arising out of the discussion with respect to these delegations, your Committee has put forward the above noted recommendation.

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3. Speed of Vehicles on Smith Avenue in the vicinity of the Crosswalk at Cascade School

Recommendations:

- (a) "THAT the Burnaby R.C.M.P. provide instruction to the children of Cascade School on the proper crossing by pedestrians of streets.
- (b) THAT a program of enforcement be carried out by the Burnaby R.C.M.P. at Gilmore Avenue Community School.
- (c) THAT Joy Smith, Co-Chairperson, Parent Council of Cascade School, 4077 Lister Court, Burnaby, B.C., V5G 2C3 be sent a copy of this report."

R E P O R T

A letter dated 1983 February 04 was received from Mrs. Joy Smith, Co-Chairperson, Parent Council of Cascade School, 4077 Lister Court, Burnaby, B.C., V5G 2C3 regarding the speed of vehicles travelling on Smith Avenue in the vicinity of the crosswalk at Cascade School.

This matter was referred to the Director Engineering who reported as follows:

"On 83 02 15, a sunny and clear day with dry pavement, we conducted a series of speed studies using radar equipment. The results of our studies are as follows:

11:00 - 12:00

85th percentile speed - 50 km/h
50th percentile speed - 44 km/h
Average speed - 44 km/h
Maximum speed - 68 km/h
Minimum speed - 17 km/h

12:00 - 13:00

85th percentile speed - 47 km/h
50th percentile speed - 41 km/h
Average speed - 40 km/h
Maximum speed - 65 km/h
Minimum speed - 16 km/h

14:50 - 15:45

85th percentile speed - 44 km/h
50th percentile speed - 34 km/h
Average speed - 34 km/h
Maximum speed - 62 km/h
Minimum speed - 10 km/h

The above information indicates that the speeds are not excessive and that during the periods when school children are present the speeds are reduced to below the legally posted speed limit, i.e. 50 km/h. To post the subject school zone to 30 km/h would not reduce the speeds, only increase the number of violators. For example on 82 02 02 Gilmore Avenue adjacent Gilmore School was posted to 30 km/h zone at the direction of the Committee. The effect of this action was stated in a previous report to the Committee.

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Another example of a designated collector street, as are both Smith and Gilmore Avenues, being posted to a 30 km/h zone is Government Street beside Seaforth School. These two previous studies on the effects of reduced speed limits on collector streets are further proof of the generally accepted, by Traffic Engineering people, that motorists drive not to the posted speed limit but to their perceived safe speed.

Also, to post a designated collector street with a reduced speed limit is contradictory to the intent of having a street hierarchy system. A collector street with its wider pavement, protected right-of-way, and center-line is intended to 'attract' traffic from adjacent neighbourhoods and then 'carry' them on a preferred route to the next level in the hierarchy. Forcing traffic to drive slower on the collector street than they can legally travel on an adjacent residential street may result in traffic using the residential street.

The request of Joy Smith may have been prompted by a recent, late January accident involving a young girl crossing in the marked crosswalk across Smith Avenue in front of Cascade School. Speed was not a contributing factor to this accident. The contributing factors were, a vehicle stopped improperly at the curb, i.e. within the restricted area adjacent a crosswalk, the driver of a second vehicle indicated to the girl that it was 'safe' to cross, and the girl ran into the street and was struck by a third vehicle passing the first one.

In addition to the request of Ms. Smith, we recently received a memo from the R.C.M.P. which contained the following comments on the situation in the vicinity of the Cascade School:

- '(a) Children range in age from six to ten years and obviously have not been trained in proper crosswalk procedure.
- (b) Parents wait for the children when school is out and their vehicles are lined up along side the school blocking the view of the children to other drivers in the area and also this blocks the clear view of the crosswalk itself.
- (c) Traffic does not vary its speed when the children are present and speeds of 50 - 60 km/h are not uncommon.'

Item (c) above was not substantiated by our investigation, in fact as stated previously the speed of traffic was reduced when children were present. Also the percentage of traffic exceeding the existing legal speed limit for each of the three time periods were as follows:

11:00 - 12:00	-	15.8%
12:00 - 13:00	-	9.9%
14:50 - 15:45	-	2.2%

Of these vehicles only eight (2%) may have been charged with violations due to the 'tolerance' limit on enforcement.

The R.C.M.P. memo contained four recommendations which were as follows, in part:

- '(a) School talks explaining crosswalk procedure.
- (b) Install 'No Parking' signs along side the school...If properly signed, enforcement action could follow.

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- (c) 30 KPH speed signs should be posted due to the age of children, similar to the ones at the school located in the 100 Block Gilmore Avenue.
- (d) Have the crosswalk signs posted in a more prominent position.

Our comments on these recommendations are as follows:

- (a) This should be done through cooperation between the school and the R.C.M.P.
- (b) Parking is currently banned adjacent schools, as defined in the Burnaby Street and Traffic Bylaw and signs are placed beneath all school blue pentagon signs in advance of school property. The problem is not one of 'parking' but of 'stopping' by parents who come to pick-up or drop-off their children. This subject was the topic of a recent report to the Committee.
- (c) As stated previously the posting of 30 km/h signs will not necessarily reduce the speed, only increase the number of violators. The copy of the report on the Gilmore Avenue situation and the evidence in this report substantiates this theory.
- (d) The crosswalk signs are installed according to the accepted standard and in our opinion are more than adequately visible provided the parents do not stop, when picking up their children, so as to obscure these signs. In addition to the crosswalk signs there are the advance school warning signs, i.e. the blue pentagons, which are visible well in advance of the school zone and 'School X' ahead pavement markings on the Smith Avenue pavement.

In summary the evidence we have gathered does not indicate that there exists a speeding problem on Smith Avenue adjacent the Cascade School, especially when there are children present. To install a reduced speed limit, 30 km/h, would require continued enforcement to be effective. The problems noted by both the R.C.M.P. and ourselves are the result of parents driving their children to and from school or of the children not using the marked crosswalk properly.

STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:

- (i) THAT no additional traffic control devices be installed on Smith Avenue, nor any existing ones be relocated.
- (ii) THAT the Burnaby R.C.M.P. provide instruction to the children of Cascade School on the proper crossing by pedestrians of streets.
- (iii) THAT Joy Smith, Co-Chairperson, Parent Council of Cascade 4077 Lister Court, Burnaby, B.C., V5G 2C3, be sent a copy of this report."

4. Request for "Children Crossing" Sign - Government Road and Piper Avenue

Recommendations:

- (a) "THAT the request for a 'Children Crossing' sign at Government Road and Piper Avenue be denied.
- (b) THAT the Burnaby R.C.M.P. be requested to continue enforcement of the posted speed limit.
- (c) THAT Mr. G.B. Crawford, Principal, Seaforth Elementary School, 7881 Government Road, Burnaby, B.C., V5A 2C9 be sent a copy of this report."

R E P O R T

A letter dated 1983 February 04 was received from Mr. G.B. Crawford, Principal, Seaforth Elementary School, 7881 Government Road, Burnaby, B.C., V5A 2C9 requesting the placement of a 'Children Crossing' sign at the intersection of Government Road and Piper Avenue.

This matter was referred to the Director Engineering who reported as follows:

- "I Existing Traffic Control Pertaining to Captioned Location
- (i) Government Road between Brighton Avenue and Phillips Avenue is classified as a 28 foot local collector street with parking banned its entire length.
- (ii) The east and west approaches to the intersection in question have blue pentagon school warning signs mounted with 30 km/h regulatory tabs.
- II Investigation Done in Response to Request
- (i) Speed studies were conducted during the hours that school children would be crossing the street and the following results were obtained:
 - a) The 85th Percentile speed was 49 km/h.
 - b) The 50th Percentile speed was 38 km/h.
 - c) The seven highest speeds recorded were between 58 km/h and 72 km/h.
 - d) Three of the highest speeds recorded were vehicles whose registered owners live in the area.
- (ii) Origin/destination studies conducted during traffic volumes peak hours had the following results:
 - a) There is no commuter traffic problem on Government Road at this location.
 - b) The majority of traffic using Government Road are local residents.

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III Conclusions

- (i) Since the blue pentagon sign as defined by Schedule I of the Motor Vehicle Act Regulations warns the driver that school children may be crossing Government Road, the requested 'School Crossing' sign would only be repeating the message already conveyed by the blue school pentagon.
- (ii) The majority of traffic violations observed that could endanger school children crossing Government Road are being committed by residents internal to the area.
- IV STAFF RECOMMENDATIONS TO THE TRAFFIC SAFETY COMMITTEE:
- (i) THAT the request for a 'Children Crossing' sign at Government Road and Piper Avenue be denied.
- (ii) THAT the R.C.M.P. be requested to continue enforcement of the posted speed limit.
- (iii) THAT Mr. G.B. Crawford be sent a copy of this report."

Respectfully submitted,

Alderman A.H. Emmott,
Chairman

Alderman G.H.F. McLean,
Member

Alderman E. Nikolai,
Member

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