

1995 NOVEMBER 20

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE  
(TRAFFIC SAFETY DIVISION)

HIS WORSHIP, THE MAYOR  
AND COUNCILLORS

**C. POST IMPLEMENTATION REVIEW OF COMPREHENSIVE STOP  
SIGN CONTROL**

RECOMMENDATION:

1. THAT this report be received by Council for information purposes.

REPORT

The Traffic and Transportation Committee (Traffic Safety Division), at its meeting held on 1995 November 07, adopted the attached staff report outlining the impact of comprehensive stop sign control schemes on traffic safety. Staff noted that early crash history data indicates a significant decrease in traffic collisions in some areas with conversion of "courtesy corners" to stop sign controlled intersections. Staff will be monitoring the crash occurrences at more recent installations to confirm these initial observations.

MEMBERS:

Mr. W.B. Bennett  
Mr. M. Bloomfield  
Mrs. L. Brown  
Mrs. M. Canessa  
Mr. E. Fourchalk  
Ms. L. Kapp  
Mr. M. Mullan  
Ms. D. Niccoli  
Mr. D. Ramsbotham  
Mr. D. Richardson

Respectfully submitted,

Councillor J. Young  
Chairman

Councillor D. Evans  
Member

: COPY - CITY MANAGER  
- DIRECTOR ENGINEERING  
- OFFICER-IN-CHARGE, R.C.M.P.

City of Burnaby

INTER-OFFICE COMMUNICATION

**TO:** TRAFFIC SAFETY COMMITTEE **DATE:** 1995 10 27  
**FROM:** ASST. DIRECTOR ENGINEERING,  
TRAFFIC & ENGINEERING SYSTEMS **FILE:** 55-13-02  
**SUBJECT:** POST IMPLEMENTATION REVIEW OF COMPREHENSIVE STOP SIGN  
CONTROL  
**PURPOSE:** To provide the committee with an update of the impact of comprehensive stop sign  
control schemes on traffic safety.

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RECOMMENDATION:

1. THAT this report be received for information purposes.

REPORT

1.0 INTRODUCTION/BACKGROUND

In the Fall of 1992, the Traffic Safety committee requested staff to prepare a comprehensive scheme of alternating stop signs for the grid streets in the neighbourhood bounded by Willingdon, Parker, Delta, and Hastings. Staff was also requested to poll the area residents to determine the level of acceptance for this scheme and if implemented, review it after six months to determine its effectiveness.

There was overwhelming response in favour of the proposed stop sign scheme by area residents and the scheme was implemented in the Spring of 1993. In the Fall of 1993, Council also approved the extension of the original stop sign scheme eastward to include the area bounded by Hastings, Holdom, Parker, and Delta.

Since the Fall of 1994, four other stop sign scheme controls have been implemented subsequent to a favourable response by polled area residents. These include:

- 1) Capital Hill Area
- 2) Patterson, Rumble, Imperial, Nelson
- 3) Edmonds, Griffiths/19 Street, Stride, Kingsway
- 4) South East Burnaby Community Transportation Plan

Although there has not been sufficient elapsed time to objectively evaluate the impact of the last four stop sign control schemes on traffic safety, the level of acceptance from residents has been positive as with the first two stop sign control schemes.

## 2.0 Accident History

As the table below indicates, there has been a significant decrease in traffic collisions after installation of the stop sign control schemes.

**Table 1: Before and After Crash History at intersections in the area bounded by Willingdon, Hastings, Delta, and Parker**

Location	Before Installation (2 Years)	After Installation (2½ Years)
Alpha and: Frances	8	0
Georgia	6	1
Pender	8	0
Union	2	3
Venables	0	0
Beta and: Frances	8	0
Georgia	2	0
Pender	1	4
Union	3	1
Frances and: Gamma	3	1
Gamma and: Georgia	1	0
Pender	4	1
Union	1	1
Venables	0	0
<b>TOTAL</b>	<b>47</b>	<b>12</b>

It will be recalled that area scheme was the subject of an earlier report to the committee which indicated a more significant initial increase in accident rate. However, these data confirm our initial more tentative conclusion that the conversion of courtesy corners to stop sign control yields a significant public traffic safety benefit.

**Table 2: Before & After Crash History in the Area Bounded by Hastings, Holdom, Parker, Delta**

Location	Before Installation (2 Years)	After Installation (1½ Years)
Frances/Springer	0	0
Frances/Howard	3	0
Frances/Ellesmere	0	0
Georgia/Springer	1	0
Georgia/Howard	3	0
Georgia/Ellesmere	0	0
Union/Springer	2	1
Union/Howard	0	1
Venables/Springer	0	0
Venables/Howard	0	0
<b>Total</b>	9	2

### 3.0 Traffic Flows

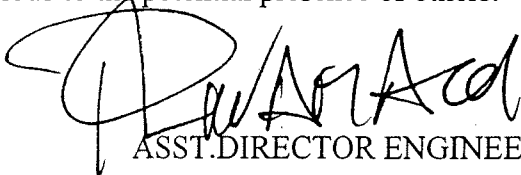
Unfortunately, staff was unable to obtain data on traffic volumes prior to the implementation of the original stop sign scheme but before and after counts were taken for the scheme in the area that is bounded by Hastings, Holdom, Parker, and Delta. While the intent of the scheme was to enhance safety, it would appear that it has decreased traffic - presumably through traffic - on the more heavily used streets.

Location	1994 April (Before)	1995 October (After)
Union (Howard to Springer)	2,658	1,590

**4.0 Discussion & Conclusion**

The early crash history data indicates a significant traffic safety benefit can accrue in some areas with conversion of "courtesy corners" to stop sign controlled intersections. Staff will be monitoring the crash occurrences at more recent installations to confirm these initial observations. Pending further results the focus of area wide stop installations has been shifted to smaller areas which already have a mix of stop-sign controlled and uncontrolled intersections. These areas benefit from resolving the ambiguity arising from mixed control and have a lower impact on the resources required for implementation.

Generally the response from area residents to the conversion of courtesy corners to stop sign control has been very favourable in polls conducted both before and after implementation. We have also received a significant number of spontaneous telephone calls supporting stop sign implementation. There has also been a small number of people who have contacted us to express the view that additional stop signs are an unwarranted expense given a very clear definition of priority at uncontrolled intersections in the Motor Vehicle Act. Unfortunately, the data and observation confirm that too many drivers seem ignorant of the hazard of driving through intersections oblivious to the potential presence of others.

  
ASST. DIRECTOR ENGINEERING  
TRAFFIC & ENG. SYSTEMS

SP:ma

cc: City Manger

