

REPORT
1996 December 09

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE
(TRAFFIC SAFETY DIVISION)

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

B. PARKER STREET AT MADISON AVENUE

RECOMMENDATION:

1. *THAT* Council receive this report for information.

REPORT

The Traffic and Transportation Committee (Traffic Safety Division), at its meeting held on 1996 December 03, adopted the *attached* report outlining the results of a review of warrants for installation of a four way stop at the Parker Street/Madison Avenue intersection. Based on traffic volumes and accident data compiled for this intersection, the Committee advised that the installation of four way stop control is not warranted. The Committee further advised that traffic volumes and pedestrian volumes do not satisfy the conditions required for installation of a traffic signal, pedestrian signal or marked crosswalk. The Committee concluded by advising that staff will continue to monitor the intersection.

MEMBERS:

Mr. N. Smith
Mr. D. Berardine
Mrs. M. Canessa
Mr. E. Fourchalk
Ms. L. Kapp
Mrs. D. Mumford
Mr. D. Ramsbotham
Mr. D. Richardson
Mr. A. MacDonald

Respectfully submitted,

Councillor J. Young
Chairman

Councillor D. Evans
Member

: COPY - CITY MANAGER
- DIRECTOR ENGINEERING

City of Burnaby

INTER-OFFICE COMMUNICATION

TO: TRAFFIC SAFETY COMMITTEE **DATE:** 1996 11 25
FROM: ASST. DIRECTOR ENGINEERING, **FILE:** 55-13-02
TRAFFIC & ENGINEERING SYSTEMS
SUBJECT: PARKER STREET AT MADISON AVENUE
PURPOSE: To advise the Committee of the results of a review of the warrants for the installation of a four way stop at this intersection.

RECOMMENDATION:

1. THAT this report be received for information.

REPORT

1.0 BACKGROUND

During discussion of inquiries at the Regular Council Meeting held on 1996 October 21, reference was made to the status of "... a request for a four way stop at the intersection of Parker Avenue and William Street..." that had been referred to the Traffic and Transportation Committee. Upon clarification, staff were advised that this request was related to the intersection of Parker Street and Madison Avenue and that the focus of concern was pedestrian safety. A review of the motor vehicle crash data and pedestrian/traffic counts has been completed. The analysis of the review is detailed in the following report.

2.0 TRAFFIC COUNTS

Manual traffic counts were conducted during the morning and afternoon peak periods. The peak hour intersection summary sheets have been attached as "Exhibit 1: Morning Peak Hour" and "Exhibit 2: Afternoon Peak Hour" for the information of the Committee. As indicated on these sheets, traffic on the Madison Avenue legs, the north and south legs indicated on the diagram is very light.

During the morning peak hour, which was calculated to occur between 07:35 and 08:35, the total approach volumes on Madison Avenue during this period were 21 vehicles southbound and 31 vehicles northbound. This compares with 303 vehicles eastbound and 793 vehicles westbound.

During the afternoon peak hour, which was calculated to occur between 16:40 and 17:40, traffic volumes are similar with the east-west volumes reversed. The total approach volumes on Madison Avenue during this period were 27 vehicles southbound and 41 vehicles northbound. This compares with 832 vehicles eastbound and 393 vehicles westbound.

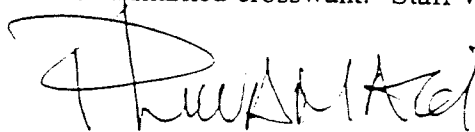
3.0 ACCIDENTS

Motor vehicle accident data for this intersection was reviewed for the period 1992 November 01 to 1996 October 31. A total of twelve occurrences were recorded during this period with a peak of five during 1994 and a low of zero during 1993. Three collisions were recorded in 1995 and one to date in 1996. The reduction in collisions in 1996 may be partially due to the introduction of a stop sign control scheme in the neighbourhood north of Parker earlier this year.

The accident data does not indicate the type of problem that is correctible by four way stop control. Given the disparity in traffic volumes as described in Section 2.0 of this report, installation of four way stop signs would likely contribute to an increase in motor vehicle accidents.

4.0 CONCLUSIONS

Based on the traffic volumes and accident data compiled for this intersection, the installation of four way stop sign control is not warranted. Traffic volumes and pedestrian volumes also do not satisfy the conditions required for the installation of a traffic signal or pedestrian signal or marked crosswalk. The crash history does not indicate a severe problem with this intersection. Based on the number of reported accidents and the large disparity in traffic volumes, the introduction of either a traffic signal or four way stop would likely contribute to an increase in the number of collisions. The number of pedestrians observed fell significantly below the warrant threshold for a marked crosswalk. Staff will continue to monitor the intersection.



ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENG. SYSTEMS

BB:
Attach.
cc: City Manager

DISTRICT OF BURNABY TRAFFIC ENGINEERING
Two Vehicle Analysis

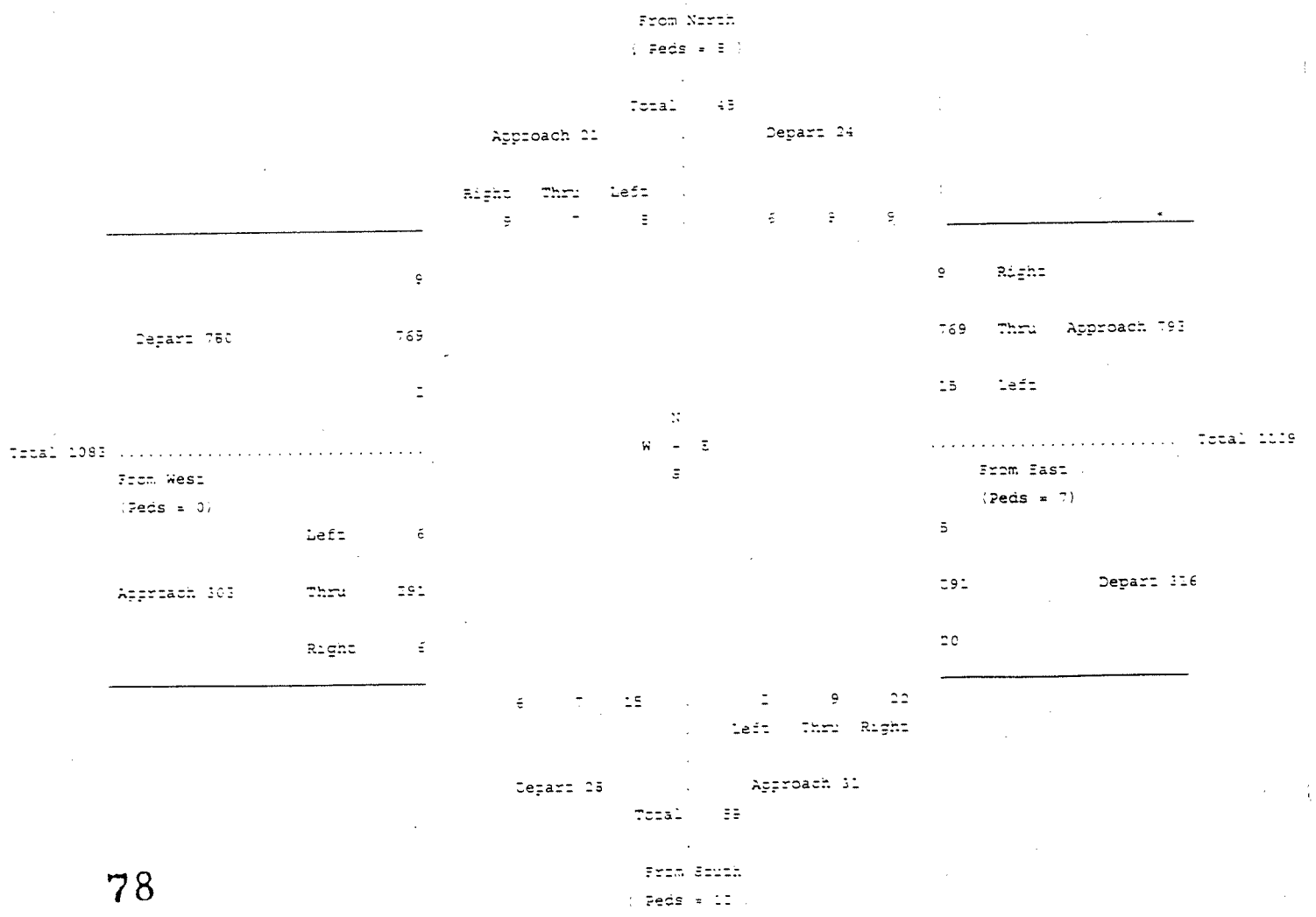
Page: 4
Date: 9/14/1996

Location: PARKER-MADISON Starts : 11/19/96 at 07:00:00
Notes : Ends : 11/19/96 at 09:00:00
Study ID: MERG 00340 Interval : 5 min Intervals: 24
Operator: S.PORDAN & A.EVANS S/N : 69 Type: Car, Truck, Pedest
Weather : CLEAR & VERY COLD (-3C.) Correction: 1.00

TOTAL INTERSECTION PEAK HOUR ANALYSIS

Total Intersection Peak 15: Tue Nov 19 07:15:00 1996

DIRECTION	VOLUME					Peak Factor	PERCENTS			
	Peds	Left	Thru	Right	Total		Left	Thru	Right	Total
From North	8	5	7	9	21	1.58	23.8%	31.3%	42.9%	100.0%
From South	10	2	9	20	31	1.39	6.5%	29.0%	64.5%	100.0%
From East	7	15	769	9	793	0.26	1.9%	97.0%	1.1%	100.0%
From West	0	6	291	6	303	0.26	2.0%	96.0%	2.0%	100.0%
Totals	25	28	1076	44	1146	0.27	2.4%	51.7%	3.8%	100.0%



DISTRICT OF BURNABY TRAFFIC ENGINEERING
Two Vehicle Analysis

Page: 4
Date: 9/15/19

Location: PARKER-MADISON Starts : 11/19/96 at 16:00:
Notes : Ends : 11/19/96 at 18:00:
Study ID: MERG 00343 Interval : 5 min Intervals: 24
Operator: S.PORDAN & A.EVANS S/N : 69 Type: Car, Truck, Pedest
Weather : CLEAR AND VERY COLD Correction: 1.00

TOTAL INTERSECTION PEAK HOUR ANALYSIS

Total Intersection Peak is: Tue Nov 19 16:40:00 1996

DIRECTION	VOLUME					Peak Factor	PERCENTS			
	Peds	Left	Thru	Right	Total		Left	Thru	Right	Total
From North	5	8	12	-	27	0.56	29.6%	44.4%	25.9%	100.0%
From South	2	2	20	16	41	0.51	4.9%	48.8%	46.3%	100.0%
From East	4	17	363	113	503	0.27	4.3%	92.4%	3.3%	100.0%
From West	3	52	767	13	832	0.27	6.3%	92.2%	1.6%	100.0%
Totals	14	79	1162	31	1293	0.28	6.1%	89.5%	4.0%	100.0%

From North
(Peds = 5)

Total 112

Approach 11

Depart 89

Right Thru Left

52 20 13

13 Right

Depart 172 141

363 Thru Approach 393

17 Left

Total 1104

N

W - E

S

Total 1197

From West
(Peds = 3)

From East

(Peds = 4)

Left 52

5

Approach 832 Thru 767

767

Depart 794

Right 13

13

13 20 17

Left Thru Right

Depart 41

Approach 41

Total 82

From South

Peds = 2

