

CITY OF BURNABY

TRAFFIC AND TRANSPORTATION COMMITTEE  
(TRAFFIC SAFETY DIVISION)

HIS WORSHIP, THE MAYOR  
AND COUNCILLORS

A. BOUNDARY ROAD AT KINCAID STREET

RECOMMENDATION:

1. THAT westbound to southbound left turns from Kincaid Street to Boundary Road be banned until traffic signal options are examined.

R E P O R T

The Assistant Director Engineering - Traffic and Engineering Systems submitted the following report to the Committee:

"Staff have reviewed a preliminary copy of the submission from B.C. Transit dated 1993 April 20 regarding the above intersection (APPENDIX 1). The proposed banning of westbound to southbound left turns is an acceptable interim solution to the problems that are occurring between buses and other vehicles at this intersection. Signalization options will be discussed with City of Vancouver staff. A report will be prepared for a future Committee meeting outlining the results of these discussions."

MEMBERS:

Mr. D. Rankin  
Mr. W.B. Bennett  
Mr. M. Bloomfield  
Mrs. L. Brown  
Mrs. M. Canessa  
Mrs. G. Evans  
Mr. T. Hulme  
Mr. E. Fourchalk  
Mr. D. Ramsbotham  
Mr. W.B. Roxburgh  
Mr. R. Weston

Respectfully submitted,

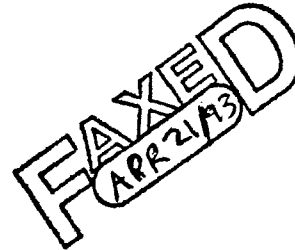
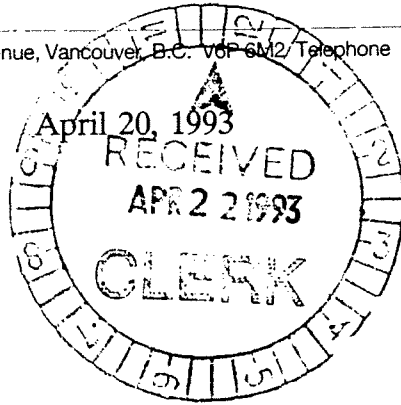
Councillor J. Young  
Chairman

Councillor D. Evans  
Member

Councillor C. Redman  
Member

: COPY - CITY MANAGER  
- DIR. ADMIN. & COMM. SERV.  
- DIRECTOR ENGINEERING  
- DIRECTOR PLANNING & BUILDING  
- OFFICER-IN-CHARGE, R.C.M.P.

City of Burnaby  
City Clerk's Department  
4949 Canada Way  
Burnaby, B.C.  
V5G 1M2



Attn.: Mr. S. Cleave, Secretary  
Traffic and Transportation Committee

Dear Sir:

**Re: Boundary Road at Kincaid Street**

I am writing to request permission to make a presentation to the May 4, 1993 Traffic and Transportation Committee (Traffic Division) meeting concerning a number of transit operational problems at this intersection. These problems are associated with traffic conflict between buses and other vehicles, and the delay to transit services.

**1. Traffic Conflicts**

Southbound buses on Boundary require the entire median refuge area to turn left onto eastbound Kincaid Street. Field observations have identified that westbound traffic on Kincaid often attempt to cross the intersection when the median refuge area is already occupied by a bus or other vehicles (see attached figure). When this occurs, the bus turning path is blocked by the left turning vehicle. This results in the following conflicts:

- (i) Northbound drivers are required to brake abruptly to avoid a collision.
- (ii) The westbound drivers are also required to brake to avoid contacting the bus.
- (iii) The westbound driver is required to back up to permit the bus to complete the turn.

Our field staff have reported that these conflicts occur frequently.

**2. Delay to Transit Services**

The Boundary/Kincaid intersection is not controlled by a traffic signal. Transit vehicles therefore can only make this turn when a suitable gap occurs in northbound traffic. The opportunity for the buses to make this turn is very limited, particularly in the peak periods when the traffic volume is high and the prevailing travel speed is usually beyond the posted speed limit. The existing operating condition of this intersection has resulted in significant delays to transit services. More specific description of the delay to transit services is given below:

APPENDIX 1

#25 Brentwood Mall Service

This service is routed to travel southbound Boundary Road to eastbound Kincaid. High traffic volumes on Boundary Road provide limited gaps, resulting in lengthy delays to transit operations. Observations indicate that the #25 Brentwood Mall service is delayed 2 minutes or over at this location. Bus operators often must rely on northbound motorists yielding the right-of-way to complete this turn.

#25 UBC Service

This service is routed to travel westbound Kincaid to northbound Boundary. Buses are delayed by other westbound vehicles queued to turn right or left onto Boundary Road. The #25 UBC service is further delayed while waiting for a gap in northbound Boundary traffic. Recent observations indicate transit service is delayed up to 3 minutes at this location.

**3. Proposed Solutions**Short Term Solution

- (i) It is suggested that the westbound to southbound left turn movement at Boundary/Kincaid be banned to deal with the traffic conflict problem. I understand that this option is being considered by Burnaby Traffic staff. Please note that the displaced left turns could be accommodated by the new traffic signal at Moscrop/Boundary.
- (ii) To compliment (i), a physical channelization should be constructed to ensure that westbound vehicles must turn right onto Boundary Road northbound.

If this short term solution is found to be not feasible, BC Transit would like to review routing alternatives with Burnaby staff to avoid making the southbound to eastbound left turn at Boundary/Kincaid.

Permanent Solution

As a permanent solution, BC Transit recommends a bus or vehicle-activated signal be constructed at this intersection. The proposed signals would be activated by buses and other vehicles making the southbound left turning or westbound right turning movement. This option would provide the following benefits:

- (i) Reduce delays for southbound left turning buses;
- (ii) Reduce delays for westbound right turning buses.

There would be a separate phase to permit southbound left turns and westbound right turns to occur without conflict. Southbound through traffic on Boundary Road would not be affected.

4. Summary

The existing geometry and traffic conditions at the intersection of Kincaid and Boundary have resulted in frequent conflict and delay for transit operations. Please consider the immediate implementation of a westbound "Right Turn Only" restriction as an interim solution. BC Transit would be pleased to meet with Burnaby Traffic staff to identify and implement a suitable permanent solution.

I would appreciate your assistance in placing this item on the agenda of the May 4, 1993 Traffic Division meeting. Please arrange for an overhead projector and a VCR for my presentation.

Please call me at 264-5028 if you require any further information.

Yours truly,



Dave Currie, P.Eng.  
Transportation Engineer

Attachment

DC/bl



Boundary Rd.

*Bus operator required to wait for suitable gap in northbound traffic to turn onto Kincaid*

*Westbound left turning driver enters intersection, blocking bus turn and northbound traffic*

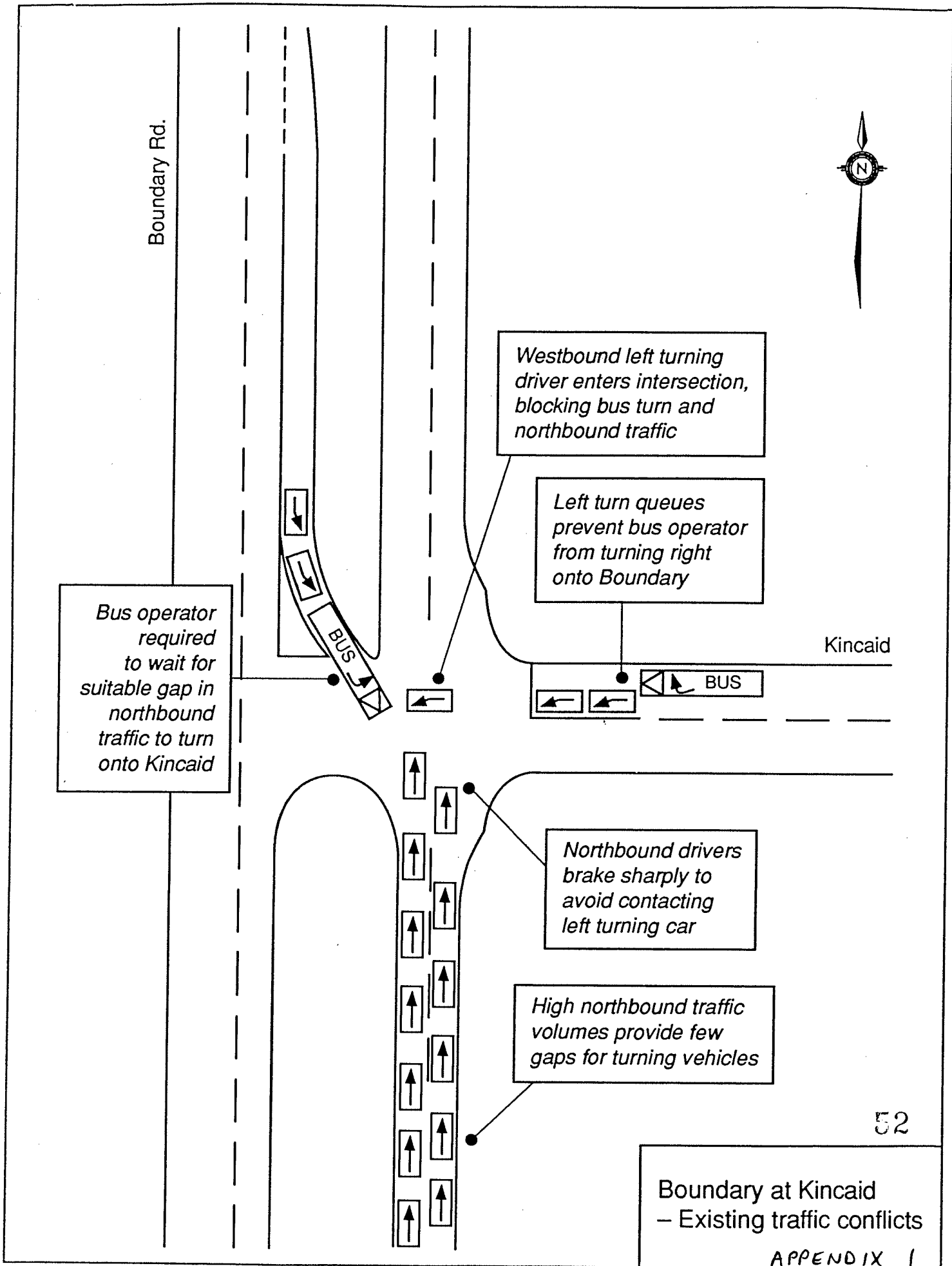
*Left turn queues prevent bus operator from turning right onto Boundary*

Kincaid

*Northbound drivers brake sharply to avoid contacting left turning car*

*High northbound traffic volumes provide few gaps for turning vehicles*

Boundary at Kincaid  
– Existing traffic conflicts



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