



CITY OF RICHMOND

REPORT TO COMMITTEE

TO: Public Works and Transportation Committee **DATE:** February 20, 2001
FROM: Gordon Chan, P. Eng. **FILE:** 6450-01
 Manager, Transportation
**RE: TRAFFIC CALMING MONITORING – FOLLOW-UP REPORT – SAUNDERS ROAD
AND 23000 BLOCK DYKE ROAD**

STAFF RECOMMENDATION

That staff continue to monitor the impact on traffic conditions of the traffic calming and pedestrian safety measures implemented on Dyke Road (23000 Block) and Saunders Road (Bakerview Drive to No. 4 Road) respectively and report back to Council if further actions are necessary.

Gordon Chan, P. Eng.
Manager, Transportation

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STAFF REPORT

ORIGIN

Following concerns raised by area residents on Dyke Road (23000 block) and Saunders Road (Bakerview Drive to No. 4 Road) with respect to speeding vehicles and pedestrian safety, staff implemented various traffic calming and pedestrian safety measures in these two areas. At the February 8, 1999 regular Council meeting, Council endorsed the following measures:

- installation of four speed humps at 150-metre intervals on Dyke Road, starting at its junction with Fraserwood Drive; and
- construction of a crushed gravel sidewalk on the north side of Saunders Road between Bakerview Drive and No. 4 Road, the removal of on-street parking in this area and the installation of traffic advisory signage along Saunders Road.

As part of the Council resolutions on both issues, staff were directed to monitor the traffic conditions at these locations and report back on the effectiveness of the measures. This report provides the results of the monitoring programs.

ANALYSIS

1. Dyke Road (23000 Block) - Traffic Calming Measures

Traffic Calming Measures Implemented

To address residents' concerns of speeding vehicles and "rat-running" traffic, four speed humps at 150-metre intervals were installed on the residential portion of Dyke Road, beginning at its junction with Fraserwood Drive. Signage and road markings were placed at each speed hump to alert drivers to their presence and advance-warning signs with reduced speed limit tabs of 30 km/h were also erected at both ends of the section of Dyke Road containing the speed humps.

Speed humps were determined to be an appropriate traffic calming device for this location due to its relative isolation and the predominantly localized use of the roadway by the immediate residents, who also supported the installation of the devices.

Effectiveness of Installations

To determine the effectiveness of the traffic calming devices in deterring speeding, a study of vehicle traffic was conducted in both the westbound and eastbound traffic lanes of the 23000 block of Dyke Road during February 7-12, 2001. A similar traffic study was conducted in July 1998 in the same vicinity prior to the installation of the speed humps. The results of both traffic studies are summarized below.

Measure	Before Speed Humps		After Speed Humps	
	Westbound	Eastbound	Westbound	Eastbound
Study Period	July 22-24, 1998 (6 AM to 6 AM)		February 7-12, 2001 (12 PM to 12 PM)	
Direction	Westbound	Eastbound	Westbound	Eastbound
Average Daily Traffic Count	627	480	317 (49 % decrease)	285 (41 % decrease)
Average Speed	41 km/h	42 km/h	31 km/h (24 % decrease)	30 km/h (29 % decrease)

The February 2001 traffic study reveals that the average speeds in both directions have significantly decreased. In addition, westbound traffic on Dyke Road has decreased by nearly one-half, while eastbound traffic has fallen by 41 percent. The results indicate that the installation of speed humps on Dyke Road has proven effective in significantly reducing not only the average speed of vehicles using the road but also traffic volumes.

2. Saunders Road (Bakerview Drive to No. 4 Road) - Pedestrian Safety Measures

Pedestrian Safety Measures Implemented

To respond to residents' concerns regarding pedestrian safety, a crushed gravel sidewalk was installed on the north side of Saunders Road between Bakerview Drive and No. 4 Road and on-street parking on the north side was removed. Additional traffic signage was installed to advise drivers to respect the speed limit of 50 km/h and to alert them to the presence of students and children along the roadway.

Effectiveness of Installations

Staff observations of pedestrian activity in the area indicate that the walkway is effective in directing pedestrian movements off Saunders Road, particularly for students walking to and from McNair Secondary School. Consideration will be given to the relocation of the stop bar on Saunders Road at No. 4 Road to enable the placement of crosswalk across Saunders Road at this intersection to further guide pedestrians to the walkway.

A study of vehicle traffic was also conducted in both the westbound and eastbound traffic lanes of the 9000 block of Saunders Road during January 12-17, 2001. A similar traffic study was conducted in October 1998 at the same vicinity prior to the installation of the sidewalk and signage. The results of both traffic studies are summarized below.

Measure	Before Sidewalk & Signage		After Sidewalk & Signage	
Study Period	October 5-6, 1998 (1 PM to 1 PM)		January 12-17, 2001 (1 PM to 12 PM)	
Direction	Westbound	Eastbound	Westbound	Eastbound
Average Daily Traffic Count	673	737	539 (20 % decrease)	531 (28 % decrease)
Average Speed	49 km/h	49 km/h	48 km/h	49 km/h

The January 2001 traffic study reveals that westbound traffic on Saunders Road has decreased by 20 percent, while eastbound traffic has fallen by 28 percent. Average speeds in both directions have remained the same and are within the posted 50 km/h speed limit. This result is reasonable given that the intent of the enhancements was to provide an improved walking environment for pedestrians. Based on staff observations, the walkway is well used and an effective pedestrian safety improvement.

FINANCIAL IMPACT

None to the City as no further traffic calming or pedestrian safety measures are recommended.

CONCLUSION

The results of traffic studies conducted before and after the installation of four speed humps at 150-metre intervals along the residential portion of Dyke Road clearly indicate that the traffic calming measures have significantly reduced not only average travel speeds but also average traffic volumes. Average vehicle speeds in both directions have decreased 24-29 percent and are within the new reduced speed limit of 30 km/h. Staff observations of pedestrian activity on Saunders Road indicate a high usage of the walkway installed on the north side between Bakerview Drive and No. 4 Road, particularly by students. Given these results at both locations, no further traffic calming or pedestrian safety measures are recommended. Staff will continue to monitor the traffic conditions in these two areas and will advise Council if further actions are required to address any traffic-related issues.



Joan Caravan
Transportation Planner I



Carlos Rocha
Traffic Technician II