R178 : Refined Traffic Calming Policy

Corporate Report

NO: R178

COUNCIL DATE: July 24, 2000

REGULAR COUNCIL

TO: **Mayor & Council** DATE: **July 5, 2000**

FROM: **General Manager, Engineering** FILE: **3821-000**

SUBJECT: **Refined Traffic Calming Policy**

RECOMMENDATIONS

It is recommended that Council support refinements to the Engineering Department's existing Traffic Calming Policy and Processes. The nature of the updates is to:

- reduce the minimum daily traffic requirement for residential collector roads from 5,000 vehicles per day to 3,000 vehicles per day; and
- modify the procedure for measuring resident support for a proposed residential collector road traffic calming plan.

INTENT

To seek approval for refinements to Surrey's "Traffic Calming Policy and Procedures", developed based upon the Engineering Department's experience in applying the criteria.

BACKGROUND

At the February 22, 1999 Council-in-Committee Meeting, an "Updated Traffic Calming Policy", included in a Corporate Report from the Acting General Manager of Engineering, was approved in principle by Council. During the meeting, concerns were expressed that the 67% level of resident support for a traffic calming plan, recommended in the policy, might be difficult to obtain. It was agreed that a 60% level of resident support would be more suitable. Application of the policy since the meeting has been based upon the 60% level.

The existing policy as written in the February, 1999, report is attached as Appendix 1.

During the subsequent 18 months, the Engineering Department has measured traffic conditions on 62 residential roads in Surrey, providing additional feedback on the suitability of the approved Policy and Procedures.

DISCUSSION

Selection of candidate locations for traffic calming in Surrey is based upon measured levels of vehicle volumes, speeding, and, in the case of local roads, shortcutting as well. Residential roads classified as either local or collector are considered.

Local roads are intended to be used by local residents and vehicles, providing services to the residents. Therefore, residents expect low traffic volumes and do not expect shortcutting traffic. The criteria for selecting candidate residential local roads consider these factors.

Since collector roads are intended to link local roads to arterial roads, higher traffic volumes are expected. Therefore, the minimum volume threshold for collector roads must be higher than for locals. Definition and measurement of shortcutting via a collector road would be controversial and very labour intensive; therefore, the minimum volume criteria doubles as an indicator of possible shortcutting between arterial roads via a residential collector.

The experience gained by the Engineering Department since adoption of the existing Traffic Calming Policy suggests that refinements can be made. The proposed changes to the policy are shown as mark-ups to the existing policy in Appendix 2.

Review of Collector Road Daily Traffic Volume Criteria

The Engineering Department has measured traffic volumes on all existing major collector roads in Surrey. At the present time, approximately 83% of all collector roads have traffic volumes below 5,000 vehicles per day, and therefore, do not qualify for traffic calming under our current policy.

Where traffic calming has been introduced in Surrey on major collector roads, studies have shown that speeds have dropped significantly. As well, there is general satisfaction from residents as we have received minimal complaints upon implementation of traffic calming devices. Given the successful implementation of traffic calming on collector roads thus far, Engineering Department staff believe it would be prudent to broaden the number of collector roads eligible for traffic calming. By reducing the threshold value from 5,000 vehicles per day to 3,000 vehicles per day, the proportion of collector roads potentially eligible for traffic calming would be increased from 17% to 30%.

Future Review of Local Road Speed Criteria

Engineering Department staff have measured speeds on 62 local and collector residential roads since February, 1999. In the existing Traffic Calming Policy, the speed criteria is triggered when the median speed exceeds 60 kilometres per hour. Median, or 50th percentile speed, is the speed which 50% of vehicles are travelling at or below. This criteria was met at 3 of the locations surveyed.

Requests for traffic calming have been received for areas where part time school area and playground 30 km/h speed limits apply, and where a 30 km/h speed limit is in effect at all times. Measurements indicate that speeds in these areas are generally in the 30 km/h to 40 km/h range, and that none of the locations exceed the 60 km/h median speed threshold. While strict, compliance with the speed limit is low in these areas, operating speeds

are the lowest of all locations measured.

Engineering Department staff are currently considering the suitability of an alternative threshold and/or measure for speeding. Staff plan to evaluate additional data, to ensure that any change to the criteria helps identify the areas with the highest priority for traffic calming measures.

A follow-up report will be prepared with recommendations for any suitable adjustments to the speed criteria.

Review of Resident Support Criteria

Appropriate selection of the required level of resident support for a traffic calming plan is critical. Once a traffic calming plan has reached the resident survey step in the process, it has already been determined that there is a significant traffic problem, and the Engineering Department has developed proposed traffic calming plans in consultation with the residents. If the policy requires an unnecessarily high rate of resident support, it may be difficult to achieve sufficient support to implement a plan which would benefit residents. However, if the level of support and/or response rate required are too low, significant opposition may surface following implementation, forcing a time-consuming and costly process to address concerns.

The “Canadian Guide to Neighbourhood Traffic Calming”, published by the Transportation Association of Canada and Institute of Transportation Engineers, suggests that the purpose of a resident survey is to determine whether there is significant opposition to particular details of a proposed plan, rather than to hold a referendum for the plan.

The February, 1999 update to the Traffic Calming Policy increased the required support from “greater than 50%” to 60% of all affected households. This change was intended to address a concern that “greater than 50%” support for a plan could easily be reversed, particularly in small neighbourhoods. The 60% support requirement was successfully achieved with the Fairway Park Neighbourhood traffic calming plan, approved by Council in June, 1999. In the Fairway Park case, the neighbourhood included 170 single family homes and a 70-unit strata complex, and local roads only.

However, the Engineering Department has recently worked with a resident committee to develop an effective and acceptable traffic calming plan for a residential collector road (New McLellan Road/56 Avenue), which would affect approximately 800 homes. A sufficient response rate to achieve support from 60% of all residents would have been virtually unattainable. Although only 173 properties have frontage on the road where the devices are proposed, an additional 600 households use the road as the primary access to their local roads. This is largely the result of an unusual topography and a large number of long culs-de-sac in the area. Of the 365 replies received from the survey, 76% of residents support the plan.

In addition to problems achieving 60% support from all property owners in a very large survey area, residential roads with a mix of single family properties and multi-family residential, industrial or commercial properties present unique complications. Although the Engineering Department has not dealt specifically with this situation as yet, staff have concluded that some projects will require the establishment of unique criteria to indicate majority acceptance prior to distributing resident surveys.

SUMMARY

Proposed refinements to the Engineering Department's Traffic Calming Policy and Procedures have been developed based upon the past 18 months experience applying the existing policy and procedures. Reduction of the minimum daily volume requirement for residential collector roads will generate additional candidate

neighbourhoods which could benefit from traffic calming. Modification of the resident support requirements for proposed residential collector road projects, to reduce the rate of reply for affected residents not fronting the road with the devices, will improve the chance of approval of the proposal.

The Engineering Department is currently evaluating adjustment of the speed criteria for residential local roads, and will prepare a follow-up report on this issue.

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