TORONTO CITY CLERK

Clause embodied in Report No. 4 of the Works Committee, as adopted by the Council of the City of Toronto at its meeting held on April 16, 17 and 18, 2002.

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Traffic Calming Policy

(City Council on April 16, 17 and 18, 2002, amended this Clause:

(1) in accordance with the following recommendation of the Works Committee, embodied in the communication dated September 10, 2001, from the City Clerk:

> *"The Works Committee recommends the adoption of Recommendations Nos. (1) to (8) contained in the report dated August 31, 2001, from the Commissioner of Works and Emergency Services, and requests that such recommendations be considered in conjunction with the previous recommendations of the Committee, contained in the Clause, entitled 'Traffic Calming Policy'.",*

subject to the following amendments to the report dated August 31, 2001, from the Commissioner of Works and Emergency Services:

(a) amending Recommendation No. (1) by adding thereto the words "subject to amending Criteria No. 2 embodied therein to now read as follows:

> *'2. Traffic calming measures may be considered at or near locations where the road grade is between 5 percent and 8 percent, as per the present system.';*

(b) striking out Recommendation No. (3) and inserting in lieu thereof the following new Recommendation No. (3):

> *"(3) consideration of physical traffic calming on a street be initiated by the local Councillor following a public meeting, or upon receipt of a petition signed by at least 25 percent of affected households (or 10 percent in the case of multiple family rental dwellings), or by a survey conducted by the Ward Councillor;";*

(c) amending Recommendation No. (6) by deleting the figure "40 percent" and inserting in lieu thereof the figure "50 percent plus one",

so that the recommendations embodied in the report dated August 31, 2001, from the Commissioner of Works and Emergency Services, as amended, now read as follows:

"It is recommended that:

(1) physical traffic calming be considered only on the local and collector classification of roads and be subject to and conform with the technical criteria described in Appendix 1 of this report, subject to amending Criteria No. 2 embodied therein to now read as follows:

'2. Traffic calming measures may be considered at or near locations where the road grade is between 5 percent and 8 percent, as per the present system.';

(2) speed humps not be installed on primary Toronto Fire Service or Toronto Emergency Medical Service routes, or Toronto Transit Commission bus routes;

(3) consideration of physical traffic calming on a street be initiated by the local Councillor following a public meeting, or upon receipt of a petition signed by at least 25 percent of affected households (or 10 percent in the case of multiple family rental dwellings), or by a survey conducted by the Ward Councillor;

(4) staff liaise with the respective Ward Councillors to establish the boundaries of areas which potentially will be impacted by proposed traffic calming measures;

(5) consultation with emergency services and TTC representatives occur early in the process of considering each traffic calming proposal;

(6) physical traffic calming measures only be installed on streets where the results of a formal poll indicate that a minimum of 50 percent plus one of the affected households (with frontage or flankage) have responded, and at least 60 percent of the responding households are in favour of the proposal;

(7) in the event that the requests for traffic calming measures exceed the budget allocation, funding for approved physical traffic calming projects be distributed in accordance with the ranking system illustrated in Appendix 2 of the report; and

(8) the City of Toronto request the Province of Ontario to place physical traffic calming measures into Schedule A of the Municipal Class Environmental Assessment.";

(2) to provide that the Capital Budget for traffic calming measures be fairly distributed among the six Community Council areas;

(3) to provide that surveys conducted on collector roads be undertaken in consultation with the local Councillor(s) and include a reasonable selection of streets that feed into the collector road; and

(4) by adding thereto the following:

"It is further recommended that:

(a) the assistance of the Association of Municipalities of Ontario be sought in pursuing any requests to change the statutes or regulations;

(b) all approved traffic calming projects be grandparented under existing policies; for project priority setting, the point system recommended by staff be utilized in consultation with the respective Councillors;

(c) the point system include an evaluation provision for extraordinary circumstances;

(d) all staff reports prepared in regard to traffic calming projects indicate the point value assigned via the staff evaluation;

(e) any unused funds within the Department's budget be reported to Council in July for possible application to approved traffic calming projects;

(f) traffic calming be considered when a road is being upgraded and/or reconstructed; and

(g) when petitioning or surveying for traffic calming, only one survey per petition name be accepted per household, in accordance with the report (August 31, 2001) from the Commissioner of Works and Emergency Services; and further, that the Commissioner of Works and Emergency Services be requested to report to the Works Committee providing details of the one poll per household scheme.")

(City Council on February 13, 14 and 15, 2002, deferred consideration of this Clause to the next regular meeting of City Council scheduled to be held on April 16, 2002; such Clause to be the first item of business and identified as a "time-sensitive" issue.)

(Clause No. 1 of Report No. 1 of The Works Committee,
entitled "Traffic Calming Policy")

(City Council on November 6, 7 and 8, 2001, deferred consideration of this Clause to the regular meeting of City Council scheduled to be held on February 13, 2002, and the City Clerk was requested to append the communication dated October 23, 2001, from the Minister of the Environment, as submitted by Councillor Moscoe, to the Clause.)

(Clause No. 2 of Report No. 15 of The Works Committee,
entitled "Traffic Calming Policy")

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(City Council on October 2, 3 and 4, 2001, deferred consideration of this Clause to the next regular meeting of City Council scheduled to be held on November 6, 2001.)

(Clause No. 2 of Report No. 13 of The Works Committee,
entitled "Traffic Calming Policy")

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(City Council on July 24, 25 and 26, 2001, deferred consideration of this Clause to the next regular meeting of City Council scheduled to be held on October 2, 2001.)

(Clause No. 3 of Report No. 11 of The Works Committee,
entitled "Traffic Calming Policy")

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(City Council on June 26, 27 and 28, 2001, deferred consideration of this Clause to the next regular meeting of City Council scheduled to be held on July 24, 2001.)

(Clause No. 2 of Report No. 9 of The Works Committee,
entitled "Traffic Calming Policy")

The Works Committee recommends:

(1) the adoption of the report dated May 28, 2001, from the Commissioner of Works and Emergency Services;

(2) that all communications and submissions be referred to the Commissioner of Works and Emergency Services for consideration in the report to be submitted to the Works Committee at its meeting of September 10, 2001;

(3) that the Province of Ontario be requested to grant such legislation as is necessary to enable the City to set speed limits at whatever limits it wishes; and

(4) that the Toronto Police Services Board be requested to accelerate the program to adopt the use of unmarked vehicles.

The Works Committee reports, for the information of Council, having requested the Commissioner of Works and Emergency Services to:

(1) report back to the Committee on the following:

(i) an inventory of the number of speed humps in each of the 44 wards, including those currently being considered; and

(ii) the minimum number of, and maximum distance between, speed humps, traffic islands and traffic circles that could be installed to be deemed a traffic calming measure; and

(2) evaluate and report back to the Committee on traffic calming measures currently in place on Humbercrest Boulevard.

The Works Committee submits the following report (May 28, 2001) from the Commissioner of Works and Emergency Services:

Purpose:

The purpose of this report is to summarize and discuss Traffic Calming Policy issues arising through the consultation process.

Financial Implications and Impact Statement:

There are significant costs associated with the current practice of installing physical traffic calming measures. Funds to cover the cost of the installation of traffic calming measures are included in the Transportation Services Division Capital Budget on a city-wide basis. An amount of $750,000 has been approved under the Capital Works Program for each of the past two years, 2000 and 2001. Costs of on-going administration, design and maintenance are accommodated within the Operating Budget.

It is not anticipated that the adoption and implementation of the proposed traffic calming policy, as set out in the report to the Works Committee dated March 8, 2001, will impact on the level of funding currently provided for traffic calming. It should be noted, however, that there has been a steady increase in the demand for traffic calming installations and, should this trend continue, funding requirements may have to be re-addressed.

Recommendations:

It is recommended that:

(1) physical traffic calming be endorsed as an effective way of improving traffic conditions on local and collector streets in the City of Toronto;

(2) physical traffic calming be considered principally:

(i) for local and collector streets;
(ii) where local support exists;
(iii) where existing traffic impacts are significant; and
(iv) where the impacts of traffic calming on emergency and transit services and on adjacent uncalmed streets are relatively minor;

(3) the implementation of physical traffic calming measures be undertaken in conjunction with annual road reconstruction and maintenance programs, to the extent possible; and

(4) the process for conducting traffic engineering studies, evaluating options, and undertaking public consultation for physical traffic calming measures, as well as proposals for the qualifying criteria for installing physical traffic calming measures, be presented to the Works Committee at its meeting of September 10, 2001.

Background:

The Works Committee at its meeting on March 28, 2001, adopted the report dated March 8, 2001, from the Commissioner of Works and Emergency Services respecting a harmonized traffic calming policy for the City of Toronto, and in so doing adopted the following recommendations:

(1) that this report be forwarded to all Community Councils for consideration, and that their comments on the proposed traffic calming policy be submitted to the Works Committee for consideration at its June 6, 2001 meeting; and

(2) that this report be distributed to any interested residents and parties, including neighbourhood and business improvement associations in Toronto, as well as citizen advisory committees and advocate groups for transportation modes, such as the City's cycling and pedestrian committees, for comment; neighbourhood associations and business improvement associations are encouraged to provide comments to their respective Community Councils, while broad interest groups are encouraged to submit comments directly to the Works Committee.

The Works Committee reports having also requested that:

(1) the Commissioner of Works and Emergency Services develop a system of prioritization of requests whereby equity is applied across Community Council areas and also the setting of a maximum number of studies or reviews per year based on budget allocation for this activity, the report on this system to be included for approval at the meeting of the Committee on June 6, 2001; and

(2) the Commissioner of Works and Emergency Services further report to the Committee for its meeting on June 6, 2001, on appropriate traffic calming measures that ensure pedestrian safety on streets, found mostly in suburban areas, that do not have sidewalks or where there may be natural drainage in the form of swales or ditches.

The Traffic Calming Policy report was distributed to Community Councils, Agencies, Boards and Commissions, and other agencies and advocate groups associated with transportation.

The Community Councils discussed this matter at their regularly scheduled meetings on May 15 and 16, 2001, and listed below are the resolutions of each Community Council:

The Downtown Community Council reports having recommended to the Works Committee that:

(1) the traffic calming process as set out in the report (March 8, 2001) from the Commissioner of Works and Emergency Services be adopted, subject to:

    (a) Section 2.2 of Table 1 titled, "Traffic Calming Warrant Criteria" of the report (March 8, 2001) being amended to read, "Traffic calming measures may be considered at or near locations where the road grade is between five percent and eight percent";

    (b) provision being made in the warrant approval process which would address the impact of schools or high pedestrian traffic in the area under consideration for traffic calming; and

    (c) the Commissioner of Works and Emergency Services reporting to the relevant Community Council, rather than the Works Committee, with his negative recommendations whenever an application fails to meet the warrants; and

(2) the Province of Ontario be requested to amend the new Municipal Class Environmental Assessment Act, to designate traffic calming as a Schedule A activity.

The East Community Council reports having:

(1) received a staff presentation on the proposed Traffic Calming Policy;

(2) directed that the Works Committee be advised that the East Community Council does not concur, at this time, in the recommendations embodied in the report, dated March 8, 2001, from the Commissioner of Works and Emergency Services, having regard for Recommendation No. (3)(a)(ii) hereunder; and

(3) recommended to the Works Committee that:

    (a) the Commissioner of Works and Emergency Services be requested to report to the Works Committee:

        (i) in consultation with the City Clerk, on a consistent policy for petitions and the polling of residents applicable to the traffic calming and street permit parking policies, currently under consideration;

(ii) on the equitable distribution of funds to be budgeted annually for these issues, by Community Council area, prior to the consideration of these policies;

(iii) in consultation with the Fire Chief, the General Manager, Emergency Medical Services and the Chief of Police, on routes that may not be suitable for traffic calming measures; and

(iv) on a protocol to manage area-wide traffic management plans that overlap Community Council boundaries;

(b) the Commissioner of Works and Emergency Services be requested to:

(i) complete the effectiveness study on Community Safety Zones no later than the end of the year 2001; the results of such study to be reported to City Council through the Community Councils and the Works Committee; and

(ii) create a mechanism to ensure, considering the limited capital budget for the installation of traffic calming measures, that such installations be equally and fairly distributed throughout the City so that no one Community Council area shall receive preferential treatment;

(c) the Traffic Calming Process Flow Chart (Appendix 6) be prefaced with a public consultation meeting to be held at the discretion of the Ward Councillor;

(d) the initial petition be warranted at 60 percent of all adult residents on affected streets;

(e) the resultant poll reflect 60 percent of all adult residents in a polled neighbourhood;

(f) the Medical Officer of Health be requested to comment to Works Committee on potential pollution issues; and

(g) a ranking criteria be established for the expenditure of funds on traffic calming measures.

The Midtown Community Council reports having:

(A) recommended that the Proposed Process for Installing Traffic Calming Measures (Appendix 5 contained in the report (March 8, 2001) from the Commissioner of Works and Emergency Services, proposing a harmonized traffic calming policy) be amended to read as follows:

"(1) When submitting a request for traffic calming to the Councillor, proponents must include a petition of support for the project from at least 25 percent of the affected households on the street. In the case of rental units, it shall be 10 percent.

(2) Staff will investigate to confirm whether or not there is a problem as identified by the petitioners.

(3) If it has been determined that there is a problem, the Traffic Operations staff will review the request and determine if the proposed traffic calming, or any alternative calming that staff recommends, will have significant traffic impacts on adjacent local streets. If the proposal is anticipated to have significant impacts, the staff will expand the study to include adjacent streets. Councillors will be consulted in the establishment of the boundaries of the study area.

(4) The proposal(s) will be reviewed by staff to determine if it satisfies the criteria outlined in (3). These criteria shall include but not be limited to the provision of sidewalks, determination of the road grade and potential impact on emergency services.

(5) The proposal is circulated to the Emergency Services (Ambulance, Fire and Police) and the TTC for their comment on the proposal and any modifications that they may suggest in order that their services are not significantly impacted.

(6) If all safety requirements are met, staff will evaluate speeds, the traffic volumes, block lengths and impacts on transit service. Once all the data has been collected, an analysis and evaluation of all the alternatives will be carried out and the preferred option(s) will be chosen.

(7) There shall be no speed humps constructed on TTC routes.

(8) Staff will develop a detailed design that will illustrate the technically preferred traffic calming measures to address the traffic and street conditions. This plan will also take into account driveway locations, recommended spacing, lighting, pole locations, signage, etc.

(9) Once the detailed design is completed, the Ward Councillor will either undertake, or direct staff, to conduct a survey of households on the affected street (or portion of a street) or area, to determine the degree of public acceptance of the proposal. Wording contained in the letter regarding the poll shall be "advisory" not "determinative" in its nature. Councillors may also wish to hold a community meeting.

(10) A "successful" poll shall be defined by a response rate of 25 percent coupled with at least a 60 percent positive response rate. There shall be one response allowed per household.

(11) If the poll is successful, the City shall proceed with the four weeks of advertising as required by the Environmental Assessment Act.

(12) Upon tabulation of the poll and completion of the four weeks of advertising, a public deputation hearing is scheduled before the appropriate Community Council. If the project is not approved by Community Council, staff will respond to the proponents with a letter indicating the reasons why the project will not be implemented.

(13) If Community Council approves the project, then it is forwarded to City Council for final approval. The request to City Council should also include a recommendation to issue a Notice of Completion, in accordance with the statutory requirements of the Environmental Assessment Act. This Notice of Completion would be sent to all parties receiving the initial notice of consultation.

(14) If final approval is secured from City Council, the Notice of Completion is sent to all relevant parties with a 30-day time period for review and opportunity to request a Part II Order.

(15) If there is no Part II Order request, the project is submitted for budget approval and tendering and construction as soon as possible.

(16) If there is a Part II Order request for the project, then the project is reviewed by the Ministry of the Environment and one of the following may occur.

The Minister may:

(i) deny the request;

(ii) deny the request with conditions (such as requiring that a Schedule C process be completed or that monitoring and reporting processes be implemented);

(iii) refer the matter to mediation; or

(iv) require the proponent to comply with Part II of the EA Act (including a government review and public hearings).

(17) Traffic calming shall be considered at the time a road is resurfaced or reconstructed." and

(B) further recommended that the Province be requested to review the Environmental Assessment Act with a view to deleting all but: (1) directional closures; (2) diversions; and (3) full closures, as described in Table 3.1: Traffic Calming Measures.

The North Community Council reports having:

(1) recommended to the Works Committee that the report (March 8, 2001) from the Commissioner of Works and Emergency Services, respecting a harmonized traffic calming policy for the City of Toronto, be endorsed; and

(2) requested the Works Committee to consider:

(a) how 25 percent of the households in support of the proposed traffic calming within a particular study area can be determined;

(b) how the validity of a petition can be confirmed;

(c) the allocation of capital funding on a Community Council basis at the beginning of the year, with a further review after six months, to assess any re-allocation of unused funding; and

(d) exploring the feasibility of expanding the "Watch Your Speed" Program involving the use of photo radar as a means of enforcing vehicle speeds by issuing speed violations electronically.

The Southwest Community Council reports having recommended to the Works Committee that:

(1) with respect to Appendix 5, headed "The Proposed Process for Installing Traffic Calming Measures", that:

(a) Recommendation No. (1) be deleted, and the following substituted in lieu thereof:

'(1) When submitting a request for traffic calming, that the request be considered based on the results of a survey to be conducted by the local Councillor, in lieu of proponents submitting a petition of support.';

(b) wherever mentioned, the word "Warrant" be deleted and the word "Criteria" be substituted in lieu thereof; and

(c) the words "Works Committee" be deleted from the second to last paragraph on page 3 of the Proposed Process, and the words "appropriate Standing Committee" be substituted in lieu thereof, to read as follows:

'In the event that a traffic calming request does not meet the requirements of Criteria 1, 2 or 3, at steps 1, 5 or 9 respectively, and the Ward Councillor requests that the project and staff study continue anyway, staff will report on the status of the project to that point to the appropriate Standing Committee, requesting direction on whether to proceed further.';

(2) the Proposed Process for Installing Traffic Calming Measures be compressed to allow for decisions to be made more expeditiously;

(3) the Southwest Community Council is opposed to the limiting of traffic calming measures based on budget allocations;

(4) should the process of limitations be adopted, that funds be allocated evenly on a per kilometre, per ward basis, only in those areas that permit traffic calming, and that any unused portion of funds be allowed to be traded for future credits in November of each year;

(5) all references to provincial regulations as they pertain to the Municipal Class Environmental Assessment Act on traffic calming, be deleted from the City of Toronto's by-laws;

(6) City Council be requested to advise the Ministry of the Environment that it is Council's view that the Minister's approval of speed humps and other traffic calming measures is an unnecessary intrusion on the City of Toronto's jurisdiction and that the appropriate Acts or Regulations be amended accordingly; and

(7) the Commissioner of Works and Emergency Services be requested to report on the potential for reviewing the current criteria to allow for the narrowing of streets as a traffic calming option.

The West Community Council reports having recommended to the Works Committee that:

(1) the harmonized traffic calming policy embodied in the report dated March 8, 2001, from the Commissioner of Works and Emergency Services be adopted, subject to amending the Warrant 2 criterion regarding sidewalks to provide that sidewalks first be considered as a high priority before traffic calming measures are examined;

(2) by the end of 2001, additional staff resources be allocated to the West District to ensure that traffic calming requests are dealt with in a timely manner and do not draw on current staff resources;

(3) for the balance of 2001, funding priority be given to traffic calming projects in those parts of the City that did not previously allow for traffic calming measures; and

(4) for the 2002 budget, the Budget Advisory Committee consider increasing the line item for traffic calming measures to ensure an equitable distribution of traffic calming measures throughout the entire City.

Discussion:

There was a range of Community Council responses to the proposed Traffic Calming Policy. Some deliberations were quite brief, while others took two hours or more. Some comments and formal motions addressed broad and fundamental issues, while others dealt with the details of process and criteria.

Within this report, staff propose to deal primarily with the broader issues and seek general support for the concepts of using physical traffic calming measures in Toronto. A further report, to be submitted to the September 10, 2001 meeting of the Works Committee, would then address more detailed issues raised during the consultation process with respect to the study and approval processes, and the criteria to be used when evaluating proposals.

Some concerns have been raised about the effectiveness, safety and environmental impacts of physical traffic calming. Within the report dated March 8, 2001, staff advised that there are benefits and disbenefits associated with physical traffic calming. However, in the opinion of staff, the benefits for the majority of neighbourhood residents outweigh the negative impacts. For example, residents have greater comfort on and enjoyment of their streets once motor vehicle traffic is calmed. A calmed street is less of a barrier between neighbours. However, depending upon the type of traffic calming measure(s) used, response times of emergency services can be increased.

There is limited Toronto data on the frequency of collisions on or near a street before and after the installation of traffic calming measures. So far the data suggests that there may be a slight reduction in the frequency of collisions resulting from such measures. However, a key element is the potential severity of a collision on a calmed street. Slower-moving vehicles are less likely to injure other road users if they are involved in a collision. Furthermore, drivers of slower-moving vehicles are more likely to avoid collisions in the first place.

Staff do have good Toronto statistics for before and after speeds on calmed streets. Significant speed reductions have been recorded, especially with the use of speed humps spaced 60 metres to 80 metres apart.

Staff discussed environmental issues within the March 8, 2001 report, and noted an increase in air and noise pollution associated with gasoline-powered vehicles on traffic calmed streets in comparison to vehicles being driven at consistently moderate speeds. However, a traffic calming measure would compare favourably in this regard when compared to the effects of a stop sign.

Judging from the popularity of physical traffic calming measures throughout the world, the general public seems to be generally in favour of the benefits over the disbenefits. Furthermore, the use of traffic calming has been acknowledged by the Transportation Association of Canada and the Institute of Transportation Engineers.

Through feedback from the Community Councils, there seems to be general support for the continued use of physical traffic calming measures; however, the East Community Council has asked for the adoption of this use in principle to be deferred, pending the outcome of the consideration of equitable distribution of funds across the city for this purpose.

The opinions voiced by Community Councils on this issue ranged from giving priority to those Community Council areas currently installing traffic calming measures; to an equal distribution of funds to each Community Council area; to giving priority to those areas which have not been active until now.

The status of the budget for 2001 is as follows: $750,000 has been allocated for physical traffic calming within the capital budget. Since the end of last year's construction season, numerous requests and proposals for traffic calming have been processed and approved. This year's budget has already been fully committed to these projects. Therefore, all projects approved later this year will have to be placed on a waiting list for funding next year. We anticipate that the combined cost of approved but unfunded projects will be approximately $500,000 by the end of 2001. Staff of Districts 2 and 4 (the former Cities of Etobicoke and Scarborough) have advised that they currently have no traffic calming projects under study.

Obviously, there are significant differences between the levels of activity in each Community Council area with respect to requests for and installations of traffic calming measures. It is possible that an equitable level of interest and activity will not be established across the Community Council areas for a number of years.

Furthermore, if there is a waiting list of approved traffic calming projects, and there is the possibility that the annual funding is not sufficient to accommodate all the projects within one year, then those streets that are in the greatest need should receive priority for the limited funding. Therefore, one option for allocating the funds is to use a ranking system, which would be applied uniformly across the city.

Staff have developed a ranking system for this purpose and it is attached to this report as Appendix 1. Within this ranking system, four criteria are measured: pedestrian and bicycling factors; collision history; volume of traffic; and speed of traffic. In the case of speed and traffic volume, different threshold values are used for local roads than collector roads. This is because the function of a collector road is to act as a connection between local roads and arterial roads, so traffic speeds and volumes generally tend to be higher than on local roads. This principle was established by Toronto City Council when it adopted the Road Classification System in 2000.

To illustrate how the ranking system works, if local streets have the same volume, the one with a higher operating speed would rank higher. In another example, if two local streets have similar traffic operations characteristics, the one with more frequent collision activity would be given priority. Streets on which there are pedestrian generators, such as schools or parks, and/or bicycle routes, would receive more ranking points than similar streets without these features.

As staff reported within the March 8, 2001 policy proposal, the new Municipal Class Environmental Assessment includes the installation and removal of physical traffic calming measures within Schedule B if the cost is less than $1.5 million, or Schedule C if the cost exceeds $1.5 million. Prior to April 4, 2001, traffic calming projects were included in Schedule A. The City of Toronto has legal obligations to follow the requirements of the Act.

The vast majority of traffic calming projects in the City of Toronto will cost less than $1.5 million. In fact, it is rare for a single project to cost over $200,000.

There seems to be strong support to request the Province of Ontario to reconsider the recent amendments to the Municipal Class Environmental Assessment as they relate to traffic calming. The Downtown Community Council suggests that traffic calming projects be returned to Schedule A, where they were previously. The Southwest Community Council has a similar

opinion. Midtown Community Council suggests similar action, but makes the distinction that severe measures (directional closures; diversions; and full closures) remain in their current place within Schedule B.

Staff propose a third option: that the City of Toronto request the Ministry of the Environment to amend the Municipal Class Environmental Assessment to identify all physical traffic calming projects which cost less than $500,000 within Schedule A. Projects costing more than $500,000 but less than $1.5 million would be subject to the requirements of Schedule B.

Conclusions:

Staff are of the opinion that the benefits of prudently placed physical traffic calming measures can outweigh the disbenefits. We recommend that Toronto City Council endorse the basic principles of traffic calming and support its continued application.

The approved traffic calming budget of $750,000 has already been fully committed for 2001 and we anticipate that there will be a long list of traffic calming projects on a waiting list at the start of the 2002 construction season. Staff recommend the application of a ranking system uniformly across the City to establish priorities for project installations in 2002 and beyond.

There are a number of recommendations made by Community Councils which relate to the details of evaluating and processing proposals, including the initiation process and the formal polling near the completion of each project. These issues have not been addressed within this report. We propose that another report be submitted to the September 10, 2001 Works Committee meeting to address these more detailed elements of the proposed Traffic Calming Policy.

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List of Attachment(s):

Appendix 1 – Traffic Calming Ranking System

Appendix 1

Traffic Calming Ranking System

Ranking Max.100 points	Speed (0 to 25 points)	Local Road 2 points for each km/h that the 85th%ile speed is above the Minimum Speed threshold used in Warrant 3.1 of Traffic Calming Policy	Collector Road 1 point for each km/h that the 85th %ile speed is above the Minimum Speed threshold used in Warrant 3.1 of Traffic Calming Policy
	Volume (0 to 25 points)	Local Road 1 point for every 100 vehicles of daily traffic (0-2500 vehicles per day)	Collector Road 1 point for every 220 vehicles of daily traffic over 2500 (2500-8000 vehicles per day)
	Collisions (0 to 25 points)	5 points for 1 preventable collisions[1] recorded by police in the past 3 years; or 10 points for 2 or more preventable collisions[1] recorded in the past 3 years; or 10 points for 1 or more preventable collisions[1] recorded resulting in personal injury in the past 3 years.	
	Pedestrian and Bicycling Factors (0 to 25 points)	5 points for each pedestrian generator (eg. park, school, seniors centre, recreation centre, church, or other public institution, etc.) 10 points for a signed bicycle route[2]	

Notes: The review should generally be conducted from one intersecting collector street (or minor or major arterial street) to another.
Road classifications are as determined in the City's Road Classification System.
[1]Preventable collisions are those that are considered preventable through the use of traffic calming measures.
[2]Signed bicycle route means a bicycle route identified in the City's Master Cycling Plan.

The Works Committee also submits the following communication (March 28, 2001) from the City Clerk:

The Works Committee at its meeting on March 28, 2001, had before it a report (March 8, 2001) from the Commissioner of Works and Emergency Services submitting a harmonized traffic calming policy for the City of Toronto, and recommending that:

(1) this report be forwarded to all Community Councils for consideration, and that their comments on the proposed traffic calming policy be submitted to the Works Committee for consideration at its June 6, 2001 meeting; and

(2) this report be distributed to any interested residents and parties, including neighbourhood and business improvement associations in Toronto, as well as citizen advisory committees and advocate groups for transportation modes, such as the City's cycling and pedestrian committees, for comment; neighbourhood associations and business improvement associations are encouraged to provide comments to their respective

Community Councils, while broad interest groups are encouraged to submit comments directly to the Works Committee.

The Committee also had before it a communication (May 17, 2000) from the City Clerk advising that the Works Committee at its meeting on May 17, 2000, had before it a report (May 9, 2000) from the Commissioner of Works and Emergency Services respecting the enactment of a moratorium on the approval of all new traffic calming measures, as requested by the Committee at its meeting on April 19, 2000, in response to a communication from Councillor Bill Saundercook, former Chair, Works Committee; and further advising that the Committee deferred consideration of the aforementioned report until such time as the department's review of traffic calming measures is completed and the proposed policy is brought before the Committee.

The Committee:

(1) adopted the recommendations contained in the aforementioned report;

(2) requested the Commissioner of Works and Emergency Services to develop a system of prioritization of requests whereby equity is applied across Community Council areas, and also the setting of a maximum number of studies or reviews per year based on budget allocation for this activity, the report on this system to be included for approval at the meeting of the Committee on June 6, 2001;

(3) requested that the Commissioner of Works and Emergency Services further report to the Committee for its meeting on June 6, 2001, on appropriate traffic calming measures that ensure pedestrian safety on streets, found mostly in suburban areas, that do not have sidewalks or where there may be natural drainage in the form of swales or ditches; and

(4) requested that staff presentations be made to the Community Councils when this matter is considered.

(Report dated March 8, 2001, from the
Commissioner of Works and Emergency Services)

Purpose:

The purpose of this report is to propose a harmonized traffic calming policy for the City of Toronto.

Financial Implications and Impact Statement:

There are significant costs associated with the current practice of installing physical traffic calming measures, particularly in the former Cities of Toronto and York. Funds to cover the cost of the installation of traffic calming measures are included in the Transportation Services Capital Budget on a city-wide basis. An amount of $750,000 was approved under the 2000 Capital Works Program and an amount of $750,000 has been requested in the submitted 2001 request. Costs of ongoing administration, design and maintenance are accommodated within the Operating Budget.

It is not anticipated that the adoption and implementation of the proposed traffic calming policy as set out in this report will impact on the level of funding currently provided for traffic calming. It should be noted, however, that there has been a steady increase in the demand for traffic calming installations across the City and should this trend continue, funding requirements may have to be re-addressed.

Recommendations:

It is recommended that:

(1) this report be forwarded to all Community Councils for consideration, and that their comments on the proposed traffic calming policy be submitted to the Works Committee for consideration at its June 6, 2001 meeting; and

(2) this report be distributed to any interested residents and parties, including neighbourhood and business improvement associations in Toronto, as well as citizen advisory committees and advocate groups for transportation modes, such as the City's cycling and pedestrian committees, for comment; neighbourhood associations and business improvement associations are encouraged to provide comments to their respective Community Councils, while broad interest groups are encouraged to submit comments directly to the Works Committee.

Executive Summary:

The proposed harmonized traffic calming policy for the City of Toronto draws from the experience and policies of Toronto's seven previous municipalities, amalgamated in January 1998. Traffic calming has been implemented on City streets since 1974, although most traffic calming measures have been installed in recent years.

Late in 2000, the Province of Ontario amended the Environmental Assessment Act to include physical traffic calming measures as Schedule B Projects. Any traffic calming project approved by Toronto City Council after April 4, 2001, is subject to the requirements of the Environmental Assessment Act.

It is requested that the Community Councils, and other interested parties, comment on the proposed traffic calming policy and on the following recommendations proposed to be brought back to the Works Committee for consideration at its June 6, 2001 meeting:

(1) that physical traffic calming be endorsed as an effective way of reducing traffic speeds on local and collector streets in the City of Toronto;

(2) that physical traffic calming be considered principally;

- for local and collector streets;
- where local support exists;
- where existing traffic impacts are significant; and

- where the impacts of traffic calming on emergency and transit services and on adjacent uncalmed streets are relatively minor;

(3) that the process for conducting traffic engineering studies, evaluating options, and undertaking public consultation, in accordance with the requirements of the Environmental Assessment Act for physical traffic calming measures, be followed as described in this report;

(4) that the qualifying criteria contained in this report be used as the determining justification for installing physical traffic calming measures; and

(5) that, to the extent possible, the implementation of physical traffic calming measures be undertaken in conjunction with annual road reconstruction and maintenance programs.

Background:

City Council, at its meeting of July 29, 1998, adopted Clause No. 8 of Report No. 10 of The Toronto Community Council, entitled "South Eglinton Area (East) Traffic Calming Project (Phase 1) – Poll Results (North Toronto)", and requested the Commissioner of Works and Emergency Services to report on "traffic calming, the various elements of traffic calming, and the experience so far, such report to provide options for the consideration of the Toronto Community Council and City Council."

City Council, at its meeting of October 28, 29 and 30, 1998, adopted Clause No. 1 of Report No. 10 of The York Community Council, entitled "Traffic Calming Measures on Greenbrook Drive", and requested the Commissioner of Works and Emergency Services "to develop a comprehensive report with respect to a protocol for the implementation of traffic calming measures in communities, and on the feasibility of conducting pre- and post-implementation analysis of such measures."

City Council, at its meeting of March 2, 3 and 4, 1999, adopted Clause No. 1 of Report No. 3 of The Strategic Policies and Priorities Committee, which included the recommendations embodied in the 1999 Capital Budget Book which requested the Commissioner of Works and Emergency Services "to provide to the Urban Environment and Development Committee and the Budget Committee a detailed report on traffic calming."

City Council, at its meeting of June 7, 8 and 9, 2000, adopted Clause No. 11 of Report No. 12 of The Works Committee, entitled "Traffic Calming Measures and Policies", and in doing so deferred consideration of the May 9, 2000 report of the Commissioner of Works and Emergency Services addressing a request by the Chair of the Works Committee on a motion to enact a moratorium on the approval of all new traffic calming measures "until such time as the department's review of traffic calming measures is complete and the proposed policy is brought before the Committee."

Discussion:

(1) Introduction:

The Transportation Services Division receives hundreds of complaints each year about traffic on residential roadways. Members of the community request solutions to traffic concerns in their neighbourhoods such as aggressive driving, speeding, non-compliance of traffic controls, discomfort felt by pedestrians and cyclists while close to or using their roadways, "cut-through" traffic and traffic noise. There are a range of solutions that address these problems, one of which is traffic calming.

Traffic calming is a term most commonly associated with physical features placed on a roadway to influence the speed of motor vehicles. This report and proposed policy deals exclusively with physical traffic calming measures. The purpose of traffic calming is to reduce the speeds of motor vehicles and to improve traffic safety and comfort levels for all users of residential streets. Traffic calming of residential streets is seen as supportive of the proposed Official Plan directions of improving the quality of life for city residents.

City Council has requested staff to develop a new traffic calming policy for the City of Toronto. This new policy builds from the best practices and existing policies of all the former municipalities, most notably the former Cities of North York, Toronto and York, which have significant experience with traffic calming. The former City of Toronto installed its first speed humps in 1974, although most traffic calming measures have been installed in the last few years. The former City of North York installed its first traffic calming in 1996 while York started traffic calming in 1994. In East York, Etobicoke and Scarborough, traffic calming was either not used or was tried only on a limited or experimental basis.

In the preparation of this policy, two working groups were established to ensure that appropriate staff were consulted. Fire Services, Emergency Medical Services and Police Services, plus the Toronto Transit Commission were represented on an External Staff Liaison Committee which met several times in late 2000 and early 2001. Transportation Services staff, including representatives of each of the four geographic districts which provide traffic operations, traffic planning and road operations functional services, took part in an internal traffic calming working group.

Numerous other groups and members of the public will likely wish to provide input into the development of this policy. Staff propose that it be distributed to Community Councils for review, as well as neighbourhood and business improvement associations in Toronto, citizen advisory committees, the City's cycling and pedestrian committees, and other pedestrian, cycling, transit, trucking and motorists' organisations. City Councillors will also be asked to distribute the policy to any other interested parties. Feedback from neighbourhood and business associations will be encouraged through Community Councils, while broader interest groups will be invited to submit comments directly to the Works Committee.

(2) Legislative Acts:

City of Toronto Act (Traffic Calming), 2000:

In the former City of Toronto, special Provincial legislation (enacted in 1994) authorized the City to post 30 kilometre per hour (km/h) speed limits on streets with traffic calming. At the request of City Council, staff have applied for and obtained legislation so that, as an option, 30 km/h speed limits can be set on any City street which has physical traffic calming. The legislation is entitled the City of Toronto Act (Traffic Calming), 2000 and it received Royal Assent on December 21, 2000.

New Municipal Class Environmental Assessment Act:

The new Municipal Class Environmental Assessment Act was approved by the Minister of the Environment in October 2000. It comes into effect on April 4, 2001. An outline of the new Class EA process and it's implications are detailed in the attached Appendix 1.

The new Class EA includes in its project schedules both the installation and removal of traffic calming measures. These are identified as Schedule B activities when the cost is less than $1.5 million, and Schedule C activities if over $1.5 million. Since it is anticipated that the cost of the vast majority of traffic calming projects in the City of Toronto would be less than $1.5 million, only Schedule B requirements are discussed in Appendix 1.

Schedule B activities require two mandatory points of contact with the public and review agencies which are expected to be conducted at specific stages in the process. The first mandatory point of contact requires the notification of directly affected property owners and review agencies and notification in two separate issues of a local newspaper having general circulation in the project area. Subsequent to this first contact, staff must compile a mailing list of all individuals who have expressed an interest in the project. The second point of contact for the Class EA process is the issuance of a Notice of Completion. This notice is mailed to all individuals on the mailing list indicating the nature of the project to be undertaken, and notifies the public that they have a 30-day period during which a request may be made for a Part II Order (formerly known as a "Bump-up").

Any member of the public submitting a Part II Order request under the Class EA has a responsibility to bring their concerns to the City early in the process to permit changes to the project or process early on, when the City has more flexibility to do so. Requests which are clearly made with the intent of delaying a project, or which do not contain a reasonable amount of information, may be denied by the Minister.

The inclusion of traffic calming in the new Class EA will affect the process for and timing of new traffic calming installations. The harmonized policy developed later in this report has been developed to fully comply with the new Class EA requirements.

(3) What is Traffic Calming?

In 1997, the Institute of Transportation Engineers (ITE) defined traffic calming as "the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non-motorized street users."

Traffic calming is intended to improve the quality of life for residents on traffic calmed streets, achieve slower speeds for motor vehicles, and increase the safety and the perception of safety for non-motorized users of the street. Traffic calming is also intended to promote increased pedestrian, cycle and transit usage in an effort to help reduce the negative effects of motor vehicles on the environment.

The Transportation Association of Canada (TAC) and the Canadian Institute of Transportation Engineers (CITE) published, in 1998, the Canadian Guide to Neighbourhood Traffic Calming (the Guide) in part to achieve an appropriate level of national standardization of traffic calming measures. The Guide provides guidance (as opposed to setting standards) on the design and installation of traffic calming measures.

The Guide contains four chapters of which the last two are most relevant to this policy. Chapters 3 and 4 of the Guide address the applicability, effectiveness and design guidelines for traffic calming measures. The Guide describes 25 different traffic calming measures and classifies them into the following four different groups:

- vertical deflections;
- horizontal deflections;
- obstructions; and
- signs.

Some of the measures addressed in the Guide (for example signs) are not considered physical traffic calming measures and are used primarily for other reasons.

The Guide provides design and application guidelines for a range of measures. A description of the most common traffic calming measures is provided in Appendix 2 (Table 3.1 of the Guide). Appendix 3 provides a brief outline of the key benefits and disbenefits of each traffic calming measure (Tables 3.2 and 3.3 of the Guide). More detailed information regarding these traffic calming measures, their applicability and effectiveness may be found in the Guide.

The City of Toronto uses almost all of the traffic calming measures identified in the Guide but also uses edge lines, parking, and "parking islands" as non-physical forms of traffic calming measures.

(4) Traffic Calming State of the Practice:

<u>North America and the World</u>:

Traffic calming started in European centres in the early 1970's and is now practised throughout the world. Notable programs aimed at calming traffic are in place in Britain, West Germany,

Denmark and France. Other world leaders in traffic calming include Australia, where the term Local Area Traffic Management is used to describe traffic calming. Overall, the trends abroad indicate that traffic calming is generally shifting in emphasis from single street improvements toward area-wide programs.

North America has gained considerable ground with respect to the development of traffic calming over the past ten years. The early beginnings of traffic calming programs in the United States (U.S.) date back to the early 1970's when Seattle, Washington, began to undertake area-wide traffic planning. Berkeley, California, also introduced a city-wide traffic management plan at about the same time. Other traffic calming programs in the United States started in San Jose, California, Gainesville, Florida, and Portland, Oregon in the late 1970's and early 1980's. Today, the Cities of Seattle and Portland have traffic calming programs that are considered to be model programs; however, there are at least 20 major cities throughout the United States that have modern, large scale traffic calming programs. Several dozen smaller U.S. cities also have traffic calming policies in place.

Traffic calming programs usually include either spot traffic improvements or area-wide traffic improvements, or both. However, North America is following the world trend from single street improvements to area-wide programs. Proposed traffic calming installations must usually satisfy a set of minimum requirements before further ranking and prioritization of projects is carried out. The polling of residents, to determine support for proposed traffic calming installations, is acknowledged to be a critical step in the implementation process.

Canadian cities that have successfully implemented traffic calming include Vancouver and Victoria, British Columbia, Edmonton and Calgary, Alberta, and Montreal and Sherbrooke, Quebec. Ontario municipalities with traffic calming experience include the City of Ottawa, the City of Vaughan, the Town of Richmond Hill, the Town of Markham, and the Town of Pickering. Each has a traffic calming program or policy in place. Other jurisdictions, including the City of Mississauga, experimented with various traffic calming in the 1990's, but have not formally adopted a traffic calming program.

It is interesting to note that the public response to traffic calming in North America has been mixed. There are examples of opposition, which have resulted in moratoriums of traffic calming to allow city councils to re-evaluate and revise their policies and programs. Generally, the results of program pauses have been the focusing of program goals, the tightening of qualifications for traffic calming, and the reduction of traffic calming budgets. For example, in late 1999 the City of San Jose, California, temporarily suspended their traffic calming program for about nine months. In mid-2000, the City introduced a new traffic calming policy with a focus on community education and targeting residential areas for the purpose of minimizing intrusion by non-local vehicles. San Diego, California, also imposed a moratorium on all speed hump projects while new warrants were being developed. Boulder, Colorado, imposed a large budget cut on their traffic calming program after a review, and Berkeley, California, put its speed hump program on hold until emergency response issues could be resolved.

Toronto:

Traffic calming, which introduces physical changes to roadways to help moderate speeding and aggressive driving, has been implemented in a variety of forms over the past few years in some parts of Toronto. The former City of Toronto installed its first speed humps in 1974. For about the next 15 years, a variety of other techniques were used to control traffic including one-way street mazes and choker points. Some treatments were area-wide, while others were spot improvements. In the early 1990's, the former City of Toronto began to introduce modern vertical and horizontal traffic calming measures. In 1994, it adopted a formal traffic calming policy, and in 1997 it endorsed an updated policy for the installation of speed humps on city streets. Speed humps in the former City of Toronto have been generally avoided on streets designated as primary emergency response routes, and have not been used on streets with regularly scheduled transit service. Considerable effort has also been given to ensure that traffic calming measures are compatible with bicycles. The speed hump design, for example, is based on a Dutch design and is very comfortable for cyclists.

Traffic calming measures currently in use include traffic circles, chicanes, and raised intersections, with asphalt speed humps the most common method of traffic calming in the city. About $750,000 worth of traffic calming measures are installed in Toronto each year, including about 300 speed humps. The vast majority of these measures have been installed within the boundaries of the former City of Toronto. Generally, the public has reacted favourably to traffic calming. Like most major cities with traffic calming programs, Toronto fosters information sharing between those requesting traffic calming and municipal staff. Organized groups of residents requesting traffic calming work closely with City staff to assess the traffic problem, and to determine whether traffic calming will help to solve it. City officials are careful to evaluate public support for traffic calming plans.

Staff recommend that the City of Toronto continue to utilize physical traffic calming as an effective response to the issue of inappropriate speeding on local and collector roads within the City of Toronto. Staff also recommend that a harmonized traffic calming policy be developed to standardize the evaluation of traffic calming proposals, and to allow the prioritization of the installation of approved traffic calming proposals within the Capital Works Program.

The proposed traffic calming policy builds from the best policies contained within the respective traffic calming programs of the former Cities of Toronto, York and North York, which all have experience with traffic calming.

(5) Impacts of Traffic Calming on Emergency Services and Transit:

Physical traffic calming does impact the provision of emergency and transit services. Staff of the Toronto Fire Service, the Toronto Emergency Medical Services and the Toronto Transit Commission have voiced the greatest concerns.
The concerns of emergency services with respect to traffic calming are primarily with vertical measures such as speed humps. A national survey within the U.S. conducted by the City of Berkeley, California, indicated that "four out of five cities report 'some concern' on the part of emergency services over the use of speed humps." There have been many studies conducted over the past few years involving speed humps and fire response times and most of these have

been summarized in the ITE document "Traffic Calming: State of the Practice." The findings in this document indicate that in nearly all the studies conducted, the delay per speed hump is usually under 10 seconds per hump. Though in isolation this time seems fairly short, total delay increases when speed humps are installed in series along a response route.

A more recent study conducted for the former City of Ottawa and the former Region of Ottawa-Carleton (now the City of Ottawa) indicate that "emergency service delivery is hindered by traffic calming that reduces speeds on regional roads, but is relatively unaffected by traffic calming on local streets." However, emergency services personnel interviewed indicated that "the emergency service response times after traffic calming has been put in place, is still within the acceptable time limit (as defined by each service provider)."

Toronto Fire Service:

The Toronto Fire Service has indicated that their position has not changed from the position taken by the former (July 1997) City of Toronto Fire Department in the "City of Toronto - Installation of Speed Humps on City Streets" policy report. The comments from the Toronto Fire Service from that report are as follows:

> "We have received other cities' traffic calming plans. Concessions have been granted to designate certain routes free of all such devices. Wide scale area planning is needed prior to implementation. The public needs to know upfront the factors that are at stake, traffic safety versus medical and fire response time. The decision as to how to proceed is a political one, and should be left up to the community to decide which is to prevail."

Toronto Emergency Medical Services (TEMS):

TEMS have indicated the following with respect to the installation of traffic calming measures:

> "As a department we applaud and respect every measure that can be taken to improve safety on our streets within Toronto.
>
> It must be realized that when we do encounter such road restrictions as speed humps, bumps, swells or dips, the response of an emergency vehicle specifically an ambulance may be delayed responding to a street with these implements in place. Further, once a patient is placed in the back of the vehicle, the ambulance crew will be required to come to a complete stop and ease their wheels over the humps, bumps, swells, or dips in order to prevent the patient from being tossed around in the back of the vehicles.
>
> TEMS recognizes that there may be some circumstances in which the installation of speed bumps is unavoidable. With this in mind, it must be remembered that speed bumps create considerable pain and discomfort for ambulance patients, and can lead to a worsening of already existing injuries. As a result, while it will not always be possible to do so, the installation of speed bumps should, as a matter of policy, be avoided wherever possible, and should only occur when all other traffic calming measures have been unsuccessful."

Toronto Police Service:

In June 2000, the Toronto Police Service produced its Road Safety Strategy report, which outlined the service priorities for 2000. The mission statement for the Traffic Services Unit is "to deliver effective and efficient traffic policing services aimed at reducing collisions and incidents of poor driving behaviour thereby reducing traffic deaths and injuries, and to ensure the safe and orderly movement of traffic within the City of Toronto." The Toronto Police Service hopes to achieve this goal through awareness, education and enforcement strategies. However, with limited budgets and limited staff resources, the police welcome any self-enforcing traffic safety measures which will allow them to use their resources in other ways to achieve their road safety goals.

Of the three emergency services providers (ambulance, fire and police), only the police are very supportive of traffic calming. Fire and ambulance services have concerns about the effects of traffic calming, especially speed humps, and their response times.

The studies regarding the provision of emergency services and traffic calming all derive a similar conclusion. The introduction of traffic calming measures on city streets will increase the response time for all emergency services. However, consultation with emergency service providers should be able to result in the installation of traffic calming devices that will result in delays that fall within acceptable limits.

Through consultation with emergency services staff, primary emergency response routes should be identified, and traffic calming would either not be recommended on these streets, or only those measures acceptable to the emergency services would be provided.

Transit:

A literature review found two North American reports on the effects of traffic calming on transit. These reports originate from the City of Ottawa and the City of San Francisco. Transit services in both these cities indicate that they are concerned with the effect of speed humps. The City of San Francisco prohibits speed humps on transit routes, while indicating that other traffic calming devices are compatible with transit routes, such as chokers, traffic circles and medians. The City of Ottawa has the same concerns as the City of San Francisco. In addition, they require that when designing horizontal traffic calming measures, consideration be taken into account for the larger transit vehicles and their turning radii. A European study indicated that even though bus companies had adverse comments about traffic calming, especially speed humps, in the past, they now appear to be satisfied with 75mm high road speed humps. The study also indicated that some local road authorities have reduced the slopes of humps to assist buses.

In September 1999, the Toronto Transit Commission adopted the following recommendations:

"That the Commission:

(i) confirm its opposition to the installation of speed humps on roads which have transit service, as noted in the existing policy on speed humps approved by the

former City of Toronto Council; and endorse the inclusion of this prohibition in the city-wide policy on traffic calming;

(ii) that TTC staff engage in further consultation on suitable design for speed cushions and report back to the Commission;

(iii) endorse the inclusion, in the city-wide policy on traffic calming, of a requirement that the Chief General Manager – TTC co-sign any City staff reports on specific traffic calming projects proposed for roads which have existing transit service, or for which new transit service has already been approved by the Commission, before such reports are submitted for City Council approval;

(iv) note that staff recommendations to implement new transit routings on roads which already have speed humps would be conditional upon the removal of these devices."

Recognising the potential impact of traffic calming on transit services, the current practice of the Transportation Services Division is not to recommend speed humps on transit service routes. The traffic calming policy proposed within this report reaffirms that practice.

(6) Natural Environment Impacts of Traffic Calming (air, noise, vibration):

The physical nature of traffic calming can have an impact on gasoline-powered vehicles which in turn impacts on the natural environment. Even under ideal operating conditions, which are characterized by low average speeds, traffic controlled by traffic calming can result in increased levels of air and sound pollution and increased ground vibrations. As motorists encounter traffic calming, they modify their driving behaviour in ways that could produce more air pollution, noise and ground vibrations when compared to their previous driving pattern. This particularly applies to speed humps, although other traffic calming measures which change the way motorists behave can have similar effects.

Research has revealed that when confronted by physical traffic calming measures, most drivers change their average and maximum speeds, and their rates of acceleration and braking. These greater rates of acceleration and deceleration on traffic calmed roads can have detrimental effects on the environment since they affect engine speed and load, which in turn affects exhaust composition, temperature, and noise, which can all rise substantially. Route selection and mode of transport can also be modified. In some cases, traffic may be diverted and there may be a small shift to trips being made by walking, cycling or not at all. However, based upon the data available from our experience of traffic calming in Toronto to date, there is no conclusive evidence that traffic is routinely diverted by physical traffic calming measures.

Air Pollution:

Gasoline-powered vehicle emissions vary depending on how the vehicle is driven. Low average speeds within urban centres are known to produce the highest emissions of Carbon Monoxide (CO) and Hydrocarbons (HC), and are characterized by frequent vehicle starts and stops, and/or frequent accelerations and decelerations. As the average speed increases from low to moderate

speeds, engine operation becomes more efficient and less fuel is burned, thereby producing fewer emissions. At much higher speeds (e.g., freeway speeds), the engine power required results in much more fuel being consumed and more emissions being produced.

In 1997, the Transportation Research Laboratory (TRL) in the United Kingdom reported the impact of speed humps on the levels of emissions produced by vehicles as measured in several scientific studies. One of the studies was conducted in Austria under test conditions that are similar to operating conditions on streets in Toronto which have been traffic calmed with speed humps and posted with a 30 km/h speed limit. The test vehicle used was a medium-sized gasoline-powered vehicle with a catalytic converter. It was driven at 30 km/h and slowed to 15 km/h just prior to speed humps spaced 200 metres apart. The vehicle accelerated to 30 km/h after crossing each hump. This generated a speed and acceleration profile which is similar to that of Toronto streets with speed humps.

When compared to pseudo pre-calming conditions in which a 30 km/h constant driving speed was maintained, vehicle emissions of Nitrogen Oxides (NOx) were ten times higher, while CO levels had increased by a factor of three. The level of Carbon Dioxide (CO_2) emissions and fuel consumption increased by 25 percent with the humps in place.

Other studies cited by the TRL, which in some cases involved emission/fuel consumption models, showed similar increases in CO and HC emissions, and in fuel consumption. The results varied depending on the extent of traffic calming in place, the type of vehicle used, whether there was a catalytic converter installed, etc.

For area-wide studies, the TRL's case studies are less relevant to North American standards, since they involved non-catalyst cars or did not make such a distinction at all. Even so, the results varied, with some tests showing slight decreases in NOx and HC emissions while other tests showed greater increases in emissions of NOx, HC, CO, CO_2 and in fuel consumption.

Under the federal Clean Air Act and the Congestion Mitigation and Air Quality Program in the United States, both Houston, Texas, and Portland, Maine, have had federal funding rescinded where traffic calming has been undertaken on the premise of improving air quality. This is because the traffic calming measures resulted in increases to certain types of toxic emissions by approximately 48 percent.

Noise and Vibration:

Compared to steady travel at reasonable speeds, vehicles accelerating and decelerating near speed humps increase levels of noise pollution as they generate additional engine and exhaust noise. Noise is also generated by tires that thump and undercarriages that sometimes scrape across speed humps. Even more noise and vibration is generated by trucks crossing speed humps, partly due to their stiffer frame construction but also due to the loads they carry which are prone to shifting.

Studies conducted by researchers at the TRL indicate that 75 percent of residents on streets with speed humps thought that noise levels had increased despite the fact that traffic had been slowed compared to pre-calming conditions. This finding was partially attributed to the initial

underestimating of the amount of noise generated by the total traffic which included vans, trucks and buses. Islington Council in north London removed several dozen speed humps following complaints by residents of postal vans causing too much noise at the humps.

Another TRL study focused on vibrations that are caused by vehicles crossing speed humps. Researchers found that certain types of soils including peaty soils can transmit vibrations from speed humps to adjacent building foundations, often with harmful effects. Chartered building surveyors added that the types of vibrations which result from vehicles crossing speed humps could add to the distress of aging buildings.

In Portland, Oregon, the City's Traffic Calming Policy stipulates that speed humps must be kept a minimum of 6 metres away from street maintenance access holes to reduce the transmission of vibration from the street into adjacent buildings. Before proceeding with traffic calming on any street, the City of Portland also advises residents of the potential for increased noise from large vehicles as well as from vehicles slowing at speed humps.

Studies have been undertaken to determine if there is an overall reduction in collision frequency as a result of traffic calming. Even though the results of these studies have so far proven to be inconclusive, residents on a traffic-calmed street often enjoy greater comfort levels and a sense of increased safety on their street. Traffic calming can enhance a neighbourhood by reducing the barrier effect of a road and, in some cases, by increasing opportunities for planting trees and shrubs. In these ways, traffic calming can be seen as enhancing the quality of life for residents.

The potential for increases in air, noise and vibration pollution that result from the installation of traffic calming has to be weighed against the benefits to the local residents from the reduction in overall average vehicle speeds. Local area residents should decide the trade-off between these issues. As a result, staff support the inclusion in the new traffic calming policy of the requirement that traffic calming proposals be supported by a majority of affected households.

(7) Traffic Calming Experience in Toronto and the Development of a New Policy:

Most requests for traffic calming come from residents and community organizations. In fostering the traffic calming implementation process, City staff work closely with these residents to secure public acceptance of the proposed traffic calming plan. However, despite hours of volunteer and staff effort, the implementation of traffic calming plans sometimes divides communities. Public opinion is often mixed; some people are of the opinion that speed humps, for example, improve safety and comfort on their street, while others see these features as a nuisance or inconvenience.

The experience to date has indicated that installation of traffic calming does reduce average operating speeds. Staff who work with the public to develop traffic calming plans use the 85^{th} percentile speed (the speed at which 85 percent of motorists are travelling at or below) as a good way of assessing the speed characteristics of a street. Experience shows that it usually takes an 85^{th} percentile speed of 10-15 km/h above the posted speed limit for speeding to be identified as a problem by area residents. To date, speed humps have had a significant impact on reducing the 85^{th} percentile speeds on the streets where they have been installed.

Knowledge gained through traffic calming installations indicates that low volumes of traffic (i.e., under 1,000 vehicles per day) do not necessarily result in traffic concerns and therefore are not, on their own, precursors to traffic calming. However, low volumes combined with excessive speeding (i.e., 85th percentile speeds over 15 km/h above the speed limit) is a bona fide issue.

Traffic calming can be a concern when dealing with streets with higher traffic volumes (i.e., in excess of 8,000 vehicles per day) which are usually collector roads. In these cases, it may result in a diversion of traffic volume, speed and collisions to adjacent streets of similar or lower classification. The overall disbenefits of traffic calming in the neighbourhood could outweigh the benefits. On streets with volumes in excess of 8,000 vehicles per day, actions by the City other than physical traffic calming would be required to deal with speeding problems.

When discussing traffic calming, staff are careful not to promote this traffic management technique as a method of reducing traffic volumes on a street. To date in the City of Toronto, hundreds of local streets have been traffic calmed. Data on whether traffic volumes are diverted from calmed streets has been inconclusive. Some calmed streets have exhibited small increases or decreases (under 10 percent difference) in daily traffic volumes while others have exhibited relatively higher variations (some more than 20 percent). This may be attributed, in part, to the normal fluctuation of traffic on different days as well as to the different times of the year when the traffic was counted.

There are many variables affecting the potential diversion of traffic from calmed streets, such as the original traffic volume on the street, the type of measure(s) used, the availability and knowledge of alternate routes within a network, and the estimated travel time of each possible route. Within a grid type network of streets, where no higher class of road exists nearby, some traffic diversion onto similarly classed roads can be anticipated, especially with certain types of traffic calming measures. Consideration should be given, at the early design stage of the traffic calming plan, to a variety of traffic calming measures. For example, implementing mini traffic circles instead of full road closures may result in traffic volumes remaining at normal levels while decreasing vehicle speeds.

A common standard of care with traffic calming programs throughout the world is to ensure physical measures are only installed where traffic diversion effects have been considered and accounted for. Otherwise, traffic calming can have the undesirable effect of shifting existing traffic problems elsewhere. Under the proposed policy for the City of Toronto, the impacts to adjacent streets are considered early in the traffic calming review process.

Experience has shown that for very short block lengths (with stop signs or traffic signals at each end) speeding is minimal. This is because the traffic controls already modify the speed of traffic for approximately 60 metres in each direction. This is borne out by the 85th percentile speeds, measured on city blocks that are less than 120 metres, which typically are found to be below the speed limit. In addition, traffic calming on short blocks poses problems associated with the proper sighting and installation of the calming devices and accompanying signage in appropriate locations. Stop signs on normal or longer blocks are not an appropriate speed reduction device, because overall speeds have been known to increase after the installation of an unwarranted stop sign.

Attention has also been given to bicycles when designing traffic calming measures. Staff have been careful to consider whether proposed traffic calming measures are compatible with cyclists.

(8) Criteria for Installing Traffic Calming:

Building on the traffic calming experience gained in Toronto, a number of key criteria have been developed to evaluate traffic calming requests. Because of the extensive costs and implications associated with traffic calming proposals, requests for traffic calming should be assessed objectively. This will ensure that traffic calming is implemented in appropriate circumstances, and that streets in greater need of traffic calming receive priority for limited funding.

It is proposed that each traffic calming proposal be assessed against a number of warrant criteria, as outlined in Table 1. Failure to satisfy these warrants would result in a request for traffic calming being declined. Declined streets may still be eligible for other mitigating measures and/or police enforcement initiatives which are discussed later in this section.

There are three traffic calming warrants that need to be satisfied for a request for traffic calming to be recommended for approval. Warrant 1, Petition, ensures there is a basic level of community support for traffic calming requests. Warrant 2, Safety Requirements, and Warrant 3, Technical Requirements, have multiple components which must be individually fulfilled in order to satisfy each respective warrant.

Warrant 1 of the Traffic Calming Warrant Criteria, Petition, gauges the opinion of the area affected by a proposal, by requiring a petition in support of traffic calming to be signed by a minimum of 25 percent of the households on the street. This would ensure that limited staff resources are expended on proposals supported by the community. It also allows commonly held views of neighbourhood traffic issues to quickly gather support while eliminating requests that are not supported by the community. Warrants 2 and 3 should not be considered until Warrant 1 is satisfied. Notwithstanding this criterion, all reported safety related issues are investigated and reported on by staff.

Upon satisfying Warrant 1, requests for traffic calming are reviewed for potential impacts to neighbouring streets. District Traffic Operations staff will evaluate the proposal to determine if there may be significant traffic impacts on adjacent streets. If there is this potential, the review of the traffic calming proposal will be modified to include the proposed street as well as adjacent impacted streets. While this procedure is not a warrant, it is an important step in ensuring that traffic problems are not shifted to neighbouring streets. If the study is expanded to include adjacent streets, a petition will not be required from those additionally identified streets.

Warrant 2, Safety Requirements, has three components that aim to ensure key safety requirements are satisfied prior to proceeding with traffic calming. The first of the three components, Warrant 2.1, addresses pedestrian safety. There should be continuous sidewalks on at least one side of local streets or both sides of collector streets (or streets of higher classification) prior to the installation of traffic calming measures. The purpose of this warrant is to ensure that the issue of pedestrian safety is given primary and public consideration. Sometimes it is not feasible to retrofit sidewalks onto streets that do not have them. Under these circumstances, Warrant 2.1 could be satisfied even though no sidewalks exist. In these cases,

should the remaining traffic calming warrants be satisfied and the request recommended for approval, pedestrian safety issues would be addressed at the design stage of the traffic calming plan.

Warrant 2.2 deals with road grades. For safety purposes, traffic calming measures should not be installed on streets with road grades of more than five percent. Setting a limit serves to maintain reasonably safe driving conditions in adverse weather for motorists negotiating the calming measures.

Warrant 2.3 requires that there not be significant impacts to emergency services as a result of the traffic calming measures being implemented. This determination will be made by consulting with Fire, Emergency Medical and Police Services staff early in the review process. In meetings held with Transportation staff, emergency services staff have indicated their support for this consultation process. Should traffic calming plans change after they have been reviewed by emergency services staff, they will be given an opportunity to review the new plan and to submit further comments.

Warrant 3, Technical Requirements, evaluates whether the traffic conditions on a street being considered for traffic calming meet thresholds regarding the manifestation of traffic problems. This is accomplished by undertaking a technical review of measurable traffic parameters on streets where traffic calming is requested. The data collected and evaluated includes the 85^{th} percentile speed on the street (the speed at which 85 percent of the vehicles on a street are travelling at or below), the daily traffic volume and the city block length.

Warrant 3.1 requires that a street's 85^{th} percentile speed be 10 to 15 km/h above the warranted speed limit on a street, with daily traffic volumes in excess of 1,000 for local streets and 2,500 for collector streets, before traffic calming is warranted. This limit is based on the collective experience of staff working with the public to resolve traffic issues. However, if the 85^{th} percentile speed is 15 km/h or more above the warranted speed limit on a road, then there is no minimum volume requirement. This is because the degree of the traffic problem, and the potential safety risks, can be more severe.

Warrant 3.2 ensures that the traffic volume on streets being considered for traffic calming is generally consistent with the range of values for respective classes of roads (local, and collectors) as established in the City of Toronto Road Classification System approved by City Council in February 2000. Usually, there should be a minimum of 1,000 vehicles per day on local roads and a minimum of 2,500 vehicles per day on collector roads for this warrant to be satisfied. A maximum volume of 8,000 vehicles per day is used for traffic calming because the overall benefits of traffic calming are outweighed by the disbenefits when dealing with these higher volumes.

Warrant 3.3 addresses the speed profiles of short blocks controlled by stop signs and traffic signals which modify motorist behaviour, in contrast to longer blocks where speeding is more prevalent. Evidence from existing traffic data for streets in Toronto indicates that the majority of 85^{th} percentile speeds are relatively low (typically below the speed limit) for blocks shorter than 120 metres in length. City blocks shorter than 120 metres in length, with traffic controls at each

end, have a calming effect on traffic since there is insufficient distance for a motorist to attain excessive speeds and therefore do not necessarily require physical traffic calming measures.

Warrant 3.4 requires that there be no significant impacts to transit services as a result of the traffic calming measures being proposed. This determination will be made by consulting with Toronto Transit Commission (TTC) staff early in the request process. In meetings held with Transportation staff, TTC staff have indicated their support for this consultation process. Should traffic calming plans change after they have been reviewed by TTC staff, they will be given an opportunity to review the new plan and to submit further comments.

If all the traffic calming warrant criteria are met, proposals for traffic calming can be recommended for installation, pending a poll showing support by affected residents. The full process for dealing with traffic calming proposals is described in Section 9 of this discussion.

Table 1: Traffic Calming Warrant Criteria

Warrant	Criterion	Requirement	
Warrant 1 Petition	1.1 Petition	A petition requesting traffic calming must be signed by at least 25% of households on the street. Warrants #2 and #3 will not be considered until Warrant #1 is satisfied.	
Impacts to Adjacent Streets		Should the District Traffic Operations Manager anticipate that the proposed traffic calming will have significant traffic impacts on adjacent streets, the review of the traffic calming proposal shall be modified to include the proposed street as well as adjacent streets where traffic is expected to divert.	
Warrant 2 Safety Requirements (All three criteria must be fulfilled to satisfy this Warrant)	2.1 Sidewalks	On streets where traffic calming is proposed, there must be continuous sidewalks on at least one side of the street (both sides for collector streets or streets of higher classification). OR On streets where there are no sidewalks, the installation of sidewalk on at least one side of the street must have first been considered.	
	2.2 Road Grade	Traffic calming measures must not be installed at or near locations where the road grade exceeds 5%.	
	2.3 Emergency Response	On streets where traffic calming is proposed, impacts on Emergency Services will not be significant (as determined in consultation with Emergency Services (Fire, Ambulance, and Police) staff).	
Warrant 3 Technical Requirements (All four criteria must be fulfilled to satisfy this Warrant)	3.1 Minimum Speed	On streets where traffic calming is proposed, the 85th%ile speed must be a minimum of 10 km/h (but less than 15 km/h) over the warranted[1] speed limit, and the traffic volume requirements of Warrant 3.2 must be fulfilled. OR On streets where the 85th%ile speed exceeds the warranted[1] speed limit by a minimum of 15 km/h, there is no minimum volume required in Warrant 3.2.	
	3.2 Minimum and Maximum Traffic Volume	Local Roads For streets where traffic calming is proposed, the traffic volume must be between 1,000 vehicles per day and 8,000 vehicles per day.	Collector Roads For streets where traffic calming is proposed, the traffic volume must be between 2,500 vehicles per day and 8,000 vehicles per day.

Warrant	Criterion	Requirement
	3.3 Minimum Block Length	On streets where mid-block traffic calming measures are proposed, the block length[2] must exceed 120 metres.
	3.4 Transit Service	On streets where traffic calming is proposed, impacts on regularly scheduled Toronto Transit Commission (TTC) services will not be significant (as determined in consultation with TTC staff).
Notes: The review should generally be conducted from one intersecting collector street (or minor or major arterial street) to another. Road classifications are as determined in the City's Road Classification System. [1]Warranted speed limit is the speed limit specified by the City of Toronto 40 km/h Speed Limit Warrant. [2]Block length as measured from center to center of controlled intersections. A controlled intersection is one that has either traffic control signals or a stop sign controlling traffic in the direction of travel.		

Other Alternatives:

To comply with the minimum requirements of the new Class EA process, there must be an identification of a reasonable range of alternative solutions to the problem, including, the "Do Nothing" alternative. This means that early in the review of a request for traffic calming, alternatives other than traffic calming, for example, traffic signage, public education and police enforcement initiatives should be identified and evaluated.

The scope and complexity of these alternatives could range from solutions which are simple, low cost and quick to implement like warning signs, traffic information flyers or limited police enforcement, to those which may be slightly costlier or more complex to implement like a community speed watch program, or sustained police enforcement. These solutions can be incrementally applied, beginning with the simple ones and progressing to the more complex solutions if the traffic problem persists.

Alternate traffic mitigation initiatives like traffic signage, community education and enforcement programs can also be undertaken in circumstances where traffic calming is not warranted. Community education campaign messages can be general or targeted to specific audiences such as parents using school loading zones, new drivers in local neighbourhoods, and special needs groups like the elderly.

There is an existing community education campaign currently underway in the city which utilizes a radar message board called the "Watch Your Speed" program. The purpose of this program is to reduce speeding by increasing public awareness and encouraging responsible driving within neighbourhoods. It uses a portable radar device with a large display board to display the speed of passing motorists so as to educate them on their actual speed relative to the posted speed, in a non-confrontational way.

Police presence is a strong deterrent to speeding, but lasts only as long as the police are there. While the Toronto Police Service has recently affirmed its commitment to traffic safety and its priority to expand enforcement of traffic laws, its resources are limited. As part of its Traffic Safety Programs, the Toronto Police Service is keen on improving its partnerships with businesses and communities to extend its resources and further increase its impact on road safety.

(9) The Proposed Process for Installing Traffic Calming Measures:

In developing the proposed process for installing traffic calming measures, the existing approved policies and current practices for processing traffic calming proposals of the former municipalities were reviewed. The current practices of the former municipalities are attached as Appendix 4.

The proposed process for installing traffic calming measures has been outlined in detail and attached as Appendix 5. The process developed follows the steps outlined in the "Criteria for Installing Traffic Calming" section of this report. If a traffic calming request does not meet the requirements of any of the warrants and the Ward Councillor wishes the study to continue, staff will report on the status of the project to that point to the Works Committee requesting direction on whether to proceed further.

The process also incorporates the steps necessary to fulfil the requirements of the road alteration by-law, as required by the Municipal Act, and the new Municipal Class EA Act. The implementation of traffic calming measures also requires the consent of the residents, obtained by way of an official City poll. These requirements occur after the study phase of the process is completed and are initiated with the first staff report to a Community Council.

The road alteration by-law requires public notification, in the form of newspaper advertisements, for four consecutive weeks. At the end of the four weeks, members of the public are invited to attend a public hearing at a Community Council meeting if they have any concerns that they would like to bring to the attention of Council. As addressed at the beginning of the report, the new Municipal Class EA requires two mandatory points of contact with the public and any agencies that may be affected by the proposed project.

The process, as proposed, is intended to streamline all the required elements of installing traffic calming measures into a time frame that allows for the timely implementation of any requested and subsequently approved projects. The installation of traffic calming devices should be monitored to ensure that the intended purpose of the traffic calming plan has been achieved.

(10) Capital and Operational Costs and Human Resource Implications:

The installation of traffic calming measures is borne by the Capital Budget. For the past few years, $750,000 has been included in the Capital Works Program for the city-wide traffic calming program. The majority of features installed are speed humps, with an approximate cost of $2,000 each. Other traffic calming features could be many times more expensive to install. Approximately 300 speed humps were installed throughout the City of Toronto in 2000. By the end of 2000, there were approximately 750 vertical traffic calming measures (mostly speed humps and raised crosswalks) in the City of Toronto. As a broad estimate, the cost to install speed humps on all local roads in Toronto would be in the order of $106 million.

The annual cost to maintain the current number of hump-type devices, and associated signs and pavement markings, has been estimated at $47,000 for 2001. Obviously, this annual cost, which is borne by the Current Budget, will be directly proportional to the number of devices installed.

The additional costs associated with other road maintenance activities, such as winter maintenance, sweeping and leaf pick up, in the case of speed humps are insignificant.

The costs associated with studying traffic calming proposals, data collection and processing the requests are included within the Traffic Operations and Traffic Data Centre Current Budget allocations, with assistance by staff from the City Clerk's office and the Legal Division. We conservatively estimate that these resources cost approximately $535,000 per year.

Adoption of the proposed new traffic calming policy will have an impact on the delivery of other traffic investigation services. The impacts will not be similar in all areas of the city, because in the former Cities of Etobicoke and Scarborough, and the Borough of East York, there may be more interest and activity in traffic calming once this policy is adopted.

An anticipated increase in the number of traffic calming requests will result in additional pressure placed on staff resources, except in District 1 Central, where minimal impacts are anticipated. To meet an increase in traffic calming requests, investigation priorities will have to be rearranged, meaning other traffic complaints/issues may not be addressed in a timely manner.

Conclusions:

Traffic calming is becoming increasingly popular around the world. Physical traffic calming measures have been used successfully in Toronto to reduce vehicular speeds on local and collector roads, thus improving traffic safety and comfort levels on residential streets. The continued use of traffic calming is seen as supportive of the proposed Official Plan directions of improving the quality of life for city residents.

There has been a range of practices applied by the former municipalities within the amalgamated City of Toronto when dealing with traffic calming. The range of use of traffic calming measures is even greater. The need for a uniform policy is even greater now because of the new Community Council boundaries.

In addition, the provincial government recently adopted a new Municipal Class Environment Assessment Act which includes both the installation and removal of physical traffic calming features. The new Class EA comes into effect on April 4, 2001. The primary impacts on the City of Toronto are in the areas of public consultation, documentation and approval process. All traffic calming projects approved after April 4, 2001 must comply with the requirements of the Class EA Act.

Staff recommend that traffic calming continue to be used in the City of Toronto to address speeding on local and collector roads. A draft new traffic calming policy has been developed to evaluate traffic calming proposals.

In the preparation of this proposed policy, staff liaised with representatives of the three prime emergency service providers, as well as the TTC. This policy formalizes the role of these agencies in the evaluation and approval process, to minimize the impacts of traffic calming on these services.

The cost to install traffic calming measures on residential streets in the City of Toronto is significant. Furthermore, there is still mixed opinion of and reaction to these features within the community as a whole. Therefore, a process is proposed within this report to ensure these traffic measures are used where they are needed most, and where there is public acceptance of the specific features.

Staff anticipate that there will be a great deal of interest in this proposed policy at Community Councils, within institutions and associations representing groups from a wide variety of transportation interests, and within the public-at-large. A process of public consultation is proposed to solicit feedback from the Community Councils and others prior to final consideration by the Works Committee and City Council in June 2001.

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List of Attachments:

Appendix 1 – New Municipal Class Environmental Assessment Act
Appendix 2 – Table 3.1 from the Canadian Guide to Neighbourhood Traffic Calming
Appendix 3 – Table 3.2 from the Canadian Guide to Neighbourhood Traffic Calming
Appendix 3a – Table 3.3 from the Canadian Guide to Neighbourhood Traffic Calming
Appendix 4 – Traffic Calming Practices in the former municipalities of the City of Toronto
Appendix 5 – Traffic Calming Process
Appendix 6 – Traffic Calming Process Flow Chart

Appendix 1

New Municipal Class Environmental Assessment Act

General

The new Municipal Class Environmental Assessment Act was approved by the Minister of the Environment in October 2000. It comes into force on April 4, 2001. The new Class EA includes in its project schedules both the installation and removal of traffic calming measures. These are identified as Schedule B activities when the cost is less than $1.5 million, and Schedule C activities if over $1.5 million. Since it is anticipated that the cost of the vast majority of traffic calming projects in the City of Toronto would be less than $1.5 million, only Schedule B requirements are discussed here.

Definition

Under the new Class EA, Traffic Calming Measures are defined as follows:

> "physical measures designed to control traffic speeds and encourage driving behaviour appropriate to the environment".

Generally speaking, this definition encompasses physical measures specifically intended to have traffic calming effects. Modifications that may have a traffic calming effect but which are not recommended for that express purpose (such as including a treed median as a component of a road reconstruction project) are not subject to the Class EA.

Process Implications

The Class EA specifies the "minimum" requirements for environmental assessment planning. Proponents are responsible for customizing the process to reflect the specific needs of a project. The general steps required for a Schedule B project are as follows:

(1) Identification and description of the problem;

(2) Identification of a reasonable range of alternative solutions to the problem, including "Do Nothing";

(3) Preparation of a physical description of the area where the project is to occur, and a general inventory of the natural, social and economic environments that could be affected by the project;

(4) Identification of the magnitude of net positive and negative effects on the environment of each alternative solution identified, including any mitigating measures;

(5) Evaluation of all reasonable alternative solutions, including the preliminary identification of a recommended solution if feasible;

(6) Consultation with the public and review agencies;

(7) Selection or confirmation of the preferred solution considering comments from the public and review agencies; and

(8) Compilation of a Project File and issuance of a Notice of Completion to review agencies and the public with the allowance of a period of at least 30 calendar days for comments. The Notice shall include notification of the right to request a Part II Order (formerly known as a "Bump-Up").

Generally speaking, the above process requirements should not result in a significant increase to the technical effort already undertaken in support of traffic calming installations. The most likely areas the Class EA process will affect are in public consultation, documentation and the approval process. These are discussed below.

Public Consultation

Two mandatory points of contact with the public and review agencies are identified in the Class EA to occur at specific stages in the process. The type of contact with the public can range from published notices to large public meetings. Review agencies must also be contacted in the most appropriate manner, and it is not required that they be contacted in the same manner as the public. Under the Class EA, "public" and "review agencies" are defined as follows:

Public: Individual members of the public including property owners who may be affected by the project; individuals who have a general interest; special interest groups – either specific to the project or whose issues impact the project; community representatives; and the general public.

Review Agencies: Federal, provincial and municipal government agencies who represent the policy positions of their respective departments, ministries, authorities or agencies.

The primary impact for the City of Toronto in this regard will be on the form of public notification used. The Class EA requires that notices for both (2) mandatory points of contact be published in two separate issues of a local newspaper having general circulation in the project area. Where no such newspaper exists, staff must determine an equivalent local means of achieving the same objective of notification to the general public, such as general home delivery.

The first mandatory contact occurs following the evaluation of alternate solutions. In addition to the newspaper notices, where appropriate, at the first mandatory point of contact notices should be mailed, delivered or posted to all abutting properties and to all persons who might reasonably have an interest in the project. Subsequent to this first contact, the proponent must compile a mailing list of all individuals who have expressed an interest in the project. The second mandatory contact, the Notice of Completion, and any other optional notices must then be mailed to all individuals on this mailing list.

Finally, both notices to the public should include information about the Class EA process and their right to request a Part II Order (formerly known as a "Bump-up").

Review agencies will normally be contracted through a formal letter or notice. The Class EA only specifies one review agency that must be contacted in all cases: the Ministry of the Environment – Regional Office – EA Co-ordinator. Many other review agencies are identified, but these only need to be contacted if they are likely to have an interest in the project. The only agencies in this list that appear to be appropriate for most traffic calming projects are local emergency services, school boards and the TTC. However, the complete list should be reviewed for each individual project.

Documentation

For Schedule B projects, the Class EA stipulates that proponents maintain a Project File that is available for the public to review at a location to be identified in the notices issued. The Project

File must be organized chronologically in such a way as to clearly demonstrate the appropriate steps have been followed to satisfy the Class EA process.

It is recommended that staff include in the Project File a short summary listing key activities and the principal decisions or conclusions.

Approval Process

The impact of the new Class EA on the approval process for traffic calming projects begins with City Council approving the traffic calming proposal and authorising the issue of a Notice of Completion to comply with the Class EA. The Notice of Completion will define the minimum 30-day review period. During that 30-day period, any individual with concerns about the project's impacts or the process followed, who cannot resolve their concerns with the City, may write to the Minister of the Environment to request a Part II Order (an order from the Minister for the proponent to comply with Part II of the EA Act).

If no Part II Order requests are made during the 30-day period, the project is considered approved and may proceed to implementation. If any Part II Order requests are submitted, the EA Branch of the Provincial Ministry of the Environment has 45 days to review the request and prepare a report for the Minister's consideration. The 45-day period begins following the 30-day review period. If additional information is required by the EA Branch to complete their review, the EA Branch has 21 days following the receipt of this information to make a recommendation to the Minister.

The Minister may:

- deny the request;
- deny the request with conditions (such as requiring that a Schedule C process be completed or that monitoring and reporting processes be implemented);
- refer the matter to mediation; or
- require the proponent to comply with Part II of the EA Act (including a government review and public hearings).

It should be noted that any member of the public submitting a Part II Order request under the Class EA has a responsibility to bring their concerns to the city early in the process to permit changes to the project or process early on, when the city has more flexibility to do so. They must also substantiate their request to the Minister. Requests which are clearly made with the intent of delaying a project, or which do not contain a reasonable amount of information, may be denied by the Minister on the basis of being unsubstantiated.

The overall impact of traffic calming proposals now being subject to the Class EA process is the potential for delays in receiving the final sign-off required before installation can proceed. While City staff can try to expedite the process, the final timing rests with the public and the Minister of the Environment.

Appendix 2

TABLE 3.1: TRAFFIC CALMING MEASURES	
Measure	Description
Chicane	A series of curb extensions on alternating sides of a roadway, which narrow the roadway and require drivers to steer from one side of the roadway to the other to travel through the chicane. Typically, a series of at least three curb extensions is used.
Curb Extension	A horizontal intrusion of the curb into the roadway resulting in a narrower section of roadway.
Curb Radius Reduction	The reconstruction of an intersection corner using a smaller radius, usually in the 3.0 m to 5.0 m range.
Directional Closure	A curb extension or vertical barrier extending to approximately the centerline of a roadway, effectively obstructing (prohibition) one direction of traffic.
Diverter	A raised barrier placed diagonally across an intersection, that forces traffic to turn and prevents traffic from proceeding straight through the intersection.
Full Closure	A barrier extending across the entire width of a roadway, which obstructs all motor vehicle traffic movements from continuing along the roadway.
Intersection Channelization	Raised islands located in an intersection, used to obstruct specific traffic movements and physically direct traffic through an intersection.
On-Street Parking	The reduction of the roadway width available for vehicle movement by allowing motor vehicles to park adjacent and parallel to the curb.
Raised Crosswalk	A marked pedestrian crosswalk at an intersection or mid-block location constructed at a higher elevation than the adjacent roadway.
Raised Intersection	An intersection – including crosswalks – constructed at a higher elevation than the adjacent roadway.
Raised Median Island	An elevated median constructed on the centreline of a two-way roadway to reduce the overall width of the adjacent travel lanes.
Raised Median Through Intersection	An elevated median located on the centreline of a two-way roadway through an intersection, which prevents left turns and through movements to and from the intersecting roadway.
Right-in/Right-out Island	A raised triangular island at an intersection approach which obstructs left turns and through movements to and from the intersection street or driveway.
Rumble Strip	Raised buttons, bars or grooves closely spaced at regular intervals on the roadway that create both noise and vibration in a moving vehicles.
Sidewalk Extension	A sidewalk is continued across a local street intersection. For a "raised" sidewalk extension, it is continued at its original elevation, with the local roadway raised to the level of the sidewalk at the intersection. For an "unraised" sidewalk extension, it is continued at its original elevation, with the local roadway raised to the level of the sidewalk at the intersection. For an "unraised" sidewalk extension, the sidewalk is lowered to the level of the roadway.
Speed Hump	A raised area of a roadway, which deflects both the wheels and frame of a traversing vehicle.
Textured Crosswalk	A crosswalk incorporating a textured and/or patterned surface which contrasts with the adjacent roadway.
Traffic Circle	A raised island located in the centre of an intersection, which requires vehicles to travel through the intersection in a counter-clockwise direction around the island.

"This table from the Canadian Guide to Neighbourhood Traffic Calming has been reproduced in part with permission from the Transportation Association of Canada. The complete Guide may be purchased at www.tac-atc.ca"

Appendix 3
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Table 3.2
Applicability of Traffic Calming Measures

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Table 3.3
Implications of Traffic Calming Measures

Appendix 4

Traffic Calming Practices in the Former Municipalities of the City of Toronto

Three of the seven municipalities that were amalgamated to form the new City of Toronto had "formal" traffic calming policies. Traffic calming policies were adopted by the former Cities of Toronto in 1994, North York in 1995 and York in 1997. As is the case generally, prior policies remain in effect until superseded by City Council. Accordingly, traffic calming requests are still being handled in these communities of the new city in accordance with the old traffic calming policies, whether "formal" or not.

Upon receipt of a traffic calming request, the former City of North York staff undertake a 24-hour speed and volume study to determine whether or not the street meets the minimum speed and volume requirements of the traffic calming policy. If the speed and volume data meets the minimum requirements, staff would respond with a letter indicating that they could, in principle, support the request. The policy requires consensus of residents and also the establishment of a Traffic Working Group. Consensus of the residents can be ascertained with a 50 percent support by either the submission of a resident petition or by a survey carried out by the Ward Councillor. If there is no response to the staff request, there is no continuation of the project.

The Traffic Working Group, along with staff, will determine what measure(s) is appropriate for the street. If there is 50 percent support for the proposed measure(s), staff would report to Community Council asking permission to install the traffic calming measure(s) on a six-month temporary basis. This support is garnered either by a letter or memo sent by the Councillor or at a public meeting. At the end of the six-month period, staff will distribute a questionnaire to the residents asking them if they wish to see the measures(s) installed on a permanent basis. Based on the results of the questionnaire, staff will either remove the measure(s) or install it permanently.

In the former City of Toronto, once a request is received staff will undertake a technical study to determine whether the request meets the criteria for installing traffic calming (predominantly speed humps) as set out in the existing policy. Once studies have been completed, the results of the study are reported to the proponent. If the request meets the criteria, then a staff report to Community Council will seek approval to conduct a poll.

Transportation Services staff will conduct the poll. One ballot is distributed per household (properties with frontage on the street). However, each member of the household 18 years and older can respond and may request additional ballots. A 60 percent support (of valid ballots) is required for a poll to be successful.

In the former City of York, once staff receive a request for traffic calming a technical study is carried out. If it is determined that traffic calming would be a benefit, the Ward Councillor is notified and staff will undertake a survey (not an official poll). There is one response per household and a survey is sent to each owner, non-resident owner and tenant. Surveys are sent to all properties with frontage on the street. The surveys do not always require yes/no type

answers but may also give various options to choose from. A successful survey consists of a majority (50 percent + 1) response rate plus a majority (50 percent + 1) support rate.

The former City of Etobicoke did not adopt a "formal" traffic calming policy. However, Etobicoke City Council adopted a guideline which stated that "when reconstruction is undertaken to major intersections and roadways, that consideration be given to traffic calming techniques where warranted."

Like Etobicoke, the former Borough of East York did not adopt a "formal" traffic calming policy. When responding to a request to install traffic calming measures, staff will advise the Ward Councillor that a traffic calming policy did not exist in the former East York and then will undertake an investigation and a technical analysis complying with the former City of Toronto guidelines. The response to the Councillor would also indicate that the policy for the former City of Toronto was applied to the request and the results would be included in the letter.

The former City of Scarborough also did not adopt a "formal" traffic calming policy. When asked to consider traffic calming as one option for mitigating traffic speed and/or volume concerns, staff will conduct a study to determine the actual traffic conditions that exist. Staff will then make comments on the appropriateness of various traffic management techniques in general. If traffic is problematic, and traffic calming seems to be a potential corrective measure, then staff advise the Ward Councillor that Scarborough requires a supporting petition, signed by the majority of households on the affected street(s) in order to proceed further.

After receipt of the petition, staff assess the traffic calming options in detail and generate a plan which illustrates the technically preferred traffic calming measure to address the traffic and street conditions. All affected stakeholders are asked to comment on the plan, and show support or opposition, through one of a choice of public consultation processes. If there is 60 percent or more majority householder support for a technically feasible traffic calming plan, staff would report to Community Council asking for permission to fulfill the legal requirements of a road alteration by-law.

Appendix 5

The Proposed Process for Installing Traffic Calming Measures

The following proposed process combines the previous best practices with the requirement of the Environmental Assessment Act. This process follows the steps outlined in the "Criteria for Installing Traffic Calming" section of the report and each warrant must be satisfied before proceeding to the next step in the process. The following sequence of events and activities should occur prior to final City Council approval to install traffic calming measures.

(1) When submitting a request for traffic calming, proponents must include a petition of support for the project from at least 25 percent of the households on the street. The petition satisfies Warrant 1 and, if a petition is not submitted, a letter is sent to the proponent and Ward Councillor indicating that further study cannot continue unless the warrant is satisfied.

(2) If Warrant 1 is satisfied, the Traffic Operations staff will review the request and determine if the proposed traffic calming will have significant traffic impacts on adjacent local streets. If the proposal is anticipated to have significant impacts, the staff will expand the study to include adjacent streets. Once the boundaries of the study area have been identified, the Councillor of the identified area will be notified of the study.

(3) The proposal will be reviewed by staff to determine if it satisfies the criteria outlined in Warrant 2. These criteria include the provision of sidewalks, determination of the road grade and potential impacts on emergency services.

(4) The proposal is circulated to the Emergency Services (Ambulance, Fire and Police) for their comment on the proposal and any modifications that they may suggest in order that their services are not significantly impacted.

(5) If the proposal does not meet the criteria outlined in Warrant 2, a letter is sent to the proponent and Ward Councillor indicating that staff will not be proceeding with the study and the reasons why. The letter may also include non-traffic calming solutions that may be explored to address the traffic concern(s).

(6) If it is determined that the proposal has met the three safety requirements of Warrant 2, staff will proceed with the data collection required for the criteria in Warrant 3.

(7) Warrant 3 consists of evaluations of speeds, the traffic volumes, block lengths and impacts on transit service. Failure to meet any one of the technical warrants would result in a location being rejected for the implementation of traffic calming measures. Once all the data has been collected, an analysis and evaluation of all the alternatives will be carried out and the preferred solution will be chosen.

(8) The proposal is also circulated to the TTC for their comments and any modifications that they may suggest in order that their services are not significantly impacted.

(9) If the proposal does not meet the criteria outlined in Warrant 3, then a letter is sent to the proponent and Ward Councillor indicating that staff will not be proceeding any further with the request and the reasons why. This response will identify the traffic conditions and relative severity of problems.

(10) If the proposal satisfies the criteria outlined in Warrant 3, staff will develop a detailed design. The detailed design will illustrate the technically preferred traffic calming measures to address the traffic and street conditions. This plan will also take into account driveway locations, recommended spacing, lighting, pole locations, signage, etc.

(11) Once the detailed design is completed, the proponent and Ward Councillor are updated on the status of the project. This will also provide them with an opportunity for input into the design.

(12) To initiate the approval process, a staff report must be submitted to the appropriate Community Council to secure approval to authorize a poll of households on the affected

street(s) and to authorize the statutory advertising. Since most traffic calming measures are deemed to be "roadway alterations", there is a statutory process pursuant to the Municipal Act which must be followed. In order to physically alter a roadway, Council's intent to enact such a by-law must be advertised for four consecutive weeks and be considered at a subsequent Community Council meeting (public hearing) where deputations from interested persons are invited. [See step 14.] At this point or even prior to reporting, the Ward Councillor may wish to convene a public meeting in the community. If the Community Council does not support the proposal, staff will respond to the proponent with a letter indicating the reasons why the project will not be continuing any further.

At this stage, the City has the opportunity to fulfil the first mandatory point of contact, as required by the Municipal Class Environmental Assessment Process (EA Process). The staff report should also include a recommendation to notify and consult with the public and review agencies as required by the EA Process (as discussed in detail in Section 2 of this discussion). Notices would be sent to all relevant agencies and members of the public who have expressed their interest in being kept informed but who do not live on the street(s) directly impacted by the traffic calming measure(s). All residents directly affected by the installation of the traffic calming measure(s) would be notified with the appropriate wording on the official poll to be circulated for the project.

(13) Given the impact that traffic calming may have on a street, the policy calls for a high level of acceptance of those responding. The poll shall be undertaken in accordance with the official procedures as set out by the City Clerk's office. Furthermore, in the case of the traffic calming policy, a "successful" poll shall be defined as a response rate of at least 40 percent coupled with at least 60 percent valid response support rate. In the event of an unsuccessful poll, a two-year moratorium would be in effect prohibiting another poll regarding traffic calming at the requested location.

(14) Upon tabulation of the poll and completion of the four weeks of advertising, a public deputation hearing is scheduled before the appropriate Community Council. If the project is not approved by Community Council, staff will respond to the proponent with a letter indicating the reasons why the project will not be implemented.

(15) If Community Council approves the project, then it is forwarded to City Council for final approval. The request to City Council should also include a recommendation to issue a Notice of Completion, in accordance with the statutory requirements of the Environmental Assessment Act. This Notice of Completion would be sent to all parties receiving the initial notice of consultation in Step 12.

(16) If final approval is secured from City Council, the Notice of Completion is sent to all relevant parties with a 30-day time period for review and opportunity to request a Part II Order.

(17) If there is no Part II Order request, the work is scheduled for construction, the timing of which will be affected by competing priorities, contract schedules, budget implications,

etc. If the project is not approved at City Council, staff will respond to the proponent with a letter indicating the reason why the project will not be implemented.

(18) If there is a Part II Order request for the project, then the project is reviewed by the Ministry of the Environment and one of the following may occur. The Minister may:

- deny the request;
- deny the request with conditions (such as requiring that a Schedule C process be completed or that monitoring and reporting processes be implemented);
- refer the matter to mediation; or
- require the proponent to comply with Part II of the EA Act (including a government review and public hearings).

All approved traffic calming installations will be ranked in an effort to ensure that streets in greater need of traffic calming will receive priority for limited funding.

In the event that a traffic calming request does not meet the requirements of Warrants 1, 2 or 3, at steps 1, 5 or 9 respectively, and the Ward Councillor requests that the project and staff study continue anyway, staff will report on the status of the project to that point to the Works Committee, requesting direction on whether to proceed further.

The above process has been reproduced in a simplified chart format attached as Appendix 6.

Appendix 6
Traffic Calming Process Flow Chart

Appendix 6
Traffic Calming Process Flow Chart
(continued)

The Works Committee also submits the following communication (May 23, 2001) from the City Clerk (Downtown Community Council):

Community Council Recommendations:

The Downtown Community Council recommends that:

(1) the traffic calming process as set out in the report (March 8, 2001) from the Commissioner of Works and Emergency Services be adopted, subject to:

(a) Section 2.2 of Table 1 titled, "Traffic Calming Warrant Criteria" of the report (March 8, 2001) being amended to read, "Traffic calming measures may be considered at or near locations where the road grade is between 5% and 8%.";

(b) provision being made in the warrant approval process which would address the impact of schools or high pedestrian traffic in the area under consideration for traffic calming; and

(c) the Commissioner of Works and Emergency Services reporting to the relevant Community Council, rather than the Works Committee, with his negative recommendations whenever an application fails to meet the warrants; and

(2) the Province of Ontario be requested to amend the new Municipal Class Environmental Assessment Act, to designate traffic calming as a Schedule A activity.

The Downtown Community Council reports, for the information of the Works Committee, having requested the Commissioner of Works and Emergency Services to develop a system of prioritization of requests on a needs basis rather that on a community council area basis, such report on this system to be included for approval at the meeting of the Works Committee to be held on June 6, 2001.

Background:

The Downtown Community Council, on May 15, 2001, had before it a communication (March 28, 2001) from the City Clerk, respecting Harmonized Traffic Calming Policy for the City of Toronto, and:

(1) forwarding the report for consideration, and requesting that comments on the proposed traffic calming policy be submitted to the Works Committee for consideration at its June 6, 2001 meeting; and

(2) advising that the report was distributed to any interested residents and parties, including neighbourhood and business improvement associations in Toronto, as well as citizen advisory committees and advocate groups for transportation modes, such as the City's cycling and pedestrian committees, for comment; and encouraging neighbourhood associations and business improvement associations to provide comments to their

respective Community Councils and broad interest groups to submit comments directly to the Works Committee.

The Downtown Community Council also had before it a communication (May 15, 2001) from Mr. William Phillips, South Rosedale Ratepayers' Association.

The following persons appeared before the Downtown Community Council in connection with the foregoing matter.

- Mr. William Phillips, South Rosedale Ratepayers' Association; and
- Mr. Alan Burke, President, East Beach Community Association.

The Downtown Community Council's recommendations are noted above.

The Works Committee also submits the following communication (May 16, 2001) from the City Clerk (East Community Council):

Recommendations:

The East Community Council reports having:

(1) received a staff presentation on the proposed Traffic Calming Policy;

(2) directed that the Works Committee be advised that the East Community Council does not concur, at this time, in the recommendations embodied in the report, dated March 8, 2001, from the Commissioner of Works and Emergency Services, having regard for Recommendation No. (3)(a)(ii) hereunder; and

(3) recommends to the Works Committee that:

(a) the Commissioner of Works and Emergency Services be requested to report to the Works Committee:

(i) in consultation with the City Clerk, on a consistent policy for petitions and the polling of residents applicable to the traffic calming and street permit parking policies, currently under consideration;

(ii) on the equitable distribution of funds to be budgeted annually for these issues, by Community Council area, prior to the consideration of these policies;

(iii) in consultation with the Fire Chief, the General Manager, Emergency Medical Services and the Chief of Police, on routes that may not be suitable for traffic calming measures; and

(iv) on a protocol to manage area-wide traffic management plans that overlap Community Council boundaries;

(b) the Commissioner of Works and Emergency Services be requested to:

(i) complete the effectiveness study on Community Safety Zones no later than the end of the year 2001; the results of such study to be reported to City Council through the Community Councils and the Works Committee; and

(ii) create a mechanism to ensure, considering the limited capital budget for the installation of traffic calming measures, that such installations be equally and fairly distributed throughout the City so that no one Community Council area shall receive preferential treatment;

(c) the Traffic Calming Process Flow Chart (Appendix 6) be prefaced with a public consultation meeting to be held at the discretion of the Ward Councillor;

(d) the initial petition be warranted at 60 percent of all adult residents on affected streets;

(e) the resultant poll reflect 60 percent of all adult residents in a polled neighbourhood;

(f) the Medical Officer of Health be requested to comment to Works Committee on potential pollution issues; and

(g) a ranking criteria be established for the expenditure of funds on traffic calming measures.

A motion by Councillor Kelly that City Council be requested to consider increasing the Capital Budget allocation of $750,000.00, was not carried.

Background:

The East Community Council had before it a communication dated March 28, 2001, from the City Clerk, advising that the Works Committee, at its meeting held on March 28, 2001, adopted the report (March 8, 2001) from the Commissioner of Works and Emergency Services respecting a harmonized traffic calming policy for the City of Toronto, and in so doing adopted the following recommendations:

(1) that this report be forwarded to all Community Councils for consideration, and that their comments on the proposed traffic calming policy be submitted to the Works Committee for consideration at its June 6, 2001 meeting; and

(2) that this report be distributed to any interested residents and parties, including neighbourhood and business improvement associations in Toronto, as well as citizen advisory committees and advocate groups for transportation modes, such as the City's cycling and pedestrian committees, for comment; neighbourhood associations and business improvement associations are encouraged to provide comments to their

respective Community Councils, while broad interest groups are encouraged to submit comments directly to the Works Committee; and further, requested that:

(a) the Commissioner of Works and Emergency Services develop a system of prioritization of requests whereby equity is applied across Community Council areas and also the setting of a maximum number of studies or reviews per year based on budget allocation for this activity, the report on this system to be included for approval at the meeting of the Committee on June 6, 2001;

(b) the Commissioner of Works and Emergency Services further report to the Committee for its meeting on June 6, 2001, on appropriate traffic calming measures that ensure pedestrian safety on streets, found mostly in suburban areas, that do not have sidewalks or where there may be natural drainage in the form of swales or ditches; and

(c) staff presentations be made to the Community Councils when this matter is considered.

The following persons appeared before the Community Council in connection with the foregoing matter:

- Mr. Alan Burke, President, East Beach Community Association;
- Ms. Lois James, Member, Toronto Pedestrian Committee; and
- Mr. Martin Abela, Member, Toronto Pedestrian Committee.

The Works Committee also submits the following communication (May 16, 2001) from the City Clerk (Midtown Community Council):

Recommendations:

The Midtown Community Council recommends that the proposed Process for Installing Traffic Calming Measures (Appendix 5 contained in the report (March 8, 2001) from the Commissioner of Works and Emergency Services, proposing a harmonized traffic calming policy) be amended to read as follows:

(1) When submitting a request for traffic calming to the Councillor, proponents must include a petition of support for the project from at least twenty-five percent of the affected households on the street. In the case of rental units, it shall be 10 percent.

(2) Staff will investigate to confirm whether or not there is a problem as identified by the petitioners.

(3) If it has been determined that there is a problem, the Traffic Operations staff will review the request and determine if the proposed traffic calming, or any alternative calming that staff recommends, will have significant traffic impacts on adjacent local streets. If the proposal is anticipated to have significant impacts, the staff will expand the study to

include adjacent streets. Councillors will be consulted in the establishment of the boundaries of the study area.

(4) The proposal(s) will be reviewed by staff to determine if it satisfies the criteria outlined in (3). These criteria shall include but not be limited to the provision of sidewalks, determination of the road grade and potential impact on emergency services.

(5) The proposal is circulated to the Emergency Services (Ambulance, Fire and Police) and the TTC for their comment on the proposal and any modifications that they may suggest in order that their services are not significantly impacted.

(6) If all safety requirements are met, staff will evaluate speeds, the traffic volumes, block lengths and impacts on transit service. Once all the data has been collected, an analysis and evaluation of all the alternatives will be carried out and the preferred option(s) will be chosen.

(7) There shall be no speed humps constructed on TTC routes.

(8) Staff will develop a detailed design that will illustrate the technically preferred traffic calming measures to address the traffic and street conditions. This plan will also take into account driveway locations, recommended spacing, lighting, pole locations, signage, etc.

(9) Once the detailed design is completed, the Ward Councillor will either undertake, or direct staff, to conduct a survey of household on the affected street (or portion of a street) or area, to determine the degree of public acceptance of the proposal. Wording contained in the letter regarding the poll shall be “advisory” not “determinative” in its nature. Councillors may also wish to hold a community meeting.

(10) A “successful” poll shall be defined by a response rate of 25 percent coupled with at least a 60 percent positive response rate. There shall be one response allowed per household.

(11) If the poll is successful, the City shall proceed with the four weeks of advertising as required by the Environmental Assessment Act.

(12) Upon tabulation of the poll and completion of the four weeks of advertising, a public deputation hearing is scheduled before the appropriate Community Council. If the project is not approved by Community Council, staff will respond to the proponents with a letter indicating the reasons why the project will not be implemented.

(13) If Community Council approves the project, then it is forwarded to City Council for final approval. The request to City Council should also include a recommendation to issue a Notice of Completion, in accordance with the statutory requirements of the Environmental Assessment Act. This Notice of Completion would be sent to all parties receiving the initial notice of consultation.

(14) If final approval is secured from City Council, the Notice of Completion is sent to all relevant parties with a 30-day time period for review and opportunity to request a Part II Order.

(15) If there is no Part II Order request, the project is submitted for budget approval and tendering and construction as soon as possible.

(16) If there is a Part II Order request for the project, then the project is reviews by the Ministry of the Environment and one of the following may occur. The Minister may:

(i) deny the request;

(ii) deny the request with conditions (such as requiring that a Schedule C process be completed or that monitoring and reporting processes be implemented);

(iii) refer the matter to mediation; or

(iv) require the proponent to comply with Part II of the EA Act (including a government review and public hearings).

(17) Traffic calming shall be considered at the time a road is resurfaced or reconstructed.

The Midtown Community Council further recommends that the Province be requested to review the Environmental Assessment Act with a view to deleting all but: (1) directional closures; (2) diversions; and (3) full closures, as described in Table 3.1: Traffic Calming Measures.

Background:

The Midtown Community Council, at its meeting on May 15, 2001, had before it a communication (March 28, 2001) from the City Clerk, advising that the Works Committee at its meeting on March 28, 2001 adopted the following recommendations contained in the attached report (March 8, 2001) from the Commissioner of Works and Emergency Services, respecting a harmonized traffic calming policy for the City of Toronto:

(1) that this report be forwarded to all Community Councils for consideration, and that their comments on the proposed traffic calming policy be submitted to the Works Committee for consideration at its June 6, 2001 meeting; and

(2) that this report be distributed to any interested residents and parties, including neighbourhood and business improvement associations in Toronto, as well as citizen advisory committees and advocate groups for transportation modes, such as the City's cycling and pedestrian committees, for comment; neighbourhood associations and business improvement associations are encouraged to provide comments to their respective Community Councils, while broad interest groups are encouraged to submit comments directly to the Works Committee.

The Midtown Community Council also had before it a report (March 8, 2001) from the Commissioner, Works and Emergency Services, addressed to the Works Committee (March 8, 2001) concerning the proposed harmonized traffic calming policy for the City of Toronto.

The Midtown Community Council also had before it a communication (May 10, 2001) from Mr. Stan Stevenson, Toronto, requesting that Midtown Community Council amend the proposed Traffic Calming Policy.

Mr. Steven Benjamin, Manager, District 1, Transportation Services, gave an overhead slide presentation.

Ms. Susan Ainley, President, North Hill District Homeowners Association, appeared before the Midtown Community Council in connection with the foregoing matter.

The Works Committee also submits the following communication (May 21, 2001) from the City Clerk (North Community Council):

Recommendation:

The North Community Council on May 16, 2001:

(1) recommended to the Works Committee that the report (March 8, 2001) from the Commissioner of Works and Emergency Services, respecting a harmonized traffic calming policy for the City of Toronto, be endorsed; and

(2) requested the Works Committee to consider:

(a) how 25 percent of the households in support of the proposed traffic calming within a particular study area can be determined;

(b) how the validity of a petition can be confirmed;

(c) the allocation of capital funding on a Community Council basis at the beginning of the year, with a further review after six months, to assess any re-allocation of unused funding; and

(d) exploring the feasibility of expanding the “Watch Your Speed” Program involving the use of photo radar as a means of enforcing vehicle speeds by issuing speed violations electronically.

Background:

The North Community Council had before it a communication (March 28, 2001) from the City Clerk, advising that the Works Committee at its meeting on March 28, 2001, adopted the report (March 8, 2001) from the Commissioner of Works and Emergency Services, respecting a

harmonized traffic calming policy for the City of Toronto and in so doing, adopted the following recommendations:

(1) that this report be forwarded to all Community Councils for consideration, and that their comments on the proposed traffic calming policy be submitted to the Works Committee for consideration at its June 6, 2001 meeting; and

(2) that this report be distributed to any interested residents and parties, including neighbourhood and business improvement associations in Toronto, as well as citizen advisory committees and advocate groups for transportation modes, such as the City's cycling and pedestrian committees, for comment; neighbourhood associations and business improvement associations are encouraged to provide comments to their respective Community Councils, while broad interest groups are encouraged to submit comments directly to the Works Committee.

A staff presentation was made by Mr. Allen Pinkerton, Manager, Traffic Operations, Transportation Services, District 3, Works and Emergency Services.

The Works Committee also submits the following communication (May 22, 2001) from the City Clerk (Southwest Community Council):

Recommendations:

The Southwest Community Council on May 15, 2001, recommended to the Works Committee that:

(1) with respect to Appendix 5, headed "The Proposed Process for Installing Traffic Calming Measures", that:

(a) Recommendation No. (1) be deleted, and the following substituted in lieu thereof:

'(1) When submitting a request for traffic calming, that the request be considered based on the results of a survey to be conducted by the local Councillor, in lieu of proponents submitting a petition of support.';

(b) wherever mentioned, the word "Warrant" be deleted and the world "Criteria be substituted in lieu thereof; and

(c) the words "Works Committee" be deleted from the second to last paragraph on page 3 of the Proposed Process, and the words "appropriate Standing Committee" be substituted in lieu thereof, to read as follows:

'In the event that a traffic calming request does not meet the requirements of Criteria 1, 2 and 3, at steps 1, 5 or 9 respectively, and the Ward Councillor requests that the project and staff study continue anyway, staff will report on the status of the project to that point to the appropriate Standing Committee, requesting direction on whether to proceed further.';

(2) the Proposed Process for Installing Traffic Calming Measures be compressed to allow for decision to be made more expeditiously;

(3) the Southwest Community Council is opposed to the limiting of traffic calming measures based on budget allocations;

(4) should the process of limitations be adopted, that funds be allocated evenly on a per kilometre, per ward basis, only in those areas that permit traffic calming, and that any unused portion of funds be allowed to be traded for future credits in November of each year;

(5) all references to provincial regulations as they pertain to the Municipal Class Environmental Assessment Act on traffic calming, be deleted from the City of Toronto's by-laws;

(6) City Council be requested to advise the Ministry of the Environment that it is Council's view that the Minister's approval of speed humps and other traffic calming measures is an unnecessary intrusion on the City of Toronto's jurisdiction and that the appropriate Acts or Regulations be amended accordingly; and

(7) the Commissioner of Works and Emergency Services be requested to report on the potential for reviewing the current criteria to allow for the narrowing of streets as a traffic calming option.

Background:

The Southwest Community Council on May 15, 2001 had before it the following communications:

(i) (March 28, 2001) from the City Clerk, advising that the Works Committee at its meeting on March 28, 2001, adopted the report dated March 8, 2001, from the Commissioner of Works and Emergency Services respecting a harmonized traffic calming policy for the City of Toronto;

(ii) (May 11, 2001) from Mr. William Roberts, Director, Swansea Area Ratepayers' Association; and
(iii) (May 15, 2001) from Ms. Merle J. Hudson, Runnymede Road Safety Committee.

The following persons appeared before the Community Council in connection with the foregoing matter:

- Mr. William Roberts, Toronto;
- Mr. Jim Bell, Toronto; and
- Ms. Merle Hudson, Toronto.

The Works Committee also submits the following communication (May 17, 2001) from the City Clerk (West Community Council):

Recommendations:

The West Community Council at its meeting held on May 16, 2001, recommended to the Works Committee that:

(1) the harmonized traffic calming policy embodied in the report dated March 8, 2001, from the Commissioner of Works and Emergency Services be adopted, subject to amending the Warrant 2 criterion regarding sidewalks to provide that sidewalks first be considered as a high priority before traffic calming measures are examined;

(2) by the end of 2001, additional staff resources be allocated to the West District to ensure that traffic calming requests are dealt with in a timely manner and do not draw on current staff resources;

(3) for the balance of 2001, funding priority be given to traffic calming projects in those parts of the City that did not previously allow for traffic calming measures; and

(4) for the 2002 budget, the Budget Advisory Committee consider increasing the line item for traffic calming measures to ensure an equitable distribution of traffic calming measures throughout the entire City.

Background:

The West Community Council had before it a communication (March 28, 2001) from the City Clerk, Works Committee, advising that the Works Committee on March 28, 2001, adopted the report dated March 8, 2001, from the Commissioner of Works and Emergency Services respecting a harmonized traffic calming policy for the City of Toronto, wherein it recommended that:

(1) the report be forwarded to all Community Councils for consideration, and that their comments on the proposed traffic calming policy be submitted to the Works Committee for consideration at its June 6, 2001 meeting;

(2) the report be distributed to any interested residents and parties, including neighbourhood and business improvement associations in Toronto, as well as citizen advisory committees and advocate groups for transportation modes, such as the City's cycling and pedestrian committees, for comment; neighbourhood associations and business improvement associations are encouraged to provide comments to their respective Community Councils, while broad interest groups are encouraged to submit comments directly to the Works Committee;

(3) the Commissioner of Works and Emergency Services develop a system of prioritization of requests whereby equity is applied across Community Council areas and also the setting of a maximum number of studies or reviews per year based on budget allocation

for this activity, the report on this system to be included for approval at the meeting of the Committee on June 6, 2001;

(4) the Commissioner of Works and Emergency Services further report to the Committee for its meeting on June 6, 2001, on appropriate traffic calming measures that ensure pedestrian safety on streets, found mostly in suburban areas, that do not have sidewalks or where there may be natural drainage in the form of swales or ditches; and

(5) staff presentations be made to the Community Councils when this matter is considered.

The West Community Council also had before it a communication (May 14, 2001) from Mr. Bill Nemerson, Coordinator, Neighbourhood Watch, 23 Division, providing background information on petitions previously forwarded to the City of Toronto regarding traffic calming on Westhumber Boulevard; and recommending that a total study by a Committee comprised of Transportation Services staff and community representatives be undertaken and a report submitted to the West Community Council and Council.

Mr. Dominic Gulli, Manager, Traffic Operations, Transportation Services, District 2, made an overhead presentation to the West Community Council in connection with the foregoing matter.

The following persons appeared before the West Community Council in connection with the foregoing matter:

- Mr. Bill Nemerson, Etobicoke;
- Ms. Rhona Swarbrick, Etobicoke;
- Ms. Janice Etter, Etobicoke;
- Mr. B. Sandy Habus, Etobicoke; and
- Mr. Alan Shiels, Etobicoke.

The Works Committee also submits the following communication (May 29, 2001) from the City Clerk:

Recommendations:

The Toronto Pedestrian Committee recommends to the Works Committee that it consider the following primary concerns addressed by the Toronto Pedestrian Committee with respect to the proposed Traffic Calming Policy:

(1) Absence of an approved definition and City policy framework:

In general, it emerged from the various points raised that the definition of traffic calming is inadequate, limited in its approach and application, and is being proposed independent of a comprehensive supporting Council policy framework. Its inadequacy is indicated by

its lack of capacity to address certain specific circumstances raised by Committee members. For example, application to:

(i) streets without sidewalks;

(ii) streets with shoulders and natural drainage (either swales or ditches, both of which are being promoted through the Wet Weather Flow Master Plan);

(iii) streets where it has not been demonstrated that the primary problem is cut-through - not local neighbourhood - traffic;

(iv) non-local roads, to which the engineering measures encompassed by this definition are not to be applied, even though the vast majority of pedestrian/vehicle collisions occur on non-local roads.

The Toronto Pedestrian Committee questions why the five recommendations on page 2 of the March 8, 2001 report were not included in the recommendations on page 1 of the March 28, 2001 report.

(2) Re Warrant 1 (Petition) / Process for assessing where traffic calming is most needed:

In the proposed policy, receipt of petitions is the only way to trigger the process of considering the installation of traffic calming. There must be an alternate means of identifying streets for consideration of traffic calming around pedestrian destination points where high pedestrian activity is to be expected (example: schools, seniors' residences, shopping areas, community facilities) but it would be difficult if not impossible to generate a petition. Examples: apartment areas, low income areas, areas with high numbers of newcomers who are not familiar or comfortable with relevant civic process.

Further, the proposed policy contains no mechanism for prioritizing requests for traffic calming projects on a City-wide basis, and priorities (whether based on demand or need, as noted in the previous paragraph) will likely, as in the past, be highly subject to political influence.

The Toronto Pedestrian Committee believes that the policy must make provision for traffic calming projects to be generated by an identified need for pedestrian safety and amenity in pedestrian-sensitive areas, whether or not a petition exists. Calming traffic is a quality of life issue not only for residents of local streets, but for residents of non-local roads and for pedestrians who travel on all streets, local or non-local.

(3) No requirement to satisfy Warrant 2.1 (Pedestrian Safety):

This is the only warrant that does not have to be satisfied in order for a project to proceed to the approval stage. The study can proceed even though a street cannot be retrofitted with a sidewalk.

The Toronto Pedestrian Committee questions:

(i) whether a sidewalk on one side of local roads is sufficient to ensure safe and effective pedestrian travel on traffic-calmed streets (pages 15 and 17);

(ii) how Warrant 2.1 (Pedestrian Safety) relates to the existing City-wide practice of new sidewalk installations requiring the approval of a majority of residents whose property abuts the project site (pages 15 and 17);

(iii) why a policy is being considered when all but the warrant ensuring pedestrian safety (example: Warrant 2.1) must be satisfied (page 15); and

(iv) why pedestrians are being given only token consideration in a policy that purports to promote pedestrian travel and transit use (page 5).

(4) Increase of toxic emissions - a major health issue:

Research results quoted in the report claim that some traffic calming measures result in increases of toxic emissions when compared to pre-calming conditions (page 11). For example: higher levels of Nitrogen Oxides (ten times) and Carbon Monoxide (three times); and a 25 percent increase of Carbon Dioxide emissions and fuel consumption with speed humps in place.

Further investigation and in-depth discussion with the Medical Officer of Heath on this very important health issue for pedestrians and cyclists is essential, since respiratory disorders are on the rise.

(5) Prioritizing staff time and financial resources:

The potential that other traffic complaints/issues will not be addressed in a timely manner (page 20), but assigned as a lesser priority than the "customer-based" demand for traffic calming on local streets. This is a major concern of the Toronto Pedestrian Committee, especially given the general concerns expressed in point number 1 above. The Committee's concerns are both policy and budget related. Examples:

(i) installation of Pedestrian Activated Traffic Signals;

(ii) installation of refuge islands on arterial roads, especially near Toronto Transit Commission stops, schools, hospitals, and other community facilities;

(iii) completion of sidewalks on principal roads, especially those that carry Toronto Transit Commission routes;

(iv) improved sidewalk maintenance;

(v) improved pavement markings for pedestrians; and

(vi) implementation of measures to increase compliance to posted speeds on non-local roads.

(6) Environmental Assessment:

The primary focus of the Environmental Assessment process is the actual roadway, not the entire public right-of-way in which pedestrian infrastructure and amenities are located. By making traffic calming projects subject to the Environmental Assessment process, pedestrians are not being given status as stakeholders in traffic calming projects. This is especially problematic in locations with natural road drainage or where sidewalks do not exist. Therefore, the Pedestrian Committee must be added to the list of contacts for reviewing proposed traffic calming plans and receiving notification of the two mandatory public meetings.

Background:

The Toronto Pedestrian Committee had before it a communication dated March 28, 2001, from the City Clerk, advising of the action taken by the Works Committee, at its meeting held on March 28, 2001, in considering a report (March 8, 2001) from the Commissioner of Works and Emergency Services respecting a harmonized traffic calming policy for the City of Toronto, which recommended that:

(1) this report be forwarded to all Community Councils for consideration, and that their comments on the proposed traffic calming policy be submitted to the Works Committee for consideration at its June 6, 2001 meeting; and

(2) this report be distributed to any interested residents and parties, including neighbourhood and business improvement associations in Toronto, as well as citizen advisory committees and advocate groups for transportation modes, such as the City's Cycling and Pedestrian Committees, for comment; neighbourhood associations and business improvement associations are encouraged to provide comments to their respective Community Councils, while broad interest groups are encouraged to submit comments directly to the Works Committee.

The Works Committee also submits the following communication (May 29, 2001) from the Medical Officer of Health:

At its meeting of May 2001, the East Community Council requested that the Medical Officer of Public Health comment on potential pollution issues related to the proposed Traffic Calming Policy, to be brought forward to the June 6, 2001 meeting of the Works Committee.

As Toronto Public Health has not reviewed the impact of traffic calming measures on air pollution, I am not in a position to provide detailed comments on this matter at this time. If you need further information, please contact Monica Campbell at 416-338-8091.

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The Works Committee reports, for the information of Council, having also had before it during consideration of the foregoing matter the following communications:

(i) (April 18, 2001) from Mr. Emile-J. Therien, President, Canada Safety Council, providing comments with respect to a harmonized traffic calming policy for the City of Toronto; and advising that traffic calming threatens both public safety and traffic safety;

(ii) (May 16, 2001) from Ms. Lois James, Scarborough, Ontario, requesting that Council respond to requests for traffic calming with a harmonized policy that will be fair to all Toronto districts;

(iii) (June 1, 2001) from Mr. Andrew Mahoney, Bloor West Traffic Association, stating that the proposed Traffic Calming Policy is inequitable to almost all Toronto residents;

(iv) (June 3, 2001) from Mr. Eugene Kulinek commenting on the proposed Traffic Calming Policy;

(v) (June 5, 2001) from Mr. Thomas J. Timmins, Advocacy for Respect for Cyclists, providing comments on the City's proposed Traffic Calming Policy;

(vi) (June 5, 2001) from Ms. Merle Hudson, Runnymede Road Traffic Safety Committee, commenting on the City's proposed Traffic Calming Policy;

(vii) (June 6, 2001) from the Roncesvalles-Macdonell Residents' Association, providing comments on the City's proposed Traffic Calming Policy; and

(viii) (June 6, 2001) from the Lytton Park Residents' Organization Inc. regarding the City's proposed Traffic Calming Policy.

The following persons appeared before the Works Committee in connection with the foregoing matter:

- Mr. Alan Burke, President, East Beach Community Association;

- Ms. Faye Lyons, Municipal Affairs Specialist, CAA Central Ontario;

- Mr. Alan Whiteley, President, Lytton Park Residents' Organization Inc., and filed a submission with respect thereto;

- Mr. Andrew Mahoney, Bloor West Traffic Association, and filed a submission with respect thereto;

- Mrs. Lois James, Scarborough, Ontario;

- Ms. Rhona Swarbrick, Chair, Toronto Pedestrian Committee;

- Ms. Merle Hudson, Runnymede Road Traffic Safety Committee, and filed a submission with respect thereto;

- Mr. Dalton Shipway, Toronto, Ontario;

- Mr. Thomas J. Timmins, Advocacy for Respect for Cyclists, and filed a submission with respect thereto; and

- Sergeant Brian Keown, Toronto Police Service, Parking Enforcement – Disabled Liaison Unit.

The following Councillors appeared before the Works Committee in connection with the foregoing matter:

- Councillor Joanne Flint, Ward 25 – Don Valley West;

- Councillor Douglas Holyday, Ward 3 – Etobicoke Centre; and

- Councillor Norman Kelly, Ward 40 – Scarborough-Agincourt.

(Additional attachments referred to in the foregoing communication dated March 28, 2001, from the City Clerk were forwarded to all Members of Council with the agenda for the Works Committee meeting of June 6, 2001, and copies thereof are on file in the office of the City Clerk, City Hall.)

(City Council on June 26, 27 and 28, 2001, had before it, during consideration of the foregoing Clause, a communication (June 21, 2001) from the City Clerk (Toronto Pedestrian Committee), submitted by Councillor Disero.)

(Having regard that City Council deferred consideration of this Clause to its next meeting scheduled to be held on July 24, 2001, the aforementioned communication will be resubmitted to Council.)

(City Council on July 24, 25 and 26, 2001, again had before it, during consideration of the foregoing Clause, a communication (June 21, 2001) from the City Clerk (Toronto Pedestrian Committee), submitted by Councillor Disero.)

(Having regard that City Council deferred consideration of this Clause to its next meeting scheduled to be held on October 2, 2001, the aforementioned communication will be resubmitted to Council.)

(City Council on October 2, 3 and 4, 2001, again had before it, during consideration of the foregoing Clause, a communication (June 21, 2001) from the City Clerk (Toronto Pedestrian Committee), submitted by Councillor Disero.)

(City Council also had before it, during consideration of the foregoing Clause, a communication (September 10, 2001) from the City Clerk forwarding recommendations from the meeting of the Works Committee held on September 10, 2001, regarding the Traffic Calming Policy.)

(Having regard that City Council deferred consideration of this Clause to its next meeting scheduled to be held on November 6, 2001, the aforementioned communications will be resubmitted to Council.)

(City Council on November 6, 7 and 8, 2001, again had before it, during consideration of the foregoing Clause, a communication (June 21, 2001) from the City Clerk (Toronto Pedestrian Committee), submitted by Councillor Disero.)

(City Council again had before it, during consideration of the foregoing Clause, a communication (September 10, 2001) from the City Clerk, forwarding recommendations from the meeting of the Works Committee held on September 10, 2001, regarding the Traffic Calming Policy.)

(Having regard that City Council deferred consideration of this Clause to the regular meeting of City Council scheduled to be held on February 13, 2002, the aforementioned communications will be resubmitted to Council.)

(City Council also had before it, during consideration of the foregoing Clause, the following communication (October 23, 2001) from the Minister of the Environment, Province of Ontario, submitted by Councillor Howard Moscoe:

I recently received a letter from the Honourable Chris Hodgson, Minister of Municipal Affairs and Housing, informing me about a question you posed at the last Association of Municipalities of Ontario conference Ministers' Open Forum.

I understand that you questioned the ministry's rationale for bringing into force requirements for environmental assessment before the installation of traffic calming measures such as speed bumps. In fact, pursuant to the Environmental Assessment Act (EA Act), all municipal undertakings, including the construction of traffic calming measures, are subject to the requirements of the EA Act. Further, the Municipal Engineers Association Municipal Class Environmental Assessment outlines an approved planning process that allows municipalities to plan and implement municipal infrastructure works without submitting an individual environmental assessment for my review. If you require further information or clarification, please feel free to contact Ms. Gemma Connolly, Project Officer, with this ministry's EA Project Coordination Section, at 416-314-7213.

I hope you find this information to be helpful.)

(City Council on February 13, 14 and 15, 2002, again had before it, during consideration of the foregoing Clause, a communication (June 21, 2001) from the City Clerk (Toronto Pedestrian Committee), addressed to the Works Committee, submitted by Councillor Disero, entitled "Pedestrian Infrastructure as it relates to the proposed City-wide Traffic Calming Policy.)

(City Council also had before it, during consideration of the foregoing Clause, a communication (September 10, 2001) from the City Clerk, entitled "Traffic Calming Policy – Revised Proposals.)

(Having regard that City Council deferred consideration of this Clause to its next regular meeting scheduled to be held on April 16, 2002, the aforementioned communications will be resubmitted to Council.)

(City Council on April 16, 17 and 18, 2002, again had before it, during consideration of the foregoing Clause, the following communication (June 21, 2001) from the City Clerk:

Recommendation:

The Toronto Pedestrian Committee recommends to the Works Committee that it:

(1) consider at its July 2001 meeting, the following communication (June 11, 2001) from Rhona Swarbrick, Chair of the Toronto Pedestrian Committee regarding Pedestrian Infrastructure as it relates to the proposed City Wide Traffic Calming Policy;

(2) permit Ms. Rhona Swarbrick, the Chair or Mr. Wayne Scott, Vice-Chair of the Toronto Pedestrian Committee to depute and reflect the Committee's views at its July, 2001 meeting; and

(3) endorse the comments in the aforementioned communication subject to adding the following:

> *"That sidewalks be installed on both sides of a street prior to traffic calming measures being considered."*

Background:

The Toronto Pedestrian Committee, at its meeting on June 20, 2001, had before it a communication dated June 11, 2001, from the Rhona Swarbrick, Chair of the Toornto Pedestrian Committee to Councillor Disero, Chair, Works Committee, requesting that this matter be considered at the July, 2001 Works Committee meeting, in order that pedestrian inequities can be addressed prior to the Committee receiving staff recommendations on a City-wide traffic calming policy at its meeting scheduled to be held on September 10, 2001.)

(City Council also had before it, during consideration of the foregoing Clause, the following communication (September 10, 2001) from the City Clerk:

Recommendation:

The Works Committee recommends the adoption of Recommendations Nos. (1) to (8) contained in the report dated August 31, 2001, from the Commissioner of Works and Emergency Services; and requests that such recommendations be considered in conjunction with the previous

recommendations of the Committee contained in Clause No. 2 of Report No. 13 of The Works Committee entitled "Traffic Calming Policy".

Background:

The Works Committee at its meeting on September 10, 2001, had before it a report (August 31, 2001) from the Commissioner of Works and Emergency Services respecting the comments received on the two previous staff reports on traffic calming; and recommending that the following recommendations be considered in conjunction with the recommendations adopted by the Works Committee at its June 6, 2001 meeting:

(1) physical traffic calming be considered only on the local and collector classification of roads and be subject to and conform with the technical criteria described in Appendix 1 of this report;

(2) speed humps not be installed on primary Toronto Fire Service or Toronto Emergency Medical Service routes, or Toronto Transit Commission bus routes;

(3) consideration of physical traffic calming on a street be initiated by a public meeting, or a petition signed by at least 25 percent of affected households (or ten percent in the case of multiple family rental dwellings), or by a survey conducted by the Ward Councillor;

(4) staff liaise with the respective Ward Councillors to establish the boundaries of areas which potentially will be impacted by proposed traffic calming measures;

(5) consultation with emergency services and TTC representatives occur early in the process of considering each traffic calming proposal;

(6) physical traffic calming measures only be installed on streets where the results of a formal poll indicate that a minimum of 40 percent of the affected households (with frontage or flankage) have responded, and at least 60 percent of the responding households are in favour of the proposal;

(7) in the event that the requests for traffic calming measures exceed the budget allocation, funding for approved physical traffic calming projects be distributed in accordance with the ranking system illustrated in Appendix 2 of the report; and

(8) the City of Toronto request the Province of Ontario to place physical traffic calming measures into Schedule A of the Municipal Class Environmental Assessment.

The Committee also had before it a report (August 22, 2001) from the Commissioner of Works and Emergency Services responding to a request from the Works Committee for a report on the effectiveness of the existing traffic calming measures on Humbercrest Boulevard; advising that physical traffic calming has been applied successfully on Humbercrest Boulevard and has been instrumental in regulating and calming motor vehicle operations, so that speeds are generally close to or below the 40 km/h speed limited and no complaints about traffic on Humbercrest Boulevard have been received; and recommending that this report be received for information.

The Committee also had before it a copy of communication (September 4, 2001) from Councillor Howard Moscoe, Ward 15 - Eglinton-Lawrence, addressed to Mayor Ann Mulvale, Town of Oakville, and President, Association of Municipalities of Ontario, respecting changes in Municipal Class Environmental Assessment legislation with regard to traffic calming.

The Committee also had before it a communication (September 10, 2001) from Ms. Rhona Swarbrick, Chair, Toronto Pedestrian Committee, urging the Committee to request staff to report on the design options that provide for the safe, convenient, and comfortable travel of pedestrians on traffic-calmed streets that do not have sidewalks.

Ms. Rhona Swarbrick, Chair, Toronto Pedestrian Committee, appeared before the Works Committee in connection with the foregoing matter.

(Report dated August 31, 2001, from the
Commissioner of Works and Emergency Services)

Purpose:

The purpose of this report is to discuss the variety of comments received on the two earlier staff reports on traffic calming, and to recommend a new harmonized Traffic Calming Policy for the City of Toronto.

Financial Implications and Impact Statement:

There are significant costs associated with the current practice of installing physical traffic calming measures. Funds to cover the cost of the installation of traffic calming measures are included in the Transportation Services Division Capital Budget on a city-wide basis. An amount of $750,000 has been approved under the Capital Works Program for each of the past two years – 2000 and 2001. Costs of ongoing administration, design and maintenance are accommodated within the Operating Budget.

The adoption and implementation of a harmonized traffic calming policy will not directly impact on the level of funding currently provided for traffic calming since it is essentially capped at $750,000. It should be noted, however, that there has been a steady increase in the demand for traffic calming installations and, should this trend continue, there will be pressure to increase the funding allocation for traffic calming measures.

Recommendations:

These recommendations are proposed to be considered in conjunction with the recommendations adopted by the Works Committee at its June 6, 2001 meeting.

It is recommended that:

(1) physical traffic calming be considered only on the local and collector classification of roads and be subject to and conform with the technical criteria described in Appendix 1 of this report;

(2) speed humps not be installed on primary Toronto Fire Service or Toronto Emergency Medical Service routes, or Toronto Transit Commission bus routes;

(3) consideration of physical traffic calming on a street be initiated by a public meeting, or a petition signed by at least 25 percent of affected households (or ten percent in the case of multiple family rental dwellings), or by a survey conducted by the Ward Councillor;

(4) staff liaise with the respective Ward Councillors to establish the boundaries of areas which potentially will be impacted by proposed traffic calming measures;

(5) consultation with emergency services and TTC representatives occur early in the process of considering each traffic calming proposal;

(6) physical traffic calming measures only be installed on streets where the results of a formal poll indicate that a minimum of 40 percent of the affected households (with frontage or flankage) have responded, and at least 60 percent of the responding households are in favour of the proposal;

(7) in the event that the requests for traffic calming measures exceed the budget allocation, funding for approved physical traffic calming projects be distributed in accordance with the ranking system illustrated in Appendix 2 of the report; and

(8) the City of Toronto request the Province of Ontario to place physical traffic calming measures into Schedule A of the Municipal Class Environmental Assessment.

Background:

The Works Committee, at its meeting on March 28, 2001, adopted a report dated March 8, 2001, from the Commissioner of Works and Emergency Services respecting a harmonized traffic calming policy for the City of Toronto, and in so doing adopted the following recommendations:

(1) that this report be forwarded to all Community Councils for consideration, and that their comments on the proposed traffic calming policy be submitted to the Works Committee for consideration at its June 6, 2001 meeting; and

(2) that this report be distributed to any interested residents and parties, including neighbourhood and business improvement associations in Toronto, as well as citizen advisory committees and advocate groups for transportation modes, such as the City's cycling and pedestrian committees, for comment; neighbourhood associations and business improvement associations are encouraged to provide comments to their respective Community Councils, while broad interest groups are encouraged to submit comments directly to the Works Committee.

The Works Committee requested that:

(1) the Commissioner of Works and Emergency Services develop a system of prioritization of requests whereby equity is applied across Community Council areas and also the setting

of a maximum number of studies or reviews per year based on budget allocation for this activity, the report on this system to be included for approval at the meeting of the Committee on June 6, 2001; and

(2) the Commissioner of Works and Emergency Services further report to the Committee for its meeting on June 6, 2001, on appropriate traffic calming measures that ensure pedestrian safety on streets, found mostly in suburban areas, that do not have sidewalks or where there may be natural drainage in the form of swales or ditches.

The Traffic Calming Policy report was distributed to Community Councils, Agencies, Boards and Commissions, and other agencies and advocate groups associated with transportation.

The Community Councils discussed this matter at their regularly scheduled meetings on May 15 and 16, and the resolutions of each Community Council were listed in the staff report dated May 28, 2001, which was presented to the Works Committee on June 6, 2001. At that meeting, the Works Committee adopted the report and in so doing adopted the following recommendations:

(1) that physical traffic calming be endorsed as an effective way of improving traffic conditions on local and collector streets in the City of Toronto;

(2) that physical traffic calming be considered principally:

- *(i) for local and collector streets;*
- *(ii) where local support exists;*
- *(iii) where existing traffic impacts are significant; and*
- *(iv) where the impacts of traffic calming on emergency and transit services and on adjacent uncalmed streets are relatively minor;*

(3) that the implementation of physical traffic calming measures be undertaken in conjunction with annual road reconstruction and maintenance programs, to the extent possible; and

(4) that the process for conducting traffic engineering studies, evaluating options, and undertaking public consultation for physical traffic calming measures, as well as proposals for the qualifying criteria for installing physical traffic calming measures, be presented to the Works Committee at its meeting of September 10, 2001.

In addition, the Committee:

(1) recommended to Council:

- *(i) that the Province of Ontario be requested to grant such legislation as is necessary to enable the City to set speed limits at whatever limits it wishes; and*
- *(ii) that the Toronto Police Services Board be requested to accelerate the program to adopt the use of unmarked vehicles;*

(2) requested the Commissioner of Works and Emergency Services to report back to the Committee on the following:

(i) an inventory of the number of speed humps in each of the 44 wards, including those currently being considered; and

(ii) the minimum number of, and maximum distance between speed humps, traffic islands and traffic circles that could be installed to be deemed a traffic calming measure; and

(3) further requested the Commissioner of Works and Emergency Services to evaluate and report back to the Committee on traffic calming measures currently in place on Humbercrest Boulevard.

Discussion:

The Works Committee has heard the full range of responses to the initial traffic calming policy proposal: from out-right opposition to traffic calming at one extreme; to considerable support suggesting that traffic calming should be the "rule" and standard for most streets, especially locals and collectors at the other extreme; and more middle of the road comments voiced about the proposed criteria, and the approval and study processes for traffic calming. At its meeting of June 6, 2001, the Works Committee reaffirmed its support for traffic calming in general, and speed humps in particular, so this report will concentrate on discussions related to the process of how traffic calming proposals are dealt with by City staff and City Council. Two options are presented in this report:

(1) treating traffic calming as the "rule" or standard for local streets; and

(2) fine-tuning the traffic calming policy presented within the March 8, 2001 report, in response to comments and concerns.

General comments are provided about the effectiveness and impacts of traffic calming, prior to a detailed discussion about each of the two options. Some outstanding issues and requests are discussed at the end of the report.

A. General Comments:

(1) Speed Regulation:

The primary objective of physical traffic calming is to regulate the speed of vehicles with the use of road design features. The intent of the design is to create a fairly uniform rate of speed which is the desired speed for the residents. By choosing one type of measure, or a combination of traffic calming measures, appropriately designed and installed at the proper spacings, it is possible to establish a fairly uniform desired operating speed on the street.

The most common desired speeds on traffic calmed local roads are 30 km/h or 40 km/h, and on calmed collector roads are 40 km/h or 50 km/h.

Speed humps are now the most common traffic calming measure because they are the most effective in creating a 30 km/h operating speed. For instance, typical "before and after" study results on local roads show an 85th percentile speed of 45 km/h to 50 km/h prior to traffic calming and "after" 85th percentiles of 32 km/h to 37 km/h midway between speed humps. In the case of the street with a 32 km/h speed profile, the 85th percentile speed at the humps themselves is 26 km/h.

On a local street with pinch points and raised pinch points, the "before" 85th percentile was 50 km/h and the "calmed" speed is now 42 km/h, both at the pinch point and midway between the measures.

There has been experimentation with and fine-tuning of the design and placement of physical traffic calming measures over the past decade or more in North America. It is possible that some installations from the past have not yielded the desired results of calmed, uniform traffic flow, such as where humps are only placed at one end of a long section of road.

However, there are generally high levels of public acceptance on streets where humps have been installed recently. Excessive speeding has been reduced considerably.

(2) Safety:

Concerns have been raised about the safety impacts of traffic calming measures, and of speed humps in particular. Representatives of the Toronto Fire Service (TFS) and Emergency Medical Service (EMS) have raised concerns about their response times on streets with speed humps, because their arrival times will be increased by approximately 10 seconds per hump. EMS is primarily concerned about the added discomfort that a patient will feel while lying in the ambulance, traversing the humps.

Given the complex equation of benefits and risks of traffic calming, the community affected should be provided with a complete assessment of the advantages and disadvantages, and given the opportunity to decide the appropriate balance for their neighbourhood. The assessment provided should be a composite of traffic and emergency response information.

The key elements of this issue, which should be addressed for each individual or area-wide traffic calming proposal, are these:

(i) speed humps should not be placed on a primary response route of the TFS or the EMS;

(ii) the combined number of speed humps on routes into the centre of a neighbourhood should be minimized; and

(iii) when the residents are polled on their support for traffic calming on their street, the impacts of the proposal on emergency service response times should be clearly stated to the public.

The current practice of sending all proposals to emergency service representatives for comments, and of advising residents of the potential impacts within polls, should be maintained.

It is also worth repeating here that speed humps should not be placed on TTC surface routes. Also, the Toronto Police Service is officially supportive of traffic calming because it regulates vehicle speeds without their presence.

With respect to the safety of the more vulnerable users of our roads, namely pedestrians and cyclists, the risks of being hit, and of being seriously injured if struck by a vehicle, are reduced on traffic calmed streets, especially those treated with speed humps. At slower speeds, drivers are better able to avoid collisions, and the impacts of collisions are significantly reduced.

Concerns have been raised about the relative importance of traffic calming and sidewalks on streets which currently do not have a sidewalk. In our first report, dated March 8, 2001, staff suggested that sidewalk installation be considered first, before the use of traffic calming measures.

However, the construction of sidewalks is sometimes impractical, such as on streets which have ditches or swales (rural cross-sections). In cases like this, where pedestrians have no reasonable alternative but to walk on the road, the need to regulate slower vehicle speeds is even greater. The installation of speed humps has been successful on rural cross-section roads in other jurisdictions, and staff would recommend the use of this measure on such streets in Toronto.

The types of humps we use (with a sinusoidal profile) are comfortable for pedestrians alone or with strollers, wheelchair users and cyclists. Bump signs would be placed at the ends of the humps to warn motorists as usual, and also to prevent motorists from driving fully or partially around the ends of the humps.

With respect to cyclists' safety, the primary issue is the design and placement of pinch points or chicanes (curb extensions), especially when this treatment causes cyclists to alter their normal path, on the right hand side of the road.

Sometimes it is not practicable to install a curb extension on narrow roads while leaving sufficient width between the feature and curb for a bike lane. Generally, curb extensions do not place cyclists at greater risk if motorist speeds are fairly slow. This is achieved at chicanes and is best achieved at pinch points by installing a hump in combination with a pinch point, which is a design that has been used successfully in Toronto in the past.

(3) Fuel Consumption/Pollution:

From a fuel consumption perspective, the optimum speed for most vehicles to burn the least gasoline is a speed which is too fast for local streets in an urban environment (60-80 km/h). Traffic management techniques, which result in a uniform flow of vehicles, are more environmentally acceptable than those which result in "stop and go" patterns.

As mentioned earlier in this report, physical traffic calming is supposed to regulate traffic to flow at a fairly uniform rate. By comparison, a popular traffic management technique employed over the past few decades is the multiple use of all-way stop signs. These devices cause "stop and go" traffic conditions, and are environmentally worse than physical traffic calming because

they result in higher fuel consumption and the associated pollution. Furthermore, stop signs are not an effective speed control device when placed at the ends of long or mid-length blocks.

For example, when traffic calming measures were installed on a local street in Toronto, and three all-way stop sign controls were removed at the same time, there was an estimated reduction of 90 tonnes of carbon dioxide, which is by far the primary pollutant associated with the use of gasoline fuel in motor vehicles, released per year at that location. Carbon dioxide is the major pollutant associated with climate change. Studies have shown that when appropriate traffic calming measures are implemented on a community-wide basis, this can result in a total reduction of emissions from vehicles in the locality.

B. Two Policy Options:

The follow discussion outlines two basic options for a harmonized traffic calming policy for the City of Toronto:

(1) Physical Traffic Calming is the "Rule"/Standard on Local Roads:

Currently, traffic operations staff conduct a detailed traffic analysis of each traffic calming request to assess existing traffic characteristics. The purpose of this is to ascertain whether a traffic "problem" exists on each street, and to suggest whether mitigating measures are required; and to determine potential impacts of "corrective" measures.

Staff would generally recommend against the expenditure of funds if a "problem" is not apparent, meaning primarily that traffic speed and volumes are moderate. However, in some areas of the city, current practice appears to be one where the Ward Councillor will seek and receive approval at Community Council to conduct a poll of the residents, even in those cases where staff have recommended against physical traffic calming measures. Traffic calming would later be recommended to City Council if the poll results were positive.

Essentially, in some parts of the city, current practice has evolved to treat traffic calming as the "rule" and implementation is approved whether or not staff have confirmed a problem exists. In this scenario, considerable staff resources are expended on detailed studies which are not needed or wanted and these resources could be used on other traffic investigations and analyses. This type of reallocation of staff resources would only be realized if traffic studies were not required for other elements in the traffic calming process as well, such as to establish priorities and to conduct follow up evaluations.

A traffic calming policy based on the premise that physical traffic calming measures are the "rule", to be treated as a type of amenity, could be relatively uncomplicated. Simple conditions could be identified where, as the exceptions, traffic calming should not be implemented, for instance:

- *on roads with a grade in excess of five percent;*
- *on block lengths less than 120 metres between controlled intersections;*
- *on primary TFS or EMS routes (this relates primarily to speed humps); and*
- *on TTC bus routes (this relates primarily to speed humps).*

However, notwithstanding the apparent benefits of a simplified process based on treating traffic calming as the rule for local streets, there are a few implications of this option listed below:

- *The policy would not reflect the relative needs of each request.*

- *This option would not be consistent with the requirements or the intent of the Municipal Class Environmental Assessment of Ontario. Because physical traffic calming is currently included in Schedule B, the City is required to identify the "problem", and develop and evaluate options, including a "do nothing" option.*

  Under the current regulations, there is the risk that someone opposed to traffic calming could appeal any or all approved projects (within 30 days) and the Province may insist that the City follow a detailed study process, in every case which is appealed.

  Within the staff report dated May 28, 2001, staff discussed several options, basically asking the Province, formally, to revert back to the previous condition: that physical traffic calming be considered as a Schedule A activity of the Municipal Class Environmental Assessment, and therefore not be subject to provincial review.

  The Province could be given options which relate to threshold project costs (such as individual projects over $500,000 would be subject to Schedule B) and/or which relate to degree of impact (such as closures and diverters).

  However, until changes are made to the Municipal Class Environmental Assessment document, the City must follow existing environmental assessment regulations.

- *The simplified process should only apply to local roads. The potential impact of introducing physical traffic calming measures on collector roads is usually significantly greater than on local roads, because higher traffic volumes are affected. Therefore, traffic calming proposals on collector roads should always be evaluated using more detailed criteria as described later in this report.*

The first option, described above, takes into consideration the current practice in some parts of the city when dealing with local roads, and could relieve staff of considerable analytical effort. One major risk associated with this option is the lack of conformity with the current provincial environmental assessment legislation. As a result, staff cannot recommend an option which would violate current statutory requirements.

(2) Fine-tuning the Process and Criteria Proposed in the March 8, 2001 Report:

The basic elements of this option are listed below, and include a technical criteria by which proposals for traffic calming are evaluated. Also, the technical analysis, which is conducted by staff, is used to generate rankings of the approved projects, thus identifying priorities for the limited funds. This process would be in conformity with and meet all requirements of the current Municipal Class Environmental Assessment.

(a) A semi-formal initiation:

This could be in the form of a public meeting, a Ward Councillor survey, or a petition signed by at least 25 percent of the households on the street (or 10 percent in the case of multiple family rental dwellings).

(b) Consideration of area-wide impacts:

Staff will review the request and advise the Ward Councillor if they believe other streets could be impacted by the proposed traffic calming. Councillors will be consulted in the establishment of the boundaries of the study area.

(c) Internal consultation and technical criteria:

Staff will review the request from a safety perspective, looking at issues such as road grades, block lengths and the provision of sidewalks, and liaise with representatives from emergency services and the TTC. If the proposal is likely to proceed further, staff will conduct a traffic study in order to evaluate the proposal against the technical criteria listed in Appendix 1. The traffic study will address issues such as traffic speeds, vehicle volumes, collision history, and parking.

Staff will comment on the traffic conditions on the street or in the area, and propose a number of mitigating measures or traffic management options, to address the circumstances. Options could include the use of a "Watch Your Speed" trailer, speed limit changes, parking regulation modifications, physical traffic calming (if the technical criteria are satisfied), speed limit enforcement, additional monitoring, or no further action at the time.

(d) Report to Community Council:

Staff will report their findings to the appropriate Community Council. If approved, staff will prepare the proposed designs and a formal poll will be authorized and conducted.

(e) The formal poll:

The simplest and fairest type of poll would be a "one-vote-per-household" technique, to those households which have direct frontage or flankage on the affected streets. This is the same technique proposed for polling within the harmonized permit parking policy report.

There are good reasons for having a uniform process for conducting these types of household polls, and the City Clerk's Division is currently working on this harmonization activity. However, the support rate that indicates a positive response could vary from issue to issue, depending upon the potential impact of the issue being discussed. For instance, if traffic calming is considered a controversial issue, a response and support rate greater than a simple "majority of those households replying" could be used to indicate a positive response.

Firstly, a high response rate for these types of polls would be required (i.e., 40 percent), and then a high support rate of those replying (i.e., 60 percent) would gauge strong public support for a traffic calming proposal.

(f) Council approval and ranking:

Projects receiving a positive response in their respective polls would be recommended for Council approval. Approved projects would be competing for limited funds each year. A ranking system could be applied city-wide to ensure that those streets with the worst problems or greatest need would be funded first. A proposed point rating system is illustrated in Appendix 2, and elements such as demographics, safety, traffic conditions and land use would be used to assess relative priority.

The proposed physical traffic calming review and approval process is summarized below:

(i) semi-formal initiation;
(ii) consideration of area-wide impacts;
(iii) basic road safety/design review;
(iv) consultation with emergency services and TTC staff;
(v) traffic study and technical evaluation;
(vi) consideration of options;
(vii) report to Community Council.
- *(a) If traffic calming is technically supportable, the report will seek to:*
  - *authorize poll;*
  - *authorize road alteration by-law; and*
  - *initiate Class Environmental Assessment notification;*
- *(b) If traffic calming is not technically supportable, then an information report is submitted;*

(viii) conduct a formal poll;
(ix) report to Community Council (Public Hearing).
- *(a) If there is a positive response to poll, traffic calming is recommended to Council; and*
- *(b) If there is not public support, an information report is submitted;*

(x) City Council approval;
(xi) Class Environmental Assessment Notice of Completion; and
(xii) ranking of approved traffic calming projects for annual construction program.

Listed below are a few comments about the adoption of Option 2:

- *the relative needs of each proposal would be reflected in the criteria and ranking elements of the policy;*

- *this option would be consistent with the requirements of the Municipal Class Environmental Assessment of Ontario. However, because even small traffic calming projects are now explicitly included in Schedule B of the Class Environmental Assessment, cities are required to advertise completion of each project, in addition to other long-standing compulsory advertisements in advance of road alteration by-laws.*

These new requirements could add significant staff resources, time and costs to traffic calming projects. Therefore, even if this option is adopted, the City of Toronto could still formally request the Province of Ontario to place physical traffic calming into Schedule A of the Municipal Class Environmental Assessment, and therefore not be subject to provincial review. This would effectively revert back to pre-April 4, 2001 conditions; and

- *this criteria-based process reflects current study practice undertaken by staff throughout the city, including areas which currently do not routinely install traffic calming measures. In these areas, including the former Cities of Etobicoke and Scarborough, staff would typically receive a complaint about traffic (such as speeding and/or high volumes) but not a specific request for physical traffic calming.*

  Staff would then conduct a traffic study to determine traffic characteristics, and apply warrants such as the Council-approved interim criteria for 40 km/h speed limits and all-way stop sign control. Options would be generated, such as "do nothing", warning signs, the "Watch Your Speed" trailer, speed limit changes, all-way stop sign control, speed limit enforcement, or physical traffic calming. If physical traffic calming is the preferred technical option, the process described above could be followed.

Staff recommend adoption of this second option which is "criteria-based" in order to provide a uniform technique for determining the actual need for traffic calming projects throughout the City and satisfying the requirements of the Municipal Class Environmental Assessment.

C. Outstanding Issues:

At its meeting of June 6, 2001, the Works Committee requested information on the three items listed below:

(1) Speed Hump Inventory by Ward:

By the end of 2001, there will be approximately 206 streets which have been traffic calmed with the use of speed humps.

The list below illustrates the numbers of streets city-wide where speed humps have been or will be installed:

2001 - 62 streets;
2000 - 65 new streets;
1999 - 45 streets; and
1998 and before - 34 streets.

The majority of these streets are located in a relatively small proportion of the wards in the city. Appendix 3 lists those wards where speed humps have been installed prior to 2001, and installed or planned for 2001, and the number of streets so treated in each ward.

There are some wards where speed humps have been approved for certain streets, but the installations are on hold pending funding in 2002.

(2) Physical Traffic Calming Treatments and 30 Km/h Speed Limit:

As mentioned in an earlier report, the Province of Ontario has enacted special legislation to allow the City of Toronto to establish 30 km/h speed limits on public streets, providing it is accompanied by physical traffic calming. This legislation is presently unique to the City of Toronto. Outside the city, the minimum speed limit which a city can establish on a public road is 40 km/h, whether it is accompanied by physical traffic calming or not.

The intent of the legislation is to allow for the 30 km/h legal speed limit to be placed on a local street which is designed to encourage a 30 km/h operating speed. Properly designed and spaced physical traffic calming is the design technique which accomplishes this. In order to encourage an operating speed of 30 km/h, speed humps and/or other traffic calming measures would be placed at 60 metre to 90 metre intervals along the street.

(3) Traffic Calming on Humbercrest Boulevard:

The Works Committee has requested a report on the traffic calming which has been installed on Humbercrest Boulevard. A separate report is being presented to the Works Committee which provides an update on measures which have been installed, and the traffic operations recorded since.

<u>Conclusions</u>:

At its meeting of June 6, 2001, the Works Committee reaffirmed its support for traffic calming in general, and speed humps in particular. The Works Committee determined that physical traffic calming should be considered principally for local and collector streets; where local support exists; where existing traffic impacts are significant; and where the impacts of traffic calming on emergency and transit services and on adjacent uncalmed streets are relatively minor.

There are two basic options for a harmonized traffic calming policy:

(1) treating traffic calming as the "rule" for local streets; or

(2) a criteria-based assessment of traffic calming proposals and priority ranking.

These two options have been discussed in this report, and staff are recommending the use of a criteria-based process in order to provide a uniform technique for determining the actual need for traffic calming projects city-wide, and to meet all the requirements of the current Municipal Class Environmental Assessment.

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List of Attachments:

Appendix 1 – Criteria for Physical Traffic Calming
Appendix 2 – Traffic Calming Ranking System
Appendix 3 – Speed Humps By Ward)

APPENDIX 1

CRITERIA FOR PHYSICAL TRAFFIC CALMING

(1) On streets where there are no sidewalks, the installation of sidewalk on at least one side of the street must be considered prior to physical traffic calming.

AND

(2) Traffic Calming measures must not be installed at or near locations where the road grade exceeds five percent.

AND

(3) On streets where mid-block traffic calming measures are proposed, the block length between controlled intersections (stop signs or traffic control signals) must exceed 120 metres.

AND

(4) On streets where the 85^{th} percentile speed exceeds the warranted speed limit by a minimum of 15 km/h, there is no minimum volume required.

OR

(5) On streets where traffic calming is proposed, the 85^{th} percentile speed must be a minimum of 10 km/h (and less than 15 km/h) over the warranted speed limit, and the following traffic volume requirements must be fulfilled:

Local Roads – between 1,000 and 2,500 vehicles per day (principally); and
Collector Roads – between 2,500 and 8,000 vehicles per day (principally).

Notes:
- *Warranted speed limit is the speed limit specified by the City of Toronto 40 km/h Speed Limit Warrant.*
- *Block lengths are measured from centre to centre of intersecting streets.*
- *Road Classifications are as specified in the City of Toronto Road Classification System.*
- *The review should be conducted from one intersecting collector street (or arterial street) to another.*

APPENDIX 2

TRAFFIC CALMING RANKING SYSTEM

<table>
<tr><td><u>Ranking</u>

Max.100 points</td><td><u>Speed</u>

(0 to 25 points)</td><td><u>Local Road</u>

2 points for each km/h that the 85th %ile speed is above the Minimum Speed threshold used in Warrant 3.1 of Traffic Calming Policy</td><td><u>Collector Road</u>

1 point for each km/h that the 85th %ile speed is above the Minimum Speed threshold used in Warrant 3.1 of Traffic Calming Policy</td></tr>
<tr><td></td><td><u>Volume</u>

(0 to 25 points)</td><td><u>Local Road</u>

1 point for every 100 vehicles of daily traffic (0-2500 vehicles per day)</td><td><u>Collector Road</u>

1 point for every 220 vehicles of daily traffic over 2500 (2500-8000 vehicles per day)</td></tr>
<tr><td></td><td><u>Collisions</u>

(0 to 25 points)</td><td colspan="2">5 points for 1 preventable collision[1] recorded by police in the past 3 years; or
10 points for 2 or more preventable collisions[1] recorded in the past 3 years; or
10 points for 1 or more preventable collisions[1] recorded resulting in personal injury in the past 3 years.</td></tr>
<tr><td></td><td><u>Pedestrian and Bicycling Factors</u>

(0 to 25 points)</td><td colspan="2">5 points for each pedestrian generator (e.g., park, school, seniors centre, recreation centre, church, or other public institution, etc.)
10 points for a signed bicycle route[2].</td></tr>
<tr><td colspan="4">Notes: The review should generally be conducted from one intersecting collector street (or minor or major arterial street) to another.
Road classifications are as determined in the City's Road Classification System.
[1]Preventable collisions are those that are considered preventable through the use of traffic calming measures.
[2]Signed bicycle route means a bicycle route identified in the City's Master Cycling Plan.</td></tr>
</table>

APPENDIX 3

SPEED HUMPS BY WARD

	Installed Pre-2001		*Carry over 2000 and Proposed 2001*	
Ward	*Number of streets with speed humps installed*	*Number of speed humps installed*	*Number of streets with speed humps approved by Council*	*Number of speed humps approved*
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
7	*1*	*2*	-	-
8	*1*	*2*	*2*	*5*
9	*1*	*3*	-	-
10	*8*	*22*	*1*	*3*
11	-	-	*1*	*3*
12	*1*	*4*	-	-
13	*5*	*21*	-	-
14	*14*	*85*	*3*	*14*
15	*9*	*26*	*4*	*13*
16	*8*	*45*	*3*	*7*
17	*18*	*106*	*7*	*31*
18	*11*	*57*	*4*	*26*
19	*12*	*85*	*5*	*22*
20	*5*	*19*	-	-
21	*21*	*47*	*1*	*2*
22	*11*	*88*	*3*	*17*
23	-	-	*2*	*5*
24	-	-	-	-
25	*5*	*18*	-	-
26	-	-	-	-
27	*1*	*4*	*1*	*3*
28	*2*	*8*	-	-
29	*1*	*3*	*3*	*21*
30	*2*	*4*	-	-
31	-	-	-	-
32	*5*	*16*	*22*	*114*
33	-	-	-	-
34	*2*	*6*	-	-
35	-	-	-	-
36	-	-	-	-
37	-	-	-	-
38	-	-	-	-
39	-	-	-	-
40	-	-	-	-
41	-	-	-	-
42	-	-	-	-
43	-	-	-	-
44	-	-	-	-
Total	*144*	*671*	*62*	*286*