INFORMATION NOTE

Title:	**Traffic Calming Policy - Discussion on Review**
Date Prepared:	December 3, 2020
Report To:	Committee of the Whole
Councillor and Role:	Councillor Sandy Hickman, Transportation & Regulatory Services
Ward:	N/A

Issue: A review of the City's Traffic Calming Policy is underway. Prior to preparing a public engagement strategy staff are seeking general discussion and commentary from Council on several key areas of the policy to better understand the broad goals and outcomes Council is interested in exploring.

Discussion – Background and Current Status:

The Traffic Calming Policy and the associated Traffic Calming Warrant was developed by a consultant for the City and was completed in 2011. They were designed to manage the requests to slow vehicle traffic, reduce non-local traffic, and/or correct or improve perceived safety concerns in the street network.

It is important to note that projects which fall under the Traffic Calming Policy are fundamentally neighbourhood driven projects. Council has chosen to spend discretionary funds to try and address concerns raised by residents. The policy creates a framework to prioritize these projects and select appropriate interventions, but the demand for these projects originates with local residents.

Council considered a Traffic Calming Policy Overview in summer of 2020. Following this Council requested that the policy be reviewed to address points of common difficulty and improve the policy overall. Transportation Engineering and the Office of the City Clerk have since initiated a full policy review.

The goals of the policy and the basic process are included below for reference. These sections are reproduced from the Traffic Calming Policy Overview for the convenience of the reader.

Note that should any changes to the policy be adopted it is planned to bring any currently active projects to a conclusion regardless of where they rank based on a revised policy. This does not mean that all streets which have been ranked through the existing policy will be addressed before the revision. 'Currently active projects' means only those that have reached Step 6 of the traffic calming policy implementation described below.

Goals of the Traffic Calming Policy

The Traffic Calming Policy was developed to provide a system with which to handle the numerous requests the City receives each year requesting action be taken to slow vehicle traffic, reduce non-local traffic, or correct/improve safety concerns in the street network.

The four most important goals of the policy are to:

- provide a standardized process to address concerns regarding speeding and safety;
- provide this process in a manner that is fair, reasonable, consistent and cost-effective;
- prevent installation of measures that need to be removed shortly after installation; and,
- ensure the most important concerns are addressed while funding is available (instead of expending the available budget on minor concerns).

Traffic calming is mostly focused on neighbourhood liveability. While improvements in safety can be a benefit of a successful traffic calming project, they are rarely the driving factor behind the City's current program. Deficiencies in, or improvements to, the street network may be addressed outside the traffic calming program under one of several programs the City operates:

- Annual accessible pedestrian signal program
- Annual sidewalk repair program
- Annual pedestrian crossing program
- Annual sidewalk infill program
- Road Safety Initiatives
- Capital Projects
- Road Rehab

Basic traffic calming process

The process that a request for traffic calming follows is outlined in the Policy. Over the years some minor changes have occurred in this process to reflect the practicalities of and experience with these projects. The steps, and changes, are shown in the table below.

Step	Current Policy	Current Practice
1	Request – Request is received, typically from public or Councillor.	No change.
2	Screening – Data is collected on grade, speed and volume. This is evaluated with % non-local traffic to determine project eligibility.	No change but steps 2 and 3 are effectively a single process conducted by staff.

Step	Current Policy	Current Practice
3	Scoring and Ranking – Additional factors are incorporated based on street context to develop a score.	
4	Toolbox – An initial staff review of possible measures is conducted at this point.	Typically restricted to top 10 projects at any given point.
5	Project Selection – Projects are selected and referred to capital budget for funding of a traffic calming study.	Council has allocated funding to an Annual Traffic Calming Program and top ranked projects are pursued without individual project approvals.
6	Design, Public Support, Final Council Approval, Implementation – This step covers a number of sub steps described below.	

A breakdown of Step 6 in the process is provided here:

Step	Current Policy	Current Practice
6-A	Initial Public Support – the original requestor is to circulate a survey seeking support for project. Requires 60% support of affected residents to proceed.	Staff develop this survey, hand deliver it, and collect responses. The threshold of “60% of affected residents” was adjusted to “60% of survey responses” given the low response rate that is typical.
6-B	Draft Design – a public meeting is held to discuss project options	This meeting was held for projects conducted early in the lifetime of the Policy. Unfortunately, these meetings were not well attended and upon implementation found to be ineffective in identifying issues presented by the community affected. In substitute, the survey conducted in ‘6-A’ includes the preliminary options that would have been discussed in this step.
6-C	Draft Design – a draft design is developed by staff	No change.

Step	Current Policy	Current Practice
6-D	Draft Design – a public meeting is held to review	Rather than a public meeting we now implement a temporary project at this step. This method has been more effective at communicating the impacts of the project and gathering feedback from affected residents. Technical monitoring/evaluation also occurs here.
6-E	Final Plan – a final traffic calming plan is developed	This plan now incorporates the direct feedback on the temporary implementation. (Feedback is collected via calls, emails, 311, Councillors, etc.)
6-F	Final Public Support – the original requestor is to circulate a survey seeking support for the final plan.	Staff develop this survey, hand deliver it, and collect responses. Same threshold as above applies before project proceeds.
6-G	Identify Funding – forward funding request for the final plan to the capital budget process	These steps have been precluded by the establishment of the Annual Traffic Calming Program budget.
6-H	Final Council Approval – council approves capital budget for project implementation	
6-I	Permanent Implementation – The final plan is implemented	No change.
6-J	Evaluation and Monitoring	This step now occurs during the temporary implementation in step ‘6-D’.

Areas of possible change within the policy

The discussions presented below outline a variety of areas under which change may be made to the current policy. Most of these have practical implications on which projects are eligible for traffic calming and how highly they rank in the list of eligible projects.

The status quo within each of these area expresses the policy goals of the original Traffic Calming Policy. These policy goals may or may not express the current values of Council or the public. Changes in these areas could express different values and lead to different projects being prioritized and completed.

Changes within the areas outlined will have direct implications on the following outcomes. These outcomes are ultimately what express the values of Council and residents:

- What kind of street is prioritized – streets that are ‘too wide’? historic streets that are carrying ‘too much’ vehicle traffic? streets with ‘sensitive uses’?
- What is the balance between technical criteria (such as speed and volume) vs contextual information (such as current street design and land use)?
- How are resident expectations managed through the process?
- What is the balance between streets serving the motoring public, streets serving active modes, and the experience of an adjacent resident?

Feedback is welcome from both Council and residents to explore these issues and the areas of possible change below. New or different considerations will be incorporated in the process of policy review as they are identified.

1. Need for a Traffic Calming Policy

The question has been asked about whether a Traffic Calming Policy is required at all. While traffic calming projects could be completed without this policy it provides a standardized framework against which the funding identified for traffic calming can be allocated. The current traffic calming policy provides a technical underpinning to this determination which means it is easier to make data driven decisions about these projects.

Staff position: *A traffic calming policy is beneficial as it defines a process for how these issues are handled in a fair and consistent manner.*

2. Re-evaluation timeframe

If a street is evaluated and found to not qualify for traffic calming, it is possible for a re-evaluation to be requested after a period of two years has passed. This timeframe attempts to balance the workload created by a re-evaluation request and the likelihood of a material change in conditions present on the street evaluated.

It has proven very unlikely for any street to become eligible for traffic calming after initially being rejected. In addition, there is often false hope given to a resident who requests traffic calming when told a re-evaluation will take place so soon after the previous evaluation found the street to not qualify.

A longer re-evaluation period could be offset by providing staff discretion to initiate a re-evaluation if there is an identified cause, such as changes to the road network or a large new development.

Staff position: *Extending the re-* evaluation *period would help manage resident expectations, reduce staff workload, and is unlikely to result in highly deserving streets being overlooked.*

3. New development

Currently, the traffic calming policy does not address new development or the rehabilitation of existing streets. The Envision Municipal plan highlights the importance of a complete streets approach and one of the City's strategic goals is to "Improve safety for all users on a well-maintained street network."

Rising to the spirit of these policies the City has incorporated proactive traffic calming features in recent development and road reconstruction projects. A good example of this is the work completed over the past few years on Water Street.

It may be beneficial to explicitly state within the traffic calming policy that these types of requirements may be placed on projects that are not stand-alone traffic calming projects. The inclusion of traffic calming features in City projects would depend, as it does now, on staff capacity to complete the designs unless additional resources were allocated. These projects are also completed based on technical merit as part of the road work and typically do not involve public consultation on the traffic calming features (staff do discuss with major stakeholders such as schools, Metrobus, SJRFD where needed).

Staff position: *Include in the revised policy provisions for the application of traffic calming tools to projects completed in new development or road rehabilitation/reconstruction.*

4. Capacity to complete projects

In a typical year, staff undertake one to three traffic calming projects from the top of the priority list. This depends on the size and complexity of the projects. Simpler projects with fewer properties impacted require less effort and less funding to complete and therefore more can undertaken at one time.

One criticism of the current policy is that after the street is evaluated and qualifies, it can take a long time for a project to be undertaken for implementation. It is important to

recognize that both staff time and funding are required to complete these projects and a change in capital funding does not necessarily lead directly to more projects being completed.

Staff position: *The current funding level of $50,000 allocated annually is in line with staff capacity to complete the public engagement, design, and implementation work.*

5. Long priority list / low eligibility threshold

The current priority list for traffic calming projects has over 40 eligible projects. While eligible under the existing scoring system a project at the bottom of this list currently has no reasonable prospect of being completed in a timely manner. This artefact of the current system leads to disappointment and frustration by residents who are seeking traffic calming in their neighbourhood. A resident may request traffic calming, be told their request is eligible, but then be informed that it is not likely to see any action for many years.

For these marginal streets, while a response that a project is not eligible may be less welcome to some, it also conveys a more realistic perspective. This could be accomplished by increasing the eligibility threshold or introducing a relative ranking system. The first would permanently disqualify these low scoring, but still eligible, projects, while the later would disqualify them until such time as projects scored higher are addressed and removed from the evaluation pool.

Staff position: *A shift to a system that identifies only a 'top ten' list as eligible for consideration at any given time may bring expectations of those seeking action on their street more in line with program capacity.*

6. Relative vs. independent scoring

The current policy scores each project independently based on pre-set thresholds. This approach allows individual projects to be scored without considering what other potential projects could be undertaken. Once the evaluation thresholds are established by the policy, the ranking system is fixed.

One way that independent scoring can create concerns within this system is when collected data values exceed maximum score thresholds. For example, if a local road exceeds 2,150 vehicles per day (vpd) then no further points are available. Two streets in our current database are Meadowbrook Drive (2300 vpd) which scores the same as Quidi Vidi Road (5,900 vpd) for the 'volume' factor.

A relative ranking system requires many projects to be ranked as a set. It allows more flexibility in how projects are scored but comes at the cost of easy predictability. New projects added to the evaluation pool can affect the fundamental score of projects previously evaluated, not just the rank position. For example, a system that assigns points to the top x% of streets evaluated will score streets differently depending on which streets are included within the evaluation.

With a ranked scoring system, it is possible that a larger number of marginal projects are disqualified if they do not score particularly highly within individual criteria.

Staff position: *A relative ranking system is more complex and scores for individual streets are not stable over time. However, it enables the policy to identify streets that have exceptional operating characteristics.*

7. Factor independence

In the current scoring system, each variable is scored independently. The scoring system for Local Roads is reproduced below for reference. As a result, there is no correlation in the scoring for factors that may compound or negate each other. For example, higher speeds score the same whether they are near a school area or not.

Concerns received, and real safety implications, are often due to combinations of factors that occur: where a street lacks sidewalks and serves a community green space, where either situation in isolation may not be as much of an issue but when considered together provides may justify a higher ranking.

Factor	**Criteria**	**Maximum Points**
Collision History	2 points for each collision in the past three years involving vulnerable road users, to max of 10	10
Traffic Volumes	1 point for every 50 vehicles above 900, max 25	25
Traffic Speeds	1 point for each km/h above posted speed, max 20	20
Non-Local Traffic	3 points for each 10% of non-local above 30%, to a maximum of 15 (reached at 70% non-local traffic)	15
Pedestrian Generators	5 points for each high school, park, community centre or senior facility within study area, to max of 10	10
Pedestrian Facilities	5 points if no sidewalk	5

Factor	Criteria	Maximum Points
Schools and Safe Routes to School	5 points if there is an elementary school or Safe Route to School within the study area	5
Bicycle Concerns	5 points if the road is an existing or planned cycle route	5
Transit Services and Routes	-2 points if existing or planned transit route	0
Block Length	1 point for each 50m increment if greater than 100m, to max of 5	5
		100

While much more complex, a scoring system could be developed that considers the relationship between factors such as speed, volume, and context. This could award additional points to areas where several factors combine to create a situation that has more technical justification for action than another area where individual factors may score higher.

Staff position: *Developing, testing, and validating a system of interrelated factors is one of the more labour-intensive changes that could be made in the entire policy. From a technical perspective it also has the most potential to identify projects of highest merit. However, technical merit may not align with the goals identified by Council or residents.*

8. Volume thresholds

Points are awarded for vehicles above 3,000 per day on collector roads and above 900 per day on local roads. However, these roads are expected to carry between 1,000 and 12,000 vehicles per day for collectors and up to 3,000 per day for local streets. This leads to the situation where roads that are operating well within their technical expectation are scoring maximum points for volumes. For example, a collector street with 5,500 per day, or a local street with 2,250 vehicles per day.

The result of this is that “normal” streets are scoring highly for this factor and are diluting or displacing streets that are operating outside of the “normal” range. That said, the existing low thresholds do express a position that the policy would like to encourage these streets to operate at the lower range of their design domain.

There is also the possibility that streets that serve very high volumes are misclassified. A local road carrying a higher volume may actually be functioning as a collector for the neighbourhood. Similarly, a collector may actually be operating as a minor arterial within the network if it has volumes near the upper end of the technically appropriate range.

Staff position: *The evaluation mechanism for vehicle volume would be a better technical tool if it captured outliers and either increased the points awarded for them or triggered a re-consideration of the street classification.*

9. Speed scoring

Speed scores are a significant proportion of the total a street might receive with up to 20 or 25 points for locals and collectors respectively. Speeds are currently only awarded points when the 'typical' speed ('operating' speed or '85th percentile' speed) is above the speed limit. As such, on most streets that are of concern to residents but operate just below 50km/hr are pushed further down the list priority.

Conversely, streets that have the limit set at 30km/hr for political or historic reasons and operate at the same speeds (just below 50km/hr) receive a high number of points and subsequently rank highly.

In other cases, such as school zones, where there is a technical justification for a 30km/hr speed limit the scoring based on posted speed works as intended and ranks these areas higher.

One possible approach to address the concerns residents have expressed with this system is to evaluate streets based on a target speed rather than the posted speed. For example, the target speed for local residential streets could be set at 30km/hr and all evaluations of speed could be benchmarked against that target. Significant effort would be required with this approach to ensure that the context of each street evaluated matches the target speed used. Our current street classification is very coarse and "local" covers streets that serve both through traffic needs and access to individual properties.

Another change that could be made is to reduce the total points available for the speed score. This would increase the impact of points awarded for other contextual factors.

Staff position: *Developing, testing, and validating a system of target speeds is one of the more labour-intensive changes that could be made in the entire*

policy. Because speed is directly related to safety it also has the most potential to identify projects with possible safety impact.

10. Context/function mismatch

An issue that is often raised by concerned residents is that the function of their street (as a collector or arterial) does not match the context of the street. In these cases, such as Waterford Bridge Road, a street is not eligible for traffic calming because it is an important link in the City street network. In a Catch 22, traffic calming is requested for this street precisely because it is well used and that this level of use does not match the design of the street.

This occurs most often in older areas of the City where the streets were not necessarily "designed". This can, however, also happen in newer areas of the City where the design of the street meets the needs of vehicle traffic but the land use surrounding it does not match that use. An example of this case is Great Eastern Avenue where the frontage of single-family homes and on street parking conflicts with the major collector (or perhaps minor arterial) role of the street.

Whether traffic calming is used in these situations is a direct trade off between the use of the road by a large number of people as they pass through in a vehicle and the feeling of safety and comfort that the adjacent homeowners experience.

From a technical perspective, these streets tend to be key links within the City transportation network. They are often the only, or one of a very few, good routes to pass between key destinations within the City. Adding traffic calming to these streets does not reduce the need for people to travel and they will find other routes. In situations where there are no, or few, options, this can easily lead to displacing drivers into neighbourhoods where additional vehicles are less able to be accommodated.

Transit and emergency services often use these routes as well and need to be carefully considered. In the best-case scenario, a targeted implementation of traffic calming tools for a minimal stretch of road can realize a benefit or resolution to a specific localized concern.

On the other end of the spectrum, some road types, such as a residential cul-de-sac or short crescent, are eligible for evaluation within the traffic calming policy. Due to the nature of these streets they never score high enough to be eligible for a project. As such, the policy could be streamlined by excluding these from consideration thereby eliminating the need for staff to conduct an evaluation.

Staff position: *Very small streets could be disqualified without change in policy outcomes. Opening the screening criteria to allow more, and busier, streets to be considered would not be justified from a technical perspective. While it would take significant effort to design, test, and validate, a separate eligibility system could be developed to target localized areas of concern on otherwise ineligible streets.*

11. Non-local traffic thresholds

The current policy includes an evaluation of how 'local' the traffic on a particular street is. In other words, traffic that is travelling through an area to a destination nearby or further afield is considered 'non-local'. This is difficult and expensive to measure properly so estimates are typically used.

How this measure is defined, and the acceptable values within the policy, could express different values. The use of this factor validates the feeling of ownership a resident might have over the street in front of their home. Another perspective is that City streets are constructed and maintained by, and for, the benefit of all residents.

This factor is closely related to the factor that considers the total vehicle volume on the street. Given the frequent use of estimating procedures it could be argued that a busy street is receiving points for the same thing twice.

This factor also often causes confusion or consternation with residents seeking traffic calming for their neighbourhood. Residents often feel that only those who live in an area are 'local' when in fact visitors to an area or employees to a neighbouring building are included in the concept of 'local' traffic.

Staff position: *Removing the non-local traffic factor from the ranking system would eliminate a weakness in the current data collection practice. It also expresses a preference to considering streets as a public resource rather than serving a local need alone.*

12. Overall factor weight

The current system scores traffic characteristics (collisions, speed, and volume) at a little over half of the total possible score. 55/100 for local streets and 60/100 for collector streets. Some feel that this does not put enough weight on street context such as the design (width, sidewalks) and context (residential, schools).

The relative weight of different factors is implicated in several of the possible policy changes discussed. A simple change of weighting is the easiest way to tweak the goals that the traffic calming policy expresses.

Staff position: *Other changes offer the opportunity for target refinement of the policy but adjusting the factor weights is the easiest way to affect which projects are prioritized.*

13. Public consultation / local decision making

Early in the process of completing a traffic calming project there is a survey of affected residents to see if they are in favour of traffic calming on their street. If the survey does not provide a positive result, then the project is concluded, otherwise it continues to a temporary implementation. By reaching out early, we ensure there is support to spend the effort on a project in the area.

The last public stage in the process is a final survey on support for permanent installation. If this survey is returned with a negative result the project is concluded with no further implementation. The final survey ensures that a strong majority of an affected community supports a project before expenditures are made on a permanent installation.

Outside the traffic calming policy, a public survey result is considered in a staff recommendation or Council decision rather than being directly implemented. Because of the direct implementation of the survey results, this process is a strong step in favour of direct public decision making. However, this result is often unsatisfactory to those who were initially advocating for a project. This process also supersedes the technical evaluation: a project may achieve its goals of lower speeds and/or volumes but still be turned down by the affected residents.

In transportation projects it is common to find that those who are unsatisfied with a situation/proposal are more likely to reach out and engage. We see this borne out in the two surveys conducted as part of the traffic calming process. Generally, those unsatisfied by conditions on their street are most likely to respond to the initial survey and support the traffic calming project. After the temporary installation, we generally see those who feel negatively impacted by the change to then become engaged and express opposition the project.

One effect of the process is that projects take longer to complete. Each survey is typically a six-week to eight-week process from conception to result.

There has been some discussion of whether projects should be completed on a purely technical basis and public consultation removed from the process. This is not in line with the City's public engagement policy which says people who are impacted by a decision have the right to be consulted. Given that the traffic calming policy is intended to provide a response to public demand for this type of project it would be counter to this intent to eliminate public consultation. At the same time, it would greatly increase the chance of completing projects that are very unpopular with the local residents.

Another approach suggested is that projects found to have significant success from a technical perspective would bypass the second survey and proceed to permanent installation based on technical merit. This would require a threshold be defined for the success of a project but is easy to defend from a technical perspective.

Part of the function of the traffic calming policy is to remove the need for political decision making from individual projects. They are approved, or fail, directly from the local feedback.

Staff position: *While technical merit is important, the ultimate success of these projects relies on the input of the affected residents.*

14. Response rates and thresholds

As discussed above, the traffic calming process relies on hand delivered surveys to directly poll the affected residents on proposed changes.

The original policy – "60% of affected residents" as the threshold – implicitly assigns a "no vote" to residents that don't respond. The original policy requirement for a percentage of affected residents was also not a practical measure. Response rates are almost always lower than 60% regardless of the position those responses take. If this threshold were used, almost no projects would proceed past this step in the process.

The current practice – "60% of responses" as the threshold – assigns a "neutral" opinion to residents that do not respond. Unfortunately, when a project area is small, or the response rate is low, the question may be decided by very few of those affected. This has been found to be a less problematic issue than adherence to the letter of the original policy.

One change that could be made here is to formalize the current practice but add a threshold for response rate as contemplated in the original policy. For example, for a vote to considered conclusive: require at least 20% of residents affected to respond in

addition to the 60% approval of responses. Historic response rates could be investigated to determine an appropriate value.

Staff position: *Formalizing the current practice provides the simplest procedure and is analogous to a direct democracy approach.*

Key Considerations/Implications:

1. Budget/Financial Implications:
   This program currently has about $58,000 available from previous allocations. Council typically tops-up this fund with an annual allocation of $50,000. However, this was deferred from the 2020 capital budget.

2. Partners or Other Stakeholders:
   n/a

3. Alignment with Strategic Directions/Adopted Plans:
   n/a

4. Legal or Policy Implications:
   This note is part of a policy review that currently underway with the Office of the City Clerk.

5. Privacy Implications:
   n/a

6. Engagement and Communications Considerations:
   An engagement strategy will need to be developed in order to take the next steps on the policy review. This engagement would focus on the policy outcomes desired by the public. This process would be planned for early 2021.

   The City will work to educate residents about the policy review and promote opportunities for future engagement via Public Service Announcements, information on the City's website and social media platforms.

7. Human Resource Implications:
   If there is a desire to increase the number of projects completed annually then additional resources would be needed.

8. Procurement Implications:
   Depending on the level of effort requested on some of the changes discussed above there would be a need to hire an engineering consultant to assist with the work.

9. Information Technology Implications:
   n/a

10. Other Implications:
    n/a

Conclusion/Next Steps:
Some of the changes above could be made simply while some require significant effort. There are likely other suggestions for ways in which changes could be made that have not yet been identified which may be identified through the public engagement process.

Once feedback has been received from Council there will be an opportunity for the public to provide input on the types of changes and priorities they would like to see reflected in the policy.

Fundamentally, any changes made to the traffic calming policy will result in some residents being more satisfied and some being less satisfied with the outcomes. No set of changes can be expected to eliminate feedback from residents who do not see projects implemented on their streets.

Following this public engagement process there are two key paths down which this policy review could develop:

- Staff could synthesize the feedback received and develop a set of simple changes to the policy that reflect the direction received from Council and the public. The items identified above as requiring significant effort to develop, test, and validate are not within the available capacity of staff to complete.
- Staff could issue an RFP to have an engineering consultant undertake some of the more labour-intensive changes discussed. Staff would work with the consultant to develop, test, and validate these items in combination with any simpler changes to the policy to create a new evaluation tool. This effort could be funded by a capital allocation or funded from the available traffic calming budget.

Report Approval Details

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This report and all of its attachments were approved and signed as outlined below:

Scott Winsor - Dec 3, 2020 - 3:11 PM

Jason Sinyard - Dec 3, 2020 - 4:14 PM