

DECISION/DIRECTION NOTE

Title: Traffic Calming Policy Update

Date Prepared: August 10, 2022

Report To: Committee of the Whole

Councillor and Role: Councillor Maggie Burton, Transportation & Regulatory Services

Ward: N/A

Decision/Direction Required:

This Decision Note presents a summary of proposed changes to the City's current traffic calming policy. The proposed changes are based on previous traffic calming policy review, council recommendations, feedback from public engagement including stakeholder consultation, and jurisdiction review of traffic calming policies from municipalities across Canada.

Discussion – Background and Current Status:

Policy Review and Council Recommendations

The current [Traffic Calming Policy](#) and the associated [Traffic Calming Warrant](#) were developed in 2011. They were designed to manage the requests to slow traffic speed, discourage non-local traffic, and/or correct or improve perceived safety concerns in the street network.

In [June of 2020](#), Staff prepared an overview of the City's Traffic Calming Policy. Following this, Council requested that the policy be reviewed. Transportation Engineering and the Office of the City Clerk have since initiated a full policy review.

[In December 2020](#), Staff prepared a review of the policy and identified key areas for updating the policy. This review was discussed with Council to gather feedback and direction on how the policy could be updated to better reflect current Council priorities.

[In March, 2021](#), following the policy review, 12 policy update areas were identified, which were categorized into two groups. The first category, as listed below, was mostly related to improving project selection and scoring criteria, whereas the second was more related to enhancing traffic calming process.

Project Selection and Scoring Criteria

- Traffic Volume Threshold
- Non-Local Traffic Volume
- Interrelated Factors

Traffic Calming Process

- Annual Priority List
- Formalize Temporary Implementations
- Public Survey Distribution



- Target Speed
- Street Context
- New Development/Rehab Work
- Public Response Rate
- Re-evaluation Timeline
- Cul-de-sacs and Crescents/P-loops

Note that the previous review stated that two of the update areas – developing scores for target speed and interrelated factors – require a significant effort, and thus, were recommended to complete by external consultant. Due to the lack of funding, consultant retaining was not approved. As part of policy update, Council also directed Staff to conduct public engagement to gather public concerns and feedback on the above specific areas.

Public Engagement and Stakeholder Consultation

[In February 2022](#), Public Engagement session was held to collect public feedback on above mentioned two categories of policy areas via an online survey. In summary, public response showed a clear preference to all the policy updates recommended by Council except for the re-evaluation timeframe. Majority of the public preferred 2-year period for re-evaluation, which was different from the Staff's recommendation of 5-year time period.

In addition to the Public Engagement, stakeholder meetings were conducted with the agencies whose services could be impacted by the City's Traffic Calming Program. This included meetings with Emergency Medical Service (EMS) - Eastern Health, Royal Newfoundland Constabulary (RNC) and Metrobus. The main objectives of the meeting was to share the ongoing review/update plan of City's current Traffic Calming Policy and get comments and feedback based on their experience on City's traffic calmed streets. In general, these agencies have experienced no significant adverse impact on their services. Metrobus suggested that the City share its future traffic calming plan prior to its implementation on the streets that have transit service.

Key Policy Updates

The policy updates presented in this section is based on the findings from previous review of City's 2011 Policy and Council recommendations, feedback from public engagement and stakeholder consultation, and findings from a jurisdiction scan of traffic calming policies from municipalities across Canada. The Jurisdictional scan included policy review from a total of eight Canadian municipalities that have recently updated their policy and have a similar scoring system¹ as our City's policy.

Revised Scoring Scheme

One of the key parts of the Traffic Calming Policy is the scoring scheme used for prioritizing streets. Each street that passes a set of pre-screening criteria is scored based on a number of factors and their criteria, and the streets are ranked based on the total score they receive. The

¹ Maximum score of 100 points

maximum score that a street can get is 100, which will remain unchanged in the updated policy. **Table 1** shows revised scoring scheme based on specific changes as per Council recommendations (**DN March 2021**) and some enhancements added from other municipalities current practices. The updated scoring scheme has a single table for Local and Collector roads. However, it is noted that the factors such as traffic volume and traffic speed are weighted differently for these two road categories. Also, some of the scoring factors that represent a common theme are regrouped under the same heading, which has resulted into a total of six different categories, namely, collision history, traffic volume, traffic speed, pedestrian generators, active transportation facilities and adjacent landuse.

Table 1: Upated Scoring Scheme

Scoring Factor	Point Criteria	Max Score	Notes
Collision History	<p>1 point for each Property Damage Only (PDO) collision in the past 3 years</p> <p>2 points for each injury/fatal collisions or; 2 points for each collision involving vulnerable road users in the past 3 years</p>	10	<p>Updated policy considers scores for PDO and injury/fatal collisions too.</p> <p>Max points for Local and Collector are same.</p>
Traffic Volume	<p>Local Road: 1 point for every 50 vehicle above 900 vehicle per day (vpd)</p> <p>Collector Road: 1 point for every 200 vehicle above 3,000 vpd</p>	25	<p>Scoring criteria changed for collector with threshold increased for Collector (DN March 2021); max score reaches at 8000 vpd.</p>
Traffic Speed	<p>Local Road: 1 point for each 1 km/hr above posted speed</p> <p>Collector Road: 1 point for each 1 km/hr above threshold (i.e., posted speed + 5 km/hr)</p>	30	<p>Maximum point increased:10 points added to Local and 5 to Collector.</p>
Pedestrian Generators	<p>5 points for each Sr/Jr high school, park, playground, licensed child care centre, library, residential retail store, community centre or senior facility within study area, to max of 10</p>	15	<p>More facilities added in the pedestrian generator list.</p>

Scoring Factor	Point Criteria	Max Score	Notes
	5 points if there is an primary/elementary school or safe route to school within the study area, to max of 5		
Active Transportation Facilities	<p>For sidewalk: 0 if sidewalk existed on both sides, 10 points if missing on both sides, Give 2 points for each 20% sidewalk missing. That means:</p> <p>0 - sidewalk exists on both sides 2 pts - Approx 20% of sidewalk missing 4 pts - Approx 40% of sidewalk missing 6 pts - Approx 60% of sidewalk missing 8 pts - Approx 80% of sidewalk missing 10 pts - no sidewalks</p> <p>For bike route: 5 points if there is an existing bike route or is part of Bike Master Plan full network</p>	15	Weight increased for vulnerable road users (DN March 2021)
Adjacent Landuse	<p>5 points if fully residential area; reduce 1 point for every 20% non-residential area. That means:</p> <p>5 points - All residential area 4 points - Approx 80% residential area 3 points - Approx 60% residential area 2 points - Approx 40% residential area 1 points - Approx 20% residential area 0 point - non-residential area</p>	5	Adjacent Landuse factor added to incorporate residential neighbourhoods along Collector roads (DN March 2021)

Note: Blue ones indicate added new factors or modified criteria

The following summarizes proposed changes to the scoring scheme, also indicated in blue in the above table.

Collision History: According to the current Traffic Calming Policy 2011 (also referred to as the 2011 Policy), points are given to historical collisions that are only related to vulnerable road users. The revised scoring scheme considers other collisions such as property damage only (PDO) and fatal/injury collisions as well. The weight allocated is 1 point for each PDO collision

and 2 points for each fatal/injury collision. The point for vulnerable road users related collisions will remain same.

Proposed Change: Consider PDO and fatal/injury collisions in the revised scoring.

Traffic Volume Threshold: The maximum score allocated to traffic volume for both Local and Collector roads is 25 points. Based on 2011 Policy, Local roads get points from 900 vehicle per day (vpd) and reach maximum value at 2150 vpd. Similarly, Collector roads get points from 3000 vpd and reach maximum value at 5,500 vpd. In other words, Local and Collector roads that have traffic volume higher than its upper thresholds get the same maximum point. Previous review (**DN March 2021 and IN Dec 2020**) recommended revising these upper volume threshold to make the scoring more sensitive to higher traffic volumes.

Based on traffic volume data, City's Local and Collector roads are expected to carry up to 2150 vpd, 8000 vpd, respectively. This suggests only Collector could have threshold changed from 5,500 vpd to 8000 vpd. With this change, Collector gets 1 point for every 200 vpd above its lower threshold reaching its maximum 25 points at 8000 vpd (i.e., new upper threshold).

Proposed Change: Increase upper volume threshold for Collector from 5,500 vpd to 8000 vpd.

Non-local Traffic Volume: Non-local traffic volume is difficult and expensive to measure accurately. Also, this factor is closely related to the total traffic volume, which is already part of the scoring. Having non-local traffic volume factor, often a busy street gets points for the same matter twice. Therefore, previous review (**DN March 2021 and IN Dec 2020**) recommended removing this from scoring scheme. Jurisdiction scan also shows that this factor is rarely used in scoring by other municipalities.

Proposed Change: Exclude non-local traffic volume in the revised screening and scoring scheme.

Street Context : Previous review (**DN March 2021 and IN Dec 2020**) recommended to add more weights to street context, which is addressed by the following changes in the revised scoring scheme:

- Points for sidewalk is increased by 5 points for Local Road. With this, the maximum point a street (Local or Collector) can get for sidewalk is 10. Score will be allocated based on the proportion of sidewalk for the given street as follows: If a street has sidewalks on both sides of the street, it gets no point; for each 20% missing sidewalk, 2 points is given; street gets maximum 10 points when there is missing sidewalk on both sides.

- Some additional locations such as playgrounds, licensed childcare centres, library and retail stores are identified as pedestrian generators.
- Adjacent Land Use is added as a new factor to provide weights related to land use context. With this scoring, street in a residential area, irrespective of whether it be a Local or Collector, gets additional points based on the proportion of residential area fronting the street. A street gets 5 points if it is a fully residential area; 1 point is reduced for every 20% non-residential area, reaching 0 point when it is a fully non-residential area.

Proposed Change: Consider above mentioned street context related components in revised scoring scheme.

Traffic Speed: It was recommended that the score be developed for target speed (**DN March 2021**). From Jurisdiction scan, all other municipalities have scoring for speed based on speed limit; and therefore, will keep same as in 2011 Policy. Maximum score for traffic speed is increased to 30 points; however, there will not be any change in the scoring criteria. It is a common practice among municipalities to have a higher weight to speed compared to the traffic volume.

Proposed Change: Scoring for traffic speed to be based on the posted speed limit; Increase maximum score for traffic speed to 30 points.

Removed Factors: Three factors, namely, transit route, EMS route and block length, are removed from the revised scoring scheme. This aligns with the practices across other Canadian municipalities. Rather than considering in scoring, these municipalities consult EMS and Transit service agencies to get their feedback on traffic calming projects prior to implementation. In our stakeholder meeting with Metrobus, it was suggested that the City share its traffic calming projects with Metrobus Staff at the initial phase of project formulation.

Proposed Change: Remove transit route, EMS route and block length from the revised scoring scheme.

Interrelated factors: It was recommended that the score be developed for interrelated factors (**DN March 2021**). From Jurisdiction scan, no other municipalities have scoring for interrelated factors. Having multiple factors on a street already results in a higher score.

Proposed Change: Not recommended to develop interrelated factors as it makes scoring process complex and is unnecessary.

Improvement in Traffic Calming Process

Request Initiation: In the updated policy, a petition would be required to initiate the traffic calming process. The petition intends to minimize resources spent in evaluating streets which may not proceed due to insufficient resident support at the later stage of implementation. For the updated policy, it is proposed that a person bringing a request would have to get signatures from at least 25% of households on their street for the petition. Similar approaches have been practiced by some other municipalities in Canada. A standard format for petition would be included in the updated policy and readily available to residents.

Proposed Change: Add a step for petition with minimum requirement of signatures from 25% of households in the revised policy.

Formalize Temporary Implementations: Based on the current practice, City first installs temporary traffic calming measures prior to the permanent ones. This approach provides an opportunity for testing and evaluating their impact for both residents/road users and the technical team and have proven to be more effective. To adjust this process, public surveys are completed at two stages — first one prior to implementation of the temporary measures and the second one prior to the implementation of permanent measures. Evaluation and Monitoring occur after implementing temporary traffic calming measures. It was recommended to formalize this practice (***DN March 2021***).

Proposed Change: Formalize the implementation of temporary traffic calming measures in the updated policy.

Public Survey Distribution: Public surveys are conducted prior to the installation of both temporary and permanent traffic calming measures. The significance of second survey is, if residents realize comparatively less benefit of traffic calming in their streets, they will have a chance to show no support or vice versa. Traffic Calming Policy 2011 envisions that the resident making the request would also distribute the survey. However, in practice, City Staff distribute each survey by hand.

Proposed Change: Formalize the practice of City Staff distributing the survey.

Public Response Rate: The public participation is key part of implementing traffic calming measures in their neighborhoods. For this, public survey is distributed to the affected residents at two stages prior to the implementation. Accordingly, 60% of the affected residents would need “yes” vote to move to next step of implementation. In practice, this requirement for public survey was changed to “60% of responded survey”. This provision assigns “neutral” opinion on resident that do not respond. Previous review recommended to formalize this current practice (***DN March 2021***)

To make the traffic calming process more participatory, it is proposed that the minimum response rate of at least 50% +1 households response rate be considered for the survey in addition to the 60% support rate criteria. In absence of this step, there is a chance that a street even with a very low response rate can easily qualify for traffic calming. For example, consider a street for traffic calming has a total of 100 households (HH) with the following response statistic from Public Survey:

- Total number of HH responded = 10
- Number of household (HH) supporting traffic calming = 6
- Number of HH against traffic calming = 4
- % of HH in favour of traffic calming = 60%

In this scenario under the current policy, the given street would be qualified for implementation of traffic calming despite a very low percentage of residents indicating they are in favour of it. (i.e., 60% of respondents but only 6% of households). It is important to have a good representation of residents involved for a successful implementation of the project.

Proposed Change: Consider the minimum response rate for public survey to be 50%+1 household with support from at least “60% of the responded” household.

Annual Priority List: Current policy simply follows the ranking list when selecting the project for implementation. Whenever a new street is evaluated, street ranking could change, thereby impacting the implementation plan. For the updated policy, it was recommended to prioritize top 10 streets for implementation of traffic calming in each fiscal year so that it will allow technical team to prepare a systematic plan for implementation for the given fiscal year (**DN March 2021**).

Proposed Change: Annually, prioritize 10 streets for implementation.

Re-evaluation Timeline: Based on 2011 Policy, if a street gets excluded from traffic calming for not meeting any of the traffic calming process criteria, it would have to wait at least 2 years for the next consideration. It was recommended that re-evaluation timeline be changed from 2-year to 5-year to allow more time to focus on new requests and optimize the resource (**DN March 2021**). If there is a major change in the traffic pattern, that street could be exempted from this constraint.

Proposed Change: Consider re-evaluation timeline to be 5-year period.

Cul-de-sacs and Crescents/P-loops: Current policy doesn't screen out cul-de-sacs, crescents, and P-loops. Due to the nature of these streets, they never scored high enough to be eligible for traffic calming in the past. That means, there is a wastage of time and money for data collection and analysis to assess their eligibility. As such, the updated policy could be streamlined by excluding these from consideration, thereby focusing on most needed locations. Crescent could

be sometimes long; therefore, limitation of 300 m is considered for their exclusion from traffic calming.

Proposed Change: Screen out cul-de-sacs, P-loops and crescents (length <300 m).

New Development/Rehab Works: It was recommended to include provision for the application of traffic calming tools to the projects identified under new developments and road rehabs (**DN March 2021**). This aligns with the [Envision St. John's Municipal Plan 2021](#) stating "Require new development to anticipate and implement traffic calming measures consistent with the principles and objectives of the City's Traffic Calming Policy, so that proactive measures can be applied before traffic problems arise."

It is important that the traffic calming measures considered for these projects would not unduly affect service of emergency vehicles, transit buses and other vehicles, and would not create safety concerns. Examples of traffic calming measures suitable for this type of projects are roundabouts, curb extensions and raised crosswalks. These projects typically do not involve public consultation on the traffic calming features; however, Staff may need to discuss with stakeholders such as schools and Metrobus, where needed.

In case of streets that are under the traffic calming potential list (score above 30) and are considered for City's street rehab project, these streets would be given higher priority. The general traffic calming process to follow for this kind of project would be same as for the normal streets.

Proposed Change: Consider traffic calming tools to the projects identified for new developments and street rehab projects; In addition, streets qualified for traffic calming and considered for Rehab projects to be given priority for implementation.

Key Considerations/Implications:

1. Budget/Financial Implications:
City has recently increased [Traffic Calming Program budget for 2022](#) from \$50,000 to \$200,000.
2. Partners or Other Stakeholders:
Stakeholders, namely, Emergency Medical Service (EMS) - Eastern Health, Royal Newfoundland Constabulary (RNC) and Metrobus were consulted for their comments and feedback on City's Traffic Calming Policy and Program.
3. Alignment with Strategic Directions:

A City that Moves: Improve safety for all users on a well-maintained street network.

A Connected City: Develop and deliver programs, services and public spaces that build safe, healthy and vibrant communities.

4. Alignment with Adopted Plans: N/A

5. Accessibility and Inclusion: N/A

6. Legal or Policy Implications:

This note is part of a policy review and update. After proposed changes in this Decision Note are finalized, the updated policy document will be prepared in cooperation with the Office of the City Clerk.

7. Privacy Implications: N/A

8. Engagement and Communications Considerations:

Public Engagement was undertaken by Transportation Engineering and Organizational Performance and Strategy teams in February 2022. Accordingly, "What We Heard" document was released in March, 2022.

9. Human Resource Implications: N/A

10. Procurement Implications: N/A

11. Information Technology Implications: N/A

12. Other Implications: N/A

Recommendation:

That Council approve the revised scoring scheme and other changes to traffic calming process presented in this Decision Note for the Updated Traffic Calming Policy.

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Report Approval Details

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