

Presented To:	Operations Committee
Presented:	Monday, Jun 03, 2019
Report Date	Tuesday, May 21, 2019
Type:	Managers' Reports

## Request for Decision

### Traffic Calming – 2019 Ranking

#### Resolution

##### Resolution 1

That the City of Greater Sudbury approves the 2019 ranking list for traffic calming eligible roadways as outlined in the report entitled “Traffic Calming – 2019 Ranking”.

And that the City of Greater Sudbury initiates the public support component for the traffic calming process based on the ranking order.

And that the City of Greater Sudbury provides the results of the associated traffic studies to the Greater Sudbury Police Services, and requests increased enforcement on roadways identified with speeding concerns as outlined in the report entitled “Traffic Calming – 2019 Ranking”, from the General Manager of Growth and Infrastructure, presented at the Operations Committee meeting on June 3, 2019.

##### Resolution 2

That the City of Greater Sudbury amends the traffic calming policy by lowering the required minimum response rate to advance a traffic calming project to have a traffic calming plan developed to 25% as outlined in the report entitled “Traffic Calming – 2019 Ranking”, from the General Manager of Growth and Infrastructure, presented at the Operations Committee meeting on June 3, 2019.

##### Resolution 3

That the City of Greater Sudbury initiates a two year pilot project to install temporary traffic calming measures on the top two streets (Riverside Drive and Michelle Drive) identified in the 2019 traffic calming ranking as outlined in the report entitled “Traffic Calming – 2019 Ranking”, from the General Manager of Growth and Infrastructure, presented at the Operations Committee meeting on June 3, 2019.

#### Signed By

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**Recommended by the C.A.O.**

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## **Relationship to the Strategic Plan / Health Impact Assessment**

This report refers to operational matters.

## **Report Summary**

Each year the City of Greater Sudbury reviews various roads under the City's traffic calming policy. This report will provide an overview of the City's traffic calming policy, roads where the policy has been applied and the updated traffic calming ranking for 2019.

## **Financial Implications**

Recommendations of this report may be carried out within the existing approved budget and staffing resources. The cost to implement the 2 year pilot project to install temporary traffic calming measures is estimated at \$25,000. Staff recommends the pilot project costs be funded from the 2018 Traffic Calming capital account.

# **2019 Traffic Calming Update**

## **Background**

The City's Transportation and Innovation Services section receives numerous requests each year to install traffic calming measures such as speed humps, pavement markings and additional signage to reduce speeding and improve safety on its roadways. In February, 2008, the City of Greater Sudbury retained IBI Group to develop a traffic calming policy to aid staff in evaluating requests and the application of traffic calming devices. This policy was adopted by City Council on May 12, 2010.

## **What is Traffic Calming?**

The Institute of Transportation Engineering defines traffic calming as "the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non motorized street users."

## **Traffic Calming Warrant**

The City's traffic calming warrant is based upon the review of the best practices of over twenty (20) jurisdictions throughout North America. In addition, public input was solicited through surveys posted on the City's website and at the Citizen Services Centres. Two (2) stakeholder workshops were also held with City departments and agencies including City Councillors, Police, Fire, EMS, Planning, Roads and Engineering.

The traffic calming warrant consists of an initial screening where a combination of requirements must be met for a site to be eligible for traffic calming. The threshold criteria and screening process can be found in the attached Exhibits "A" and "B".

Sites that pass the initial screening are then ranked against each other using a weighted point criteria based on the classification of the road. Each eligible site is awarded points based on its score for each factor, with a maximum score of 100 points. A score of 30 points has been established as a minimum threshold to qualify for traffic calming consideration. The scoring criteria for local and collector roads is outlined in the attached Exhibit "C".

## **Initial Screening and Ranking of City of Greater Sudbury Roads**

Over the past year, residents requested six locations to be evaluated for traffic calming. Three locations met the minimum criteria and have been added to the final ranked list (see Exhibit "E") while three locations did not. See Exhibit "D" for the list of road segments which did not qualify.

Overall the initial screening process has been completed for 291 road segments on 184 different roads. Of the 291 road segments reviewed, 31 qualified for the ranking process and scored more than 30 points to qualify for traffic calming consideration. As part of the final ranking process, any abutting road segments that each scored greater than 30 points were combined into one segment and assigned the higher score of the two abutting road segments.

### **Final Ranking**

As indicated in the attached Exhibit “E”, a total of 31 roadways qualify for traffic calming. Depending on the calming devices chosen and the length of the project, the City's traffic calming budget of \$175,000 should be enough to complete one major roadway, similar in size to Southview Drive or Attlee Avenue. This cost would only cover the proposed traffic calming measures.

In addition to the eligible roadways, Exhibit “E” shows the project length and indicates whether the road is a transit route or primary emergency services route. It is noted that the cost estimates may vary greatly depending on the devices preferred by the residents. For example, on a 1 km road, you could add pavement markings for bicycle infrastructure for \$10,000 or construct physical devices for \$150,000. Roadways that are not transit routes or primary emergency service routes may qualify for vertical traffic calming measures such as speed humps. Speed humps are not only effective in reducing vehicle speed but are also less expensive to construct than many other calming devices.

Roadways that are eligible for traffic calming and are also identified under the Roads Capital Program for infrastructure improvements, will have the recommended traffic calming measures incorporated as part of the design and construction. Kathleen Street is an example of where traffic calming was incorporated as part of the capital contract.

### **Initiated Projects**

Since 2010, staff has initialized several traffic calming projects throughout the City, some of which were stand-alone projects and others which were incorporated into other infrastructure improvements carried out under the Roads capital program. The April 2016 report entitled “[Traffic Calming – 2015 Ranking](#)” contains more information on completed projects. In addition, the report entitled “[Southview Traffic Calming Update](#)” contains a history of traffic calming on Southview Drive and how the current traffic calming plan was created and implemented.

## **Project Updates**

In May 2018, staff began the public consultation process in advance of 2019 infrastructure improvement capital projects proposed on York Street and Auger Avenue.

In accordance with the traffic calming policy, staff polled residents on both York Street and Auger Avenue to see if there was support for traffic calming. Public information sessions were held for both locations to inform and consult with residents.

As per the traffic calming policy, in order for a traffic calming plan to be developed, a minimum 50% response rate was required from residents, with a minimum 60% support rate of all respondents. In both cases, less than 50% of residents responded which meant staff did not proceed with developing a traffic calming plan for these locations.

## **Future Projects**

As shown on Exhibit "E", Riverside Drive is the top priority on the traffic calming ranking. Staff will begin the public consultation process for Riverside Drive during 2019.

## **Traffic Calming Policy Review**

Since the implementation of the traffic calming policy there have been eight locations that have gone to the public consultation/survey stage to determine if residents support the development or implementation of a traffic calming plan on their street. As summarized in the table below, of the eight locations, only two achieved the minimum response and support rate to proceed with a traffic calming plan.

<b>Location</b>	<b>Response Rate (50% required)</b>	<b>Support Rate (60% required)</b>
Jean Street	33%	58%
Niemi Road	68%	84%
King Street	19%	63%
Robinson Drive	60%	48%
Attlee Avenue	60%	90%
Ontario Street	36%	70%
York Street	48%	66%
Auger Avenue	42%	60%

Residents have expressed frustrations with City staff regarding the process to advance traffic calming projects while their concerns regarding speeding on the road continue. With these concerns in mind, staff are proposing a change to the

minimum response rate required to proceed with developing a traffic calming plan and a pilot project for temporary traffic calming measures. These changes are outlined below.

### **Minimum Response Rate**

In order to determine if the minimum response and support rates were comparable in the province, staff researched other municipality's traffic calming policies. The table below shows the majority of municipalities have stopped polling residents or have lowered the minimum thresholds.

Municipality	Minimum Response Rate	Minimum Support Rate
City of London	25%	25%
City of Ottawa	N/A	N/A
City of Kingston	N/A	N/A
City of Barrie	N/A	N/A
City of Brampton	N/A	N/A
City of Burlington	50%+1	N/A
City of Guelph	60%	60%
City of Kitchener	50%	60%
City of Windsor	N/A	60%
City of Vaughn	75%	75%

Since public support is paramount when considering traffic calming initiatives, staff recommends the traffic calming policy be amended so that the required minimum response rate to have a traffic calming plan developed be lowered to 25% and while keeping the required minimum support rate at 60%. If the minimum response rate is revised as recommended above, it is anticipated that more traffic calming projects will move to the development and implementation stage where residents will have the opportunity to provide feedback to help develop and vote on whether they support the final traffic calming plan. Staff recommend the required 50% response rate and 60% support rate remain the same for voting on the final traffic calming plan to ensure there is strong support from the residents for traffic calming measures to be constructed.

### **Proposed Pilot Project – Temporary Traffic Calming Measures**

Residents who live on roads which have qualified for traffic calming measures have expressed concerns with the length of time it takes for their road to begin the public consultation process. In order to address these concerns, staff are proposing a two year pilot project to install temporary traffic calming measures on the top two streets (Riverside Drive and Michelle Drive) identified on the traffic calming ranking.

Staff are proposing the use of temporary flexible bollards as a traffic calming measure. These bollards would be installed for the duration of the summer and removed in the fall. The City of Kingston recently piloted temporary flexible bollards as a traffic calming measure and achieved speed reductions of 8 to 10 km/h. A picture of the temporary flexible bollards utilized by the City of Kingston can be seen below. To achieve these speed reductions, the City of Kingston installed the bollards every 100 to 125 m. Based on this spacing, staff estimate the cost for purchasing, installing and removing the bollards for the proposed two year pilot will be \$25,000.

To measure the success of the pilot project, staff will conduct traffic studies to determine the effectiveness of the bollards, survey area residents to measure their satisfaction with the temporary measures and to review the costs of the project. The results of the pilot project will be included as part of the 2020 report on traffic calming along with a recommendation on whether to implement the temporary traffic calming measures on all roads which qualify for traffic calming.



### Resources Cited

Canadian Institute of Transportation Engineers and Transportation Association of Canada, *Canadian Guide to Neighbourhood Traffic Calming*, 1998

City of Greater Sudbury, *Traffic Calming Policy*, Accessed online:  
<http://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&attachment=1993.pdf>

# EXHIBIT: A

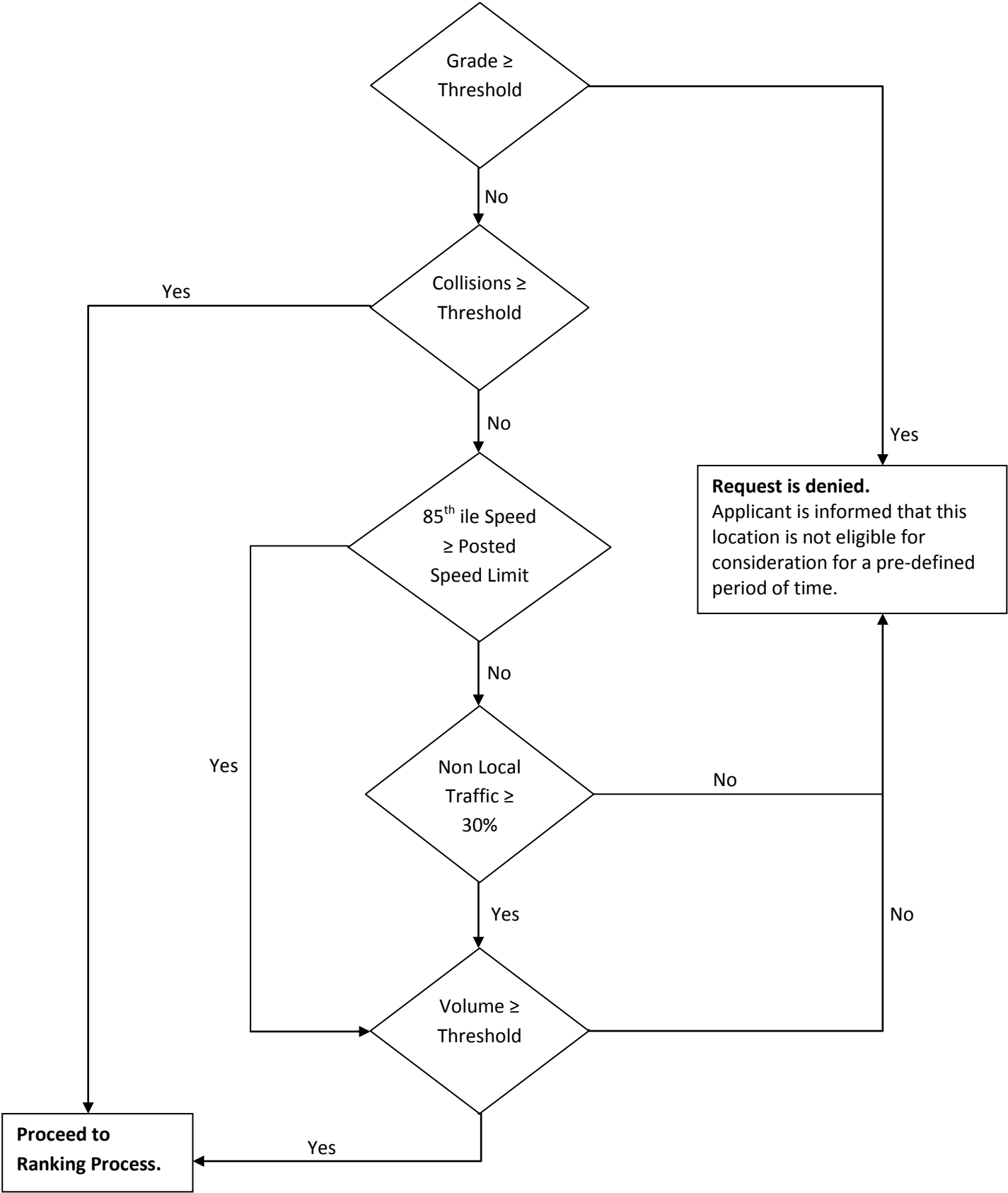
## Traffic Calming Criteria

Criteria	Threshold		Notes
	Local Road	Collector/Tertiary Arterial	
Grade	< 8%		If the grade is equal to or greater than 8%, traffic calming is not permitted
Collision History	≥ 6	≥ 12	Number of collisions within the last three years involving vulnerable road users and/or which may be potentially corrected by traffic calming measures.
Volume	≥ 900	≥ 3,000 vpd (Collector) ≥ 5,000 vpd (Tertiary Arterial)	Two-way AADT Volumes
Speeds	≥ posted speed limit		85 <sup>th</sup> percentile speed
Non-Local Traffic	≥ 30%		'Cut-through traffic'



# EXHIBIT: B

## Screening Process



# EXHIBIT: C

## Scoring Criteria

### Local Roads

Factor	Point Criteria	Maximum Points
Collision History	4 points for each qualifying collision in the past three years	20
Traffic Speeds	1 point for each km/h above posted speed limit	15
Non-Local Traffic	3 points for each 10% of non-local traffic above 20% (maximum reached at 60% non-local traffic)	15
Traffic Volumes	1 point for each 50 vehicles above 900	20
Pedestrian Generators	5 points for each school or park within the study area (other Pedestrian Generators may be defined by City staff)	10
Pedestrian Facilities	5 points if there are no sidewalks in the study area	5
Emergency Services and Routes	- 4 points if the study area is a primary Emergency Services route	0
Transit Services and Routes	- 2 points if the study is an existing or planned transit route	0
Block Length	1 point for each 50 metre increment between stop-controlled points	10
Adjacent Land Uses (residential)	1 point for each 20% of residential land use	5
		<b>100</b>

### Collector and Tertiary Arterial Roads

Factor	Point Criteria	Maximum Points
Collision History	3 points for each qualifying collision in the past three years	15
Traffic Speeds	1 point for each km/h above posted speed limit	20
Non-Local Traffic	2 points for each 10% of non-local traffic above 20% (maximum reached at 60% non-local traffic)	10
Traffic Volumes	1 point for each 100 vehicles above 3,000 for Collector roads and 5,000 for Tertiary Arterials	20
Pedestrian Generators	5 points for each school or park within the study area (other Pedestrian Generators may be defined by City staff)	10
Pedestrian Facilities	10 points if there are no sidewalks in the study area, 5 if only on one side	10
Emergency Services and Routes	- 6 points if the study area is a primary Emergency Services route	0
Transit Services and Routes	- 4 points if the study is an existing or planned transit route	0
Block Length	1 point for each 50 metre increment between stop-controlled points	10
Adjacent Land Uses (residential)	1 point for each 20% of residential land use	5
		<b>100</b>

**Road Segments Evaluated between 2018-2019 Which Do Not Qualify for Traffic Calming**

<b>Street</b>	<b>From</b>	<b>To</b>	<b>Reason</b>
Courtland Drive	Auger Avenue	East Limit	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Armstrong Street	Kaireen Street	Hunter Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Holland Road	Woodbine Avenue	Lillian Boulevard	Does not meet the minimum score threshold

## Traffic Calming Final Street Ranking - 2019

Rank	Location	Score	Length (m)	Transit or ES Route?
1	Riverside Drive (Regent Street to Broadway Street)	74.2	960	Yes
2	Michelle Drive (Municipal Road 80 to Ivan Street)	71.6	1100	Yes
3	Brenda Drive (Moonrock Avenue to St Charles Lake Road)	69.8	1300	No
4	Lansing Avenue (LaSalle Boulevard to Maley Drive)	63.4	1750	Yes
5	Grandview Boulevard (Montrose Avenue to Wedgewood Drive)	63.1	290	Yes
6	Kelly Lake Road (Southview Drive to Copper Street)	59.3	490	Yes
7	<b>Robinson Drive (Kelly Lake Road to Southview Drive)</b>	<b>59</b>	<b>1000</b>	<b>Yes</b>
8	Hawthorne Drive (Barry Downe Road to Auger Avenue)	54.3	860	Yes
9	<b>Bancroft Drive (Dundas Street to Kingsway)</b>	<b>53</b>	<b>450</b>	<b>Yes</b>
10	Arnold Street (Barbara Street to 400 m West of Skyward Drive)	51.4	515	Yes
11	Demarais Road (Municipal Road 80 to Talon Street)	51.2	647	No
12	Morin Avenue (Dell Street to Tedman Avenue)	50.5	460	Yes
13	Balsam Street (Garrow Road to Nickel Street (East Leg))	49.1	1200	Yes
14	Hawthorne Drive (Auger Avenue to Claudia Court (East Leg))	48.2	300	No
15	Meehan Street (Dennie Street to Coulson Street)	47.4	330	No
16	Valleyview Road (Municipal Road 80 to L'Horizon Secondary School)	47.0	180	No
17	Dublin Street (Attlee Avenue to Arthur Street)	46.5	540	No
18	Cote Avenue (Highway 144 to Hill Street), Chelmsford	44.8	450	No
19	Whittaker Street (Douglas Street to Haig Street)	43.3	365	Yes
20	Hillcrest Drive (Brian Street to Mikkola Road)	42.0	710	Yes
21	Beaumont Avenue (Woodbine Avenue to Moss Street)	41.6	180	Yes
22	<b>Leslie Street (Notre Dame to Murray Street)</b>	<b>41</b>	<b>103</b>	<b>Yes</b>
23	Second Avenue (Highway 17 to Government Road), Coniston	39.8	940	Yes
24	Gemmell Street (Attlee Avenue to Downland Avenue)	39.2	200	No
25	Edward Avenue (Highway 144 to Falcon Street)	37.3	570	Yes
26	Woodbine Avenue (Agincourt Avenue to Roy Avenue)	37.1	450	Yes
27	Greenbriar Drive (Scarlett Road to Highgate Road)	36.7	160	Yes
28	<b>Paquette Street (Lasalle Blvd to Lamothe Street)</b>	<b>35.9</b>	<b>380</b>	<b>Yes</b>
29	Mackenzie Street (Baker Street to Elgin Street)	35.6	380	Yes
30	Loach's Road (Oriole Drive to Cerilli Crescent)	32.6	660	Yes
31	Stonegate Drive (Beatrice Crescent to Attlee Avenue)	31.7	250	No