

Presented To:	Operations Committee
Presented:	Monday, Nov 06, 2017
Report Date	Thursday, Oct 19, 2017
Type:	Managers' Reports

## Request for Decision

### Traffic Calming - 2017 Ranking

#### Resolution

##### Resolution # 1

THAT the City of Greater Sudbury approves the 2017 ranking list for traffic calming eligible roadways as outlined in the report entitled "Traffic Calming - 2017 Ranking" from the General Manager of Growth and Infrastructure, presented at the Operations Committee meeting on November 6, 2017.

##### Resolution # 2

THAT the City of Greater Sudbury directs staff to proceed with the next steps of the traffic calming process as per the recommendations outlined in the report entitled "Traffic Calming - 2017 Ranking" from the General Manager of Growth and Infrastructure, presented at the Operations Committee meeting on November 6, 2017.

#### 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 ranking for 2017.

#### Financial Implications

Recommendations of this report may be carried out with existing approved budget and staff complement.

#### Signed By

**Report Prepared By**

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*Digitally Signed Oct 19, 17*

**Health Impact Review**

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**Financial Implications**

Apryl Lukezic  
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**Recommended by the Department**

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

Ed Archer  
Chief Administrative Officer  
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## **Traffic Calming – 2017 Ranking**

The City's Traffic and Transportation Engineering Section receives numerous requests each year to install traffic calming measures such as speed humps and traffic circles 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 permanently 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 24 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 are outlined in the attached Exhibit "C".

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

Over the past year, residents requested four (4) locations to be evaluated for traffic calming. All four (4) locations did not meet the minimum criteria. See Exhibit “D” for the list of road segments which did not qualify.

Overall the initial screening process has been completed for 272 road segments on 169 different roads. Of the 272 road segments reviewed, 32 qualified for the ranking process and scored more than 30 points. As part of the final ranking process, any abutting road segments that scored greater than 30 points were combined into one (1) segment and assigned the highest score, resulting in a total of 29 roadways.

## **Final Ranking**

As indicated in the attached Exhibit “E”, a total of 29 roadways qualify for traffic calming. Depending on the calming devices chosen and the length of the project, the City's Annual traffic calming of \$175,000 should be enough to complete one major roadway, similar in size to Southview Drive or Attlee Avenue, or a couple of smaller projects per year.

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 paint bike lanes for \$10,000 or construct physical devices for \$150,000. Also, roadways that are not transit routes or primary emergency service routes 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.

Also, roadways that are eligible for traffic calming and are part of the Road Capital Program will have recommended traffic calming devices 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.

## **Projects**

Since 2010, staff has initialized several traffic calming projects throughout the City, some of which were standalone projects and others which were part of the Capital Road Program. The April 2016 report entitled [Traffic Calming – 2015 Ranking](#) contains more information on completed projects.

### Ongoing Projects

Traffic calming measures are being implemented on Southview Drive as part of the 2017 Road Capital Program. New traffic calming measures include five (5) asphalt humps, two (2) pedestrian crossovers and a bike route with edge lines. The July 2017 report [Southview Traffic Calming Update](#) contains a history of traffic calming on Southview Drive and how the new traffic calming plan was created.

### Future Projects

As shown on Exhibit “E”, Auger Avenue is tied for first on the traffic calming ranking. In addition, Auger Avenue is tentatively scheduled for rehabilitation in 2019. Staff will begin the public consultation process for Auger Avenue during the first quarter of 2018.

York Street has also been tentatively scheduled for rehabilitation in 2019. Since York Street ranks fifth on the traffic calming ranking, staff will also begin the public consultation process for York Street during the first quarter of 2018.

### **Recommendations**

As indicated in the Traffic Calming Policy, approval is required for a project or series of projects prior to initiating the public support component. Staff recommends that the list ranking the eligible roadways be approved. Based on approved budget limitations, staff will initiate the public support component in the order the roadways are ranked. However, some similar projects may be selected out of order to fully utilize the available capital budget.

Many roads which did not pass the initial screening for traffic calming had 85th percentile speeds that exceeded the posted speed. City staff will compile a list of these roadways and forward it to Greater Sudbury Police Services to be considered for speed enforcement campaigns.

### **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>

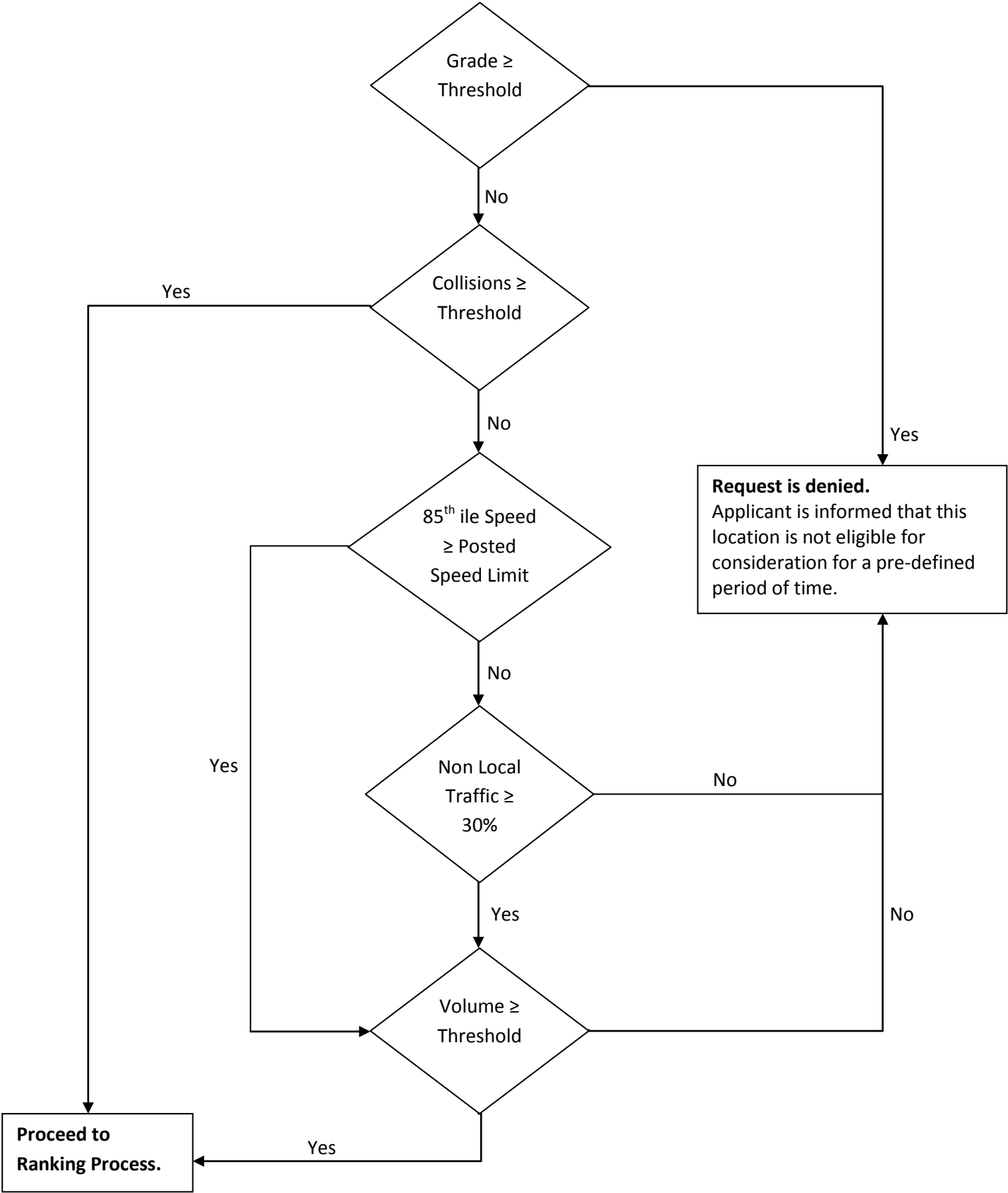
# EXHIBIT: A

## 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>

# EXHIBIT: D

## Road Segments Evaluated between 2016-2017 Which Do Not Qualify for Traffic Calming

Street	From	To	Reason
Fleetwood Drive	Notre Dame Avenue	Country Club Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Wembley Drive	Connaught Avenue	Wellington Heights	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Wembley Drive	Wellington Heights	Killarney Avenue	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
White Avenue	Thompson Street	Ethelbert Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements

# EXHIBIT: E

## Traffic Calming Final Street Ranking - 2017

Rank	Location	Score	Length (m)	Transit or ES Route?
1	Auger Avenue (LaSalle Boulevard to Gemmell Street)	74.2	1000	Yes
1	Riverside Drive (Regent Street to Broadway Street)	74.2	960	Yes
3	Michelle Drive (Municipal Road 80 to Ivan Street)	71.6	1100	Yes
4	Brenda Drive (Moonrock Avenue to St Charles Lake Road)	69.8	1300	No
5	York Street (Courtney Hill to Paris Street)	65.0	640	Yes
6	Lansing Avenue (LaSalle Boulevard to Maley Drive)	63.4	1750	Yes
7	Grandview Boulevard (Montrose Avenue to Wedgewood Drive)	63.1	290	Yes
8	Kelly Lake Road (Southview Drive to Copper Street)	59.3	490	Yes
9	Hawthorne Drive (Barry Downe Road to Auger Avenue)	54.3	860	Yes
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	Second Avenue (Highway 17 to Government Road), Coniston	39.8	940	Yes
23	Gemmell Street (Attlee Avenue to Downland Avenue)	39.2	200	No
24	Edward Avenue (Highway 144 to Falcon Street)	37.3	570	Yes
25	Woodbine Avenue (Agincourt Avenue to Roy Avenue)	37.1	450	Yes
26	Greenbriar Drive (Scarlett Road to Highgate Road)	36.7	160	Yes
27	Mackenzie Street (Baker Street to Elgin Street)	35.6	380	Yes
28	Loach's Road (Oriole Drive to Cerilli Crescent)	32.6	660	Yes
29	Stonegate Drive (Beatrice Crescent to Attlee Avenue)	31.7	250	No