

Request for Decision

Traffic Calming Priority

Presented To: Operations Committee

Presented: Monday, Mar 05, 2012

Report Date: Tuesday, Feb 21, 2012

Type: Routine Management Reports

Recommendation

That the Operations Committee approve the 2011 ranking list for Traffic Calming Eligible Roadways contained in the report from the General Manager of Infrastructure Services dated February 21, 2012; and,

That staff be directed to initiate the public support component for the Traffic Calming process based on the ranking order; and,

That projects from lower in the ranking may be chosen to fully utilize the annual budget; and,

That staff forward the results of the speed studies to the Greater Sudbury Police Services and request increased enforcement on roadways identified with speeding problems.

Background

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. In 2011, staff initiated a Traffic Calming project for Attlee Avenue. Public support has been received and detailed design of the project is underway. Construction of the traffic calming devices will be completed in 2012.

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 conditions for non motorized street users."

Traffic Calming Warrant

Signed By

Report Prepared By

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Division Review

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Recommended by the Department

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Recommended by the C.A.O.

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The City's Traffic Calming Warrant is based upon the review of the best practices from 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 is outlined in the attached Exhibit C.

Initial Screening and Ranking of City of Greater Sudbury Roads

During 2011, City staff collected collision and traffic data for all requested locations as well as a list of roads where capital roads projects are scheduled to be completed in 2012. The initial screening process was completed for 46 road segments on 35 different roads. Of the 46 road segments reviewed, 14 qualified for the ranking process, and of these, 13 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 project and assigned the highest score, resulting in a total of 7 roadways. See Exhibit D for the list of seven roadways which qualified for Traffic Calming and Exhibit E for the list of road segments which did not qualify.

Final Ranking

Currently the City's annual budget for traffic calming projects is \$150,000. Depending on the calming devices chosen, the budget should be enough to complete one major project approximately 1 km in length, or a couple of smaller projects each year.

In addition to the eligible roadways, Exhibit F shows the project length, preliminary cost estimate and indicates whether the road is a transit route or primary emergency services route. It should be 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 about \$5,000 or construct physical devices for \$150,000. 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 Roads 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.

As indicated in the Traffic Calming Policy, if a request is rejected at any point in the process, the applicants and affected residents will be informed in writing, and Traffic Calming shall not be reconsidered for the same section of road for two years.

Recommendations

As indicated in the Traffic Calming Policy, Council approval is required for a project or series of projects prior to initiating the public support component. Staff recommends that Council approve the list ranking the eligible roadways. Based on approved budget limitations, staff will initiate the public support component in the order the roadways are ranked. However, some smaller 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.

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 th percentile speed
Non-Local Traffic	≥ 30%		'Cut-through traffic'

EXHIBIT: B

Screening Process

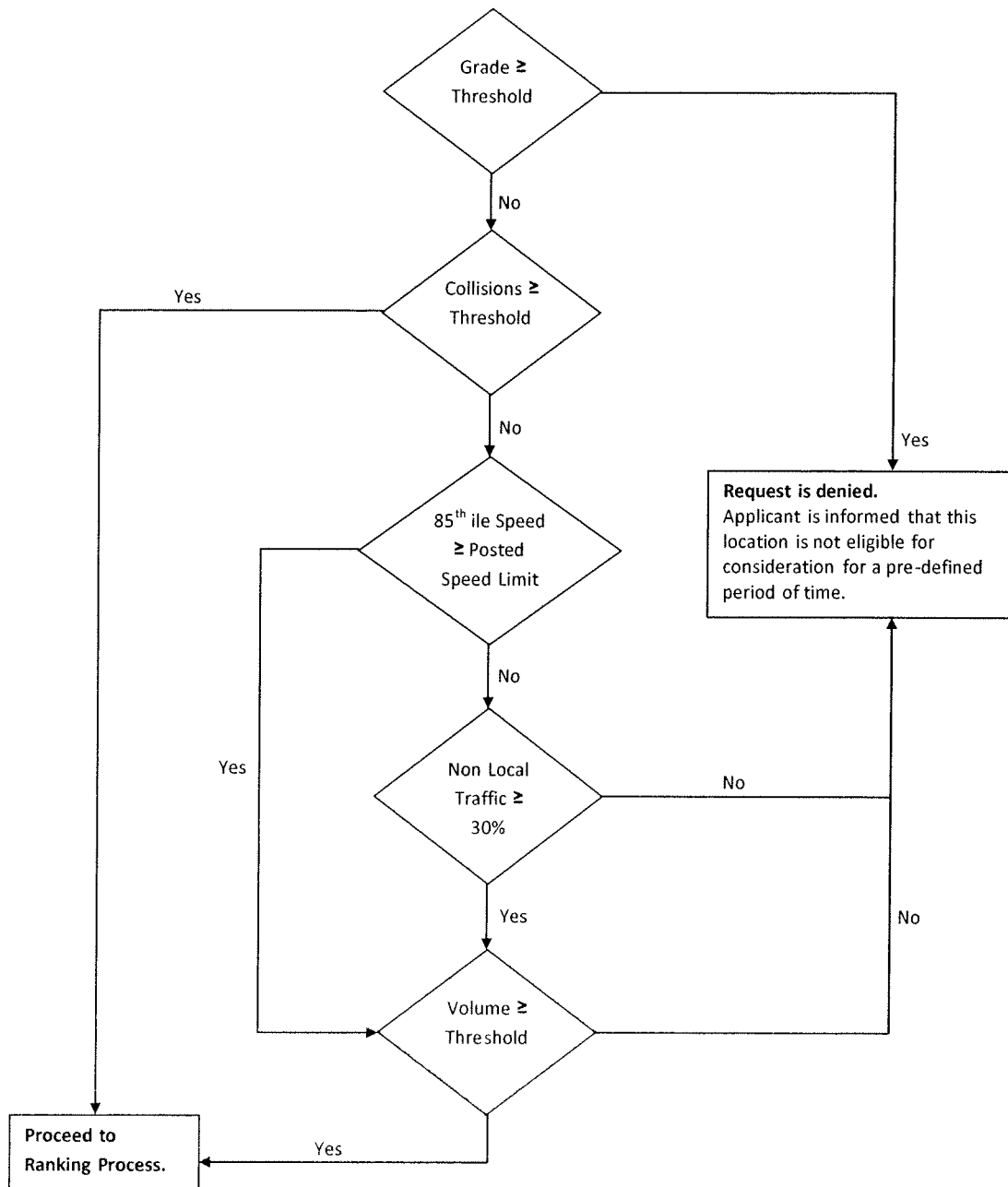


EXHIBIT: C

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
		100

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
		100

EXHIBIT: D

Road Segments Evaluated in 2011 Which Qualify for Traffic Calming

Location	Score	Length (m)	Transit or ES Route?	Preliminary Cost Estimate
Arnold Street (Barbara Street to 400 m West of Skyward Drive)	51.4	515	Yes	\$80,000
Churchill Avenue (Falconbridge Highway to Gemmell Street)	41.7	390	Yes	\$60,000
Cote Avenue (Highway 144 to Hill Street), Chelmsford	44.8	450	No	\$70,000
Errington Avenue (Highway 144 to Main Street)	69.6	1120	Yes	\$170,000
King Street (Morin Avenue to Notre Dame Avenue)	33.4	590	Yes	\$90,000
Morin Avenue (Dell Street to Tedman Avenue)	50.5	460	Yes	\$70,000
York Street (Courtney Hill to Paris Street)	65.0	640	Yes	\$100,000

EXHIBIT : E

Road Segments Which Do Not Qualify for Traffic Calming

Street	From	To	Reason Segment is not Eligible for Traffic Calming
Algonquin Road	Regent Street	Maurice Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Arnold Street	400 m west of Skyward Drive	Moonrock Avenue	Non-Local Traffic Percentage & Speed do not meet the minimum requirements.
Arnold Street	Regent Street	Barbara Street	Scored less than 30 points in the ranking process.
Cedar Green Drive	Falconbridge Road	Racicot Drive	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Church Street	Balsam Street	Peter Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Colleen Avenue	Gravel Drive	Ivan Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Countryside Drive	Blyth Road	Countryside Drive	Volume does not meet the minimum requirements.
Dennie Street	Clyde Street	M.R. 80	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Eleventh Avenue	Municipal Road 24	Sixth Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Jeanne D'Arc Street	Leger Crescent	Hamilton Crescent	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Jeanne D'Arc Street	M.R. 80	Heritage Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Kathleen Street	CP Rail Crossing	MacKenzie Street	Non-Local Traffic Percentage & Speed do not meet the minimum requirements.
Lamothe Street	Hill Street	South End	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Latimer Crescent	Loach's Road	Hunter Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Laurier Street	Lakeview Place	Parkview Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Lavoie Street	Drummond Avenue	Rideau Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Lavoie Street	Rideau Street	Montrose Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Logan Street	Lorne Street	Tuddenham Avenue	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Long Lake Road	Dew Drop Road	Chief Lake Road	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Lorraine Street	Lasalle Boulevard	Kent Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Melbourne Street	Lansing Avenue	Kelvin Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Morris Street	Elgin Street	East End	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Orell Street	Ravina Avenue	Primrose Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Orell Street	Primrose Drive	Desjardins Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Patricia Street	Melvyn Avenue	Mikkola Road	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.

EXHIBIT: E

Street	From	To	Reason Segment is not Eligible for Traffic Calming
Randolph Road	Fairbank Lake Road	Albert Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Ravina Avenue	Orell Street	60 m West of Monique Crescent	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Ravina Avenue	60 m West of Monique Crescent	Primrose Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Ravina Avenue	Primrose Drive	Orell Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Rose Marie Avenue	Lasalle Boulevard	Montfort Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Rose Marie Avenue	Montfort Street	North End	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
St. Jean Street	Junction Avenue	Aldege Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Third Avenue	Philip Street	Anderson Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Vine Avenue	Gemmell Street	Hawthorne Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
William Avenue	Gemmell Street	Hawthorne Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.

EXHIBIT: F

Traffic Calming Final Street Ranking - 2011

Rank	Location	Score	Length (m)	Transit or ES Route?	Preliminary Cost Estimate
1	Auger Avenue (Lasalle Boulevard to Gemmell Street)	74.2	1000	Yes	\$150,000
1	Riverside Drive (Regent Street to Broadway Street)	74.2	960	Yes	\$145,000
3	Michelle Drive (MR 80 to Ivan Street)	71.6	1100	Yes	\$165,000
4	Brenda Drive (Moonrock Avenue to St Charles Lake Road)	69.8	1300	No	\$195,000
5	Errington Avenue (Highway 144 to Main Street)	69.6	1120	Yes	\$170,000
6	York Street (Courtney Hill to Paris Street)	65.0	640	Yes	\$100,000
7	Lansing Avenue (Lasalle Boulevard to Maley Drive)	63.4	1750	Yes	\$265,000
8	Grandview Boulevard (Montrose Avenue to Wedgewood Drive)	63.1	290	Yes	\$45,000
9	Loach's Road (Regent Street to Lo-Ellen Park School)	59.3	360	Yes	\$55,000
10	Kelly Lake Road (Southview Drive to Copper Street)	59.3	490	Yes	\$75,000
11	Hawthorne Drive (Barry Downe Road to Auger Avenue)	54.3	860	Yes	\$130,000
12	Arnold Street (Barbara Street to 400 m West of Skyward Drive)	51.4	515	Yes	\$80,000
13	Morin Avenue (Dell Street to Tedman Avenue)	50.5	460	Yes	\$70,000
14	Dublin Street (Attlee Avenue to Arthur Street)	50.3	540	No	\$85,000
15	Robinson Drive (Kelly Lake Road to Southview Drive)	49.4	950	Yes	\$145,000
16	Balsam Street (Garrow Road to Nickel Street (East Leg))	49.1	1200	Yes	\$180,000
17	Hawthorne Drive (Auger Avenue to Claudia Court (East Leg))	48.2	300	No	\$45,000
18	Meehan Street (Dennie Street to Coulson Street)	47.4	330	No	\$50,000
19	Valleyview Road (M.R. 80 to L'Horizon Secondary School)	47.0	180	No	\$30,000
20	Cote Avenue (Highway 144 to Hill Street), Chelmsford	44.8	450	No	\$70,000
21	Hillcrest Drive (Brian Street to Mikkola Road)	42.0	710	Yes	\$110,000
22	Churchill Avenue (Falconbridge Highway to Gemmell Street)	41.7	390	Yes	\$60,000
23	Second Avenue (Highway 17 to Government Road), Coniston	39.8	940	Yes	\$145,000
24	Gemmell Street (Attlee Avenue to Downland Avenue)	39.2	200	No	\$30,000
25	Edward Avenue (Highway 144 to Falcon Street)	37.3	570	Yes	\$90,000
26	Woodbine Avenue (Agincourt Avenue to Roy Avenue)	37.1	450	Yes	\$70,000
27	Mackenzie Street (Baker Street to Elgin Street)	35.6	380	Yes	\$60,000
28	Douglas Street (Brady Street to Riverside Drive)	34.3	170	No	\$30,000
29	King Street (Morin Avenue to Notre Dame Avenue)	33.4	590	Yes	\$90,000
30	Copper Street (Martindale Road to Corsi Hill)	32.8	1300	Yes	\$195,000
31	Loach's Road (Oriole Drive to Cerilli Crescent)	32.6	660	Yes	\$100,000
32	Stonegate Drive (Beatrice Crescent to Attlee Avenue)	31.7	250	No	\$40,000