

Presented To:	Operations Committee
Presented:	Monday, May 16, 2016
Report Date	Tuesday, Apr 26, 2016
Type:	Managers' Reports

## Request for Decision

### Traffic Calming - 2015 Ranking

#### Resolution

THAT the City of Greater Sudbury approves the 2015 ranking list for traffic calming eligible roadways contained in the report dated April 26, 2016 from the General Manager of Infrastructure Services;

AND THAT the City of Greater Sudbury initiates the public support component for the traffic calming process based on the ranking order. Projects from lower in the ranking may be chosen to fully utilize the annual budget;

AND THAT the City of Greater Sudbury forwards the results of the speed studies to Greater Sudbury Police Services and requests 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 in May 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 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

#### Signed By

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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**

City staff has 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. Since 2012, the initial screening process has been completed for 104 road segments on 90 different roads. Of the 104 road segments reviewed, six (6) 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 segment and assigned the highest score, resulting in a total of five (5) roadways. See Exhibit "D" for the list of five (5) 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 \$165,000. 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. Exhibit "F" contains the list of all roadways eligible for traffic calming.

In addition to the eligible roadways, Exhibit "F" shows the project length and indicates whether the road is a transit route or primary emergency services route. The cost to install traffic calming devices may vary greatly depending on the devices preferred by the residents. For example, on a 1 km road, you could paint bike lanes for \$5,500 or construct physical devices for \$165,000 or more. 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 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. Errington Avenue is an example of where traffic calming was incorporated as part of the capital contract.

### **Initiated Projects**

Since 2010, the City of Greater Sudbury has installed traffic calming devices on many roads throughout the City. Each project has utilized a variety of devices to slow down traffic and make the road safer for vulnerable road users. Some of the devices used include curb extensions, median islands, speed bumps, edge lines for bike routes and radar speed display signs.

A summary of effectiveness of each project can be found in Exhibit "G".

As the studies indicate, some measures have been more effective than others. For example, on Attlee Avenue, although operating speeds have been reduced, the 85<sup>th</sup> percentile speeds remain above the posted speed limit. The 85<sup>th</sup> percentile speed is the speed at or below which 85 percent of drivers are travelling and is generally accepted as a good indicator of an appropriate speed limit. The effectiveness of traffic calming measures varies by the type of measures used. Horizontal devices (median islands, curb extensions) are not as effective at reducing speed as vertical devices (speed bumps and tables).

While the City has completed many traffic calming projects, there have been a number of projects which did not obtain the required public support to proceed. These projects include:

- Jean Street from Frood Road to Eva Street
- King Street from Notre Dame Avenue to Morin Avenue
- Ontario Street from Regent Street to Douglas Street
- Robinson Drive from Kelly Lake Road to Southview Drive

As per the policy, these roads will not be reconsidered for traffic calming for two (2) years from the date they did not receive public support.

## **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 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 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 85<sup>th</sup> 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.

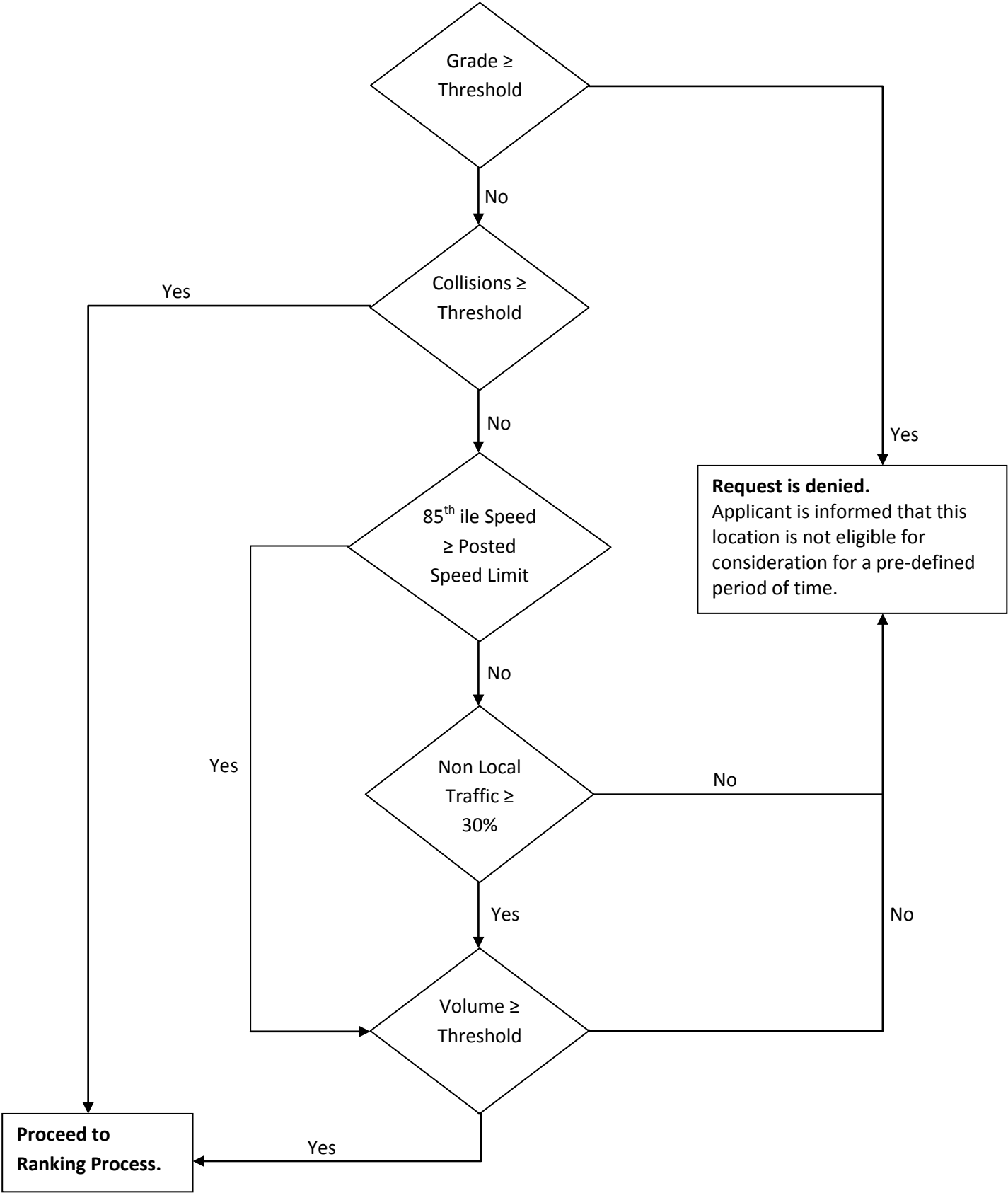
# EXHIBIT: A

## 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 <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 2012 and 2015 Which Qualify for Traffic Calming

Location	Score	Length (m)	Transit or ES Route?
Desmarais Road (Municipal Road 80 to Talon Street)	51.2	647	No
Dublin Street (Attlee Avenue to Arthur Street)	46.5	540	Yes
Whittaker Street (Douglas Street to Haig Street)	43.3	365	Yes
Beaumont Avenue (Woodbine Avenue to Moss Street)	41.6	180	Yes
Greenbriar Drive (Scarlett Road to Highgate Road)	36.8	160	Yes

# EXHIBIT: E

## Road Segments Evaluated between 2012-2015 Which Do Not Qualify for Traffic Calming

Street	From	To	Reason
Afton Avenue	Hawthorne Drive	Gemmell Street	Volume and speed do not meet the minimum requirements.
Algonquin Road	Countryside Drive	Field Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Arvo Street	Sparks Street	North End	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Barbara Street	Yale Street	Arnold Street	Volume and speed do not meet the minimum requirements.
Barrington Street	Falconbridge Highway	West End	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Belanger Street	Main Street	Bridge Street	Volume and speed do not meet the minimum requirements.
Brierwood Court	Kelly Lake Road	Bigwood Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Carol Street	Municipal Road 80	Suzanne Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Chenier Street	Oscar Street	Municipal Road 80	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.



# EXHIBIT: E

Street	From	To	Reason
Claude Street	Moonlight Avenue	Ridgemount Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Copper Street	Martindale Road	Zinc Street	Scored less than 30 points in the ranking process.
Copper Street	Zinc Street	Kelly Lake Road	Scored less than 30 points in the ranking process.
Countryside Drive	Blyth Road	Countryside Drive	Volume does not meet the minimum requirements.
Creighton Road	School Street	Club Road	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Culver Crescent	Algonquin Road	Access Road	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Culver Crescent	Field Street	Access Road	Volume and speed do not meet the minimum requirements.
Danforth Avenue	Gemmell Street	Fielding Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
David Street	Bridge Street	Marion Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Dollard Street	Madison Avenue	Briar Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.

# EXHIBIT: E

Street	From	To	Reason
Ellen Street	St Agnes Street	Laurier Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Elm Street (Valley East)	Durham Avenue	Larch Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Elm Street (Valley East)	Main Street	Durham Avenue	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Ester Street	Treeview Road	Long Lake Road	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Ester Street	Treeview Road	West End	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Ferndale Avenue	Parkdale Avenue	Bancroft Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Field Street (Lively)	Brian Street	Timothy Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Field Street (Sudbury)	Larchwood Drive	Algonquin Road	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Fleetwood Drive	Notre Dame Avenue	Country Club Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.

# EXHIBIT: E

Street	From	To	Reason
Foch Street	Sellwood Avenue	Randolph Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Frontenac Street	Papineau Crescent	Carmelo Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Gill Street	Beaton Avenue	West End	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Glendale Avenue	Clearview Avenue	Lonsdale Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Gregg Lane	Martindale Road	Gino Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Grenoble Street	Old Falconbridge Road	Grenoble Court	Non-Local Traffic Percentage & Speed do not meet the minimum requirements.
Gutcher Avenue	Irving Street	Mary Street	Non-Local Traffic Percentage & Speed do not meet the minimum requirements.
Gutcher Avenue	Irving Street	Lorne Street	Non-Local Traffic Percentage & Speed do not meet the minimum requirements.
Haig Street	Byng Street	Whittaker Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Highgate Road	West Leg of Plumtree Crescent	East Leg of Plumtree Crescent	Volume and speed do not meet the minimum requirements.

# EXHIBIT: E

Street	From	To	Reason
Highgate Road	Greenbriar Drive	Third Avenue	Volume and speed do not meet the minimum requirements.
Hillside Avenue	McCrea Heights Avenue	West End	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Hines Street	Moonlight Avenue	Equinox Crescent	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Hunter Street	Latimer Crescent	Oriole Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Huntington Drive	Falconbridge Road	Auger Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
John Street	Paris Street	Annie Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Kennedy Street	Barry Downe Road	East End	Scored less than 30 points in the ranking process.
Kipling Court	Westmount Playground	Westmount Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Kipling Court	Westmount Playground	Westmount Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Lamothe Street	Barry Downe Road	Leon Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.

# EXHIBIT: E

Street	From	To	Reason
Laura Street	Eva Street	Carmen Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Laura Street	Municipal Road 80	Eva Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Laval Street	Regent Street	East End	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Leslie Street	Mont Adam Street	Myles Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Logan Avenue	Lorne Street	Quinn Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Logan Avenue	Quinn Street	Mary Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Louis Street	Pierre Street	Helene Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Louisa Drive	Cam Street	Muriel Crescent	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Louisa Drive	Cam Street	Muriel Crescent	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.

# EXHIBIT: E

Street	From	To	Reason
Maple Street	Cedar Street	Durham Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
Maple Street	Larch Street	Cedar Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Marie Avenue	Helene Street	Pierre Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Maureen Crescent	Gemmell Street	Dowland Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements.
McNeill Boulevard	Beatty Street	Ethelbert Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Melvyn Avenue	Hillcrest Drive	Timothy Avenue	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Minto Street	North of Brady Street	Larch Street	Non-Local Traffic Percentage & Speed do not meet the minimum requirements
Minto Street	South of Brady Street	Van Horne Street	Non-Local Traffic Percentage & Speed do not meet the minimum requirements
Morris Street	Howey Drive	Annie Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements

# EXHIBIT: E

Street	From	To	Reason
Navanod Road	Fourth Avenue	East End	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Nobel Street	Granite Street	Huron Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Norfolk Court	St Andrew's Road	St Andrew's Road	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Northway Avenue	Lasalle Boulevard	Palisade Place	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Old Skead Road	Gordon Street	Sunny Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Old Skead Road	Sunny Street	Skead Road	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
O'Neil Drive West	Covington Avenue	Falconbridge Highway	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
O'Neil Drive East	Garson Coniston Road	Penman Avenue	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Parkwood Street	Maple Street	Pine Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements

# EXHIBIT: E

Street	From	To	Reason
Patrick Avenue	Hawthorne Drive	Canterbury Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Paul Street	Anthony Street	Graham Road	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Paul Street	Caroline Street	Anthony Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Peter Street	Martin Road	Beverly Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Pond Hollow Drive	Sweetberry Drive	Mist Hollow Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Pond Hollow Drive	Mallards Landing Drive	Mist Hollow Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Prevost Street	St Agnes Street	Laurier Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Railway Road	Robinson Drive	East End	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Ralph Street	Bellevue Avenue	South End	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements



# EXHIBIT: E

Street	From	To	Reason
Ravina Avenue	Monique Crescent	Monique Crescent	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Rene Street	Addy Crescent	Mederic Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
River Road	Main Street	North End	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Ronald Crescent	Thomas Avenue	Black Lake Road	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Roy Avenue	Lasalle Boulevard	Woodbine Avenue	Volume does not meet the minimum requirements
Roy Street	West End	East End	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Second Avenue	Torbay Road	Bayside Crescent	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
South Lane Road	Pioneer Road	Highway 69	Volume does not meet the minimum requirements
Springhill Drive	Racicot Drive	Racicot Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
St. Nicolas Street	Edinburgh Street	Wembley Drive	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements

# EXHIBIT: E

Street	From	To	Reason
Talon Street	Will Street	Josephine Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Third Avenue	Highgate Road	Kingsway	Volume does not meet the minimum requirements
Third Avenue	Kenwood Street	Highgate Road	Volume does not meet the minimum requirements
Third Avenue	Kenwood Street	Bancroft Drive	Non-Local Traffic Percentage, Speed do not meet the minimum requirements
Trembley Street	Talon Street	Laval Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Whittaker Street	Douglas Street	Victoria Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Windle Drive	Millwood Crescent	North End	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements
Worthington Crescent	Marion Street	Ramsey Road	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Worthington Crescent	Riverside Drive	Marion Street	Non-Local Traffic Percentage & Volume do not meet the minimum requirements.
Yale Street	Marcel Street	Linda Street	Non-Local Traffic Percentage, Speed & Volume do not meet the minimum requirements

# EXHIBIT: F

## Traffic Calming Final Street Ranking - 2015

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

## Traffic Calming Project Results

Location	Year of Study	Speed Limit (km/h)	Average Speed (km/h)	85 <sup>th</sup> Percentile Speed (km/h)	Volume
Attlee Avenue (Gemmell Street and Beatrice Crescent)	2010 (pre)	50	50	55	5278
	2014 (post)	50	46	52	4026
	<b>Difference:</b>		<b>-4</b>	<b>-3</b>	<b>-1252</b>
Attlee Avenue (Peel Street and Belfry Avenue)	2010 (pre)	50	58	66	6139
	2014 (post)	50	49	56	5426
	<b>Difference:</b>		<b>-9</b>	<b>-10</b>	<b>-713</b>
Churchill Street (Porter Street and Gemmell Street)	2011 (pre)	50	49	58	1365
	2013 (post)	50	46	55	1597
	<b>Difference:</b>		<b>-3</b>	<b>-3</b>	<b>232</b>
Errington Avenue (Highway 144 and Brookside Road)	2011 (pre)	50	55	66	5839
	2014 (post)	50	51	60	3478
	<b>Difference:</b>		<b>-4</b>	<b>-6</b>	<b>-2361</b>
Jeanne D'Arc Street, Val Therese (Heritage Drive and Dugas Street)	2011 (pre)	50	43	50	1668
	2014 (post)	50	45	50	2125
	<b>Difference:</b>		<b>2</b>	<b>0</b>	<b>457</b>
Kathleen Street (Frood Road and Bessie Street)	2012 (pre)	50	36	45	6531
	2013 (post)	50	42	50	5971
	<b>Difference:</b>		<b>6</b>	<b>5</b>	<b>-560</b>
Loachs Road (Lady Ashley Court and Windle Drive)	2010 (pre)	40	49	58	5725
	2015 (post)	40	52	60	5265
	<b>Difference:</b>		<b>3</b>	<b>2</b>	<b>-460</b>

Location	Year of Study	Speed Limit (km/h)	Average Speed (km/h)	85 <sup>th</sup> Percentile Speed (km/h)	Volume
Niemi Road (Santala Road and Irene Crescent)	2009 (pre)	50	44	52	2742
	2014 (post)	50	39	53	2626
	<b>Difference:</b>		<b>-5</b>	<b>1</b>	<b>-116</b>
Southview Drive (Cranbrook Crescent and Bouchard Street)	2008 (pre)	50	47	54	11021
	2010 (traffic circle)	50	41	49	10450
	2013 (removed)	50	51	57	13264
	2014 (speed table)	50	28	35	9597