

Request for Decision

South Bay Road Speed Limit

Presented To: Operations Committee

Presented: Monday, Jan 20, 2014

Report Date Wednesday, Jan 08, 2014

Type: Managers' Reports

Recommendation

THAT the City of Greater Sudbury increase the speed limit on South Bay Road from Ramsey Lake Road to the Athletic Building Road to 50 km/h, and;

THAT staff forward the results of the speed studies to the Greater Sudbury Police Services and request that they increase the level of enforcement in the area, all in accordance with the report from the General Manager of Infrastructure Services dated January 8, 2014.

Background

The City received a petition signed by 145 area residents and students and faculty of Laurentian University to increase the speed limit on South Bay Road from Ramsey Lake Road to the Athletic Building Road back to 50 km/h (see Exhibit 'AA').

At the Traffic Committee meeting held on June 17, 2011, staff presented a report dated May 27, 2011 that reviewed the appropriate speed limit for South Bay Road (see Exhibit 'BB'). The report was prepared in response to a request from St. Joseph's Health Centre and the Maison Vale Inco Hospice to lower the maximum limit to 40 km/h.

Using the Transportation Association of Canada (TAC) guidelines for establishing posted speed limits, staff found that the recommended speed limit for South Bay Road from Ramsey Lake Road to Arlington Boulevard was 70 km/h. The TAC guidelines were adopted by City Council for use on arterial and major collector roadways. The guidelines assess appropriate speed limits based primarily on the classification, function and physical characteristics of a roadway.

A speed study conducted in March 2011, south of Ramsey Lake Road showed that the average speed was 63 km/h and the 85th percentile speed was 71 km/h. The 85 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.

Signed By

Report Prepared By

Dave Kivi
Co-ordinator of Transportation & Traffic
Engineering Services
Digitally Signed Jan 8, 14

Division Review

David Shelsted
Director of Roads & Transportation
Services
Digitally Signed Jan 8, 14

Recommended by the Department

Tony Cecutti
General Manager of Infrastructure
Services
Digitally Signed Jan 8, 14

Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed Jan 8, 14

Although the TAC guidelines and 85th percentile speed supported an increase in the speed limit, staff recommended that it remain at 50 km/h. Subsequently, Council approved a reduction in the speed limit to 40 km/h from Ramsey Lake Road to Laurentian University's Athletic Building Road.

In order to review the impact of reducing the speed limit to 40 km/h, staff completed a follow up speed study on South Bay Road on September 17, 2013. Vehicle speeds were recorded 250 metres south of Ramsey Lake Road, which is the same location as the previous study. A summary of the results is presented in the table below.

South Bay Road Speed Study Summary

Date	Speed Limit	Average Speed	85th Percentile Speed
March 1, 2011	50 km/h	63 km/h	71 km/h
September 17, 2013	40 km/h	57 km/h	64 km/h

The speed drivers choose to travel is influenced by the design of the road, adjacent level of development and prevailing road and weather conditions. The majority of motorists drive at a speed that they consider reasonable and safe for road, traffic and environmental conditions.

The results of the speed study shows that a 10 km/h reduction in the speed limit has resulted in a 6 to 7 km/h reduction in operating speed. This reduction is greater than would normally be expected. It appears that when drivers experience a speed limit that is much lower than their expectations, they choose speeds that will lessen the risk of getting a ticket and minimize the amount of the fines and demerit points. When the speed limit was reduced to 40 km/h, 30 percent of drivers travelled at 20 km/h or more over the limit and 6 percent were going 30 km/h or more over the limit.

A review of the collision history on South Bay Road indicates the speed limit reduction has not had an effect on safety. Since the implementation of the 40 km/h speed limit 2.5 years ago, there has been three collisions which may be related to speeding. In the three years prior to the speed limit reduction there were three collisions which may have been related to speed. An analysis of the collisions shows that four of the six collisions occurred when road conditions were less than ideal. This type of collision pattern is typical in areas where younger and less experienced drivers are the predominate driver type.

Establishing safe and realistic speed limits is important because it invites public compliance by conforming to the behavior of the majority of motorists and provides a clear reminder to violators. Based on the results of the initial speed limit review, staff recommends that the speed limit be increased on South Bay Road to 50 km/h, from Ramsey Lake Road to the Athletic Building Road. The Operations Committee may also consider increasing the limit of this section of South Bay Road to 60 km/h, which is still less than the 70 km/h limit recommended using the TAC guidelines.

It is also recommended that staff forward the results of the speed study to the Greater Sudbury Police Services and request additional enforcement in the area. The previous speed studies show that whether the maximum speed limit is 40 or 50 km/h speeding will still be a concern.

PETITION: REINSTATEMENT OF 50 km/h SPEED LIMIT ON SOUTH BAY ROAD

August 2011

In a report to the Traffic Committee of the City of Greater Sudbury on June 17, 2011, the General Manager of Infrastructure Services recommended that the speed limit on South Bay Road from Ramsey Lake Road to the east end remain at 50 km/h.

The Traffic Committee disregarded this recommendation and reduced the speed limit on the portion of South Bay Road from Ramsey Lake Road to Athletic Building Road to 40 km/h, without consultation with the residents of the area.

We, the residents of the area, request that the Traffic Committee/Council accept the recommendation of the report of the General Manager of Infrastructure Services, and return the speed limit on South Bay Road to 50 km/h. We request the opportunity to speak to the Traffic Committee on this issue.

**THE ORIGINAL PETITION WAS SIGNED BY SEVENTEEN (17)
RESIDENTS OF SOUTH BAY ROAD.**



Presented To:	Traffic Committee
Presented:	Friday, Jun 17, 2011
Report Date	Friday, May 27, 2011
Type:	Managers' Reports

Request for Decision

Maximum Speed Limit - South Bay Road, Sudbury

Recommendation

That the speed limit on South Bay Road from Ramsey Lake Road to the east end remain at 50 km/h, and;

That staff forward the results of the speed studies to the Greater Sudbury Police Service, and request that they increase the level of enforcement in the area all in accordance with the report from the General Manager of Infrastructure Services dated May 27, 2011.

Background:

The City's Traffic and Transportation staff received a request from Ward 10 Councillor, Frances Caldarelli, Jo-Anne Palkovits, President and CEO of the St. Joseph's Health Centre and Leo Therrien, Executive Director of the Maison Vale Inco Hospice, to reduce the speed limit on South Bay Road from Ramsey Lake Road to the east end from 50 km/h to 40 km/h (**see Exhibit 'A'**).

At the October 13, 2010 meeting, City Council adopted the use of the Canadian Guidelines for Establishing Posted Speed Limits, published by the Transportation Association of Canada (TAC), for evaluating posted speeds on arterial and major collector roadways. These guidelines assess appropriate posted speed limits based primarily on the classification, function and physical characteristics of a roadway.

South Bay Road is a collector roadway located in Sudbury and provides a connection between Ramsey Lake Road and the Lake Laurentian Conservation Area. South Bay Road also provides access to Laurentian University, St. Joseph's Villa, Maison Vale INCO Hospice and St. Joseph's Health Centre (**see Exhibit 'B'**).

South Bay Road is constructed to a rural standard with asphalt shoulders, from Ramsey Lake Road to the Athletic Building Road. It has gravel shoulders from the Athletic Building Road to the east end.

Due to the physical characteristics of the roadway, staff evaluated South Bay Road in three segments:

Signed By

Report Prepared By

Dave Kivi
Co-ordinator of Transportation & Traffic
Engineering Services
Digitally Signed May 27, 11

Division Review

Robert Falcioni, P.Eng.
Director of Roads and Transportation
Services
Digitally Signed May 27, 11

Recommended by the Department

Greg Clausen, P.Eng.
General Manager of Infrastructure
Services
Digitally Signed May 30, 11

Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed May 30, 11

EXHIBIT: BB

1. Ramsey Lake Road to Athletic Building Road
2. Athletic Building Road to Arlington Boulevard
3. Arlington Boulevard to the East End

Applying the physical characteristics of each segment to the new Canadian Guidelines and using a functional classification of a “two lane rural undivided major collector” yields the total risk scores and recommended speed limits detailed in **Exhibits ‘C’, ‘D’ and ‘E’** and summarized in the table below:

	Segment	Total Risk Score	Recommended Posted Speed Limit (km/h)
1.	Ramsey Lake Road to Athletic Building Road	25	70
2.	Athletic Building Road to Arlington Boulevard	28	70
3.	Arlington Boulevard to East End	40	60

Staff also completed speed studies on South Bay Road, south of Ramsey Lake Road and west of Arlington Boulevard, on March 1, 2011. The study south of Ramsey Lake Road was conducted just south of the entrance to the Maison Vale INCO Hospice and recorded the speeds of over 6,750 vehicles. The average speed recorded was 63 km/h while the 85th percentile speed was 71 km/h. The 85th 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 study west of Arlington Boulevard was conducted just east of house # 1452 South Bay Road and recorded the speeds of just over 1,000 vehicles. The average recorded speed was 54 km/h while the 85th percentile speed was 64 km/h.

Although the results of the TAC Guidelines, and speed studies, indicates that the speed limit could be increased, staff recommends that the existing speed limit on South Bay Road remain at 50 km/h. Further, staff recommends that the results of the speed studies be forwarded to the Greater Sudbury Police Service with a request for increased enforcement on South Bay Road.

Additionally, City staff conducted ball bank studies to measure the “comfortable” speed of the horizontal curves along South Bay Road. The horizontal curves from Ramsey Lake Road to Arlington Boulevard had measured “comfortable” speeds of greater than or equal to 50 km/h. Most of the curves east of Arlington Boulevard had “comfortable” speeds of less than 50 km/h. City staff will arrange to have appropriate curve warning signs installed on this section of South Bay Road to further enhance safety.



August 6, 2010

Mr. Bill Lautenbach, General Manager
Growth and Development
City of Greater Sudbury
PO Box 5000, Station A
200 Brady Street
Sudbury, Ontario P3A 5P3

Dear Mr. Lautenbach,

RE: Bylaw to 40 km/hour speed limit on South Bay Road

We are writing to request your assistance in reducing the speed limit on a portion of South Bay Road to 40 km/hour.


Important health care facilities are located on this stretch of road; that is St. Joseph's Villa, a 128-bed long-term care home, St. Joseph's Continuing Care Centre, a chronic hospital named under the Public Hospitals Act and the Maison Vale Inco Hospice. Residents, patients, families, visitors, volunteers and staff travelling to our facilities use the road to walk and / or ambulate by wheelchair on the roadside. Safety is a concern as drivers currently exceed the posted limit of 50 km/hour. As protectors of our community's most vulnerable, we trust that the City will support our request to reduce the speed limit.


We see the need for this reduced speed limit from the intersection of Ramsey Lake Road/South Bay Road to the intersection of South Bay Road/Athletic Building Road on the University property. We have attached a map indicating this zone.

We understand that a new bylaw can be passed at City Council to post a 40km/hour speed limit. Through this letter, we are formally applying for this change. We would like to work with you, at your earliest convenience to spearhead this initiative.

Thank you for your continued support of our organizations.

Yours truly,


Jo-Anne Palkovits
President & CEO
St. Joseph's Health Centre


Leo Therrien
Executive Director
Maison Vale Inco Hospice

cc. Frances Calderilli, Councillor, Ward 10

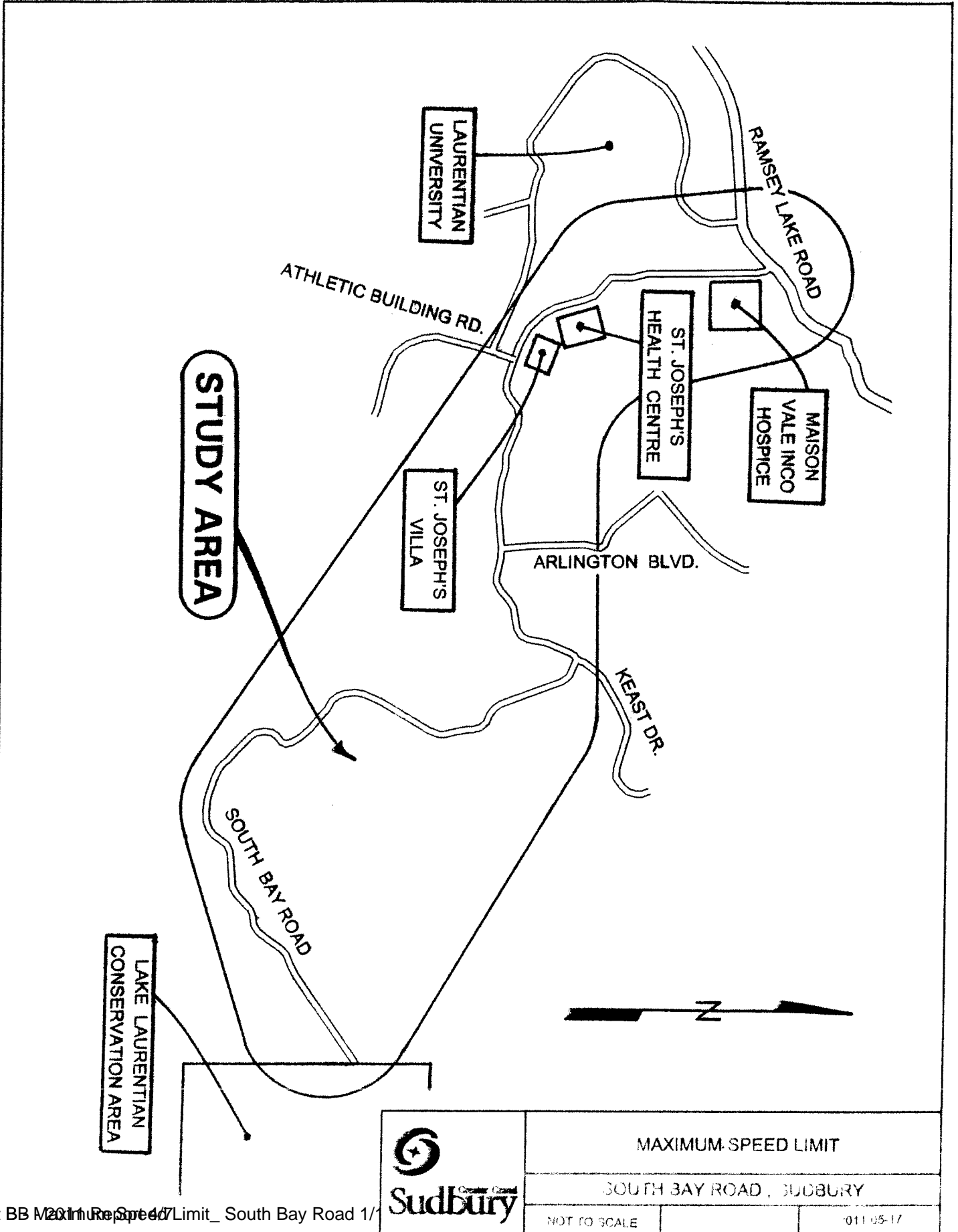
ST. JOSEPH'S HEALTH
CENTRE OF SUDBURY
CENTRE DE SANTÉ
ST. JOSEPH DE SUDBURY
1120 Avenue St. Joseph #100
Sudbury, ON N3P 0Y7
Tel: (705) 671-2386


ST. JOSEPH'S VILLA
OF SUDBURY
VILLA SAINT-JOSEPH
DE SUDBURY
1250 Avenue St. Joseph #100
Sudbury, ON N3P 0Y7
Tel: (705) 671-2386

ST. JOSEPH'S
Maison Vale Inco
Hospice
1120 Avenue St. Joseph #100
Sudbury, ON N3P 0Y7
Tel: (705) 671-2386

EXHIBIT: BB

EXHIBIT: B



 Sudbury	MAXIMUM SPEED LIMIT	
	SOUTH BAY ROAD, SUDBURY	
	NOT TO SCALE	011 05-17



Automated Speed Limit Guidelines FORM A - Automated Speed Limit Guidelines Spreadsheet

Version:
10-Apr-09

Name of Corridor:	South Bay Road		
Segment Evaluated:	Ramsey Lake Road	to	Athletic Building Road
Geographic Region:	Sudbury		
Road Agency:	City of Greater Sudbury		
Road Classification:	Collector	Length of Corridor:	850 m
Urban / Rural:	Rural	Design Speed: (Required for Freeway, Expressway, Highway)	km/h
Divided / Undivided:	Undivided	Current Posted Speed: (For information only)	50 km/h
Major / Minor:	Major	Prevailing Speed: (85th Percentile - for information only)	70.8 km/h
# Through Lanes Per Direction:	1 lane	Policy: (Maximum Posted Speed)	

		RISK	Score
A1	GEOMETRY (Horizontal)	Medium	4
A2	GEOMETRY (Vertical)	Lower	2
A3	AVERAGE LANE WIDTH	Lower	1
B	ROADSIDE HAZARDS	Medium	6
C1	PEDESTRIAN EXPOSURE	Medium	2
C2	CYCLIST EXPOSURE	Medium	2
D	PAVEMENT SURFACE	Lower	3
E1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	<i>Number of Occurrences</i>	0
	STOP controlled intersection	0	
	Signalized intersection	0	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade railroad crossing	0	
E2	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	<i>Number of Occurrences</i>	4
	Left turn movements permitted	6	
	Right-in / Right-out only	0	
E3	NUMBER OF INTERCHANGES	<i>Number of Occurrences</i>	0
	Number of interchanges along corridor	0	
F	ON-STREET PARKING	N/A	0

Total Risk Score:

24

Recommended Posted Speed Limit (km/h):

As determined by road characteristics

70

As determined by policy

The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance.

Comments:



Automated Speed Limit Guidelines
FORM A - Automated Speed Limit Guidelines Spreadsheet

Version:
10-Apr-09

Name of Corridor:	South Bay Road		
Segment Evaluated:	Athletic Building Road	to	Arlington Boulevard
Geographic Region:	Sudbury		
Road Agency:	City of Greater Sudbury		
Road Classification:	Collector	Length of Corridor:	600 m
Urban / Rural:	Rural	Design Speed: (Required for Freeway, Expressway, Highway)	km/h
Divided / Undivided:	Undivided	Current Posted Speed: (For information only)	50 km/h
Major / Minor:	Major	Prevailing Speed: (85th Percentile - for information only)	64.4 km/h
# Through Lanes Per Direction:	1 lane	Policy: (Maximum Posted Speed)	

		RISK	Score
A1	GEOMETRY (Horizontal)	Medium	4
A2	GEOMETRY (Vertical)	Lower	2
A3	AVERAGE LANE WIDTH	Medium	2
B	ROADSIDE HAZARDS	Lower	3
C1	PEDESTRIAN EXPOSURE	Higher	3
C2	CYCLIST EXPOSURE	Higher	3
D	PAVEMENT SURFACE	Lower	3
E1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	<i>Number of Occurrences</i>	1
	STOP controlled intersection	0	
	Signalized intersection	0	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade railroad crossing	0	
Sidestreet STOP-controlled or lane	1		
E2	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	<i>Number of Occurrences</i>	6
	Left turn movements permitted	7	
	Right-in / Right-out only	0	
E3	NUMBER OF INTERCHANGES	<i>Number of Occurrences</i>	0
	Number of interchanges along corridor	0	
F	ON-STREET PARKING	Lower	1

Total Risk Score:

28

Recommended Posted Speed Limit (km/h):

As determined by road characteristics

70

As determined by policy

The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance.

Comments:



Automated Speed Limit Guidelines FORM A - Automated Speed Limit Guidelines Spreadsheet

Version:
10-Apr-09

Name of Corridor:	South Bay Road		
Segment Evaluated:	Arlington Boulevard	to	East End
Geographic Region:	Sudbury		
Road Agency:	City of Greater Sudbury		
Road Classification:	Collector	Length of Corridor:	2,500 m
Urban / Rural:	Rural	Design Speed: (Required for Freeway, Expressway, Highway)	km/h
Divided / Undivided:	Undivided	Current Posted Speed: (For information only)	50 km/h
Major / Minor:	Major	Prevailing Speed: (85th Percentile - for information only)	km/h
# Through Lanes Per Direction:	1 lane	Policy: (Maximum Posted Speed)	

		RISK	Score
A1	GEOMETRY (Horizontal)	Higher	6
A2	GEOMETRY (Vertical)	Medium	4
A3	AVERAGE LANE WIDTH	Medium	2
B	ROADSIDE HAZARDS	Medium	6
C1	PEDESTRIAN EXPOSURE	Higher	3
C2	CYCLIST EXPOSURE	Higher	3
D	PAVEMENT SURFACE	Lower	3
E1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	<i>Number of Occurrences</i>	2
	STOP controlled intersection	1	
	Signalized intersection	0	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade railroad crossing	0	
E2	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	<i>Number of Occurrences</i>	8
	Left turn movements permitted	41	
	Right-in / Right-out only	0	
E3	NUMBER OF INTERCHANGES	<i>Number of Occurrences</i>	0
	Number of interchanges along corridor	0	
F	ON-STREET PARKING	Higher	3

Total Risk Score:

40

Recommended Posted Speed Limit (km/h):

As determined by road characteristics

60

As determined by policy

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The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance.

Comments: