



REPORT FOR ACTION

Traffic Calming (Speed Humps), 30 km/h Speed Limit – Silver Springs Boulevard

Date: October 9, 2019
To: Scarborough Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 22 – Scarborough-Agincourt

SUMMARY

This staff report is about a matter that the Community Council has delegated authority to make a final decision.

As a result of requests from the Councillor, Silver Springs Public School, St. Sylvester Separate School and residents regarding vehicle speeds on Silver Springs Boulevard, Transportation staff reviewed the need for traffic calming on Silver Springs Boulevard, between Perthshire Street and Wayside Avenue.

Our assessment indicates the criteria as set out in the Traffic Calming Policy, has not been satisfied. Therefore, traffic calming measures are not recommended on Silver Springs Boulevard.

Transportation staff also reviewed the feasibility of reducing the speed limit from 40 km/h to 30 km/h. Our assessment indicates that warrant criteria for the reduction of the speed limit from 40 to 30 km/h is also not satisfied. Therefore, a reduction of the speed limit to 30 km/h is not recommended for Silver Springs Boulevard.

RECOMMENDATIONS

The Acting Director, Traffic Management, Transportation Services, recommends that:

1. Scarborough Community Council not authorize the installation of traffic calming measures on Silver Springs Boulevard, between Perthshire Street and Wayside Avenue.

2. Scarborough Community Council not reduce the speed limit from 40 km/h to 30 km/h on Silver Springs Boulevard, between Perthshire Street and Wayside Avenue.

FINANCIAL IMPACT

There is no financial impact resulting from the adoption of the recommendations in this report.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Existing Conditions

- Silver Springs Boulevard, between Perthshire Street and Wayside Avenue, is a two-way collector road.
- The pavement width is approximately 9.5 metres and the posted speed limit is 40 km/h.
- There are municipal sidewalks on both sides of this roadway and there is no TTC service along this roadway.
- The land use in the surrounding area consists mainly of single-family residential dwellings and an elementary school.
- Both Silver Springs Public School and St. Sylvester Separate School are located on the west side of Silver Springs Boulevard, between Perthshire Street and Wayside Avenue.
- U-turns are prohibited just outside the school limits on Silver Springs Boulevard, between Rakewood Crescent and Revlis Crescent.
- All-way stop controls are provided on Silver Springs Boulevard at Wayside Avenue, Dancy Avenue and Perthshire Street.

Vision Zero – Toronto's Road Safety Plan

The City of Toronto is committed to eliminating traffic-related deaths and serious injuries on its roadways and protecting its most vulnerable road users (VRU), including pedestrians and cyclists. To help the City achieve that goal, City Council adopted the Vision Zero Road Safety Plan in July 2016, which is a comprehensive, city-wide strategy that includes many road safety countermeasures that address all road users, but with particular emphasis on VRU. "School Children" is one of six emphasis areas identified in the plan.

To improve safety in areas around schools, the City is designating School Safety Zones and Community Safety Zones at all schools across the City, starting with elementary (grades K-8) schools. The School Safety Zones program involves the installation of various signs and pavement markings enhancements along frontages of schools within 150 metres of the school property, including new School Zone signs with flashing beacons, radar speed display signs (also referred to as driver feedback signs), "SCHOOL" and speed limit stencils painted on the roadway and zebra crossings at all stop-controlled intersections.

With regards to Community Safety Zones, in 2018 City Council approved the designation of Community Safety Zones within approximately 150 metres of the school property in front of all elementary schools.

To date, nine schools in Ward 22 have received School Safety Zone treatments and the above countermeasures have already been implemented. Currently, Silver Springs Public School is ranked 16th among 33 schools identified in Ward 22 and School Safety Zone treatments are expected to be implemented in the future based on the ranking.

Analysis

Traffic Calming Warrants

Transportation Services conducted mid-block speed and volume studies on Silver Springs Boulevard. The study found the vehicular operating speed on Silver Springs Boulevard to be between 38 km/h and 48 km/h and the average daily traffic volume of approximately 2,433 vehicles.

The operating speed, also known as the 85th percentile speed, is the speed at which 85 percent of vehicles travel at or below. The study findings were assessed against the City of Toronto's Traffic Calming Policy and it was found that Silver Springs Boulevard does not satisfy the installation criteria for traffic calming devices. More specifically, the recorded operating speed must be at least 10 km/h over the warranted 40 km/h speed limit.

The following table identifies the result of the studies:

Roadway	Speed Limit	Direction	85th percentile	Vehicle Volume	Warranted
Silver Springs Blvd Between Perthshire St and Revlis Cres (N)	40	Northbound	51 km/h	2,161	NO
		Southbound	47 km/h		
Silver Springs Blvd Between Revlis Cres (S) and Dancy Ave	40	Northbound	40 km/h	2,505	NO
		Southbound	39 km/h		
Silver Springs Blvd Rakewood Cres and Wayside Ave	40	Northbound	39 km/h	2,634	NO
		Southbound	39 km/h		

The warrants were not met based on the following criteria:

Speed: The operating speeds as noted above on each block between Perthshire Street and Wayside Avenue on Silver Springs Boulevard are less than the required minimum 10 km/h over the warranted speed limit to satisfy the traffic calming installation criteria. Therefore, the installation of traffic calming on Silver Springs Boulevard, between Perthshire Street and Wayside Avenue, is not warranted.

The attached technical summary entitled "Appendix A Table 1: Traffic Calming Warrant Criteria – Silver Springs Boulevard, outlines the results of our assessment.

30 km/h Speed Limit

Staff reviewed the feasibility of reducing the speed limit to 30 km/h on Silver Springs Boulevard. The City of Toronto's 30 km/h Speed Limit Policy allows 30 km/h speed limits on local and collector roads that abut schools.

The roadway environment warrant criteria dictates that road classification must be either local or collector, the pavement width must not be greater than 8.5 metres, the operating speed be no greater than 50 km/h and the daily traffic volume be no greater than 8,000 vehicles per day.

The 30 km/h warrant criteria was applied against Silver Springs Boulevard. However, given that Road Environment failed to satisfy the requirements, specifically due to the road width being 9.5 metres wide which is greater than the required 8.5 metres or less,

a 30 km/h speed limit is not recommended on Silver Springs Boulevard, between Perthshire Street and Wayside Avenue.

Collision Analysis

A review of Toronto Police Service collision records for a three-year period ending December 31, 2018, did not find any reported collisions attributed to speeding on Silver Springs Boulevard.

Alternate Recommendations

If, despite the findings above, the Scarborough Community Council determines that traffic calming would be beneficial, it may approve the following as to form:

1. Scarborough Community Council direct the Acting Director of Transportation Services, Traffic Management to request the City Clerk to poll eligible householders on Silver Springs Boulevard, between Perthshire Street and Wayside Avenue. The poll is to determine whether residents support the installation of traffic calming, in accordance with the City of Toronto Traffic Calming Policy.

2. Subject to favourable results of the poll:

a. Scarborough Community Council authorize the installation of traffic calming (speed humps) on Silver Springs Boulevard, between Perthshire Street and Wayside Avenue.

b. Scarborough Community Council direct the City Solicitor to prepare a by-law to alter the roadways of Silver Springs Boulevard, between Perthshire Street and Wayside Avenue, for traffic calming purposes, generally as shown on the location Plan, attached to the report entitled "Traffic Calming Review – Silver Springs Boulevard.

c. Scarborough Community Council reduce the speed limit from 40 km/h to 30 km/h on Silver Springs Boulevard, between Perthshire Street and Wayside Avenue.

The estimated cost of installing speed humps on Silver Springs Boulevard, between Perthshire Street and Wayside Avenue, is approximately \$28,000.00. Installation would be subject to availability in Transportation Services 2020 Capital Funding estimates and competing priorities.

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ATTACHMENTS

1. Attachment 1: Table 1: Traffic Calming Warrant Criteria – Silver Springs Boulevard
2. Attachment 2: 30 km/h Speed Limit Warrant – Silver Springs Boulevard
3. Location Plan: Traffic Calming Review and 30 km/h Speed Limit – Silver Springs Boulevard

Attachment 1: Table 1: Traffic Calming Warrant Criteria

Silver Springs Boulevard, between Perthshire Street and Wayside Avenue

All three of the following warrants must be achieved

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Warrant	Criterion	Requirement		Warrant Satisfied
Warrant 1 Petition	1.1 Petition	Petition signed by at least 25% of the households on the street and/or 10% multiple family rental dwellings		Yes
Warrant 2 Safety Criteria [all three criteria must be fulfilled to satisfy warrant]	2.1 Sidewalks	Are there continuous sidewalks on at least one side of street [both sides for collector of higher classification] OR On streets where no sidewalks exist, installation of sidewalks on at least one side must first be considered		Yes
	2.2 Road Grade	Road grade does not exceed 8% [Traffic calming measures must not be installed at or near these locations where grade exceeds 8%]		Yes
	2.3 Emergency Response	Emergency Services have noted that the impact of traffic calming, specifically speed humps, will not significantly affect service delivery		N/A
Warrant 3 Technical Requirement [all four criteria must be fulfilled to satisfy warrant]	3.1 Minimum Speed	The 85th percentile speed must be a minimum of 10 km/h over the warranted speed limit and the volume warrant [3.2] must be fulfilled*		No (38 - 48 km/h)
	3.2 Traffic Volumes	Local Road Traffic volume must be between 1,000 and 8,000 vehicles per day	Collector Road Traffic volumes must be between 2,500 and 8,000 vehicles per day	Yes (2500)
	3.3 Minimum Block Length	On streets where mid-block traffic calming measures are proposed, the minimum block length must exceed 120 metres		Yes
	3.4 Transit Service	Impacts on regularly scheduled Toronto Transit Service vehicles will not be significant [as determined in consultation with TTC staff]		N/A
Warranted [yes/no]				No

Attachment – 2: 30 km/h Speed Limit Warrant for Silver Springs Boulevard

30 km/h Speed Limit Warrant - Silver Springs Boulevard

- i. Implementation must be approved by Community Council.
- ii. 30 km/h speed limit can be implemented (without traffic calming) if either Warrants "B" and "C" are met **OR** "B" and "D" are met.
- iii. In situations where a road has existing scheduled transit service, staff will confirm that as a result of a speed limit reduction no significant impacts will be experienced by transit.

Warrant "A" – PETITION

Consideration of 30km/h speed limit on a street upon receipt of a petition signed by at least 25% of affected households (or 10% in the case of multiple family rental dwellings).

Warrants "B ", "C" and "D" will not be considered until Warrant "A" is satisfied.

ROAD ENVIRONMENT

Warrant "B" – ALL of the following criteria must be met

1. Local or Collector road	☒ Yes ☐ No
AND	
2. Pavement width less or equal to 8.5 metres	☐ Yes ☒ No
AND	
3. Operating speed 85 th percentile no greater than 50 km/h	☒ Yes ☐ No
AND	
4. Maximum traffic volume Local & Collector – less than 8,000 vehicles/day	☒ Yes ☐ No

SCHOOL AND CYCLING ENVIRONMENT

Warrant "C" – At least ONE of the following criteria must be met

1. Elementary or junior high school abuts the road - <i>(The 30 km/h maximum speed limit must extend at a minimum 150 metres beyond the boundary of school property and can be extended to include full road section)</i>	☒ Yes ☐ No
OR	
2. Improved parkland abuts the road that is contiguous to and used to gain access to an elementary or junior high school - <i>(The 30 km/h maximum speed limit must extend at a minimum 150 metres beyond the boundary of the parkland and can be extended to include full road section)</i>	☐ Yes ☒ No
OR	

3. Presence of cycling facilities identified by means of a contra-flow bicycle lane, mid-block sharrows or signed bicycle route

Yes / No

PEDESTRIAN AND TRAFFIC ENVIRONMENT

Warrant "D" – At least THREE of the following criteria must be met

1. Absence of continuous sidewalk on both sides of the road or major portion of the road

Yes / No

OR

2. 'Significant parking activity' that results in cars being parked most of the time on both sides of the road or parked on one side, and the pavement width is less than 6.5 metres

Yes / No

OR

3. 2 or more curves in short distance from each other (< 200 metres) with a safe operating speed less than 30 km/h

Yes / No

OR

4. Lack of sufficient safe stopping distance (65 metres) based on the operating speed of 40 km/h at two or more locations

Yes / No

OVERALL WARRANT SUMMARY

Warrants "B" and "C" met OR "B" and "D" met

Yes / No

Location Plan: Traffic Calming Review and 30 km/h Speed Limit – Silver Springs Boulevard

