

Traffic Calming Review - Bertrand Avenue, between Birchmount Road and Kennedy Road

Date: February 24, 2020
To: Scarborough Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 21 – Scarborough Centre

SUMMARY

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

In response to the Councillor's and residents' concerns regarding the speed of vehicles on Bertrand Avenue, Transportation staff reviewed the need for traffic calming on Bertrand Avenue, between Birchmount Road and Kennedy Road. Our assessment indicates the technical criteria as set out in the traffic calming policy has been satisfied on this street. Therefore, traffic calming should be installed on Bertrand Avenue, between Birchmount Road and Kennedy Road.

RECOMMENDATIONS

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

1. Scarborough Community Council request the City Clerk to poll eligible householders on Bertrand Avenue, between Birchmount Road and Kennedy Road, to determine whether residents support the installation of traffic calming (speed humps), 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 speed humps on Bertrand Avenue, between Birchmount Road and Kennedy Road; and

(b) Scarborough Community Council direct the City Solicitor to prepare a by-law to alter the roadway for the installation of eight speed humps on Bertrand Avenue, between Birchmount Road and Kennedy Road, generally as shown on the Location

Map attached as Attachment 2 to this report entitled "Traffic Calming Review - Bertrand Avenue, between Birchmount Road and Kennedy Road".

3. Subject to approval of Recommendations 1 and 2 above, Scarborough Community Council reduce the speed limit from 40 km/h to 30 km/h on Bertrand Avenue, between Birchmount Road and Kennedy Road, in conjunction with the installation of speed humps.

FINANCIAL IMPACT

The estimated cost of installing the speed humps on Bertrand Avenue, between Birchmount Road and Kennedy Road is approximately \$24,000. The installation of speed humps on the subject roadway would be subject to availability in Transportation Services 2021 Capital Budget.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Existing Conditions

The following characteristics describe Bertrand Avenue, between Birchmount Road and Kennedy Road:

- Bertrand Avenue is a two-way collector road.
- The pavement width is approximately 8.5 metres and the regulatory speed limit on Bertrand Avenue is 40 km/h.
- There are sidewalks along both sides of Bertrand Avenue.
- The land use in the surrounding area consists mainly of single family residential dwellings and an elementary public school and park area.
- There is no TTC service on Bertrand Avenue.

Analysis

Traffic Calming Petition

A petition received through the Councillor's office on or about the time the Service Request was initiated, March 2019, showing 58 (77%) residents signing/support the initial review of for Speed humps on Bertrand Avenue. The following table below shows these details.

Location	No Response	Support	Total # of Residents
Bertrand Avenue	17	58 (77%)	75

Traffic Calming Warrants

Transportation Services conducted mid-block speed and volume studies on Bertrand Avenue, between Birchmount Road and Kennedy Road during a mid-week period in April 2019. The study found the vehicular operating speed to be between 48 km/h and 53 km/h and the average daily traffic volume of approximately 6,012 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 Bertrand Avenue does largely 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 or just at the required threshold.

To identify existing traffic conditions on Bertrand Avenue, between Birchmount Road and Kennedy Road, 24-hour vehicle volume and speed studies were conducted. The following table identifies the results of these studies.

Bertrand Avenue	Speed Limit	Direction	85th percentile	Vehicle Volume
77 Bertrand Avenue, between Birchmount Road and Rosemount Drive	40 km/h	Eastbound	48 km/h	6,012
		Westbound	51 km/h	
124 Bertrand Avenue, between Rosemount Drive and Ionview Road	40 km/h	Eastbound	48 km/h	5,253
		Westbound	50 km/h	
158 Bertrand Avenue, between Ionview Road and Kennedy Road	40 km/h	Eastbound	48 km/h	4,934
		Westbound	53 km/h	

The attachment entitled "Attachment 1: Traffic Calming Warrant Criteria - Bertrand Avenue between Birchmount Road and Kennedy Road", summarizes the results of our assessment.

A review of all speed and volume studies indicates that Warrant 3 - Technical Requirement and - 3.1 minimum speed are met on Bertrand Avenue. Therefore, the installation of traffic calming on Bertrand Avenue, between Birchmount Road and Kennedy Road is warranted.

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 Bertrand Avenue, between Birchmount Road and Kennedy Road.

Conduct Poll

The City of Toronto's traffic calming policy stipulates that residents who would be directly affected by installing speed humps be formally polled. Should the Scarborough Community Council approve the recommendations outlined above, Transportation Services would request a poll of eligible residents on Bertrand Avenue, between Birchmount Road and Kennedy Road. If the poll supports the speed humps, Transportation Services would schedule installation based on relative need, competing priorities and funding availability.

Relative Priority and Other Impacts

Relative need and priority of speed hump installation is based on technical assessment of traffic volume, vehicle speed percentages, speed related collisions, and the presence of schools, parks, seniors' residences and bicycle routes. To assess this relative priority, Bertrand Avenue has a traffic calming ranking calculation of 30 out of a possible value of 100.

No alterations to parking regulations would be required, nor would the number of parking spaces be affected by the installation of speed humps. Installation of speed humps will have a minimal effect on winter services, street cleaning and garbage collection.

However, speed humps will result in slower operating speeds for all vehicles, including emergency service vehicles, and could result in increased response times in the event of an emergency.

Emergency Service Comments

Consultation with emergency services (Police, Fire and Paramedic Services) is required to ensure that the design and layout of the traffic calming proposal does not unduly affect their operations.

The Ward Councillor has been advised of the recommendations of this staff report.

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ATTACHMENTS

1. Attachment 1 - Table 1: Traffic Calming Warrant Criteria - Bertrand Avenue between Birchmount Road and Kennedy Road.
2. Attachment 2 - Location Map -Traffic Calming Review - Bertrand Avenue between Birchmount Road and Kennedy Road.

Attachment 1 - Table 1: Traffic Calming Warrant Criteria - Bertrand Avenue between Birchmount Road and Kennedy Road.

All three of the following warrants must be achieved

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*		Yes (53 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 (6,012 vpd)
	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

Attachment 2 - Location Map -Traffic Calming Review - Bertrand Avenue between Birchmount Road and Kennedy Road.

