

## **Medland Street – Traffic Calming**

<b>Date:</b>	January 11, 2010
<b>To:</b>	Etobicoke York Community Council
<b>From:</b>	Director, Transportation Services, Etobicoke York District
<b>Wards:</b>	Ward 13 – Parkdale-High Park
<b>Reference Number:</b>	p:\2010\Cluster B\TRA\EtobicokeYork\eycc100024-to

### **SUMMARY**

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

This report summarises the results of an investigation into installing speed humps on Medland Street, between Dundas Street West and Annette Street. The staff review shows that the criteria for installing speed humps are not satisfied.

### **RECOMMENDATIONS**

**Transportation Services recommends to Etobicoke York Community Council that:**

1. Traffic calming not be installed on Medland Street, between Dundas Street West and Annette Street.

#### **Financial Impact**

Adopting the above-noted recommendation does not result in any financial impact; however, if Community Council decides to approve installing traffic calming devices on this section of Medland Street, the following financial impact will result:

1. The estimated cost for installing approximately two speed humps will be \$6,000.00. This can be accommodated within funds allocated by City Council as part of the Transportation Capital Budget, subject to competing priorities and funding availability.

## ISSUE BACKGROUND

Councillor Bill Saundercook, on behalf of area residents, asked Transportation staff to review installing physical traffic calming measures on Medland Street, between Dundas Street West and Annette Street, to address concerns with current traffic operations, particularly a concern about taxis and delivery vehicles “short cutting” through the neighbourhood.

## COMMENTS

Medland Street is a north-south local road that operates both ways between Dundas Street West and Annette Street, and has a pavement width of 7.6 metres. Curb side sidewalks exist on both sides of the road. The posted speed limit is 40 km/h; however, this is not considered a warranted speed limit as it does not meet the City’s existing 40km/h speed limit warrant. Parking is prohibited on the east side of the street at all times with a one hour limit on a portion of the west side.

We assessed the subject location according to the City of Toronto’s Traffic Calming Policy. The principal criteria for installing of speed humps are vehicle operating speeds and volume. Other environmental factors are also examined, such as road width, pedestrian facilities and grade. The proposal was evaluated under each of the three criteria (Warrants 1, 2 and 3), with the results summarized in Appendix A.

Based on our assessment, Medland Street does not satisfy Warrant 3.1 “Minimum Speed” which is required to satisfy the entire warrant. The following table summarises traffic volume and speed data:

Location: Medland Avenue, between Dundas St W and Annette St						
Count Date: 30 September 2009						
Time Period	Northbound			Southbound		
September 30, 2009	Traffic Volume (Veh/Hour)	85 <sup>th</sup> %-tile Speed (km/h)	10 km/h Pace (km/h)	Traffic Volume (Veh/Hour)	85 <sup>th</sup> %-tile Speed (km/h)	10 km/h Pace (km/h)
a.m. Peak Hour	150	45		55	52	
p.m. Peak Hour	61	48		122	45	
Total 24 Hour	790	47	36-45	882	50	36-45

The 85<sup>th</sup> percentile speed and 10 km/h pace speed are statistical measures of free-flow vehicle operating speed. The 85<sup>th</sup> percentile speed is the vehicle operating speed at or below which 85 percent of all traffic is moving. Studies show that crash rates are lowest at or around the 85<sup>th</sup> percentile speed. The 10 km/h pace speed represents the speed range containing the highest number of speed observations.

The combined 85<sup>th</sup> percentile vehicle speed recorded on Medland Street, on a typical weekday under prevailing lighting and road surface conditions, is 49 km/h. This does not achieve 10km/h over the warranted speed limit criteria described in Warrant 3.1, and does not suggest a significant speeding problem. Accordingly, we cannot recommend

installing of speed humps on Medland Street between Dundas Street West and Annette Street.

Institute of Transportation Engineer's data show that while speed humps typically result in a 7km/h – 10km/h reduction in vehicle operating speeds, they do not appear to be particularly effective at reducing traffic volume. Based on our experience, speeds humps are unlikely to reduce the number of taxis or delivery vehicles on Medland Street, or to result in any substantial reduction in vehicle traffic volumes without diverting traffic to neighbouring local streets.

Notwithstanding our recommendation, if Etobicoke York Community Council decides to proceed with installing speed humps on Medland Street, we recommend that:

1. The City Clerk (Polling Registry Services) survey eligible householders in English or any other language specified by Community Council, on Medland Street, between Dundas Street West and Annette Street to determine if property owners/occupants support the installation, according to the City of Toronto Traffic Calming Policy.
2. Subject to favourable results of the survey;
  - a. The City Solicitor prepare a by-law to alter sections of the road on Medland Street, between Dundas Street West and Annette Street, for traffic calming purposes, generally as shown on the attached drawing EY10-001, dated January 2010, and circulated to residents during the polling process.
  - b. Transportation Services take the necessary actions to reduce the speed limit from 40 km/h to 30 km/h on Medland Street, between Dundas Street West and Annette Street, when the speed humps are installed.

Installing 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.

The current City of Toronto Traffic Calming Policy requires that the City Clerk (Polling Registry Services) formally survey property owners/occupants who are directly affected by installing speed humps on this section of Medland Street. Under the policy, the City Clerk must receive a minimum response rate of 51 percent, of which at least 60 percent of respondents must favour installing speed humps.

Subject to approval by Community Council, according to the recommendations indicated above, the City Clerk will survey property owners/occupants and report the results to Etobicoke York Community Council. If the survey supports installing speed humps on Medland Street, between Dundas Street West and Annette Street, Transportation Services staff will schedule their installation based on relative need and competing priorities.

Relative need (and to prioritize installing speed humps) is based on traffic volume, vehicle speed percentages, speed related crashes, and the presence of schools, parks, seniors residences or bicycle routes. Based on this technical assessment, Medland Street scored 21 ranking points out of a possible 100.

Consultation with emergency services (Police, Fire and Emergency Medical Services) is required in order to ensure that the design and layout of a traffic calming proposal does not unduly affect their operations. Although we generally advise emergency services of our intentions, we do not always receive a formal response. However, Toronto Fire Services provides the following general statement regarding speed hump installation:

“...Toronto Fire Service is supportive of initiatives that improve the life safety of our citizens. Our concern is that the physical calming measures being proposed may negatively impact emergency response to the area.

The vertical restrictions imposed by speed humps have a much greater affect on large fire vehicles than smaller passenger vehicles. Response time increases with every obstacle a fire vehicle encounters en route from the fire station to the incident. Although the increase at each hump may only be seconds, the cumulative effect can be a significant amount of time that could result in increased property damage, unnecessary injury or loss of life.

Speed humps are generally hard on large, heavy vehicles (fire vehicles) and increase the potential to suffer mechanical damage. This in turn can lead to a vehicle being placed out of service for considerable periods of time. Aside from the costs associated with repairs, there is a decrease in the resources available to respond to other emergency situations.”

## **CONTACT**

Larysa Sereda, Engineering Technician Technologist, Etobicoke York District  
Phone: 416-394-8435; Fax: 416-394-8942  
Email: [lsereda@toronto.ca](mailto:lsereda@toronto.ca)  
AFS11235

## **SIGNATURE**

---

Allan Smithies, Acting Director  
Transportation Services - Etobicoke York District

## **ATTACHMENTS**

Appendix A: Traffic Calming Warrant Criteria  
Attachment 1: Map  
Attachment 2: Aerial Photo

## Appendix A

### Traffic Calming Warrant Criteria Medland Street, between Dundas Street West and Annette Street

Warrant	Criterion	Requirement	Met/Not Met
<b>Warrant 1</b> Petition	1.1 Petition	A petition requesting traffic calming must be signed by at least 25% of households on the street. <b>OR</b> A direct request from the Ward Councillor.  <b>Warrants #2 and #3 will not be considered until Warrant #1 is satisfied.</b>	<b>Met</b> – Direct request from Ward Councillor, along with petition.
Impacts to Adjacent Streets		No significant traffic impacts on adjacent streets	<b>Met</b> – There should be no traffic spill-over to other streets given the configuration of streets in the area.
<b>Warrant 2</b> Safety Requirements  (all three criteria must be fulfilled to satisfy this Warrant)	2.1 sidewalks	Continuous sidewalks on at least one side of the street (both sides for collector streets or higher classification). <b>OR</b> Where there are no sidewalks, the installation of sidewalk on at least one side of the street must have first been considered	<b>Met</b> – Continuous sidewalk on both sides of Medland Street.
	2.2 Road Grade	Road grade 5% or less <b>OR</b> Between 5% and 8% road grade may be considered. Investigation must determine installation to be safe.	<b>Met</b> – Road grade of Medland Street is less than 8%.
	2.3 Emergency Response	No significant Impacts on Emergency Services (as determined in consultation with Emergency Services (Fire, Ambulance and Police) staff.	<b>Met</b> – General objections from Toronto Fire, Ambulance and Police.
<b>Warrant 3</b> Technical Requirements  (all four criteria must be fulfilled to satisfy this warrant)	3.1 Minimum Speed	85 <sup>th</sup> percentile speed is a minimum of 10 km/h (but less than 15 km/h) over the warranted 40 km/h speed limit, and the traffic volume requirements of Warrant 3.2 must be fulfilled. <b>OR</b> On streets where the 85 <sup>th</sup> percentile speed exceeds a warranted 40 km/h speed limit by a minimum of 15 km/h, there is no minimum volume required in warrant 3.2.	<b>Not Met</b> – Speed studies show 85 <sup>th</sup> percentile as 49 km/h for two-way traffic.
	3.2 Min. and Max. Traffic Volume	Local Roads Traffic volume between 1,000 Veh/day and 8,000 Veh/day	Collector Roads Traffic volume between 2,500 Veh/day and 8,000 Veh/day
	3.3 Minimum Street Segment Length between stop controls	Street segment length must exceed 120 meters between stop controls (signals or stop signs)	<b>Met</b> – Street segment exceeds 120 metres with a 200 m segment length.
	3.4 Transit Service	Impacts on regularly scheduled Toronto Transit Commission (TTC) services will not be significant (as determined in consultation with TTC staff)	<b>Met</b> – No TTC service.