

Speed Limit Review – Warden Avenue between Kingston Road and Danforth Avenue

Date: March 14, 2018
To: Scarborough Community Council
From: Director, Transportation Services, Scarborough District
Wards: Ward 36 – Scarborough Southwest

SUMMARY

This report provides the results of a speed limit review conducted on Warden Avenue, between Kingston Road and Danforth Avenue. The analysis concludes that a 40 km/h speed limit is not technically justified on this section of Warden Avenue. However, engineering judgement dictates that a 40 km/h limit would increase safety along the subject section of road.

The Warden Avenue consists primarily of single family dwellings along this section of road where there are numerous pedestrian generators including nearby schools, several places of worship, public library and commercial plaza's. Reduced speed limit would increase the overall safety of pedestrians, cyclists and other traffic utilizing this section of Warden Avenue.

RECOMMENDATIONS

The Director, Transportation Services, Scarborough District recommends that:

1. City Council reduce the speed limit from 50 km/h to 40 km/h on Warden Avenue, between Kingston Road and Danforth Avenue.

FINANCIAL IMPACT

The financial cost of installing the recommended 40 km/h signs is approximately \$4,000.00. The funding for the signs is available in the Transportation Services Division's 2018 Operating Budget, within Cost Centre TP0397.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

As a result of a request from Councillor Gary Crawford, Transportation Services staff reviewed the traffic conditions and operations of this roadway to determine whether a reduction of the speed limit is justified on the subject section of Warden Avenue.

The following characteristics describe Warden Avenue, between Kingston Road and Danforth Avenue:

- Warden Avenue is a two lane minor arterial roadway north of Kingston Road, and a four lane roadway between Clonmore Drive/Hollis Avenue and Danforth Avenue.
- The land uses on this section of roadway include single family residential homes, small retail plazas, library, and a gas station. There are sidewalks on both sides of Warden Avenue. The pavement width is approximately 8.5 metres (north of Kingston Road) and 15 metres (south of Danforth Avenue) respectively.
- Based on the speed study results the 85th percentile speed (the speed at or below which 85% of the motorists travel) is 52 km/h on this section of Warden Avenue.
- A Pedestrian Crossover is located on Warden Avenue on the south side of Freeman Street.
- The recorded (4,842 to 5,750) vehicles per day volume is lower than the typical values for a minor arterial roadway classification.

Analysis

Pedestrian Collision History - Warden Avenue, Kingston Road to Danforth Ave

There were two pedestrian collisions which occurred in the past five year period ending December 31, 2017. A four year old child was hit crossing the Warden Avenue at the pedestrian crossover located south of Freeman Avenue. An adult pedestrian were also hit crossing Warden Avenue at Danforth Avenue.

Warden Avenue - Automatic 24-Hour Speed Study

Study Dates: Thursday, November 30, 2017

Speed Limit: 50 Km/h.

Roadway/ Location	Speed Ranges – Km/h					Total Vehicles 24 Hours	85th Percentile Speed*
	1 - 40	41 - 50	51 - 55	56 - 60	> 60		
1. In the vicinity of Dodge Rd. and Lynn Rd.	1449	2544	718	272	132	5,115	54 km/h
2. In the vicinity of lonson Blvd and Dodge Rd.	1765	2421	438	156	62	4,842	50 km/h
3. Warden Ave north of lonson Blvd.	1806	2627	569	211	74	5,287	51 km/h
4. Between Kenny Ave. and Freeman St.	2199	2489	676	287	161	5,812	53 km/h
5. Between Parker Ave and Kenny Ave.	1235	2856	881	357	168	5,497	54 km/h
6. Between Hollis Ave. and Parker Ave.	3008	2179	377	115	71	5,750	49 km/h

*The 85th percentile speed is the speed at or below which the majority of motorists

40 km/h Speed Limit Warrant

In order for a 40 km/h speed limit to be warranted, various traffic conditions must be assessed such as 85th percentile speed, pedestrian and bicycle related factors, collisions, roadway geometry and operational related factors. The investigation indicates that the overall 85th percentile speed is 52 km/h on the subject section of roadway and therefore a 40 km/h speed limit is not technically justified. However due to the road environment on this section of Warden Avenue, engineering judgement indicates that a 40 km/h speed limit should be implemented.

There are monolithic curbs on this portion of Warden Avenue. Therefore, pedestrians are close to the active traffics lanes, with no boulevards. The majority of the roadway is two-lanes and 8.5 metres wide, with single family residential houses along both sides of Warden Avenue which suggests that motorists could expect a 40 km/h speed limit.

Should the speed limit be reduced, selective enforcement will be required by Toronto Police Services to ensure compliance.

CONTACT

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SIGNATURE

Myles Currie, B.A.
Director, Transportation Services, Scarborough District

JE:cr

sc1830
D17-8595111

ATTACHMENTS

1. Location Plan (Speed Limit Review – Warden Avenue between Kingston Road and Danforth Avenue).

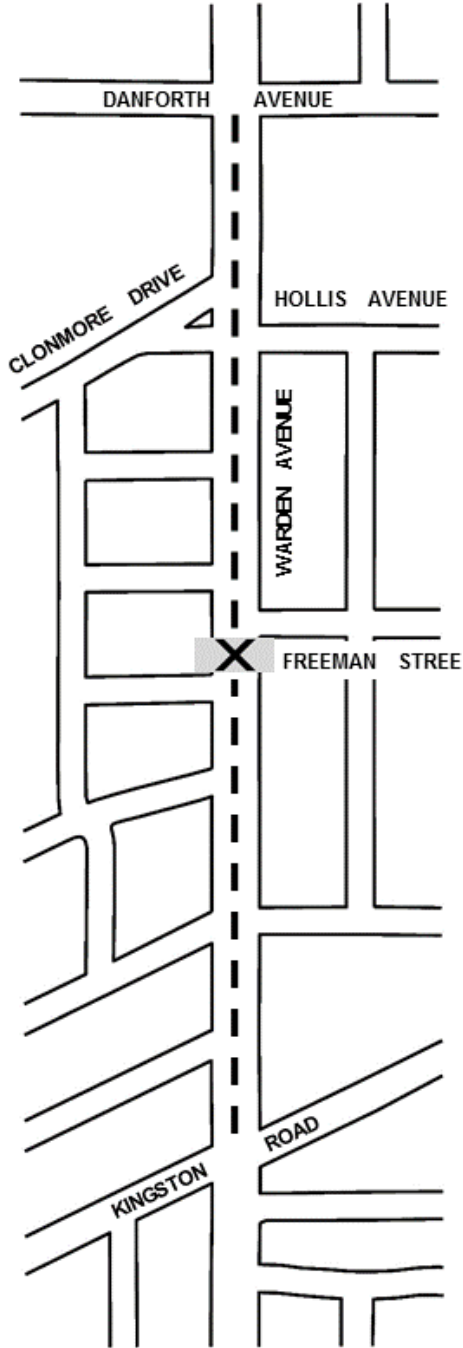
LEGEND



PROPOSED 40 km/h
SPEED LIMIT



EXISTING PEDESTRIAN
CROSSOVER



LOCATION MAP



TRANSPORTATION SERVICES

TRAFFIC OPERATIONS
Scarborough District

SCALE:	N.T.S.
DATE:	FEB., 2018
DRAFTING:	O.K.

**40 km/h SPEED LIMIT
WARDEN AVENUE BETWEEN
KINGSTON ROAD AND DANFORTH AVENUE**

FILE NUMBER: D17-8595111	
ATTACHMENT 1	WARD 35/36