



STAFF REPORT ACTION REQUIRED

Regulations to deter through traffic movement – Heath Street West, between Spadina Road and Avenue Road

Date:	February 16, 2009
To:	Toronto and East York Community Council
From:	Director, Transportation Services Toronto and East York District
Wards:	St. Paul's, Wards 21 and 22
Reference Number:	Ts09026te.top.doc

SUMMARY

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

Transportation Services is requesting approval from Toronto and East York Community Council to prohibit:

- straight-eastbound traffic movement, from 7:00 a.m. to 9:00 a.m., Monday to Friday on Heath Street West, at Spadina Road; and
- straight-westbound traffic movement, from 4:00 p.m. to 6:00 p.m., Monday to Friday on Heath Street West, at Avenue Road.

These regulations could reduce traffic volume on Heath Street West by deterring cut-through traffic, between Spadina Road and Avenue Road during rush hour periods. In turn, this might also reduce traffic volumes on Heath Street West, east of Avenue Road.

It is desirable to deter commuter traffic from using local neighbourhood streets wherever feasible. However, the regulations outlined in this report could result in increased traffic volume on other local streets in the area.

RECOMMENDATIONS

Transportation Services recommends that Toronto and East York Community Council:

1. Prohibit straight-through movement from 7:00 a.m. to 9:00 a.m., Monday to Friday, except public holidays (bicycles excepted) by eastbound traffic on Heath Street West, at Spadina Road.
2. Prohibit straight-through movement from 4:00 p.m. to 6:00 p.m., Monday to Friday, except public holidays (bicycles excepted) by westbound traffic on Heath Street West, at Avenue Road.

Financial Impact

Type of funding	Source of funds	Amount
Available within current budget	Toronto Transportation Services interim 2009 Operating Budget	\$1,000

ISSUE BACKGROUND

At the request of Councillor Michael Walker, following consultation with local residents, Transportation Services is reporting on implementing through traffic restrictions at the intersections of Heath Street West/Spadina Road, Heath Street West/Avenue Road, and turn prohibitions at the intersections of Spadina Avenue/Montclair Avenue and Spadina Avenue/Shorncliffe Avenue. The suggested turn restrictions on Spadina Road require approval by City Council and are the subject of a separate report. The intent of these regulations is to reduce the volume of cut-through traffic on Heath Street West, between Spadina Road and Avenue Road during the morning and afternoon peak periods.

COMMENTS

Road Characteristics

Spadina Road:

Spadina Road is a north-south, minor arterial road with a maximum speed limit of 40 km/h and a daily two-way traffic volume of about 17,000 vehicles. North/south transit service is provided by the “33-Forest Hill” bus. There are near-side transit stops at Heath Street West. The intersection of Spadina Road/Heath Street West is controlled by traffic signals.

Avenue Road:

Avenue Road is a north-south major arterial road with a maximum speed limit of 50 km/h and a daily two-way traffic volume of about 36,000 vehicles. Northbound left-turns are prohibited at all times and southbound left-turns are prohibited from 7:00 a.m. to 9:00 a.m., Monday to Friday at Avenue Road and Heath Street West. North/south transit service is provided by the “5-Avenue Road” bus. There are near-side transit stops at

Heath Street West. The intersection of Avenue Road and Heath Street West is controlled by traffic signals.

Heath Street West:

Heath Street West, between Spadina Road and Avenue Road, is an east-west, collector road that operates two-way with a maximum speed limit of 40 km/h. The pavement width is about 7.5 metres and the daily (two-way) traffic volume is about 7,000 vehicles. There are no exclusive turning lanes provided on Heath Street West at either Spadina Road, or at Avenue Road.

Traffic volume data

In 2008, staff undertook traffic counts at the intersections of Spadina Road and Heath Street West and Avenue Road and Heath Street West during the busiest eight-hour period of a typical weekday. Directional traffic movements were summarized into two-hour periods. The traffic volumes are shown in the following tables and staff's analysis is outlined below each.

Heath Street West at Spadina Road:

Time Period	Northbound Right-Turn Volume	Southbound Left-Turn Volume	Eastbound Through movements	Eastbound Total Volume	Westbound Through movements	Westbound Total Volume
7:30 a.m.- 9:30 a.m.	75 (14%)	61 (12%)	391 (74%)	527	121(56%)	217
10:00 a.m.– 12:00 p.m.	67 (13%)	80 (15%)	389 (73%)	536	168 (57%)	297
1:00 p.m. – 3:00 p.m.	101 (26%)	68 (18%)	210 (55%)	379	168 (54%)	313
4:00 p.m. – 6:00 p.m.	81 (35%)	51 (22%)	97 (42%)	229	394 (74%)	530
Totals	324 (19%)	260 (16%)	1087 (65%)	1671	851 (63%)	1,357

The majority of vehicles entering Heath Street West, east of Spadina Road, do so by way of eastbound straight-through movements.

The 2008 traffic count was compared with a traffic count taken in 2005 at the Heath/Spadina intersection. The southbound left-turns onto Heath Street West and straight through traffic volumes are similar in both years. However, northbound right-turns from Spadina Road onto Heath Street West have more than tripled since 2005 (from 101 to 324 vehicles, over the eight-hour survey period). This increase is equally proportional in each two-hour counting period. Delays to traffic on St. Clair Avenue West due to construction at Avenue Road might have contributed to motorists changing their routing.

Traffic volume entering Heath Street West, east of Spadina Road is higher during the morning periods than at any other time of the day. About 74% of the vehicles entering Heath Street West, east of Spadina Road originate from Heath Street West, west of Spadina Road. The opposite traffic flow pattern occurs during the afternoon rush period, from 4:00 p.m. and 6:00 p.m. when about 74% of the westbound traffic approaching the intersections crosses Spadina Road and travels further west.

Heath Street West at Avenue Road:

Time Period	Eastbound Right-Turn Volume	Eastbound Left-Turn Volume	Eastbound Through movements	Eastbound Total Volume	Westbound Through movements	Westbound Total Volume
7:30 a.m. - 9:30 a.m.	174 (23%)	52 (7%)	515 (70%)	741	152 (50%)	304
10:00 a.m. – 12:00 p.m.	115 (28%)	85 (21%)	210 (51%)	410	215 (60%)	360
1:00 p.m. – 3:00 p.m.	89 (26%)	69 (18%)	178 (55%)	336	237 (64%)	370
4:00 p.m. – 6:00 p.m.	100 (26%)	96 (25%)	182 (48%)	378	421 (68%)	617
Totals	478 (26%)	302 (16%)	1085 (58%)	1,865	1025 (62%)	1,651

About 58% of the eastbound traffic approaching the intersection over the 8-hour period crosses Avenue Road and continues further east on Heath Street West. This suggests motorists are using Heath Street West as an alternate route to get to Yonge Street and avoid congestion on St. Clair Avenue West. During the 7:30 a.m. to 9:30 a.m. period about 70% of the eastbound movements at this intersection are through movements. The opposite traffic flow pattern occurs during the afternoon rush period from 4:00 p.m. and 6:00 p.m. when about 68% of the westbound traffic approaching the intersection crosses Avenue Road and travels further west.

Comparing the 2008 data with traffic counts taken in 2003 and again in 2007 at Heath Street West and Avenue Road, indicate eastbound and westbound traffic volume has remained relatively consistent over the past 5 years.

Residents’ concerns/suggestions

Residents of Heath Street West have expressed concern about noise, pollution, difficulty getting in/out of driveways, excessive cut-through traffic and generally high volume of traffic on Heath Street West. They want the City to implement traffic regulations that will deter the amount of cut-through traffic on their street.

Review/Analysis

The volume of traffic (7,000 a day) on Heath Street West, between Spadina Road and Avenue Road is in range expected on a collector road. However, the 7.5-metre pavement width of Heath Street West is narrower than many collector roads. Queuing both east and west of Avenue Road and Spadina Road is present throughout the rush hour periods.

This increases traffic congestion, air pollution in the area, and provides few gaps in traffic flow. Based on the travel patterns observed, cut-through traffic from Spadina Road to Avenue Road and from as far west as Bathurst Street and as far east as Yonge Street, is significant. Prohibiting straight-through movement from 7:00 a.m. to 9:00 a.m., Monday to Friday by eastbound traffic on Heath Street West, at Spadina Road and straight-through movement from 4:00 p.m. to 6:00 p.m., Monday to Friday by westbound traffic on Heath Street West, at Avenue Road could deter cut-through traffic and reduce traffic volume on the section of Heath Street West, between Spadina Road and Avenue Road.

Depending on whether or not motorists adjust their travel route, turning movements at both Spadina Avenue and Avenue Road could increase by over 200% at each intersection. Also, given the width of Heath Street West, increased turn demand will cause increased queuing by eastbound traffic, west of Spadina Road and eastbound traffic, east of Avenue Road when the straight-through prohibitions are in effect. The length of queuing and delays experienced will depend on whether or not turn demand exceeds the operational capabilities of these signalized intersections. This is likely to be the case unless a majority of motorists divert to other streets north or south of Heath Street West.

Advantages/Disadvantages

The advantages and disadvantages of the straight-through and turn prohibitions noted above are as follows.

- Could discourage cut-through traffic and reduce traffic volume on Heath Street West during rush hour periods, resulting in less delay, congestion and pollution.
- Improves opportunity for residents entering/exiting their driveways on Heath Street West.
- Provides a safer environment for pedestrians crossing or walking along Heath Street West.
- Could encourage motorists to use St. Clair Avenue West as their primary east/west route.

- Residents of Heath Street West and other local streets intersecting Heath Street West could experience inconvenience since they too are subject to the regulations.
- Other residential streets in the area such as Lonsdale Road and Kilbarry Road might inherit some displaced eastbound/westbound traffic from Heath Street West.
- Increased turning movements at Spadina Road/Heath Street West and Avenue Road/Heath Street West will increase conflict between opposing directions of vehicular traffic and pedestrians and possibly result in longer queuing west of Spadina Road and east of Avenue Road.
- The regulations will require strict enforcement to be effective.

Prohibiting straight-eastbound traffic, from 7:00 a.m. to 9:00 a.m., Monday to Friday on Heath Street West, at Spadina Road impacts traffic approaching from west of Spadina Road, including residents of Heath Street West, between Bathurst Street and Spadina Road. The section of Heath Street West, west of Spadina Road is in Ward 21 St. Paul's. Councillor Joe Mihevc has been consulted in regard to this proposal.

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SIGNATURE

Peter Noehammer, P.Eng.
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LIST OF ATTACHMENTS

Drawing No. 421F-9563, dated February, 2009.

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