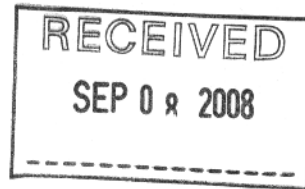


Richard Butts, Deputy City Manager

Gary Welsh, P. Eng.
General Manager
Transportation Services Division**Reply to:** Randy Hillis
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August 28, 2008

✓ Councillor Michael Walker
St. Paul's, Ward 22
Suite B26, City Hall
Toronto, ON M5H 2N2

Dear Councillor Walker:

Re: Heath Street West at Spadina Road and Heath Street West at Avenue Road Road – Suggested turn and entry restrictions

Further to e-mail communications of February 4, 2008, from Pierre D'Aoust of your office and January 17, 2008, from Ms. Jennifer Kennedy, President of the Forest Hill Homeowners Association, and several discussions with your staff regarding the above, we have reviewed the feasibility of introducing various turn/through restrictions at the subject intersections.

Our findings and recommendations based on our investigation of the subject intersections are as follows

Existing conditions

The intersection of Spadina Road and Heath Street West is controlled by traffic signals. Spadina Road is a north-south, minor arterial roadway with a maximum speed limit of 40 km/h and a daily two-way traffic volume of approximately 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 Avenue Road and Heath Street West is controlled by traffic signals. Avenue Road is a north-south major arterial roadway with a maximum speed limit of 50 km/h and daily two-way traffic volume of approximately 36,000 vehicles. Northbound left-turns are prohibited at all times, from Avenue Road onto Heath Street West. Southbound left-turns are prohibited from 7:00 a.m. to 9:00 a.m., Monday to Friday, from Avenue Road onto Heath Street West. North/south transit service is provided by the "5-Avenue Road" bus and there are near-side transit stops at Heath Street West.

Heath Street West, between Spadina Road and Avenue Road, is an east-west, collector roadway operating two-way with a maximum speed limit of 40 km/h and a daily two-way traffic volume of approximately 7,000 vehicles. There are no exclusive turning lanes provided on Heath Street West at either Spadina Road or at Avenue Road.

Heath Street West and Spadina Road – Movement Analysis

To determine if prohibiting either southbound left-turns or northbound right-turns from Spadina Road onto Heath Street West and/or prohibiting eastbound through movements from Heath Street West, west of Spadina Road onto the section of Heath Street West, east of Spadina Road is technically justified, we undertook a directional movement count at this intersection during the busiest 8-hour period of a typical weekday. Since no time periods were suggested for potential movement restrictions, we summarized the traffic volumes directionally, in two-hour periods. The traffic movements are shown in the table on the following page.

Time Period	Northbound Right-Turn Volume	Southbound Left-Turn Volume	Eastbound Through movements	Eastbound Total Volume	Westbound Total Volume
7:30 a.m.- 9:30 a.m.	75 (14%)	61 (12%)	391 (74%)	527	217
10:00 a.m.–12:00 p.m.	67 (13%)	80 (15%)	389 (73%)	536	297
1:00 p.m. – 3:00 p.m.	101 (26%)	68 (18%)	210 (55%)	379	313
4:00 p.m. – 6:00 p.m.	81 (35%)	51 (22%)	97 (42%)	229	530
Totals	324 (19%)	260 (16%)	1,087 (65%)	1,671	1,357

It is evident that the majority of traffic (65%) entered Heath Street West, east of Spadina Road, from the westerly leg of the intersection (eastbound straight-through movement).

Comparing this 2008 data with traffic counts conducted in 2005 at the intersection of Heath Street West and Spadina Road, showed that southbound left-turn volumes and through volumes are relatively unchanged. However, northbound right-turn volume from Spadina Road onto Heath Street West has more than tripled since 2005 (from 101 vehicles to 324 vehicles, over the eight-hour daytime period). The relative increase in northbound right-turns is comparable in each of the 2-hour counted periods.

In summary, traffic volumes entering Heath Street West, east of Spadina Road are highest during the morning peak/off-peak periods. Approximately 75% of the vehicles entering the east leg of Heath Street West during the a.m. 4-hour period come from the west leg of Heath Street West. Conversely, the opposite traffic flow pattern occurs during the afternoon rush period, from 4:00 p.m. and 6:00 p.m., when approximately 74% of the westbound traffic approaching Spadina Road continues west on Heath Street West towards Bathurst Street.

If movement restrictions are implemented at this intersection the most likely alternate routes for traffic displaced by the introduction of a northbound right-turn, a southbound left-turn, or an eastbound straight-through prohibition will be paralleling local roads Lonsdale Road and possibly Kilbarry Road, and roads that link with Heath Street West such as Shorncliffe Avenue/Parkwood Avenue or Montclair Avenue/Parkwood Avenue. These links would allow motorists to circumvent the movement restrictions and get back to Heath Street West. Some motorists may opt to use Spadina Road southbound to St. Clair Avenue West. However, traffic congestion on Spadina Road makes this practice less likely.

Any turn or through movement prohibition introduced at the intersection of Spadina Road and Heath Street West will not eliminate demand by motorists to travel eastbound from Spadina Road towards Avenue Road and will result in increased traffic flow on adjacent roadways, including Lonsdale Road, which already has a daily two-way traffic volume of approximately 5,800 vehicles.

Heath Street West and Avenue Road – Movement Analysis

To determine if prohibiting eastbound left-turns from Heath Street West onto Avenue Road is justified, we undertook a turning movement count at this intersection during the busiest eight-hour period of a typical weekday. Again no time periods were specified for the requested prohibition, so we summarized the traffic volumes directionally, in two-hour periods. The traffic movements are shown in the following table.

Time Period	Eastbound Right-Turn Volume	Eastbound Left-Turn Volume	Eastbound Through movements	Eastbound Total Volume	Westbound Total Volume
7:30 a.m.- 9:30 a.m.	174 (23%)	52 (7%)	515 (70%)	741	304
10:00 a.m.–12:00 p.m.	115 (28%)	85 (21%)	210 (51%)	410	360
1:00 p.m. – 3:00 p.m.	89 (26%)	69 (18%)	178 (55%)	336	370
4:00 p.m. – 6:00 p.m.	100 (26%)	96 (25%)	182 (48%)	378	617
Totals	478 (26%)	302 (16%)	1,085 (58%)	1,865	1,651

Approximately 70% of the eastbound motorists entering the intersection of Heath Street West and Avenue Road during the morning rush period continue straight through to the east leg of Heath Street West. It's likely that motorists are using Heath Street West as a means to access Yonge Street. Conversely, approximately 68% (421 vehicles) of the westbound motorists entering the intersection during the afternoon rush period continue straight through to the west leg of Heath Street West.

Comparing the 2008 data with traffic counts conducted in both 2003 and 2007 at Heath Street West and Avenue Road indicate there has been no significant increase in eastbound and westbound traffic volume over the past 5 years. In 2003, the eastbound volume on Heath Street West at Avenue Road over the eight-hour period was 1,680 vehicles. In 2008, the recorded eastbound volume over the same eight-hour period was 1,865 vehicles. In 2003, the westbound volume on Heath Street West at Avenue Road was 1,871 vehicles, while the 2008 volume was 1,651 vehicles. The volumes recorded during the 2007 traffic count were also similar to those recorded during the 2003 and 2008 surveys.

Prohibiting eastbound left-turns from Heath Street West onto Avenue Road would reduce potential delays for motorists queued behind left-turning vehicles waiting to proceed eastbound through the intersection. However, east-left turns are the minor movement at this intersection (16% of the 8-hour traffic volume). While prohibiting this movement could produce a minor reduction in eastbound traffic volume by eliminating motorists wishing to turn north onto Avenue Road, it might also have the opposite effect of attracting more traffic to Heath Street West since straight eastbound motorists will encounter less delay. The over all impact could in fact be higher eastbound traffic volumes on Heath Street West, both east and west of Avenue Road.

We suspect there are several factors currently influencing traffic volume on Heath Street West between Avenue Road and Spadina Road and possibly as far east as Yonge Street, specifically:

- The construction staging area for the residential development on the southwest corner of St. Clair Avenue West at Avenue Road has necessitated the closure of the eastbound curb lane at this intersection. As a result, the capacity of the eastbound approach on St. Clair Avenue West has been halved. The eastbound left-turn lane at Avenue Road/St. Clair Avenue West is frequently blocked by the queue of through motorists, delaying east-left turns. It is likely that some eastbound motorists use Heath Street West to avoid the resulting congestion/delay, as it provides a slightly better parallel route. It is estimated that this construction staging area will remain at this location until sometime in 2009.
- Delays and traffic congestion caused by major construction projects this year on Bathurst Street both north and south of St. Clair Avenue and the bridge rehabilitation project on Eglinton Avenue West, between Spadina Road and Chaplin Crescent could be encouraging motorists to look for "escape routes". Spadina Road, Heath Street West, Lonsdale Road and possibly Kilbarry Road provide ways of avoiding these congested areas.
- Congestion and delays caused by increased traffic volume on Spadina Road through the Forest Hill Village throughout the day are a frequent occurrence. Motorists could be turning off Spadina Road at locations north and south of Lonsdale Road to avoid these delays.
- The installation of turn prohibitions during the morning peak period at intersections along Avenue Road, south of Chaplin Crescent might have encouraged some motorists to look for alternative routes to bypass traffic congestion along the Oxtown Avenue/Oriole Parkway/Lonsdale Road link to Avenue Road. Spadina Road is an alternative north/south artery and connects with Lonsdale Road and Heath Street West to allow motorists to reconnect with Avenue Road at a point further south.

In our letter of December 7, 2007 (copy attached) we suggested prohibiting eastbound through movements, between 7:00 a.m. and 9:00 a.m., Monday to Friday and westbound through movements, between 4:00 p.m. and 6:00 p.m., Monday to Friday, at Avenue Road and Heath Street West as a potential measure to mitigate non-local traffic on Heath Street West. Prohibiting these movements could have an impact on traffic volumes on Heath Street West, both east and west of Avenue Road.

There are advantages and disadvantages to this suggestion as note below. Before considering this option, steps should be taken to ensure that residents are fully aware of the impacts associated with this proposal.

Advantages

- Reduced traffic volume on Heath Street West, resulting in less delay, congestion and pollution;
- Improved opportunity for residents entering/exiting their driveways on Heath Street West; and
- A safer environment for pedestrians crossing Heath Street West at various intersecting north/south streets.

Disadvantages

- Residents on Heath Street West, as well as other local streets taking access from Heath Street West could be inconvenienced. The Ontario Highway Traffic Act does not exempt anyone from a through traffic/turn prohibition; and
- Other local roads in the area could experience higher traffic volumes as non-resident and resident-generated traffic looks for alternative routes into the area.

We suggest further consultation with the community through a public meeting. Transportation Services' staff would be pleased to attend, to review and discuss all options.

If you have any questions regarding this investigation, please contact Randy Hillis at 416-338-5430 or the undersigned at 416-392-7773.

Yours truly,



Ron Hamilton
Manager-Traffic Operations
Toronto and East York District, West

RHH/rhh
Attach: December 7, 2007 letter to Councillor Michael Walker

2007-02648
2008-00259
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c.c. Councillor Joe Mihevc