Yonge Street Traffic Management Study

Date: June 3, 2010
To: North York Community Council
From: Director, Transportation Services Division, North York District
Wards: Ward 23 – Willowdale
Reference Number: ny10083

SUMMARY

Since the Toronto Transit Commission (TTC) operates a transit service on Yonge Street, City Council approval of this report is required.

To obtain approval to forward a copy of the Yonge Street Traffic Management Study Final Report to the Ontario Minister of Transportation and request that they implement proposed improvement A.

RECOMMENDATIONS

Transportation Services Division recommends that City Council:

1. Forward a copy of the Yonge Street Traffic Management Study Final Report to the Ontario Minister of Transportation;

2. Request that the Ontario Ministry of Transportation implement proposed Improvement A of the Final Report as soon as possible and within a period of time not to exceed 7 years; and

3. Request that the Ontario Ministry of Transportation implement proposed Improvements B and C of the Final Report within the next 5 years.

Financial Impact

There is no financial impact associated with the adoption of this report.
**ISSUE BACKGROUND**

On September 25, 26 and 27, 2006 City Council approved a motion by Councillor Filion to direct Transportation Services staff to retain a qualified consultant to undertake a Traffic and Pedestrian Management Study for the area of Yonge Street between Sheppard Avenue and Highway 401. The study was to include a review of traffic operations in the area as well as pedestrian and subway signage to address the increases in both traffic and pedestrian volumes in this corridor.

In September of 2008 Transportation Services staff retained the services of a qualified consultant to undertake the above-noted study. This report presents the results of this study which relate to the Highway 401/Yonge Street area.

**COMMENTS**

The study area for the Yonge Street Traffic Management Study is identified in Attachment 1 and is bounded by Highway 401 to the south, Elmhurst Avenue/Greenfield Avenue to the north, Tradewind Avenue/Bonnington Place to the east and Beecroft Road/Yonge Street on the west. The intent of this study was to identify a comprehensive strategy to coordinate traffic control and new infrastructure with development related traffic impacts. The study was to provide a Traffic and Pedestrian Management Plan for the area which includes improvements to address needs under current conditions, an interim development state, and full build out of the study area based on the North York Centre Secondary Plan. The Study included two Public Information Centre meetings as well as several meetings with local residents at which the Interim and Final Draft reports were presented.

As a result of development and intensification along Yonge Street and Sheppard Avenue, there have been an increase in traffic throughout this corridor. It is expected that as development continues, the demands on the road network will also increase. In addition, the Ontario Ministry of Public Infrastructure Renewal’s Places to Grow Act has also identified the North York Centre as a provincial urban growth centre. This designation supports the intensification of development as identified in the North York Centre Secondary plan.

Recent improvements within the study area have been implemented to address the increase in vehicular and pedestrian volumes in the area.
The following is a listing, with a brief description, of improvements that have been implemented to date:

- **Yonge Street Lane Configuration:**
  The southbound left turn lane storage at the Yonge Street/Lord Seaton Road intersection was extended north to the Yonge Street/Highway 401 E-S intersection and overhead lane designation signing identifying which lanes are for Yonge Street and which lanes access Highway 401. The extended left turn lane added additional queue capacity and the overhead signing provides additional information to the driver to avoid confusion.

- **Bonnington Place Turn Restriction:**
  To control traffic infiltration through the community on residential streets, a westbound left turn restriction was implemented for the A.M. peak period. This restriction led to a reduction in the turning traffic and also the traffic through the community by approximately 250 vehicles per hour in the peak period.

- **Avondale Avenue All Way Stop Control:**
  The installation of an all way stop control at the intersection of Avondale Avenue/Harrison Gardens Boulevard, facilitated northbound and southbound movements and reduced extensive delays from the residences with access on Harrison Gardens Boulevard.

- **Pedestrian Countdown Timers:**
  Installation of pedestrian countdown timers at all the intersections was completed in 2008. Studies from other jurisdictions have shown that pedestrian countdown timers have contributed to pedestrian compliance with pedestrian right-of-way and pedestrian safety.

- **Implementation of Sidewalk:**
  Temporary sidewalk has been implemented on Bales Avenue between Avondale and Glendora Avenues. This addressed an existing discontinuity and reduced the need for pedestrians to walk on the road and thus reduces the potential of pedestrian-vehicle conflict.
There are also a number of planned improvements that have been identified. The North York Centre Secondary Plan identified the Downtown Service Road south of Sheppard Avenue and east of Yonge Street. The connections include:

- Extension of Doris Avenue to Avondale Avenue, which includes a realignment of the Sheppard Avenue/Doris Avenue intersection;

- Extension of Anndale Drive to Yonge Street, intersecting at Poyntz Avenue. This would also includes the Bales Avenue intersection and the Proctor and Gamble driveway;

- The intersection of Bonnington Place and Sheppard Avenue will be closed with the implementation of a cul-de-sac at the north end of Bonnington Place; and

- The lane reconfiguration of Avondale Avenue to provide an additional lane for a separate westbound right turn lane.

There is also the Yonge Street Median that has been identified as a planned improvement. The median would run from Sheppard Avenue to Avondale Avenue/Yonge Street intersection. There would be breaks at all signalized intersections to allow for full turning movements. The implementation of the median would restrict left turn movements to and from Yonge Street and would also provide streetscaping.

The Yonge Street Traffic Management Study has identified a number of new improvement opportunities in the study area to address current and future traffic and pedestrian needs. Several of these improvements relate to the Highway 401/Yonge Street area which falls under the jurisdiction of the Province of Ontario and will require that the Province undertake the necessary studies, approvals and funding of these improvements. The specific improvements related to the Highway 401/Yonge Street area are identified below.

**Improvement A – Yonge Street Southbound to Highway 401 Eastbound on-ramp.**

Currently this traffic movement is completed via a southbound to eastbound left turn at the signalized intersection of Yonge Street at Lord Seaton Road. The report identifies that this movement currently experiences capacity deficiencies during the peak periods and due to the extensive southbound left turn queues on Yonge Street a rear-end collision problem exists. The report also identified that based on approved developments and those currently under review in the study area, the southbound to eastbound left turn movement on Yonge Street at Lord Seaton Road will experience during the morning peak period an 86% increase in delays and queues lengths with increase 37%.
Improvement A recommends the introduction of a grade separated free flow southbound to eastbound on-ramp from Yonge Street onto Highway 401 eastbound. This improvement will require the Ontario Ministry of Transportation’s approval and funding, extensive public consultation, engineering and design and would likely be feasible to complete within the next five to ten years.

**Improvement B – Highway 401 Eastbound Off-ramp to Northbound Yonge Street**

**Improvement C – Highway 401 Westbound Off-ramp**

These two improvements are interrelated and address the issues of northbound weaving movements and queuing on Yonge Street between the Westbound Highway 401 Off-ramp and Avondale Avenue. In this area, extensive weaving movements occur between vehicles exiting the free flowing Highway 401 off-ramps to northbound Yonge Street and northbound vehicles on Yonge Street. These weaving conflicts contribute to both collisions and queuing through this area on both Yonge Street and the westbound Highway 401 Off-ramp.

Improvement B recommends that the eastbound to northbound Highway 401 off-ramp onto Yonge Street be reduced from two to one lane. This improvement would allow the introduction of a third northbound lane on Yonge Street immediately north of the signalized intersection with westbound Highway 401 off-ramp. This third lane would provide a dedicated northbound lane for the westbound to northbound movement from the Highway 401 ramp and eliminate the need for this traffic to merge into the northbound lanes on Yonge Street. This would reduce queuing and weaving in this area thereby improving traffic flow and reducing the potential for collisions.

Improvement C recommends that all westbound Highway 401 off-ramp traffic be processed through the traffic control signal which currently exists at Yonge Street and the westbound Highway 401 off-ramp. Currently, only westbound to southbound traffic are processed through this signalized intersection, whereas the westbound to northbound traffic continue through a free flowing channelized lane and are forced to merge with northbound Yonge Street traffic. With the new configuration, westbound to northbound vehicles would be provided dual right turn lanes and be controlled by the traffic control signal. As with Improvement B, this new configuration would reduce queuing and weaving in this area, thereby improving traffic flow and reducing the potential for collisions. This new improvement also would provide the opportunity to better address pedestrian and cycling needs through this area.

Both Improvements B and C could be implemented within the short term (1 to 5 years, subject to funding). Improvement C is the preferred improvement however, Improvement B is an alternative design which could be considered. The operational benefits can be realized within the 1 to 5 years time frame.
The above improvements, specifically Improvement A, are seen as critical enhancements to the study area given the current and projected development intensification based on the North York Centre Secondary Plan which is supported by the Provincial identification of this area as a Growth Centre.

In conclusion, Transportation Services is recommending that the Yonge Street Traffic Management Report and more specifically proposed Improvements A, B and C be forwarded to the Ontario Ministry of Transportation for review and appropriate action.

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SIGNATURE

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ATTACHMENTS

Attachment 1: Map – Yonge Street Traffic Management Study Area (ny10083_map)