



## STAFF REPORT ACTION REQUIRED

### Proposed Bicycle Lanes on Greenwood Avenue from Danforth Avenue to Queen Street East

<b>Date:</b>	August 21, 2007
<b>To:</b>	Toronto and East York Community Council
<b>From:</b>	Director, Transportation Infrastructure Management
<b>Wards:</b>	Toronto-Danforth, Ward 30; Beaches-East York, Ward 32
<b>Reference Number:</b>	p:\2007\ClusterB\tra\tim\te07014tim

#### SUMMARY

---

Community Council does not have delegated authority from City Council to make a final decision because this report recommends amendments to on-street parking / standing / stopping regulations on a road where there is an established Toronto Transit Commission (T.T.C.) route.

The purpose of this report is to obtain authority to install bicycle lanes on Greenwood Avenue from Danforth Avenue to Queen Street East. The proposed design will provide one traffic lane and one bicycle lane in each direction, with left turn lanes at signalized intersections, and parking on both sides of the street. The Ward Councillors have been consulted and support the proposed bicycle lanes on Greenwood Avenue.

#### RECOMMENDATIONS

---

The Transportation Services Division recommends that City Council:

1. approve the installation of bicycle lanes on both sides of Greenwood Avenue, from Danforth Avenue to Queen Street East, as detailed in Appendix A of this report;
2. approve the amendments to the traffic and parking regulations detailed in Appendix B of this report; and
3. authorize and direct the appropriate City officials to take the necessary action to give effect thereto, including the introduction of all necessary bills.

## **Financial Impact**

Funds to implement the bicycle lanes on Greenwood Avenue, in the estimated amount of \$45,000.00, are provided for within the Transportation Services Division 2007 Capital Budget in the Cycling Infrastructure Account CTP 807-05.

## **DECISION HISTORY**

City Council, at its meeting on July 24, 25 and 26, 2001, adopted the Toronto Bike Plan (Clause No. 3 of Report No. 8 of the Planning and Transportation Committee). One of the key recommendations of the Toronto Bike Plan is to implement a 1,000 kilometre Bikeway Network.

## **ISSUE BACKGROUND**

The Toronto Bike Plan proposed bicycle lanes for Greenwood Avenue, between Danforth Avenue and Queen Street East.

## **COMMENTS**

### **Existing Conditions**

Greenwood Avenue, between Danforth Avenue and Queen Street East, is a four lane minor arterial roadway which operates two-way on a pavement width which varies from 14.0 metres to 15.3 metres and has a speed limit of 40 km/h. Because of the extensive amount of on-street parking, Greenwood Avenue usually operates as a two lane roadway. Traffic volumes for this section of Greenwood Avenue are in the range of 7,000 to 11,000 vehicles daily. There are four signalized intersections on this section of Greenwood Avenue at Danforth Avenue, Gerrard Street East, Dundas Street East and Queen Street East. There are also three pedestrian cross-over locations at Felstead Avenue, Ivy Avenue and Athletic Avenue.

Parking is generally permitted on both sides of Greenwood Avenue at all times of the day. However, in the afternoon peak period, parking is prohibited in the northbound direction between Danforth Avenue and Mountjoy Avenue, and between Walpole Avenue and Gerrard Street East. Permit parking is in effect from 12:01 a.m. to 7:00 a.m. on the east side of Greenwood Avenue, along the entire section from Queen Street East to Danforth Avenue, and on the west side, from Queen Street East to Dundas Street, and from Gerrard Street East to Ivy Avenue.

The T.T.C. operates the 31-Greenwood bus route in both directions on Greenwood Avenue. Buses are scheduled at 8 minute intervals during the peak periods and at 20 minute intervals during the off peak periods.

## **Bicycle Lane Design**

The installation of bicycle lanes on Greenwood Avenue will retain the existing single lane in each direction between signalized intersections. The two shared lanes in each direction, currently provided at signalized intersections, will be replaced with an exclusive left turn lane and a shared thru/right turn lane. The attached Drawing No. 421P0026, dated May, 2007, entitled “Greenwood Avenue: Danforth Ave – Queen St. E Proposed Bicycle Lane Location Plan” illustrates the proposed location of the bicycle lanes and where parking will be provided. The roadway width of 14.0 metres or more allows for a design which will retain parking on both sides of the street. The attached Drawing No. 421P0027, dated May, 2007, entitled “Greenwood Avenue: Danforth Ave. – Queen St. E: Cross Sections” illustrates the existing and proposed cross-section for Greenwood Avenue.

## **Traffic Impacts**

An analysis of the peak hour traffic conditions indicates that the existing traffic demands can generally be accommodated with a two-lane cross-section augmented with left turn lanes. Since the configuration of the signalized intersections at Danforth Avenue and Queen Street East will remain unchanged, only the signalized intersections at Gerrard Street East and at Dundas Street East will be affected by the bicycle lane proposal. Capacity analysis at both intersections indicates that there would be an increase in delay for southbound motorists in the morning peak hour and an increase in delay for northbound motorists in the afternoon peak hour. In both these situations, the anticipated increase in delay would be minimal and no significant reduction in level-of-service is expected.

## **Parking Impacts**

The proposed design will increase the parking supply on Greenwood Avenue during the PM peak period, because the two existing sections with ‘No Parking 4 p.m. – 6 p.m.’ will be changed to allow parking at all times. For all other sections of Greenwood Avenue, there will be minor reductions in the parking supply to improve sightlines at pedestrian crossovers, and to provide proper access and egress for T.T.C. buses at transit stops.

## **T.T.C. Impacts**

Greenwood Avenue generally operates as a two lane roadway (one lane in each direction) due to the extensive amount of on-street parking. With the addition of bicycle lanes, operating conditions will not change, for the most part. However, the capacity analysis indicates there will be some additional delay in the peak periods at the Gerrard Street East and at the Dundas Street East intersections. While this additional delay is not expected to have a significant impact on the 31-Greenwood bus route, the impact on transit service will be monitored following installation of the bicycle lanes. Should T.T.C. vehicles experience delays on Greenwood Avenue due to the installation of the

bicycle lanes, Transportation Services will work with the T.T.C. to mitigate these delays, including support for the installation of transit priority at the signalized intersections.

T.T.C. staff have identified a specific concern with the northbound bus stop on Greenwood Avenue, just north of Queen Street East. When a bus is stopped here, there is a potential for a queue of northbound vehicles to back up onto Queen Street East and affect the 501 streetcar service. T.T.C. and Transportation staff will monitor this location after the proposed bicycle lanes are installed, and modify the design as required.

## **Public Consultation**

In consultation with Councillors Bussin and Fletcher, approximately 700 Public Notices describing the proposal were distributed to residents of Greenwood Avenue and intersecting streets. Fourteen responses were received, with the majority (11) supportive of the bicycle lane proposal.

## **CONTACT**

Peter de Groot, P.Eng  
Transportation Engineer  
Pedestrian and Cycling Infrastructure  
Telephone: 416-392-8589  
Fax: 416-392-4808  
E-mail: pdegroo@toronto.ca

---

John Mende, P.Eng.  
Director, Transportation Infrastructure Management  
Transportation Services

PdG/nb

## **ATTACHMENTS**

Appendix A – Bicycle Lanes to be Designated  
Appendix B – Parking and Traffic By-Law Amendments  
Drawing No. 421P0026  
Drawing No. 421P0027