

**Leslie Street Connection Track  
Monitoring of Traffic Volumes  
December 17, 2013**

Traffic volumes were collected in the area of the Leslie Street construction prior to the start of construction (Baseline). After the closure of Leslie Street between Lake Shore Boulevard and the Plazas traffic signal, traffic volumes were also counted on some streets (Round 1). The availability of these data enables the TTC and City Transportation Services to highlight changes in traffic patterns as a result of the construction work on Leslie Street, as well as respond to requests from the local community and businesses. The monitoring of these changes in traffic patterns allows the project team to identify any potential traffic issues, after which the data can be used by the City's Transportation staff to mitigate the issues through on-street parking restrictions, signal timing modifications, etc.

Traffic count data is also planned to be collected throughout the stages of construction to monitor traffic trends as the project progresses.

The traffic data were collected on the following dates:

- Baseline Midblock: Primarily April 2013, over a 72 hour period (3 consecutive days)
- Baseline Intersections: April and May 2013 (a 1 day count)
- Round 1 Midblock: November, 2013, over a 72 hour period (3 consecutive days)

The process for collecting traffic data for midblock road segments differs from the process of collecting data at intersections. For midblock road segments, the data is collected via traffic counting tubes that are laid across the roads for a 24 or 48 or 72-hour time period. For intersections, turning movement counts (TMC's) capture left-turns, right-turns, through movements, as well as pedestrians and cyclists and are collected manually by observers on site. The intersection counts cover an 8 hour period (7.30- 9.30 a.m.; 10.00-12.00 mid-day; 1.00-3.00 p.m.; and 4.00- 6.00 p.m.)

For those midblock road segments represented in both the Baseline and Round 1 counts the volumes for each 72-hour time period were summed and compared. It should be noted that the peak hours identified in the tables represent the highest recorded traffic flow during the a.m. and p.m. periods. The peak hour times are not uniform between days.

From a comparison between the "Baseline" and "Round 1" traffic count data, the following observations were made:

1. An increase in traffic along Carlaw Avenue between Eastern Avenue and Lake Shore Boulevard during the analyzed 72-hour time period is shown (28% and 38% for the northbound and southbound, respectively). To mitigate the impacts of the additional traffic, the City Transportation has introduced p.m. parking restrictions on the east side of Carlaw Avenue south of Queen Street (northbound lane). Similarly, the City will be adding southbound right turn time from Carlaw to Lake Shore during the same signal phase when vehicles turn from Lake Shore Blvd eastbound to Carlaw northbound and cyclists and pedestrians have a red light.
2. An increase in traffic along Carlaw Avenue between Lake Shore Boulevard and Commissioners Street during the analyzed 72-hour time period is shown (65% and 50% for the northbound and southbound, respectively). City Transportation has introduced a northbound advanced green phase at this intersection.

3. The major closure of Kingston Road during 2013 had a significant impact on the traffic volumes on Eastern Avenue from Coxwell Avenue to Queen Street. A comparison between “Baseline” and “Round 1” counts therefore shows increases in traffic of 1157% and 801% for the eastbound and westbound directions, respectively, during the 72-hour time period.

The next set of counts (“Round 2”) are planned to be completed after the next major construction phase change along Leslie Street from the Plazas signal on Leslie Street to Eastern Avenue.