

June 17, 2015

Additional information requested for June 2, 2015 IDE Committee Report: Speedvale Avenue East from Manhattan Court to Woolwich Street – Road Design

In response to discussion at the June 2, 2015 IDE Committee meeting, the following information is provided:

1) The cost and logistics of doing a pilot road diet (ie. Re-paint, re-sign, etc. the existing road with 3 lanes and bike lanes) for a few months

- Estimated cost would be \$50,000.00
- Estimated time to implement revised temporary lane markings is three to five working days
- Anticipated work required would include installation of advance signage and signs in pilot area, removal of existing lane markings, new temporary lane markings including bicycle symbols, modifications to traffic signals
- Extensive communications program to advise travelling public of pilot project changes and opportunity to provide feedback on pilot project
- Monitoring, analysis and reporting back to committee and council on pilot road diet traffic operations (eg. public feedback, congestion, travel times, etc.)
- If pilot is not deemed successful, removal and remarking of pavement to current four lane cross section until reconstruction of roadway occurs

2) Information regarding the transit priority study and how it fits with the various options including the volume decrease (modal shift to transit) needed to bring volumes to an acceptable level for a three lane cross section

- Staff reviewed 2031 traffic scenarios with the assumption of a mature transit mode share that was developed for the “Transit Growth Strategy and Plan Study” and the following are the findings:
 - The mature transit mode share can only be achieved by a very successful public transit system with a 15% overall internal mode share and 12 % external mode share
 - The existing peak hour traffic volumes are found to be up to 1,200 vehicles per hour in the peak direction. The industry standard for one lane traffic capacity for arterial roads such as Speedvale Avenue is 900 vehicles per hour. This is equivalent to 15 vehicles per minute

- By 2031 under the four lane cross-section scenario, the peak hour peak directional traffic volumes will continue to grow up to 1,240 vehicles per hour
- By 2031 under the three lane cross-section scenario, some traffic will use alternative routes but the peak hour peak directional traffic volumes on Speedvale Avenue will be up to 1,010 which is over the one lane traffic capacity
- In summary, the existing and future traffic volumes on Speedvale Avenue warrant a four lane cross-section. Additional comments on transit impacts are as follows:
 - It is expected that improvements in transit operations along this corridor in the long term may induce a modal shift, however it is not anticipated to be sufficient to meet the traffic volume decrease required to support a three lane cross section option
 - In order to achieve the modal shift required, a community environment/framework where the use of single passenger vehicles becomes an undesirable option would need to be created

3) Cost estimates and impacts for modified Option 1 with buried hydro on both sides and also decrease lane width.

- Estimated cost: \$15,844,000.00
 - This is a net increase of approximately \$1.5M over the original Option 1 primarily due to the burying hydro partially and offset by lessened costs for the reduced lane width
- Underground hydro estimated cost: \$2,775,000.00
 - Underground hydro costs are significantly higher for this option since, in addition to hydro being relocated underground on both sides of Speedvale, the local hydro distribution to each property will also need to be relocated underground
- Property acquisition estimated cost: \$3,404,000.00
 - Property Requirement North Side: 1 to 5 metres plus transformer pad locations
 - Number of Properties Affected North Side: 16
 - Property Requirement South Side: 1 to 3 metres plus transformer pad locations
 - Number of Properties affected South Side: 24
 - Transformer pad locations will need to be included in the design for underground hydro which will result in property impacts and will be determined at detailed design stage.
- Attached are preliminary estimate and property impact summary tables