Bayview Avenue and Sheppard Avenue East

The intersection of Bayview Avenue and Sheppard Avenue East is located in the North York District. During the peak periods, the volume of traffic is generated by the Shopping Malls, YMCA, the ramps from Highway 401, commuter traffic and the subway station at the intersection of Bayview Avenue and Sheppard Avenue East.

Discussion of Issues

This signal is equipped with the Scoot System. The intersection has two, fully protected, northbound left turn lanes. Eastbound, westbound and southbound left turns are protected and permissive.

The intersection currently experiences significant delay for northbound through, left turn, southbound through, westbound through, left turn, and eastbound right traffic during morning and afternoon peak periods.

History of Actions / Background

Recent reviews of signal timings for individual traffic movements indicates that any change would have a negative impact on other critical traffic movements.
Data and Analysis

Traffic Volume Information - 8 Hour Summary

<table>
<thead>
<tr>
<th>Study Date</th>
<th>Northbound</th>
<th></th>
<th></th>
<th></th>
<th>Eastbound</th>
<th></th>
<th></th>
<th></th>
<th>Southbound</th>
<th></th>
<th></th>
<th></th>
<th>Westbound</th>
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<tbody>
<tr>
<td></td>
<td>Left</td>
<td>Thru</td>
<td>Right</td>
<td>Total</td>
<td>Left</td>
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<td>1284</td>
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Total 8 hour vehicle volume: 54842
Total 24 hour vehicle volume: 109684
Note: A factor of 2 was used to convert the 8 hr total to a 24 hour total

Options for Consideration & Potential Benefits

Immediate options
- Optimisation of the signal timing at the intersection of Bayview Avenue and Sheppard Avenue in order to allocate the adjusted SCOOT cycle lengths to the movements that experience the longest delays and not necessarily the movements with the highest volume

Near term options
- Review the co-ordination of the traffic control signals on Bayview Avenue between Sheppard Avenue and Fifeshire Road taking into account the demand for traffic exiting the Highway 401 ramps

Medium term option
- Extension of the centre median on Sheppard Avenue East to Kenaston Gardens in order to reduce delays to westbound left turning vehicles caused by vehicles occupying the same turn lane and accessing the YMCA and the gas station on the southeast corner of the intersection.

Longer Term options
- Implementation of two westbound left turn lanes
  - May impact the cycle length at the intersection thus affecting the effective co-ordination of traffic signals on Bayview Avenue between Sheppard Avenue and Fifeshire Road
  - The re-designation of a westbound through lane to a left turn lane have an impact on the flow of westbound traffic
  - An Environmental Assessment amendment may be required to reduce the number of approved lanes on Sheppard Avenue East
- Implementation of two eastbound right turn lanes configuration
  - Cycle length impacts
  - Prohibition of eastbound right turns on a red signal would be required
  - The re-designation of an eastbound through lane to a right turn lane may impact the flow of eastbound traffic on Sheppard Avenue East
<table>
<thead>
<tr>
<th>Costs</th>
<th>Funding Source (Operating/Capital)</th>
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<tbody>
<tr>
<td>Immediate</td>
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<td>Near Term</td>
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<td>Mid Term</td>
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