SUBJECT: New Street Speed Limit

TO: Committee of the Whole

FROM: Transportation Services

Report Number: TS-13-18
Wards Affected: 4, 5
File Numbers: 750-19-03
Date to Committee: December 10, 2018
Date to Council: December 17, 2018

Recommendation:
Maintain the current 60 km/h speed limit on New Street between Guelph Line and Burloak Drive.

Purpose:
A City that Moves
- Increased Transportation Flows and Connectivity

Background and Discussion:
The following staff direction was approved at the June 18, 2018 Council meeting:

   Direct the Director of Transportation Services to review and consider reducing the speed limit on New Street from Burloak Drive to Guelph Line to 50 km/hr. (SD-19-18)

This staff direction was moved as a result of a delegation requesting the speed limit reduction in order to address road safety issues perceived to be caused by the 60km/h speed limit.
Current Conditions

New Street from Guelph Line to Burloak Drive is a four-lane arterial road with sections of direct residential frontage, commercial accesses and institutional land uses such as schools and churches.

The existing speed limit on New Street between Guelph Line and Burloak Drive is 60 km/h with reduced speed limits of 40 km/h during school times in front of St. Raphael’s Catholic Elementary School and Ascension Catholic Elementary School.

A Community Safety Zone exists for a 4.5 km section of New Street between Rossmore Boulevard and Wedgewood Drive. Community safety zones are designated areas in which fines for traffic violations are increased.

Speed Limit Policy

In March 2015, Council approved a revised Speed Limit Policy, which includes a method to consistently and objectively review and establish speed limits for city streets. The speed limit policy was developed based on the guidelines provided by the Transportation Association of Canada (TAC) and is an evaluation tool to determine appropriate posted speed limits based on the classification, function and physical characteristics of a roadway. The TAC guidelines are used by a number of municipalities across Canada and are widely accepted as a uniform methodology for road agencies to set posted speed limits.

Since 2015, staff have utilized the Speed Limit Policy to review numerous streets, which has led to speed limit reductions throughout the city.

Strategy/process

Speed Limit Review

In accordance with the Council approved Speed Limit Policy, staff have performed a review of the speed limit on New Street. The factors taken into consideration include road characteristics such as driveways and accesses, the number and type of intersection right-of-way control, existing pedestrian and/or cycling facilities, road geometry, the presence of on-street parking and pavement condition.

New Street was segmented into three sections (Guelph Line to Walkers Line, Walkers Line to Appleby Line and Appleby Line to Burloak Drive) for purposes of the speed limit calculations. For all three sections, the results indicate a 60 km/h speed limit is appropriate for New Street given the classification, function and physical characteristics of the road.
Vehicle Speed Study

A study of vehicle speeds was conducted on New Street between June 3, 2018 and June 10, 2018. Data was collected at three locations along New Street between Walkers Line and Appleby Line within the section with a speed limit of 60 km/h and 40 km/h during school times. A summary of the results is provided in table 1 below.

Table 1 – Vehicle Speed Summary on New Street

<table>
<thead>
<tr>
<th>Location</th>
<th>Direction of travel</th>
<th>Speed Limit 60 km/h (outside school times)</th>
<th>Speed Limit 40 km/h (during school times)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average Speed</td>
<td>85th Percentile Speed*</td>
</tr>
<tr>
<td>New Street between Walkers Line and Strathcona Drive</td>
<td>EB</td>
<td>49 km/h</td>
<td>59 km/h</td>
</tr>
<tr>
<td></td>
<td>WB</td>
<td>45 km/h</td>
<td>54 km/h</td>
</tr>
<tr>
<td>New Street between Longmoor Drive and Belvenia Road</td>
<td>EB</td>
<td>53 km/h</td>
<td>61 km/h</td>
</tr>
<tr>
<td></td>
<td>WB</td>
<td>46 km/h</td>
<td>57 km/h</td>
</tr>
<tr>
<td>New Street between Dunvegen Road and Shoreacres Road</td>
<td>EB</td>
<td>59 km/h</td>
<td>66 km/h</td>
</tr>
<tr>
<td></td>
<td>WB</td>
<td>56 km/h</td>
<td>64 km/h</td>
</tr>
</tbody>
</table>

*the speed at which 85 percent of vehicles travelling at or below.

The data collected reveals that outside school times when the speed limit is 60 km/h the 85th percentile speed is below or very close to the posted speed limit. This indicates a relatively high percentage of speed limit compliance.

During the times when the speed limit is 40 km/h, the data collected reveals a significant reduction in vehicle speeds when compared to time during the 60 km/h speed limit. These results demonstrate a change in driver behaviour during the times of the reduced speed limit when school-related activity is most prevalent.

The results from the vehicle speed studies on New Street were then compared to data collected on other similar arterial roadways with a 50 km/h speed limit. Speed data was collected on Guelph Line south of New Street, Walkers Line south of New Street and Appleby Line south of New Street. The results of these studies are summarized in table 2 below.
Table 2 – Vehicle Speeds on Adjacent Arterial Roads

<table>
<thead>
<tr>
<th>Location</th>
<th>Direction of travel</th>
<th>Average Speed</th>
<th>85&lt;sup&gt;th&lt;/sup&gt; Percentile Speed*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guelph Line between New Street and Lakeshore Road</td>
<td>NB</td>
<td>50 km/h</td>
<td>57 km/h</td>
</tr>
<tr>
<td></td>
<td>SB</td>
<td>52 km/h</td>
<td>59 km/h</td>
</tr>
<tr>
<td>Walkers Line between New Street and Lakeshore Road</td>
<td>NB</td>
<td>52 km/h</td>
<td>60 km/h</td>
</tr>
<tr>
<td></td>
<td>SB</td>
<td>54 km/h</td>
<td>61 km/h</td>
</tr>
<tr>
<td>Appleby Line between New Street and Lakeshore Road</td>
<td>NB</td>
<td>50 km/h</td>
<td>56 km/h</td>
</tr>
<tr>
<td></td>
<td>SB</td>
<td>51 km/h</td>
<td>60 km/h</td>
</tr>
</tbody>
</table>

*the speed at which 85 percent of vehicles travelling at or below.

The data collected on other arterial roads reveals an 85<sup>th</sup> percentile speed that is consistent with the data collected on New Street during the times of a 60 km/h speed limit.

This reinforces that the speed at which drivers choose to travel is largely influenced by the characteristics of a given road. Based on this, arbitrarily lowered speed limits inconsistent with the geometry and function of a roadway have a minimal impact on the overall operating speed of vehicles and will increase the number of “illegal” drivers with additional burdens on enforcement and can lead to a lack of credibility of speed limits.

**Vehicle Collisions**

A review of the 3-year collision history for New Street between Guelph Line and Burloak Drive was conducted in order to identify whether a safety issue is present. The review did not include collisions occurring at the major intersections of New Street and Guelph Line, Walkers Line and Appleby Line however, does include all other intersections and segments. Based on this collision review, no segment within the study area revealed a higher than normal collision experience when compared to other road segments throughout the city. Staff conclude that the relative safety of New Street is well within the limits of similar roadways.

**Options considered**

As an alternative to lowering the speed limit on New Street from 60 km/h to 50 km/h (outside school times), staff recommend continued use of education and enforcement measures aimed at maximizing speed limit compliance by drivers using New Street. The use of the city’s driver feedback signs (digital signs displaying vehicle speeds) in
combination with targeted enforcement by Halton Regional Police Services as resources permit can be effective at increasing speed limit speed compliance.

Financial Matters:
Not Applicable

Public Engagement Matters:
Not Applicable

Conclusion:
Road safety may be enhanced through credible posted speed limits that match the expectation of drivers for a given roadway and its surrounding area. It is staffs’ recommendation that by utilizing its current Speed Limit Policy and the methodology within, the current posted speed limit of 60 km/h and 40 km/h “when flashing” is appropriate for New Street between Guelph Line and Burloak Drive.

Respectfully submitted,

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Report Approval:
All reports are reviewed and/or approved by Department Director, Director of Finance and Director of Legal. Final approval is by the City Manager.