



REPORT

TO: Mayor Bonnette and Members of Council

FROM: Roumen Kotev, Traffic Coordinator – Road Safety

DATE: June 1, 2022

REPORT NO.: TPW-2022-0003

SUBJECT: 40 km/h Neighbourhood Speed Limit Area Policy

RECOMMENDATION:

THAT Report No. TPW-2022-0003, dated June 1, 2022, regarding 40 km/h Neighbourhood Speed Limit Area Policy, be received;

AND FURTHER THAT the 40 km/h Neighbourhood Speed Limit Area Policy is approved;

AND FURTHER THAT costs required to fund the Policy implementation be forwarded to Budget Committee as part of the 2023 (and future year(s)) budget approval process, subject to the affordability of the Town's Long-range Financial Plan (LRFP).

KEY POINTS:

The following are key points for consideration with respect to this report:

- Resolution No. 2021-0026 requested staff to study the effects of lowering speed limits to 40 km/h in local neighbourhoods and through Report No. TPW-2021-0014 staff commenced the study.
- Staff completed a detailed assessment to pilot a reduction in the posted speed limit to 40 km/h for five (5) specific roadways and/or neighbourhoods.
- Future consideration for 40 km/h posted speed limits on Local and Collector Classification type roadways should be assessed based on an approved, defined Policy to provide consistency and transparency.
- Staff has developed the Town's 40 km/h Neighbourhood Speed Limit Area Policy. This Policy is based on the findings from the 40 km/h Speed Limit Pilot Project.
- Through Report No. TPW-2022-0009, staff has updated the Town's Traffic Calming Implementation Protocol to incorporate the future implementation of 40

km/h Speed Limit Areas and define where certain intrusive and non-intrusive measures may be applicable.

- Staff has included the initial implementation of the proposed Policy as part of the 2022 Traffic Engineering Workplan and approved 2022 budget.
- Any costs to fund the implementation of the 40 km/h Neighbourhood Speed Limit Area Policy will be forwarded to Budget Committee as part of the 2023 (and future year(s)) budget approval process, subject to the affordability of the Town's Long-range Financial Plan (LRFP).

BACKGROUND AND DISCUSSION:

Through Resolution No. 2021-0026, Council requested staff to implement a pilot project comprised of both urban and rural residential locations to assess speed reduction signage combined with and without a variety of traffic calming measures to determine if there is a positive impact on reducing overall speeds on our roadways. Through Report No. TPW-2021-0014 staff commenced with the 40 km/h Speed Limit Pilot Project as part of the 2021 Traffic Engineering Workplan.

The locations included in the Pilot Project provided a cross section of typical residential neighbourhoods within the Town, each with different characteristics but similar safety and speeding concerns. The proposed locations were selected to facilitate the data collection process and not necessarily based on the extent or criticality of the speeding issue in the area.

The following Local and Collector classification type roads and/or neighbourhood areas were selected for this Pilot Project as indicated in Attachments 1-5:

- Location #1 – Cobblehill Road Neighbourhood Area (Ward 1 - Acton)
- Location #2 – Barber Drive Neighbourhood Area (Ward 4 - Georgetown)
- Location #3 – Belmont Boulevard Neighbourhood Area (Ward 3 - Georgetown)
- Location #4 – Delrex Boulevard between Edward Street and Rexway Drive (Ward 3 - Georgetown)
- Location #5 – Tanners Drive Neighbourhood Area (Ward 1 - Acton)

Within key road segments in each neighbourhood, staff measured the operating speeds under the existing posted speed limit.

Through Report No. TPW-2021-0021, the Uniform Traffic Control By-law 84-1 was updated to designate the installation of 40 km/h Area signs at all entrance/exit points of the neighbourhoods in the study.

Post-implementation speed studies were conducted at all locations and assessed utilizing the Town's Traffic Calming Implementation Protocol. When considering if traffic calming measures are warranted Condition 2 (Speed) of the Screening Process

Criterion must be met. Under a posted speed limit of 40 km/h, the Criterion is triggered at operating speeds higher than 51 km/h.

Traffic calming measures, including both intrusive and non-intrusive such as pavement markings, bike lanes, radar messaging boards (permanent and portable), flexible bollards, curb extensions and speed humps, were evaluated in combination with the reduction of the posted speed limit of 40 km/h.

Study Details and Recommendations

Location #1 – Cobblehill Road Neighbourhood (Ward 1 - Acton)

The Cobblehill Road neighbourhood was chosen due to the number of pedestrians in the area and its proximity to St. Joseph Catholic Elementary School. The area also provides access to Fairview Cemetery and its hilly terrain allows the motorists to pick up more speed unintentionally. Staff have received complaints from local residents regarding speeding on this roadway.

The Cobblehill Road neighbourhood can be found in Attachment 1.

The primary access points to the neighbourhood are Main Street S, Mill Street W and Storey Drive.

The affected road segments include:

1. Cobblehill Road between Victoria Street and Main Street S
2. Cobblehill Road between Mill Street W and Cook Street
3. Church Street West
4. Brock Street
5. Victoria Avenue
6. Holmes Place
7. Cook Street

Pre and post 40 km/h Area implementation speed studies showed the operating speeds on Cobblehill Road between Main Street S and Victoria Avenue to be unaffected and remain at 55 km/h. This is a result of the hilly terrain in combination with approximately 400 metres of free flow conditions without traffic control devices from Storey Drive to Main Street S. To ensure motorists were given sufficient time to get accustomed to the new speed limit staff conducted a second post-implementation study in the spring of 2022. The new operating speed was 53 km/h which shows a reduction of 2 km/h.

At 50 km/h posted speed limit the operating speed of 55 km/h on the section of Cobblehill Road between Main Street S and Victoria Avenue was within acceptable ranges prior to lowering the speed limit.

Based on this analysis, a conclusion can be drawn that lowering the speed limit could create speeding concerns where they did not exist under previous conditions. In most cases the latter will trigger the consideration for traffic calming devices, therefore it is essential that each case is reviewed individually and ensure that the lower speed limit is warranted by the 40 km/h Area Speed Limit Policy. Furthermore, these results confirm that the implementation of 40 km/h speed limit on Local classified roads that serve cut-through traffic will have a minimal impact on lowering operating speeds.

Under current conditions, the operating speed of 53 km/h warrants the consideration for non-intrusive traffic calming measures on the latter road segment as per the Updated Traffic Calming Implementation Protocol. In this instance, the recommended approach to lower the operating speeds will be to install “Flexible Bollards” at a mid-block location.

Location #2 – Barber Drive Neighbourhood (Ward 4 – Georgetown)

The Barber Drive neighbourhood was chosen since it serves as a significant school route connecting to the four (4) elementary schools in Georgetown South. Additionally, it presented staff with the opportunity to study the effects of the Pilot Project in the presence of “Bike Lanes”.

The Barber Drive Neighbourhood can be found in Attachment 2.

The primary access points to the neighbourhood are Mountainview Road S, Argyll Road, Eaton Street, Killaloe Crescent and James Young Drive.

The affected road segments include:

1. Barber Drive between Eaton Street and Roane Avenue
2. Barber Drive between James Young Drive and Killaloe Crescent
3. Barber Drive between Killaloe Crescent and Smith Drive
4. Smith Drive
5. James Young Drive
6. Killaloe Crescent
7. Roanne Avenue

Under the 50 km/h speed limit the operating speeds showed to be within acceptable ranges from 44 km/h to 54 km/h.

Following the implementation of the 40 km/h Area, two (2) road segments on Barber Drive indicated traffic calming measures are required.

Barber Drive between Eaton Street and Roane Avenue had an operating speed of 53 km/h before and after lowering the posted speed limit. Barber Drive between Killaloe Crescent and James Young Drive initially showed an operating speed of 52 km/h under the 50 km/h speed limit. Once the posted speed limit was reduced, the operating speed was measured again, and it increased to 56 km/h.

In the spring of 2022, staff re-evaluated the operating speeds on all sections of Barber Drive to ensure motorists had sufficient time to adjust to the lower speed limit on the Collector road. The results showed the following operating speeds:

- Barber Drive between James Young Drive and Smith Drive – 56 km/h
- Barber Drive between Killaloe Crescent and Roane Avenue – 54 km/h

Based on these results, it was determined that on Collector classification roads that serve both local and pass-by traffic, reducing the posted speed limit does not have a significant effect on operating speeds.

Considering the results of the pre-implementation studies the operating speeds on Barber Drive were within acceptable ranges at the 50 km/h posted speed limit. The key considerations to maintain the current 40 km/h speed limit on Barber Drive are the safety of school children utilizing Barber Drive as a school route attending one of the four (4) elementary schools in the area. In such instances as this, it is beneficial to have a lower 40 km/h speed limit along with any traffic calming measures warranted as per the Town's Traffic Calming Implementation protocol.

In order to reduce the operating speeds, staff is proposing the implementation of non-intrusive traffic calming measures in the form of "Flexible Bollards" within each section of the two (2) above-mentioned road segments.

Location #3 – Belmont Boulevard Neighbourhood (Ward 3 - Georgetown)

The Belmont Boulevard Neighbourhood was primarily chosen as it does not serve as a by-pass route for traffic. The only access points to the neighbourhood are via Belmont Boulevard at its east and west intersections with 15 Side Road. This neighbourhood has a park in a central location that pedestrians of all ages frequent. Furthermore, there are locations along Belmont Boulevard where groups of school children gather to be picked up and dropped off by school busses.

The Belmont Boulevard Neighbourhood can be found in Attachment 3.

The affected road segments include:

1. Belmont Boulevard between North Ridge Crescent and Stonebrook Crescent
2. Belmont Boulevard between North Ridge Crescent and North Ridge Crescent
3. Belmont Boulevard between Willoughby Way and Grist Mill Drive
4. Belmont Boulevard between Willoughby Way and 15 Side Road
5. Grist Mill Drive
6. McNally Street between Grist Mill Drive and Belmont Boulevard
7. McNally Street between Grist Mill Drive and Lawlor Street
8. North Ridge Crescent
9. Stonebrook Crescent

10. Willoughby Way

Segments 1, 3, and 4 (above) located on Belmont Boulevard were studied before the posted speed limit reduction and indicated operating speeds of 51 km/h, 54 km/h, and 51 km/h, respectively.

Following the speed limit reduction, post-implementation studies indicated a positive effect as operating speeds were lowered within acceptable ranges. The operating speeds on Segments 1 and 4 were reduced from 51 km/h to 48 km/h, while Segment 3 was reduced from 54 km/h to 51 km/h.

In the case of the Belmont Boulevard Neighbourhood the reduction of the posted speed limit signage has shown to have a positive effect on driver behavior through the reduction of operating speeds. No additional traffic calming measures are warranted. Based on these results, it can be concluded that reducing the posted speed limit in neighbourhoods without any by-pass traffic may have positive effects in reducing the operating speeds.

However, at this location, staff have noted the potential to improve road safety by providing more positive guidance to motorists through implementation of a painted centre line. This will be implemented in the summer/fall of 2022 in conjunction with our annual pavement marking program.

Location #4 – Delrex Boulevard between Edward Street and Rexway Drive (Ward 3 - Georgetown)

Delrex Boulevard has an existing speed limit of 40 km/h, and in recent years staff have been receiving residential complaints regarding aggressive driving.

The Delrex Boulevard area can be found in Attachment 4.

The affected road segments on Delrex Boulevard include:

1. Delrex Boulevard between Edward Street and Carole Street
2. Delrex Boulevard between Carole Street and Windsor Road
3. Delrex Boulevard between Windsor Road and Rexway Drive

The operating speeds on Segments 1 and 3 (above) were 52 km/h, while Segment 2 had an operating speed of 55 km/h. In an effort to reduce the operating speeds, staff installed flexible bollards at multiple locations throughout the corridor.

Post-implementation data collection showed a reduction in the operating speeds within acceptable ranges (<54 km/h). The most drastic reduction was in Segment 2, with an operating speed of 48 km/h, a reduction of 7 km/h.

Based on the collected data, it has been confirmed that “Flexible Bollards” are an effective method of traffic calming as they lower the operating speeds. Staff recommends the re-installation of the “Flexible Bollards” on Delrex Boulevard as a seasonal traffic calming measure.

Location #5 – Tanners Drive Neighbourhood (Ward 1 - Acton)

The Tanners Drive Neighbourhood was selected as it has the Acton Arena and Tanner Drive Park within its immediate vicinity. Tanners Drive has existing speed humps, however, the intent was to evaluate the effects of reducing the posted speed limit in combination with the speed humps.

The access points to the neighbourhood are Queen Street (Hwy 7), Churchill Road N and Cedar Road.

The Tanners Drive neighbourhood can be found in Attachment 5.

The affected road segments include:

1. Bonnette Street
2. Browns Crescent
3. Hurst Street
4. Somerville Road between Bonnette Street and Hurst Street
5. Somerville Road between Bonnette Street and Tanners Drive
6. Somerville Road between Cedar Road and Tanners Drive
7. Tanners Drive between Bonnette Street and Somerville Road
8. Tanners Drive between Browns Crescent

The speed studies completed before the posted speed limit reduction was implemented showed that Segments 1 through 5 (above) have operating speeds ranging from 44 km/h to 48 km/h, which was below the existing 50 km/h posted speed limit.

Segments 7 and 8 located on Tanners Drive had operating speeds of 52 km/h and 50 km/h, respectively. Even though these speeds were acceptable, staff re-studied these segments to verify the effects of the 40 km/h area on their operating speeds. Both segments showed a reduction in operating speeds where Segment 7 was reduced to 49 km/h and Segment 8 was reduced to 48 km/h.

At this location, lowering the posted speed limit when existing speed humps were present did show a reduction in the overall operating speeds even though the operating speeds were already within the acceptable range prior to the reduction. No further traffic calming improvements are required.

Summary Findings

The 40 km/h speed limit pilot confirmed that reducing the posted speed limit with signs alone is not effective in reducing operating speeds on all roadways. A change to incorporate 40 km/h posted speed limits on all Collector and Local classification roads with cut-through will not reduce the overall operating speeds in the community. In addition, such a change will require increased Halton Regional Police Service presence to manage speed enforcement. Future consideration for 40 km/h posted speed limits on roadways and neighbourhoods should be assessed on an individual basis in combination with traffic calming measures where appropriate.

As part of the Pilot Project, staff installed and evaluated flexible bollards as an intrusive traffic calming measure on certain roadways based on existing geometrics and the surrounding area. These have proven to be effective in certain areas to reduce operating speeds.

The 40 km/h speed limit has shown effectiveness when applied on Local classification roads where the majority of the motorists live in the area (i.e., no cut-through traffic). Therefore, it is recommended that these roads/neighbourhoods be identified for implementation of 40 km/h speed limits without further analysis.

In addition, it is recommended that implementation of 40 km/h speed limit on Local classification roads that serve cut-through traffic and Collector classification roads be considered in the presence of some key characteristics in the neighbourhood which may include:

- Elementary school(s) within a walking distance
- Senior residences generating pedestrian traffic
- Parks, parkettes or cemeteries
- Road Geometrics (e.g., Vertical/Horizontal Curves)
- Pedestrian Crossover in the vicinity
- The lack of pedestrian facilities (sidewalk, multi-use pathway)

Based on the results of this study, a 40 km/h speed limit is not effective on Collector Roads without the presence of intrusive traffic calming measures.

Next Steps

Attached to this report is the Town's proposed 40 km/h Speed Limit Area Policy based on all the findings from the 40 km/h Speed Limit Pilot Project (Attachment 6). The Policy, once approved, will serve as a transparent guideline for the consideration and implementation of lower speed limits on Local and Collector classification roads.

Additionally, through Report No. TPW-2022-0009 staff has updated the Town's Traffic Calming Implementation Protocol to incorporate the future implementation of 40 km/h Speed Limit Areas, and clearly define where certain intrusive and non-intrusive

measures are effective and where they may not be implemented due to road characteristics, effectiveness, or other factors.

In the Summer of 2022, staff will commence with an analysis of the Town's road system to identify the Local and Collector classified roads that qualify for a speed limit reduction in accordance with the 40 km/h Speed Limit Area Policy. Staff will develop an implementation program and will report back to Council in Q1 or Q2 2023. It is anticipated that the implementation of the 40 km/h Speed Limit Area Policy will be a multi-year project.

STRATEGIC PLAN ALIGNMENT:

This report aligns to the Town's Strategic plan recognizing the value to foster a healthy community that provides a clean environment and range of economic and social opportunities to ensure a superior quality of life in our community.

This report also identifies transportation as one of the Town's Strategic priorities.

RELATIONSHIP TO CLIMATE CHANGE:

This report is administrative in nature and does not directly impact or address climate change and the Town's Net Zero target.

PUBLIC ENGAGEMENT:

Public Engagement has been conducted as follows: Virtual PIC on the Let's Talk Halton Hills Platform, as well as consultation on Let's talk Halton Hills.

On May 4, 2021, the Let's Talk Halton Hills platform launched to provide all interested residents with the information about the 40 km/h Speed Limit Pilot Project. This platform provided residents with the option of reviewing all relevant materials online, listening to a pre-recorded public information session, obtaining answers to their questions, and providing feedback. The majority

To date the project had 603 visitors on the Let's Talk Halton Hills Project page, and staff received 34 questions and comments from registered constituents. Staff has advised constituents of this report and the Council meeting for their information.

Staff has updated the Let's Talk Halton Hills Project page notifying all constituents of this report.

INTERNAL CONSULTATION:

This report has been discussed internally within the Transportation & Public Works Department.

FINANCIAL IMPLICATIONS:

This report has the potential to require funding in a future budget year and therefore needs to be referred to budget committee for tracking purposes.

With respect to the implementation of the 40 km/h Speed Limit Area Policy discussed above, estimated funding of \$50,000 is required in 2023 subject to approval of the Budget Committee as part of the 2023 budget process. Any future costs beyond 2023 associated with the full implementation of the 40 km/h Speed Limit Area Policy will be reviewed and forwarded to Budget Committee for consideration as part of future budget processes, subject to affordability of the Town's LRFP.

Reviewed and approved by,

Maureen Van Ravens, Director of Transportation

Bill Andrews, Commissioner of Transportation and Public Works

Jon Rehill, Acting Chief Administrative Officer