

REPORT

REPORT TO: Chair and Members of the Planning, Public Works and Transportation Committee

REPORT FROM: Matt Roj, Traffic Coordinator

DATE: November 6, 2019

REPORT NO.: TPW-2019-0035

RE: Operational Safety Reviews and Speed Limit Assessments Update – 2019 Traffic Engineering Work Plan

RECOMMENDATION:

THAT Report No. TPW-2019-0035, dated November 6, 2019, regarding the Operational Safety Reviews and Speed Limit Assessments Update – 2019 Traffic Engineering Work Plan, be received;

AND FURTHER THAT a copy of this report be forwarded to the Halton Regional Police Service for their information and applicable enforcement.

BACKGROUND:

Staff presented the 2019 Traffic Engineering Work Plan (Plan) in Report No. TPW-2019-0002 to the Planning, Public Works and Transportation Committee.

The purpose of the report was to inform the Committee about Transportation and Public Works, Traffic Engineering Section's primary responsibilities and to propose a work plan to deliver services in 2019.

Through Report No. TPW-2019-0004, staff updated the existing Traffic Calming Implementation Protocol which provided a detailed process to address speeding concerns from the community and a prioritization for implementation of traffic calming measures.

COMMENTS:

Staff have completed all the operational reviews and speed limit assessments in the 2019 Traffic Engineering Work Plan. Based on the recommended actions, some of the work will be included in the 2020 Traffic Engineering Work Plan for the Committee's review and approval.

A detailed summary of the various operational reviews and speed limit assessments, including staff recommendations, are indicated below.

Traffic Signs

Farm Vehicle Signs Review

This spring, staff undertook a review of existing “Farm Vehicle” signs in surrounding municipalities. To improve motorist and cyclist awareness of farm vehicles in rural areas of the Town of Halton Hills, staff chose a “Farm Vehicle” warning sign design used by the City of Hamilton. The picture of the sign is identified in Attachment 1.

By using a farm vehicle symbol with a supporting tab sign, the new “Farm Vehicle” sign design improves the “message” being sent to road users. Signs that use symbols are easier to identify and process than only using words.

Following installation, staff will engage the Halton Agricultural Advisory Committee and Halton Region Federation of Agriculture for feedback.

On November 4, 2019, staff installed five (5) signs at the following locations:

- 15 Side Road (south side), west of Third Line
- Eighth Line (west side), south of 5 Side Road
- Tenth Line (west side), south of 10 Side Road
- Ninth Line (west side), south of 32 Side Road
- Fifth Line (east side), immediately north of Highway 7

Subject to positive feedback from the farming community, additional signs will be installed in 2020. It is anticipated that the existing “Active Farming” signs be phased out at the end of their life cycle and replaced with the new signs.

Traffic Calming

John Street and River Drive

As part of the Traffic Calming Implementation Protocol, staff have prioritized and ranked John Street as a priority for the neighbourhood traffic calming project for 2019.

The Traffic Calming Plan (TCP) will be presented to the community at the Public Information Centre (PIC) on November 21, 2019, at the Halton Hills Cultural Centre. Residents will be able to evaluate the TCP, engage with staff, and provide their comments.

Following the PIC, staff will finalize the TCP and circulate a copy to emergency services for comments. In early 2020, staff will prepare a report to seek Council endorsement and implementation of the TCP.

Speed Limit Assessments

This spring, staff undertook speed limit assessments of the following road segments:

- Confederation Street and Ninth Line between Glen Crescent Drive and Fallbrook Trail, review of 60 km/h and 80 km/h respectively;
- Fifth Line between the northern limit of the Hamlet of Limehouse to 32 Side Road, review of 80 km/h; and
- Sixth Line between 15 Side Road and 5 Side Road, review of 80 km/h.

The Town's Speed Limit Policy was used to evaluate the road segments. Over the past 10 years, staff observed an increase in the number of cycling events and overall active transportation activities on rural roads.

To improve road safety for all road users, including pedestrians, cyclists, farm vehicles, and other motorized vehicles; the Town has been reducing the existing 80 km/h posted speed limits to 70 km/h over the past five years.

Based on the speed limit assessment, the following speed limit changes will be included in the Uniform Traffic Control By-law No. 84-1 Schedule Updates Report No. TPW-2019-0034 at the Planning, Public Works and Transportation Committee on November 19, 2019:

- Confederation Street between Glen Crescent Drive and Ninth Line, reduce the existing 60 km/h speed limit to 50 km/h;
- Ninth Line between Confederation Street and Fallbrook Trail, reduce the existing 80 km/h speed limit to 70 km/h;
- Fifth Line, extend the existing 50 km/h speed limit to a point 300m north of the Hamlet of Limehouse northern boundary;
- Fifth Line between a point 300m north of the Hamlet of Limehouse northern boundary to 32 Side Road, reduce the existing 80 km/h speed limit to 70 km/h; and
- Sixth Line between 15 Side Road and 5 Side Road, reduce the existing 80 km/h speed limit to 70 km/h.

Operational Safety Reviews – Road Segments

This spring, staff undertook operational safety reviews of the following road segments:

- 22 Side Road from Fifth Line to the east limit of the Hamlet of Limehouse;
- Bower Street between Willow Street North and Mill Street East;
- Danby Road between Silver Pond Drive and Niagara Trail;
- King Street (Georgetown) between Queen Street and Mountainview Road North;
- King Street and Green Street (Norval) between Adamson Street South (Winston Churchill Boulevard) and Guelph Street (Highway 7); and
- Wildwood Road between Confederation Street and Oak Ridge Drive.

22 Side Road: To evaluate the operating speed and volume on 22 Side Road in Limehouse, staff deployed automatic traffic recorders (ATRs) east of Elizabeth Street from June 25, 2019 to July 22, 2019.

The information collected by the ATRs identified an operating speed of 66 km/h and an average speed of 55 km/h in the posted 50 km/h zone. Staff are recommending the installation of a Vehicle Activated Traffic Calming Sign (VATCS) on 22 Side Road, facing the westbound direction traffic, west of the “50 Begins” regulatory sign as part of the 2020 Traffic Engineering Work Plan.

Bower Street: This road was evaluated through a number of traffic studies to address public concerns with traffic safety. On April 30, 2019, staff undertook a Spot Speed Radar Study (SSRS) between Frederick Street North and Wilbur Street. The combined operating and average speed results indicated the speeds of 51.14 km/h and 43.9 km/h, respectively in the posted 40km/h zone.

Staff deployed ATRs between Mill Street East (Highway 7) and Wilbur Street North from May 2, 2019 to May 9, 2019. The traffic information collected identified an operating speed of 50 km/h and an average speed of 41 km/h in the posted 40 km/h zone. The Annual Average Daily Traffic (AADT) volume was 711 vehicles.

On May 3, 2019, staff undertook a Stop Compliance Study at the intersection of Bower Street and Alice Street. The study identified that four percent (%) of vehicles disobeyed the Stop Sign Control and 29 percent (%) of vehicles rolled-through the Stop Sign Control.

There is no speeding issue identified and as such, no further actions are recommended.

On May 14, 2019, staff completed an Origin/Destination Study. The study results identified that 54 percent (%) of traffic travelling in the westbound direction during P.M. peak hours is cutting-through Bower Street. The high number of cut-through traffic is primarily generated by the vehicle delay at the Main Street/Mill Street (Highway 7) traffic signal. Some motorists try to by-pass the traffic signal by travelling on Bower Street, Willow Street North, and re-enter Highway 7 through St. Alban’s Drive or River Street.

Although the cut-through traffic percentage is high, the volume of traffic remains within the desired limit for a “Local” classification road of 1,500 AADT.

Staff will work with Halton Regional Police Service to undertake the Stop Sign Compliance enforcement.

Danby Road: Based on public concerns raised with regard to speeding on Danby Road, staff deployed ATRs between Hidden Lake Trail and the bridge from June 14, 2019 to June 21, 2019. The survey results identified the operating speed of 59 km/h and

an average speed of 49 km/h in the posted 50 km/h zone. No speeding issue was identified.

To improve road safety within the school zone, located east of Orchid Avenue, staff installed two “SLOW” pavement markings and deployed a radar message board. School zones are regularly monitored by staff through traffic studies and onsite observations. No further improvements are recommended.

King Street (Georgetown): To evaluate vehicle operating speed on King Street, staff deployed ATRs between Elgin Street and Union Street from April 24, 2019 to May 1, 2019. The survey results identified the operating speed of 56 km/h and an average speed of 42 km/h in the posted 50 km/h zone. There is no speeding issue identified and as such, no further actions are recommended.

King Street and Green Street (Norval): Staff presented Report No. TPW-2019-0023, Norval Transportation Update including the King Street/Green Street traffic operational review. This work included the installation of the two new speed humps. The operating speeds on King Street and Green Street were reduced by 10 and 12 percent (%) from 39km/h and 42 km/h to 35 km/h and 37 km/h, respectively. No further action is required with regard to the traffic calming improvements.

Staff will continue to coordinate with the Halton Regional Police Service to improve compliance with the turn prohibitions installed near Green Street and King Street.

Wildwood Road: The road segments under review have a posted speed limit of 40 km/h. Staff deployed ATRs between Chelton Street and Park Street West from May 22, 2019 to May 29, 2019. The survey results identified the operating speed at 63 km/h and an average speed of 55 km/h. Also, staff deployed ATRs between Beaver Street and Confederation Street from June 7, 2019 to June 14, 2019. The survey results identified the operating speed of 60 km/h and an average speed of 51 km/h.

Based on the study results, Wildwood Road will be prioritized, as part of the Traffic Calming Implementation Protocol.

Operational Safety Reviews – Intersections

This spring, staff undertook operational safety reviews of the following intersections:

- Arborglen Drive and Arborglen Drive
- Prince Charles Drive and Brucewood Road
- Barber Drive and Eaton Street
- River Drive and Tenth Line
- Sprowl Street and Salmon Way
- Eaton Street and Chaplin Crescent (East)

Arborglen Drive and Arborglen Drive: Over the past four (4) years, staff received a number of public concerns about pedestrian safety at the intersection of Arborglen Drive and Arborglen Drive. Adjacent to the intersection is Dr. Charles Best Parkette. The parkette is regularly used for student pick-ups and drop-offs and includes a playground and community mailboxes. Overall, the parkette functions as a focal point of the neighbourhood.

Staff undertook a turning movement count at the intersection on April 9, 2019, to determine if an All-Way Stop Sign Control is justified.

The critical part of the All-Way-Stop Control Warrant is Warrant 2B, Local Classification – Maximum Volume Split, which requires Minor street volume entering the intersection to be equal to or greater than 25 percent (%) of the total traffic volume at the three-way intersection.

At this intersection, the Minor street volume consists of 27 percent (%) of the total traffic volume.

Stop controlled intersections provide increased safety for pedestrians. Based on staff observations, children are intimidated when crossing the road at the intersection to access the parkette.

To improve pedestrian safety, staff will install an All-Way Stop Sign Control at the intersection of Arborglen Drive and Arborglen Drive by the end of 2019. This has been included in the Uniform Traffic Control By-law No. 84-1 Schedule Updates Report No. TPW-2019-0034 at the Planning, Public Works and Transportation Committee on November 19, 2019.

Prince Charles Drive and Brucewood Road: On April 2, 2019, staff undertook a turning movement count (TMC) at this intersection. The TMC results were compared to the Town's All-Way Stop Control warrant for a four-legged intersection.

The warrant results indicated that the Brucewood Road approaches generated 25 percent (%) of the total traffic. For a four-legged intersection, the required volume split between Major street vs. Minor street is 65/35 percent (%), respectively. The Motor Vehicle Collision review identified no collisions from 2014 to 2018.

To improve intersection safety, staff installed a new crosswalk and stop lines at the Brucewood Road approaches. Staff are working with the resident living at the northeast corner to improve intersection sightlines.

Due to the aggressive driving observed near the intersection, staff will install two "SLOW" pavement markings on the Prince Charles Drive approaches, as part of the 2020 Traffic Engineering Work Plan.

Barber Drive and Eaton Street: Staff undertook a turning movement count to determine if the intersection of Barber Drive and Eaton Street justifies the installation of an All-Way Stop Sign Control on April 24, 2019.

The critical part of the All-Way-Stop Control Warrant is Warrant 2B, Collector Classification – Maximum Volume Split, which requires Minor street volume entering the intersection to be equal to or greater than 30 percent (%) of the total traffic volume at the three-way intersection.

At this intersection, the Minor street volume consists of 33 percent (%) of the total traffic volume. Warrant 2A, “Minimum Hourly Average for All Approaches for Any 8 Hours of the Day,” requires a minimum entering volume of 500 vehicles. The warrant analysis indicated 523 vehicles entering the intersection during the A.M. peak. Warrant 2C, “Minimum Combined Vehicular and Pedestrian Volume on Minor Street,” requires a minimum volume of 200 units. The warranted analysis indicated 230 units during the A.M. peak.

Staff will install an All-Way Stop Sign Control at the intersection of Barber Drive and Eaton Street and update the Uniform Traffic Control By-law as part of the 2020 Traffic Engineering Work Plan.

Sprowl Street and Salmon Way: To improve safety at the intersection, staff installed a new crosswalk and stop line on the Salmon Way approach. To address sightline concerns, staff installed “No Stopping” prohibitions at the northeast corner of the intersection. No further action is recommended.

Eaton Street and Chaplin Crescent (East): In May and June 2019, staff undertook observations with regard to the pedestrian movement near the Eaton Street and Chaplin Crescent (East) intersection to assess the need for additional crosswalks. Based on staff observations, it is not recommended to install additional crosswalks due to the close proximity of the Eaton Street and Standish Crescent intersection, which is serviced by a school crossing guard.

Due to the ongoing work scheduled for November and December of this year, staff will update the Committee in early 2020 on the status of the entire 2019 Traffic Engineering work plan and proposed 2020 Traffic Engineering Work Plan.

Automated Speed Enforcement (ASE)

The Province of Ontario passed Bill 65, the Safer School Zones Act, 2017, on May 30, 2017. The purpose of the Act is to facilitate the adoption of automated speed enforcement (ASE) technology on roads with speed limits under 80 km/h in schools and community zones.

The legislation required to implement the ASE program has been passed but not yet proclaimed enforced. Since January 2018, City of Toronto has been working jointly with the Province and other partnering municipalities to develop the ASE program.

In December 2019, the City of Toronto expects to deploy photo radar cameras across the city. The installations are set to be completed on local, collector and arterial roads near schools and community safety zones. The locations of the cameras will be determined based on the speed and collision data.

Through discussions with other municipalities, staff continue to monitor the progress of the ASE program. Staff expect to present an update report to the Planning, Public Works and Transportation Committee in early 2020.

RELATIONSHIP TO STRATEGIC PLAN:

There is no relationship to the strategic plan.

FINANCIAL IMPACT:

The 2019 Traffic Engineering Work Plan is included within the approved budget.

CONSULTATION:

The report was discussed internally within the department.

PUBLIC ENGAGEMENT:

Public engagement was undertaken for individual projects and included neighbourhood meetings.

SUSTAINABILITY IMPLICATIONS:

The Town is committed to implementing our Community Sustainability Strategy, Imagine Halton Hills. Doing so will lead to a higher quality of life.

The recommendation outlined in this report advances the Strategy's implementation.

This report supports the Social Well-being pillar of Sustainability and in summary the alignment of this report with the Community Sustainability Strategy is good.

COMMUNICATIONS:

Staff will discuss the projects with staff and contractors, as required. Notification to the community will be undertaken via Council agenda, Town's website and social networks as applicable.

CONCLUSION:

Staff have completed all the operational reviews and speed limit assessments in the 2019 Traffic Engineering Work Plan. Staff will include the projects requiring further actions to the 2020 Traffic Engineering Work Plan.

Due to the ongoing work scheduled for November and December of this year, staff will update the Council in early 2020 on the status of the entire 2019 Traffic Engineering Work Plan and present the 2020 Traffic Engineering Work Plan to Council for review and approval.

Reviewed and Approved by,

A handwritten signature in cursive script, appearing to read "Maureen Van Ravens".

Maureen Van Ravens, Manager of Transportation

A handwritten signature in cursive script, appearing to read "C. Mills".

Chris Mills, Commissioner of Transportation and Public Works

A handwritten signature in cursive script, appearing to read "Brent Marshall".

Brent Marshall, Chief Administrative Officer