



OAKVILLE

REPORT

COMMUNITY SERVICES COMMITTEE

MEETING DATE: JUNE 17, 2019

FROM: Engineering and Construction Department

DATE: May 27, 2019

SUBJECT: Traffic Calming and Speed Limit Review

LOCATION: Town wide

WARD: Town wide

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RECOMMENDATION:

1. That the Report entitled "Traffic Calming and Speed Limit Review" from the Engineering and Construction Department dated May 27, 2019 be received.
2. That staff be directed to provide a report to the 2021 Budget Committee on the implementation of Automated Speed Enforcement (photo radar), including details on the initial phase experience in other municipalities, an analysis of the capacity to process the resulting *Provincial Offences Act* caseload, and related budget implications.
3. That staff be directed to provide a report to the 2020 Budget Committee with the proposed criteria, inventory and the costs associated with additional 40 km/h zones at limited high pedestrian generator areas (e.g. Business Improvement Areas (BIAs) and major active parks on local and minor collector roads).
4. That, where not already established, staff be directed to implement Community Safety Zones at every all-day 40 km/h zone fronting an elementary school on a major road.
5. That the Updated Toolbox of Traffic Calming Measures, as detailed in the staff report from the Engineering and Construction Department dated May 27, 2019, be endorsed.
6. That staff be directed to implement the revisions to the town's current Traffic Calming Process, as detailed in the staff report from the Engineering and Construction Department dated May 27, 2019.

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7. That staff be directed to provide a report to the 2020 Budget Committee with a multi-year Major Road Elementary School Zone Traffic Calming Program, including short-term installation of fixed Radar Speed Display Signs (RSDS) at elementary schools on major collector and minor arterial roads.

KEY FACTS:

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

- Concerns related to safety and speed limit compliance are commonly raised by residents and in response, staff carry out a number of initiatives,
- This report has been prepared to address several Requests for Reports from Council on safety and speed limits,
- A Traffic Calming and Speed Limit resident poll was undertaken in February 2019 to collect updated resident opinions,
- With the pending Provincial legislation and regulations related to Automated Speed Enforcement (ASE) or 'photo radar', staff recommend a report to the 2021 Budget Committee with details and analysis of the initial phase experiences of other municipalities, and the anticipated requirements and costs associated with the implementation of ASE in Oakville. A report to the 2021 Budget Committee is recommended to allow staff to provide information regarding:
 - legal requirements and implementation specifics for ASE, which will define the regulations,
 - final legislation and regulations,
 - early results, based on the implementation of ASE by other municipalities, under a POA process, and the operations of the joint processing centre, and
 - the ability of ASE to address traffic safety issues in community safety zones,
- Given that the regulations are not yet final, there is uncertainty related to the costs of implementing ASE, and the impacts to an already overburdened POA system. Staff are not recommending that the town proceed as part of the first phase of ASE, but instead await the results of the implementation in other municipalities to assess the full implications to the town. Staff will continue with our participation on the Steering Committee in order to advocate for the implementation of ASE under Administrative Penalties,
- The Highway Traffic Act now allows for municipalities to establish a higher or lower speed limit municipality-wide or neighbourhood-wide rather than rely on the current default traffic speed limit of 50 km/h. Staff recommend:
 - the current default speed limit remain at 50 km/h given there is no evidence that simply reducing speed limits has an impact without increased enforcement or specific traffic calming techniques; however, the increased application of 40 km/h in specific locations is warranted,

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- an increase in the use of 40 km/h zones at limited high pedestrian generator areas (e.g. Business Improvement Areas and major active parks on local and minor collector roads), and that staff report to the 2020 Budget Committee on proposed criteria, inventory and cost implications, and
 - in anticipation of the implementation of ASE, the creation of Community Safety Zones (CSZ) at every all-day 40 km/h zone fronting elementary schools on major roads (16 new CSZ locations),
- Traffic calming tools, while not the sole means of reducing speeds, remain viable mechanisms and have a positive impact. Refinements to our traffic calming techniques are recommended, which include:
 - add additional physical calming elements to our toolbox, such as raised intersections,
 - when considering physical traffic calming, increasing our outreach program to gather community input into the need and techniques for traffic calming to the affected street as well as the surrounding community,
 - adding a trailer mounted mobile radar speed display sign (MRSDS), recently acquired by the town, to our deployment this spring, and
 - reporting to the 2020 Budget committee on a multi-year Major Road Elementary School Zone Traffic Calming program that will consist of the installation of permanent radar speed display signs at 20 school zones on major roads as a short term measure, and the development of a program and associated costs for a longer-term program consisting of physical traffic calming measures at these locations,
- Speeding issues on other major collector and minor arterial roads will continue to be mitigated using educational efforts (such as RSDS), pavement marking and police enforcement, and
- Other revisions to the traffic calming process have been recommended to ensure proper site location, public acceptance and faster delivery of traffic calming projects.

BACKGROUND:

Concerns related to safety and speed limit compliance, including traffic calming, automated speed enforcement, community safety zones, traffic control (stop signs, signals, pedestrian crossings) and opportunities for reduced speed limits are commonly raised by residents in all communities, including Oakville. To address these concerns, town staff carry out a number of initiatives, including:

- conducting approximately 150 speed surveys each year,
- completing numerous studies, site visits and traffic observations,
- implementing traffic calming projects,

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- adding or adjusting traffic control measures,
- meeting with residents and members of Council,
- collaborating with Halton Regional Police Services,
- developing and implementing communications and education plans,
- researching best practices, and
- networking with staff from other municipalities to learn from their experiences.

Within the past three years, staff have presented multiple reports to Council on a variety of safety and speed limit compliance topics including town-wide matters such as the traffic calming policy and default speed limit, as well as neighborhood and road-specific matters.

A related initiative, the Pedestrian Safety Program was developed in 2017 to address safety issues and establish where and what type of pedestrian crossings (pedestrian crossovers, or in some cases pedestrian signals) are recommended throughout town. Through the program, over 170 candidate locations were identified, with about 10 locations (under current funding) being constructed annually over a multi-year program.

This report has been prepared and organized to address several Requests for Reports from Council on the following inter-related topics:

- Part 1 - Automated Speed Enforcement (Photo Radar)
- Part 2 - 40km/h Zones and Community Safety Zones
- Part 3 - Traffic Calming

Further to the Traffic Calming and Speed Limit poll of Oakville residents undertaken in September of 2015, staff performed another poll in February 2019 to collect updated resident opinions. The poll was made available on-line and hardcopies were available at all town community centres. There were 820 responses to the poll and the results are integrated within this report.

COMMENT/OPTIONS:

PART 1 - Automated Speed Enforcement (Photo Radar)

On May 30, 2017, Bill 65, *Safer School Zone Act*, was passed by the Province of Ontario. This legislation permits municipalities to use Automated Speed Enforcement (ASE), commonly referred to as “photo radar”, to address traffic safety issues at designated school zones and community safety zones (CSZs). Specific Provincial Regulation(s) made under the *Act* to provide the required ASE implementation details are under development but have not been passed.

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On October 23, 2017 Council approved the following staff direction,

“That, to enable the town to be prepared for the implementation of automated speed enforcement (“photo radar”), staff be directed to prepare a report for Council regarding Bill 65 – The Safer School Zones Act and considerations regarding the use and placement of automated speed enforcement cameras in school and community safety zones.”

Staff presented a report at the March 26, 2018 Community Services Committee meeting to provide an overview of the ASE legislation and the anticipated roll-out of the program. Since that time, staff have participated in various committees and working groups related to ASE, with the goal of ensuring that criteria relevant to the traffic issues in Oakville are considered and reflected in the process. The City of Toronto has taken the leadership role with the Ontario Traffic Council (OTC) in developing the ASE regulations and program.

Within the resident poll conducted in February, the following question regarding ASE was posed:

“Photo radar, also known as Automated Speed Enforcement (ASE) is currently being considered for Ontario school and community safety zones. Would you support ASE in Oakville?”

The poll found 55% of respondents to be in support of ASE in Oakville.

A request for proposal (RFP) to procure the cameras, equipment and operational support required to implement ASE was issued this spring by the City of Toronto with nine other Ontario municipalities participating. Oakville is not specifically included as a participant; however, language in the RFP will provide the opportunity for the town to join the program and enter into an agreement with the successful vendor upon Council approval of an ASE program.

On March 26, 2018 Council approved the following staff direction:

“That staff be directed to investigate the feasibility of adopting an Administrative Monetary Penalties System for a future Automated Speed Enforcement program and to work with Province and Ontario municipalities to resolve necessary required legislative changes.”

Staff has been examining the impacts and benefits to Oakville of a Provincial Offences Act (POA) process versus and Administrative Monetary Penalties System (AMPS) process through staff participation on the ASE steering committee. At present, the first phase of the ASE program will have to be launched under a POA

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process as there is currently no legislative authority to impose AMPS. There is significant interest on the ASE steering committee to move to an AMPS process in the future, and some municipalities are awaiting the establishment of an AMPS process prior to proceeding with ASE.

Implementation planning is proceeding on the basis that ASE offences will be processed through a single joint processing centre (JPC), hosted by the City of Toronto, similar to the system currently used for red light camera offences. More JPCs could be considered in the future, depending on the volume of infractions. A cost-sharing formula between the participating municipalities is under development, with more work required to answer questions related to the financial obligations of, and revenue distribution between, participating municipalities.

Analysis performed by the ASE Steering Committee has found that there is a potential to generate a high volume of infractions, even with limited cameras. The ability to process infractions will likely be a limiting factor in the initial implementation of ASE, both for the JPC and by municipalities' POA court service administrations.

As mentioned, while the Province has passed legislation that allows municipalities to operate an ASE program, a program cannot become operational until the Province proclaims the legislation as law and establishes the associated regulations, which will include specifics of the vendor ASE system. Staff anticipate the RFP results, legal requirements, Provincial Regulation(s) and JPC cost-sharing formula to be finalized later this year, along with other implementation specifics such as ASE site location and speed criteria. At that time, staff would be in a position to report back to Council with program details.

Therefore, it is recommended that staff be directed to report to the 2021 Budget Committee with details of the initial phase experience in other municipalities and an analysis on the capacity to process Oakville POA caseload, budget implications and a recommendation on the implementation of ASE in Oakville.

PART 2 - 40km/h Zones and Community Safety Zones

On April 25, 2016 Council approved the following staff direction:

“Speed Limit Review - That staff be requested to review the results of the speed reduction zones and report back on opportunities to expand the speed reduction zones in the future.”

And, on November 20, 2017 Council approved the following related staff direction:

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“Expanded use of 40km/h Zones - That staff prepare a report providing options for the increased use of 40km/h zones and/or community safety zones in areas which do, or are expected to, generate a significant number of pedestrians, and that this report either be presented on the same agenda as the Bill 65 and Speed Enforcement Placement report (requested at the October 23, 2017 Council meeting) or combined with the Bill 65 report.”

Default Speed Limits

The Highway Traffic Act (HTA) in Ontario prescribes the default traffic speed limit within a local municipality or within a built-up area to be 50 km/h, unless otherwise posted by the local authority. Municipal Councils can, through a by-law, implement higher or lower speed limits on individual streets. In Oakville, the majority of streets have a speed limit of 50km/h, with 40km/h speed limits generally in school areas and adjacent parks, and some other high pedestrian areas.

However, with the passing of Bill 65, municipalities can now establish a default speed limit lower than 50km/h either municipality-wide or within designated areas. This means that the default speed limit for an entire neighbourhood could be set at 40km/h, with signage at the entry points to that neighbourhood indicating the default speed limit. Currently signs are posted at the entry points to town advising of the default speed limit (50km/h) and any road that has a different speed limit must be signed accordingly.

In anticipation of the Bill 65 legislation, in April, 2016 staff presented a report, “Speed Limit Review” to Community Services Committee to address a previous staff direction to consider opportunities to lower speed limits in residential areas. That report included an extensive review on the matter of speed limit reductions along minor classed roadways.

In that report, staff did not recommend either an overall town-wide or neighbourhood reduction in the posted speed limit to 40 km/h. As has been found, speed limit reductions alone do not result in significant changes to driver behaviour, and so such speed limit reductions would not likely result in noticeable differences in vehicle speeds, but would lead to a significant increase in traffic calming candidates.

In the February 2019 resident poll, the following questions regarding default speed limits were asked:

1. *“Would you support a 40 km/hour speed limit in all current 50 km/hour areas (including major roadways such as Third Line, Lakeshore Road, Rebecca Street, Sixth Line, etc.)?”*
2. *“Would you support a 40 km/hour speed limit on local residential streets only (excluding major roadways)?”*

The poll found only 16% of respondents in favour of a 40 km/h speed limit in all current 50 km/h areas, while 55% of respondents were in favour a 40 km/h speed limit on local residential streets only.

Staff maintain an awareness of practices in other Ontario communities, and community-wide or neighbourhood speed reductions have not been widely adopted to date. Staff will continue to monitor the approaches in other municipalities in this regard. Based on the findings of the 2016 “Speed Limit Review” report, staff maintains that reducing speed limits only results in appreciable changes in speeds when accompanied by other measures such as traffic calming, other physical roadway changes or regular enforcement. As such, staff does not recommend that a 40 km/h speed limit be applied town-wide or neighbourhood-wide.

40 km/h zones

In the 2016 “Speed Limit Review” report, staff recommended that a more sustainable and practical solution to address driving behaviour would be expanding the use of 40 km/h zones to other roads with high pedestrian generators. With a few exceptions, prior to 2016, 40 km/h zones were limited to the frontage along elementary schools. Specifically, staff recommended expanding 40 km/h zones to the following areas:

1. 40 km/h (at all times) along the frontage of parks in close proximity to elementary schools, community centres, senior centres, public libraries and arenas along local and minor collector roads,
2. Adding all-day flashing beacons to several existing 40 km/h zones located on major collector or arterial roads, and
3. 40 km/h When Flashing during school arrival and dismissal times along town major collector and arterial class roadways along the frontage of all schools (secondary, elementary and private).

This approach was approved by Council and has led to the current inventory of 40km/h zones:

1. Signed-only, all-day 40km/h zones (71 locations)
2. Time-of-day 40km/h zones with flashing beacons (11 locations)
3. All-day 40km/h zones with flashing beacons (6 locations)

Results of Speed Reduction Zone Implementation

Following implementation of the additional 40 km/h zones noted above, staff sampled resulting speeds at five of the added locations to determine the efficacy of the posted speed limit change. The average speed reduction was found to be only 0.4km/h. Thus, installing 40 km/h zone signage alone did not have a significant effect on driver behavior, and all surveyed sites could now qualify for traffic calming

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based on their new, lowered speed limit. It is expected that this same conclusion would also apply to the other areas where the speed limit was lowered to 40km/h.

As part of the 2019 resident poll, the following question regarding 40 km/h zones was asked:

“The town already has 40 km/h speed limit in school zones, and near senior/community centres, libraries, arenas and parks adjacent to elementary schools. Where else do you think 40 km/h zones would be appropriate?”

- *Not appropriate anywhere else*
- *On all residential streets*
- *Other”*

The poll found that the majority, or 56% of respondents, feel that 40 km/h zones are not appropriate anywhere else, while 38% feel that 40km/h would be appropriate on all residential streets. There is a difference noted here from the previous poll question where 55% supported 40 km/h on local residential streets only, as opposed to all roadways. This difference is likely due to how the questions were posed, but shows there is not a strong preference among respondents for a large-scale speed limit reduction. The remaining 6% of respondents selected “Other” and provided suggestions on areas could benefit from 40km/h limits, most relating to either specific concerns, physical conditions (e.g. no sidewalks, tight curves), or locations with many pedestrians (e.g. shopping areas, churches).

Staff supports reduced speeds in high pedestrian areas, in areas where speeding is prevalent and in areas with a history of collisions; however, staff concerns associated with the further expansion of 40km/h zones include:

- Demonstrated lack of driver compliance when speed limits are lowered without complementary speed reduction tactics,
- frustration by residents with limited police enforcement,
- increase in traffic calming candidates due to more areas exceeding traffic calming warrant thresholds due to lack of driver compliance, and
- creating a false sense of security for pedestrians with lower posted speed limits, but minimal driver compliance.

Nonetheless, should Council wish to expand 40km/h zones to a broader range of roads, the following options are provided for consideration:

Option 1: Due to the concerns noted above, maintain the current practice for establishing 40 km/h zones, only adding for new schools, community centres, etc.

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- Option 2: Limited expansion of 40 km/h zones to other pedestrian generators (e.g. Business improvement Areas (BIAs) and major active parks on local and minor collector roads). This would require the development of criteria and would have budget implications for signage installation, increased education and outreach, etc. (RECOMMENDED)
- Option 3: Expand 40 km/h zones to local residential streets without sidewalks. This could represent a significant number of individually signed roads and would have associated budget implications.
- Option 4: Implement 40 km/h zones on a case-by-case basis by applying criteria (based on road geometry and other factors) outlined in the Transportation Association of Canada Guidelines for Establishing Posted Speed Limits.

Community Safety Zones

Through legislation enacted in 1998, municipalities may designate community safety zones (CSZs) as a means of promoting public safety. CSZs permit increased fines within the area, although CSZs are independent of, and not specifically associated with, a particular speed limit. It was believed that increased fines would further encourage motorists to drive at, or below the posted speed limit. The town currently has 7 Community Safety Zones (CSZs) in the town's Traffic By-Law, as follows:

- Fourth Line: Bridge Road to Wildwood Drive,
- Old Abbey Lane: Montrose Abbey Drive to Priory Court,
- Oxford Avenue: McCraney Street West to Ringwood Road/Mansfield Drive,
- Pilgrims Way: Blackburn Drive to Mapleridge Crescent/Pineway Court,
- River Glen Boulevard: Towne Boulevard to Mowat Avenue,
- Sixth Line: Elm Road to Upper Middle Road, and
- Trafalgar Road: Lawson Street to Macdonald Road.

In March 2006, staff presented a report to the Traffic Advisory Committee reviewing the CSZs that were established in Oakville, and experiences found in other municipalities. The review concluded that speed reductions only occurred where there had been a high level of police enforcement. Further, at locations where there was little police enforcement (mainly due to limited space to set up speed enforcement locations) there was virtually no change in vehicular speeds. Feedback from Halton Regional Police at the time also expressed concern with any expansion of the program.

Based on this information, it was concluded that any speed reductions in these areas was entirely due to an elevated level of police enforcement and not the presence of a CSZ. Council supported the staff recommendation that no new CSZs be introduced.

Within the February 2019 resident poll, the following question regarding CSZs was posed:

“The town currently has 7 Community Safety Zones (CSZ) in some school areas across the town where speed limits of 40 km/hour are enforced and fines are increased. Would you support adding additional CSZs in Oakville?”

The poll found 65% of respondents in favour of additional CSZs in Oakville.

Community Safety Zones and Automated Speed Enforcement

Neither the establishment of 40 km/h zones nor CSZs have resulted in significant speed reductions, unless accompanied by regular police enforcement or other complementary measures such as physical traffic calming. However, with the implementation of ASE, municipalities could have another tool that would increase enforcement of speed limits in CSZs without straining limited police resources.

As noted earlier in this report, the Bill 65 legislation would permit the use of ASE within CSZs and designated school zones. It is the opinion of staff that implementation of ASE in Oakville should be only within designated CSZs (and that CSZs be created to encompass school zones, where desired for ASE) for these reasons:

- The HTA definition of CSZ provides more flexibility in zone location and length than the definition for school zones. Incorporating school areas within CSZs would allow the CSZ to extend beyond the length prescribed for school zones under the Act,
- Speeding fines are increased, whether enforcement is by police or ASE,
- Consistency in the application of ASE fines (fines would differ between school zone and CSZ sites), and
- Consistency with locational criteria being used by other municipalities that are considering ASE.

The following options for increasing CSZs are provided for consideration:

- Option 1: Do not add any new CSZs due to minimal efficacy without consistent police enforcement, as noted above. This option could be revisited if and when ASE is implemented in Oakville.
- Option 2: In order to prepare locations as candidates for any future implementation of ASE by the town, where not already established, add CSZs at all-day 40 km/h zones fronting elementary schools on major roads (16 new CSZ locations). Vertical deflection physical traffic calming (i.e. speed cushions) does not exist and is typically not practical at these locations. In the short term, fines for speeding would

be increased in these areas. These increased fines would remain in place if and when ASE is implemented in Oakville. The estimated one-time cost of \$10,000 for this option would be funded from the existing Traffic Calming capital account. (RECOMMENDED)

PART 3 - Traffic Calming

On December 11, 2017 Council approved the following staff direction,

“That Council direct staff to report on options and implications of the options to address traffic levels and/or speeds on local and minor collector roads that are not intended to carry such volumes and/or speeds of traffic.”

Within the February 2019 resident poll, the following question regarding traffic calming was posed:

“Traffic calming is the use of physical solutions to reduce traffic speeds. It can be classified as passive and physical. Where do you think physical traffic calming is appropriate?”

- *All roadways (including major collectors and arterials)*
- *Local and minor collector roadways only (traffic volumes less than 5,000 vehicles/day)”*

The poll found 86% of respondents felt traffic calming is appropriate on local and minor collector roadways, and only 14% felt it appropriate on all roadways.

In addition to the 40 km/h and CSZ measures discussed above, the town possesses a suite of other approaches to address traffic levels and/or speeds on roads. The following approaches are reviewed in this section:

- Traffic Calming Toolbox,
- Safety Campaigns – Public Outreach,
- Mobile Radar Speed Display Sign (MRSDS),
- Major Collector and Minor Arterial Roadways, and
- Traffic Calming Process.

Traffic Calming Toolbox

The town maintains a Traffic Calming Toolbox of passive and physical measures that have been reviewed by staff and received by Council. Staff have reviewed and identified several new and emerging traffic calming measures that would be considered when addressing future traffic calming projects. The following traffic

calming measures, further detailed in Appendix C, are recommended for addition to the town's existing toolbox of measures:

- Raised Intersection
- Lateral Shift
- Speed Kidney
- Automatic Speed Enforcement
- Traffic Circles and Mini-Roundabouts

When physical traffic calming proposals on local or minor collector streets involve measures that are new to the town, and/or measures that for other reasons might warrant a pilot phase, staff will consider the installation of temporary (e.g. rubber) measures for a period prior to permanent installations. When appropriate, this opportunity would be identified and communicated with stakeholders during the planning stage of the project.

Safety Campaigns – Public Outreach

The town delivers or participates in a number of public traffic calming and safety outreach initiatives. Some campaigns are initiated and designed by town staff, while others are the result of partnerships with other agencies, including the Road Safety Committee of Ontario (ROSCO) and Halton Regional Police Services.

These outreach and education campaigns have included seasonal campaigns (e.g. school zone safety leading up to the start of school, or “Wear your Brights” pedestrian safety campaign in advance of the end of Daylight Savings Time) and specific campaigns (e.g. speeding, PXO education). Educational material and messages are shared through various channels including eNews online public newsletter; pamphlets and letters; digital screens at town facilities; and social media including Facebook and Twitter. For 2019, outreach campaigns include distracted driving, cycling and pedestrian safety, and further education associated with new PXO installations.

Mobile Radar Speed Display Sign (MRSDS)

Through the traffic calming warrant review in 2017, staff proposed a trailer-mounted mobile radar speed sign (MRSDS) as an educational tool for roads approaching their traffic calming threshold. The sign has been acquired and is being deployed this spring. Currently staff is working on location selection based on the collected speed surveys over the last two years. The MRSDS will be moved to a new location approximately every two weeks.

Traffic Calming on Major Collector and Minor Arterial Roadways

Speeding on major collector and minor arterial roadways is a complex matter, given the competing desires to move vehicles efficiently, to encourage speed limit

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compliance and improve safe driving behavior. Consideration must be given to emergency access (as these roads are typically primary emergency response routes), road maintenance, transit and impacts on active transportation facilities. As such, speeding issues on these roadways are mitigated using educational efforts (such as radar speed display signs), pavement markings, and police enforcement.

There are 20 elementary school zones in Oakville that are on major roads and that have pavement markings and/or raised medians installed to provide traffic calming effects. However, speeds in these areas still exceed the traffic calming threshold. In May 2018, the town initiated a project to identify additional traffic calming opportunities in these areas without diverting traffic volumes or impacting the function of the roadway. The study identifies short-term and long-term measures for these sites.

The recommended short-term measure is to implement fixed (permanent) radar speed display signs (RSDS) at all 20 locations. The town has had a positive experience with RSDS on both minor and major roadways. During their operation, a decrease in operating speed in the range of 2-10 km/h has been measured. The Canadian Guide to Traffic Calming recognizes these devices are being used on both temporary and a permanent basis.

In the short term, the installation of RSDS units at these 20 school zones is recommended. Forty (40) new units would be required to allow for installation at entry points to the school zone from both directions. These locations would be monitored in the spring and fall for two years, to determine if there are lasting speed reduction effects from fixed RSDS units. The estimated cost of this recommendation is \$200,000, and will be referred to the 2020 capital budget process.

The project is also developing long-term physical traffic calming recommendations specific to each school location. Additional public consultation and outreach is required prior to finalizing the recommendations for each location.

Physical traffic calming measures at 20 locations will have significant budget implications. Staff recommend that a multi-year *Major Road Elementary School Zone Traffic Calming Program* be developed and presented to the 2020 Budget Committee. At the same time, ASE could provide an effective alternative to further physical traffic calming installations, especially on these major roads, and that needs to be an on-going consideration as it could achieve the desired traffic speed reduction that the traffic calming is meant to achieve. Should an ASE program become established in Oakville, the proposed capital program would be revisited and RSDS units redeployed to other locations.

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Speeding issues on other major collector and minor arterial roadways will continue to be mitigated using educational efforts (such as RSDS), pavement markings, and police enforcement.

Traffic Calming Process

The Traffic Calming Process was initially approved by Council on June 16, 2003. The process provided a set of factors for initiation, preparation, and completion of traffic calming projects. Since that time, the process was updated in 2009 and again in 2016.

Traffic Calming Warrant Threshold

The current Traffic Calming Warrant Thresholds for local and minor collector roads are currently 50 km/h in a 40 km/h zone, and 61 km/h in a 50 km/h zone. Past reports have reviewed the implications of lowering the thresholds, but the thresholds have not changed.

The table below summarizes recent speed survey data for surveyed local and minor collector streets meeting traffic calming warrant threshold under both the current threshold and an example of a reduced threshold.

	Speed Surveys Completed	Exceed Current Threshold 50 in a 40 km/h or 61 in a 50 km/h	Exceed Example Lowered Threshold 45 in a 40 km/h or 56 in a 50 km/h
2017	75	6	16
2018	104	13	30

As can be seen in the table above, there are already a number of locations that warrant review under the traffic calming procedure, and a lower warrant speed threshold would significantly increase the number of streets qualifying for traffic calming. Staff typically manage about two traffic calming projects per year. A reduction in the threshold speed would result in a doubling or tripling of this workload, along with associated budget implications for the project costs. It could also lead to widespread physical traffic calming measures throughout town, and the associated challenges of full community acceptance. Therefore, a reduction in the warrant threshold speed is not recommended.

Revisions to the Traffic Calming Process

Although staff does not recommend changes to the traffic speed warrant, there are several areas within the current traffic calming process that do warrant revision to ensure proper site location, public acceptance and faster delivery of traffic calming projects. Staff proposes the revisions to the following areas of the town’s current Traffic Calming Process, as detailed below, be implemented:

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1. Data Collection
2. Traffic Volume Warrant Criteria
3. Defining Stakeholders
4. Stakeholder Polling Process
5. Traffic Calming Phasing and RSDS

The proposed revised process is found in Appendix A – “Traffic Calming Process and Warrant Assessments” and the associated flowchart is found in Appendix B.

Traffic Calming Process Proposed Revision 1 - Data Collection

Operating speeds are currently collected over a single 48-hour period at a selected single point of a street. If the operating speeds are found to be over the warrant threshold, the street qualifies for traffic calming. Given the substantial operational changes that traffic calming can bring to a street, a more comprehensive approach to data collection and site selection is needed. Staff is proposing to amend the current process to add an additional 7-day survey to substantiate operating speeds. For example, if a street meets the threshold for traffic calming based on the initial 48-hour survey period, a subsequent 7-day speed survey would be conducted. In addition, speed surveys will be collected on a multiple segments of a subject street to refine problematic areas. The proposed changes in data collection would ensure validity of the speeding issue.

Traffic Calming Process Proposed Revision 2 - Traffic Volume Warrant Criteria

As part of the 2019 traffic calming review, staff revisited traffic volume as a warrant criterion and reviewed volume-related requests over the past several years. Very few inquiries were received relating to local and minor collector roads, nonetheless staff recognize that it can be a concern for certain roads. Thus, traffic volume concerns raised on local and minor collector roads are proposed to be reviewed in the same manner as those based on operating speed, and be assessed based on the typical maximum volume for the road class of the subject street. Any subject streets meeting the warrant based on volume would follow the same Traffic Calming Process as for speed, with a project including public consultation, detail design and approval. A broader inclusion of stakeholders will be even more important in these situations.

Traffic Calming Process Proposed Revision 3 – Defining Stakeholders

To date, stakeholder consultation for traffic calming projects has been focused on residents of the subject road. Traffic calming on local and minor collector streets can impact users in the community beyond the subject road, notably those living on adjacent residential streets captive to the subject street. It is recommended that the stakeholders group be expanded to include those significantly impacted in the area adjacent to subject roads. Defining the stakeholder area will require engineering judgement and consultation with Ward Councillors to identify the optimal area.

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Traffic Calming Process Proposed Revision 4 – Stakeholder Polling Process

Public acceptance plays a critical part in a successful traffic calming project. The current process is based on approval from more than 50% of the respondents to the traffic calming proposal; it does not require a minimum response rate from the specific street or area under review. This means that, currently, physical traffic calming could be implemented based on a small number of responding residents. The process needs to ensure that more of the affected stakeholders support physical traffic calming measures. Staff is proposing to amend the polling component of the traffic calming process to require over 50% of stakeholders within the study area to respond to the initial traffic calming survey, and over 50% of the responding stakeholders must be in favour of physical traffic calming to proceed.

If the required percentage is not secured through the initial town-led poll, a subsequent public petition by the requesting proponent (resident) could continue the process. Signatures from over 25% of the stakeholders within the defined study area, in support of pursuing traffic calming on the subject street, would be required to continue with the process. If not, the project would be terminated and eligible for reconsideration in 2 years.

Traffic Calming Process Proposed Revision 5 - Traffic Calming Phasing and RSDS

The current traffic calming process consists of passive and physical traffic calming phases. The passive phase involves radar speed display signs (RSDS) that are implemented for approximately 9 months at a warranted location. After their removal, the warranted location enters a monitoring period of one year and determining the lasting effectiveness of a RSDS. If the operating speeds still exceed the warrant threshold, it then qualifies for physical traffic calming.

In order to move potential projects to implementation more quickly, it is recommended that local and minor collector roadways bypass the passive phase and directly enter the physical traffic calming consultation and planning phase. Removing this step could reduce the timeline by up to 12 months. RSDS signage will continue to be used on major collector and minor arterial roadways (i.e. roads with speed limits of 60km/h and above).

Traffic Calming Candidate Prioritization

Currently, physical vertical traffic calming measures (i.e. speed cushions) are installed at 22 locations throughout the town. All but one location (Ridge Road) are associated with elementary schools on local or minor collector roads.

Two traffic calming projects were constructed in 2018 (Ridge Road and Pinegrove Road). With the traffic calming process primarily being a reactive one (i.e. predominantly driven by inquiries and requests for speed surveys from residents), there are currently another 10 locations resulting from resident concerns on local or

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minor collector roads that meet traffic calming warrants. These locations will be prioritized as identified in the traffic calming process (see Appendix A) and the number of projects initiated each year will be subject to available funding and staff capacity to manage the various stakeholder survey, planning, consultation, design and construction phases.

SUMMARY:

Concerns related to safety and speed limit compliance are commonly raised by residents and the town maintains a number of traffic safety programs and initiatives. This report addresses several Requests for Reports from Council on related speed limit topics. A Traffic Calming and Speed Limit poll of residents was undertaken in February 2019 to collect updated resident opinions.

Legislation has been passed by the Province that permits municipalities to use ASE at designated school zones and CSZs, but not yet proclaimed in force. The first phase of the ASE program will be launched under a POA process and offences will be processed through a JPC. Staff recommended reporting to the 2021 Budget Committee, when more details are available, with an analysis of the initial phase experience and a recommendation on the implementation of ASE.

The Highway Traffic Act prescribes the default traffic speed limit within a local municipality to be 50 km/h, although Municipal Councils can implement higher or lower speed limits municipality-wide, within designated areas or on individual streets. Staff maintains that reducing speed limits only results in appreciable changes in driver speeds when accompanied by other measures such as traffic calming, other physical roadway changes or regular enforcement

The town has 40 km/h zones along the frontage of elementary schools and has added more at other high pedestrian generators. Staff recommends limited further expansion of 40 km/h zones to more pedestrian generators as outlined in this report.

The town currently has seven CSZs, with none added for several years due to minimal success with speed reduction. With ASE, municipalities could have another tool that would increase enforcement of speed limits in CSZs. To prepare locations as candidates for any future implementation of ASE, Staff recommends adding 16 new CSZ locations fronting elementary schools on major roads.

Staff have reviewed and recommend several new and emerging traffic calming measures for consideration when addressing traffic calming projects. A trailer-mounted mobile radar speed display sign (MRSDS) has been acquired by the town and is being deployed this spring.

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A project was initiated to identify short-term and long-term measures for additional traffic calming for elementary school zones on major roads where, despite some traffic calming measures, speeds still exceed threshold. Staff recommends a multi-year Major Road Elementary School Zone Traffic Calming Program be developed with short-term installation of RSDS units and long-term physical calming recommendations specific to each location.

Staff recommend revision to several areas within the current traffic calming process to ensure proper site location, public acceptance and faster delivery of traffic calming projects.

CONSIDERATIONS:

(A) PUBLIC

A public notification of the Traffic Calming and Speed Limit survey was published through town's website and community centres.

(B) FINANCIAL

Several recommendations in this report have budget implications and have been referred to the 2020 or 2021 Budget Committee, including:

- costs associated with additional 40 km/h zones at high pedestrian generator areas, and
- a multi-year Major Road Elementary School Zone Traffic Calming Program, including short-term installation of fixed Radar Speed Display Signs (RSDS), and
- program details and budget implications related to any future implementation of Automated Speed Enforcement (photo radar).

CSZs are recommended at all-day 40 km/h zones fronting elementary schools on major roads, with the estimated one-time cost of \$10,000 being funded from the existing Traffic Calming capital account.

(C) IMPACT ON OTHER DEPARTMENTS & USERS

Communications and IS staff provided support in the development and distribution of the resident poll.

(D) CORPORATE AND/OR DEPARTMENT STRATEGIC GOALS

This report addresses the corporate strategic goal to:

- continuously improve our programs and services
- be innovative in everything we do
- enhance our social environment
- be the most livable town in Canada

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(E) COMMUNITY SUSTAINABILITY

The safe operation of our roadways is an important facet to the social pillar of community sustainability.

APPENDICES:

Appendix A - Traffic Calming Process and Warrant Assessments

Appendix B – Proposed Traffic Calming Process Flowchart

Appendix C - Updated Toolbox of Traffic Calming Measures

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