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Report City Council The Corporation of the City of Brampton 2020-07-08

Date: 2020-05-29

Subject: Timetable for Automated Speed Enforcement Implementation (RM 33/2020 and RM 34/2020)

Contact: Kevin Minaker, Manager, Traffic and Parking Operations, Road Maintenance, Operations and Fleet, Public Works and Engineering Department, 905-874-2590

Recommendations:

- That the report titled: Timetable for Automated Speed Enforcement Implementation - (RM33/2020-RM/34/2020 - File I.AC TRAF) to the Council meeting of July 8, 2020 be received; and,
- 2. That staff continue to phase in Community Safety Zones throughout the City, based on a criteria developed, in order to ensure ASE is prioritized in locations requiring it the most, regardless if they are in school zones or other areas where vulnerable road users are at risk; and ,
- 3. That all school zones throughout the City eventually be converted to either a standalone Community Safety Zone or that they be incorporated into a larger Community Safety Zone encompassing a number of locations where vulnerable road users are present; and,
- 4. That a letter be sent by the Mayor on behalf of Council, to the Ministry of Transportation, to request the Province consider allowing the use of the Administrative Monetary Penalty System to process Automated Speed Enforcement violations, including legislative amendments that would direct the revenue from Automated Speed Enforcement penalties to municipalities; and,
- 5. That a letter be sent to the Ministry of the Attorney General by the Mayor on behalf of Council, requesting additional Justices of the Peace be added to the permanent complement servicing the City of Brampton in order to address the current shortage and to accommodate an increase in capacity of the Brampton Provincial Offences Court arising from Automated Speed Enforcement to enhance public safety; and,
- 6. That mobile Automated Speed Enforcement be implemented throughout 200 locations annually, as the initial rollout of the program, operating at key times of

the day, and that additional Automated Speed Enforcement locations be added when legislative changes are made by the Province to allow for Automated Speed Enforcement violations to be processed through the Administrative Monetary Penalty System and more judicial resources become available; and,

- 7. That signs be installed at all access points to the City to advise motorists that Automated Speed Enforcement is in effect, in order to send the message that speeding is not tolerated in our community; and,
- 8. That the letters to the Ministry of the Attorney General and the Ministry of Transportation directed in Recommendation 4 and 5 above, be sent to the Association of Municipalities of Ontario, the Regional Senior Justice and Regional Senior Justice of the Peace, Brampton Members of Parliament and Provincial Parliament, and other relevant stakeholders.

Overview:

- This report is in response to Council's referred matter (RM 33/2020) where staff are requested to provide a timetable back to Council by the July 8, 2020 Council Meeting, on the implementation of Automated Speed Enforcement in every school zone, and adjacent parkettes across the City, within a maximum of two years, including the making of school zones into Community Safety Zones, and any proposed by-law amendments as may be required.
- This report is also in response to Council's referred matter (RM 34/2020) that staff be directed to review the increasing speeds of vehicles travelling on City roadways, and report on potential methods of reducing driving speeds, and additional alternatives which could be implemented.
- Currently, there are 10 Community Safety Zones (CSZ) in the City that incorporate 13 schools. On a concurrent report, staff are recommending the implementation of an additional 25 CSZs that will incorporate an additional 30 schools. These locations are just to first phase of implementation, as a number of other roadways are in the queue to be converted to CSZs at a future Council meeting.
- So far in 2020 staff have collected speed data from 77 local and collector roadways throughout the city with speed limits of either 40 km/h or 50 km/h. Of those roadways, 4 were identified as having operating speeds in excess of what would be expected. As a result, these locations have been provided to Peel Regional Police for their consideration of additional enforcement.
- Currently there is 100.63 km of bike lanes and urban shoulders combined in the City (excluding Vodden Street/Howden Boulevard temporary bikes lane).

- Staff are in the process of updating the Neighbourhood Traffic Management Guide (NTMG) to reflect new and emerging philosophies (Vision Zero) and new technologies including speed cushions, Automated Speed Enforcement (ASE) and in-road flexible traffic calming signs.
- Staff have been incorporating countermeasures, outlined in the NTMG, through the development process and through a wide range of other initiatives including road widening, road resurfacing and other traffic related projects.
- Staff expect the ASE program to become eventually revenue neutral. However, the current capacity of judicial resources to process offences is expected to limit the revenues from fines. The financial impact will be included in the budget submission for consideration during the 2021 and respective future budget process, subject to council approval.

Background:

At the May 20, 2020 Committee of Council meeting, staff presented a report titled: "Automated Speed Enforcement (ASE) Implementation Plan" recommending the following:

- 1. That additional Community Safety Zones be established throughout the City; and,
- 2. That Automated Speed Enforcement be considered for implementation within newly established Community Safety Zones; and,
- 3. That five Automated Speed Enforcement cameras be installed as part of the initial rollout of the program and that additional cameras be added as resources and annual budget permit.

The report also outlined the following ongoing challenges faced by all municipalities throughout the province:

- Currently ASE charges are not permitted to be processed through the Administrative Monetary Penalty System (AMPS) and must be processed through Provincial Offences Act Court; and
- Lack of judicial resources represents an external constraint on the City's ability to process large volumes of ASE charges through the traditional Provincial Offences Act Court process: see "Provincial Offences Court Shortages of Judicial Resources" (see Appendix A) from the November 13, 2019 Committee of Council meeting.

Although ASE will be utilized as a key countermeasure to deter speeding throughout the City, staff will continue to supplement ASE with other countermeasures and strategies

outlined in the NTMG and through the continued application of the Vision Zero framework.

Based on the aforementioned report, the following referred matters were directed back to staff:

- 1. That staff be requested to provide a timetable back to Council by the July 8, 2020 Council Meeting, on the implementation of Automated Speed Enforcement in every school zone, and adjacent parkettes across the City, within a maximum of two years, including the making of school zones into Community Safety Zones, and any proposed by-law amendments as may be required.
- 2. That staff be directed to review the increasing speeds of vehicles travelling on City roadways, and report on potential methods of reducing driving speeds, and additional alternatives which could be implemented.

Current Situation:

School Zones

A school zone is defined as the portion of a highway that adjoins the entrance to or exit from a school, and is within 150 metres along the highway in either direction beyond the limits of the land used for the purposes of the school. Based on the definition above, there is a limited area and associated challenges with implementing ASE in school zones. As a result, at the December 11, 2019 Council meeting, staff recommended that all areas where ASE is being considered should be converted into a CSZ. This will allow staff to not only include school zones, as with the definition above, but expand the area to include other locations where vulnerable road users are present, such as: school crossings, school walking routes and active transportation facilities (bike lanes and urban shoulders). For example, a proposed CSZ along Balmoral Drive between Dixie Road and Torbram Road is a 3.3 km stretch of road that includes 5 schools. Instead of implementing 5 different CSZs, the entire segment can be included as one CSZ to ensure other vulnerable areas including four school crossings, two major connections/crossing of the Chinguacousy Trial and 2 km active transportation facilities are also captured within it.

Community Safety Zones

Currently, there are 10 CSZs in the City that incorporate 13 school zones. As a result of the recommendations from the May 20, 2020 Committee meeting, staff have identified an additional 25 locations throughout the City to implement CSZs as the first phase on implementation (see Table 1). These locations are being recommended in a concurrent report, and are just to first phase of implementation, as a number of other roadways are in the queue to be converted to CSZs at a future Council meeting. These new CSZs

(first phase) will incorporate an additional 30 school zones, and were prioritized using a ranking system based on the following criteria:

- Operating Speeds
- Vehicle Volume
- Collisions
- Presence of Sidewalks
- Adjacent Schools
- Presence of Parks, Playgrounds and Recreation Areas
- Cut-through Traffic
- School Crossings
- Pedestrian Crossovers
- Active Transportation Facilities
- School Walking Routes

Although the criteria above, naturally targets schools zones, there are also a number of locations outside of schools zones that have been prioritized due to their proximity to school crossings, active transportation facilities (bike lanes and urban shoulders) and school walking routes. Mid-block school crossings are one area that has been prioritized, as the school crossing guard must navigate two directions of traffic without the assistance of a traffic control device (traffic signals or all-way stop). Often, these areas outside of school zones can generate higher vehicular speeds when vulnerable road users are present, as opposed to school zones that are highly congested and deal more with illegal parking/stopping concerns rather than speed concerns when children are present.

There are currently 189 school crossings and 234 crossing guards in the City, of which some are within school zones and some are not.

With this in mind, staff recommend continuing to phase in CSZs throughout the City, based on the criteria developed, in order to ensure ASE implementation is prioritized based on data, regardless if they are in school zones or other areas where vulnerable road users are at risk. Through this process, all schools throughout the City will eventually be converted into CSZs.

Street	Between	Ward
Balmoral Drive	Dixie Road and Torbram Road	7
Brisdale Drive	Bovaird Drive West and Wanless Drive	6
Central Park Drive	I Park Drive Bramalea Road and Queen Street East	
Centre Street North	Williams Parkway and Kennedy Road North	1
Centre Street South	Clarence Street and Queen Street East	3
Charolais Blvd	Chinguacousy Road and McLaughlin Road	4

Table 1: Proposed New Community Safety Zones

Clementine Drive	Steeles Avenue West and Mavis Road	6
Conservation Drive	Hurontario Street and Kennedy Road	2
Don Minaker Drive	The Gore Road and Ebenezer Road	8
Elbern Markell Drive	Queen Street West and Williams Parkway	5
Elgin Drive	McLaughlin Road and Torrance Woods	4
Father Tobin Road	Bramalea Road and Torbram Road	10
Fernforest Drive	Sandalwood Parkway and Countryside Drive	9
Great Lakes Drive	Guru Nanak Street and Sandalwood Parkway	9
Gura Nanak Street	Great Lake Drive and Dixie Road	9
Heart Lake Road	Bovaird Drive East and Sandalwood Parkway	1
Jordan Street	Williams Parkway and North Park Drive	8
Laurelcrest Street	Queen Street East and Vodden Street	7
Lisa Street	Dixie Road and Clark Boulevard	3
Main Street South	Nanwood Drive and Queen Street East/ West	3
McMurchy Avenue	Queen Street West and Steeles Avenue West	3
Rutherford Road North	Queen Street East and Williams Parkway	1
Southlake boulevard	Bovaird Drive East and Williams Parkway	1
Sunny Meadow Boulevard	Bovaird Drive East and Countryside Drive	9
Vodden Street	Main Street North and Highway 410	1

Timeline for Additional Cameras

No municipality in Ontario has been able to operate ASE, due to closures associated with COVID-19, therefore no real data available to estimate costs and the number of charges. However, based on experiences from other municipalities across North America, some assumptions can to be applied to Brampton to generate estimates as follows:

- The majority of motorists will voluntarily comply with the posted speed limit in the presence of ASE;
- Some licence plate images will not be legible.

Based upon the above assumption, Staff have estimated the number of charges annually if ASE cameras are operated 24/7, as follows:

# of locations	Estimated # of Charges Annually	
200	438,000	

Currently the City of Brampton operates the Brampton Provincial Offences Court with a capacity to process approximately 65,000 charges per years ("Processing Capacity"). The Processing Capacity is based predominantly upon the allocation and availability of judicial resources, which is set by the Ministry of the Attorney General and is not a matter within the direct control of the City. In recent years Courts Administration and Prosecutions have undertaken a number of steps to maximize the Processing Capacity of the Court, including:

- Changes to the Court Schedule to make more efficient use of the existing available judicial resources and coordination with the local judiciary to add two courtrooms per week, resulting in overall efficiencies and modifications permitting the operation of 3 municipal courtroom per week (instead of 1 municipal courtroom per week), and an increase from 3 Early Resolution courtrooms operating per week to 5 operating per week;
- The City also recently established the non-parking administrative monetary penalties
 program which is intended to move some of the more minor municipal infractions out
 of the traditional court process and into a more streamlined administrative process,
 thereby permitting judicial resources to be more effectively used for more serious
 matters;
- Peel Regional Case Management days were also reorganized to allow for additional tier time within their current schedule. Additional time was allocated to the Ministry of Transportation by splitting monthly courtroom usage between them and Peel Regional Police to assist with their increasing caseloads.

Based on the current Processing Capacity of the City's POA Court and, in particular, the number of currently available judicial resources, as well as the volume of Peel Regional Police and Municipal By-law Offences, staff have identified modifications to the court schedule which would allow the City to continue to manage the existing volume of police and municipal offences, as well as assigning three courtrooms per week allocated to ASE matters.

As the estimated number of charges which would be generated based upon 24/7 operation of 200 locations (438,000 charges, as noted above in Table 2) will exceed the judicial capacity of Brampton POA Court in the future. Hence, staff would need to determine the most appropriate times of the day to operate locations, keeping in mind the hours of operation will decrease as the number of locations increase.

Based on the information above, the 200 locations can be covered annually on a rotational basis, operating at key times of the day with full implementation within 2 years.

Estimated Costs

The following is a breakdown of the estimated costs associated with Traffic Services, POA Courts and Prosecutions, based upon the operation of the cameras at key times of day and operating within the currently available ASE charge processing capacity of 18,000 charges per annum.

Traffic Services

- Estimated Operating Costs:
 - Costs associated with the rental, installation and redeployed of cameras, which do not change based on charge volume.
 - Fees associated with the agreements with the Ministry of Transportation and Toronto's Joint Processing Centre.

Based on the information above, the estimated annual operating cost for Traffic Services based on 200 locations, with ASE cameras operating at only key times of the day, is \$2,119,984. Alternatively, the cost of a 24/7 operation is estimated at \$10,964,584.

Additional staff resources may also be required to manage the program. Any required resources will be requested through the annual budget process.

Court Administration

At the outset of the launch of ASE, there are no additional POA FTE costs, however there will be fixed disbursement processing fees including data entry charge, ICON charges, Notice of Fine and Due Date (NFDD) charges and interpreter costs. Based on 200 locations, these costs are estimated at \$2,568,741. If additional resources are required, a request will be made through the City's annual budgeting process, subject to council approval and the Province providing additional judicial resources to permit the processing of charges beyond the current Processing Capacity of the Brampton POA Court.

Prosecutions

At the outset of the launch of ASE, there are no additional Prosecutions FTE costs. If additional resources are required, a request will be made through the City's annual budgeting process, subject to council approval and the Province providing additional judicial resources to permit the processing of charges beyond the current Processing Capacity of the Brampton POA Court.

Key Issues of ASE Implementation

Under the current legislation, ASE offences are to be prosecuted by municipalities in the Provincial Offences Act (POA) Courts. All municipalities have raised concerns regarding the burden that ASE will have on the POA Court as the need for additional judicial resources will be required to meet the demand to prosecute the infractions. In

particular, currently in the Central West Region, of which Brampton is a part, there has been a marked reduction in the number of Justices of the Peace available to service the increasing needs of the Region, resulting in an increasing number of court closures. The effect of the lack of judicial resources is outlined in more detail in a report to Committee of Council on November 13, 2019 titled "Provincial Offences Court Shortage of Judicial Resource" (See Appendix A).

Therefore, having ASE prosecuted through POA Court will significantly affect the number of locations a municipality is able to accommodate and some municipalities are not participating at all at this time because of their already overburdened POA court system. Court closures due to COVID-19 have complicated matters further. An ASE program operating at full capacity (24/7) without the appropriate judicial resources and ability to move ASE into AMPS could place greater burden on the POA Court.

As a result, staff recommend a letter be sent by the Mayor on behalf of Council, to the Ministry of Transportation, to request the Province consider allowing the use of the AMPS to process ASE violations, and that a letter be send to the Attorney General requesting additional judicial resources be added to the complement servicing the Brampton Provincial Offences Court in order to accommodate ASE charges.

There may also be limitations associated with the JPC, as a significant increase in cameras and charge volumes would require that additional staff be hired and trained. In addition, although it is not clear at this time, the JPC may not have the capacity to process increasing number charges as additional municipalities implement ASE, unless the hours of operation are scaled back significantly to limit the amount of charges. Due to COVID-19 the JPC has been closed, and because no real data is available at this time, it is difficult to determine its ultimate capacity.

Countermeasures Used on City Streets to Combat Speeding

This report is also in response to Council's referred matter RM 34/2020 that staff be directed to review the increasing speeds of vehicles travelling on City roadways, and report on potential methods of reducing driving speeds, and additional alternatives which could be implemented.

Neighbourhood Traffic Management Guide

Staff are in the process of updating the Neighbourhood Traffic Management Guide (NTMG) to reflect new and emerging philosophies (Vision Zero) and new technologies including speed cushions, Automated Speed Enforcement (ASE) and in-road flexible traffic calming signs. Currently, staff identify 2-3 roadways per year, based on available resources, to implement permanent (physical) traffic calming measures that consists of vertical and horizontal deflection. A list of these countermeasures is provided below with examples of where each has been implemented in the City:

- Curb Extensions (Brisdale Drive, Clarence Street).
- Raised Intersections (Brisdale Drive, Creditview Road).
- Raised Median Islands (Mountainash Road, Richvale Drive North, Clarence Street).
- Flush Median Islands (Father Tobin Road, Clarence Street).
- Roundabouts (Squire Ellis Drive, Elbern Markell Drive, Hallstone Road).
- Speed Cushions (Churchville Road).
- Chicanes (Mountainash Road).

Speeding on City Roadways

Through the use of traffic data collection devices, staff reactively and proactively collect speed and volume data on city roadways to determine if operating speeds are excessive. So far in 2020 staff have collected speed data from 77 local and collector roadways throughout the city with speed limits of either 40 km/h or 50 km/h. Of those roadways, 4 were identified as having operating speeds in excess of what would be expected. As a result, these locations have been provided to Peel Regional Police for their consideration of additional enforcement. The other roadways showed evidence of sporadic speeding only. Other countermeasures that are currently used to assist in dealing with speeding include:

- Speed Display Boards.
- Vehicle Activated Traffic Calming Signs.
- In-road flexible traffic calming signs.
- Regulatory signs (speed limit).
- Warning signs (Watch for Children, Playground Ahead, curve warning etc.).
- Pavement Markings (bike lane, ladder bars etc.).
- RoadWatch program.
- Peel Regional Police Enforcement Eliminate Racing Activity on Streets Everywhere (ERASE)

Staff are also proposing that signs be installed at all access points to the City to advise motorists that ASE is in effect, in order to send the message that speeding is not tolerated in our community.

Development Process

Staff have been incorporating active transportation facilities and traffic calming as part of the block planning, development application and subdivision review processes. Because the actual implementation of these countermeasures is typically years after the application date, many of these measures have only been realized over the last 7 years. Table 3 (below) is a list of bicycle lanes that have been incorporated through the development process:

Road	Year Implemented	Ward	Lane Kilometers
Veterans Drive	2017	6	2.6
Bonnie Braes Drive	2013	4	2.8
Castle Oaks Crossing	2016	10	2.66
Bleasdale Avenue	2013	6	1.43
Martin Byrne Street	2015	10	1.59
Remembrance Road	2015	6	1.33
Remembrance Road	2015	6	0.65
Squire Ellis Drive	2015	10	1.34
Inspire Boulevard	2018	9	1.16
Russel Creek Drive	2019	9	1.2
Remembrance Road	2013	6	2.52
		Total	19.28

Table 3: Active Transportation Facilities Through Development Process

Many new subdivisions also/will incorporate a combination of the countermeasures listed above.

Vision Zero

Similar to measures being taken through the development process, staff are also implementing strategies to protect the City's most vulnerable road users through road resurfacing, road widening and other traffic safety projects. Below is a list of roadways that have incorporated active transportation facilities through various projects. In 2019, a more aggressive approach was taken, as per the Vision Zero mandate, that no loss of life is acceptable. The Vision Zero framework acknowledges that the transportation system must be changed since it is difficult to change human capabilities and limitations. In altering the system design and operation, safety should be prioritized over speed, convenience or cost.

Table 4: Active Transportation Facilities Through Projects

Road	Facility Type	Year Implemented	Ward	Lane Kilometers
Kenview Boulevard	Urban Shoulders	2019	8	16
Central Park Drive	Bicycle Lanes	2019	7	2.4
Mountainash Road	Urban Shoulders	2019	10	5.6
Heart Lake Road	Bicycle Lanes	2019	2	3.2
Denison Avenue	Urban Shoulders	2019	1	1.8
Railroad Street	Urban Shoulders	2019	1	0.7

Kingknoll Drive	Urban Shoulders	2019	4	2.6
Fernforest Drive	Urban Shoulders	2016	9	5.82
County Court Boulevard	Bicycle Lanes	2014/2015	3	2.56
Rutherford Road	Bicycle Lanes	2009	1	3.6
Birchbank Road	Bicycle Lanes	2005	7	0.97
Balmoral Drive	Urban Shoulders	2016	7	2.3
Grenoble Boulevard	Urban Shoulders	2015	8	1.5
Sunny Meadow Boulevard	Urban Shoulders	2016	9	2.04
Don Minaker Drive	Urban Shoulders	2017	8	2.8
McMurchy Avenue	Urban Shoulders	2015	3	2.32
Fletchers Creek Boulevard	Urban Shoulders	2013	5	2.44
Queen Mary Drive	Urban Shoulders	2017	6	6
Edenbrook Hill Drive	Urban Shoulders	2017	6	6.16
Conestoga Drive	Urban Shoulders	2012-2013	2	4
Colonel Bertram Road	Urban Shoulders	2017	2	2.0
MacKay Street	Urban Shoulders	2018	7	1.44
Drinkwater Road	Urban Shoulders	2017	4	3.74
Sunforest Drive	Urban Shoulders	2017	2	3.8
			Total	81.35

In addition, in the past, there were limited options available for staff to deal with vehicle speeds on the arterial road network. With the emergence of Vision Zero, a different approach to arterial road design is being implemented. Again, through both road resurfacing and road widening projects, staff have begun reducing lane widths, a proven method to reduce vehicle speeds. For example, this new approach is evolving with the Williams Parkway (McLaughlin Road to North Park Drive) road widening project. This will be the first road widening project within the City where the Vision Zero framework will be incorporated into the design. The introduction of narrower lanes is being recommended to calm traffic with the objective of lowering the operating speed of vehicles, which in turn reduces the pedestrian crossing distance at intersections, and provides more area on the boulevard to accommodate active transportation. A number of other projects, currently in the planning phase, will also receive similar treatments.

Corporate Implications:

Financial Implications:

As a result of recommendations in this report, annual funding of approx. \$2.2 million is required towards operating costs for implementation of ASE program at 200 locations. Staff expects the current approved funding of \$240,000 sufficient for the initial rollout of the ASE program in 2020.

As additional resources and capacity in court administration, prosecution, collection services, etc. will also be required depending on the implementation schedule, the financial impact for subsequent years will be included in the budget submission for consideration during the 2021 and respective future budget process, subject to council approval.

Staff expect the ASE program to become eventually revenue neutral. However, the current capacity of judicial resources to process offences is expected to limit the revenues from fines. The financial impact will be included in the budget submission for consideration during the 2021 and respective future budget process, subject to council approval.

However, staff expects that once ASE is fully operational and increased judicial resources are in place, the total estimated costs to operate the ASE program including the contract award, additional staffing, court related costs, and centralized processing are expected to be offset by fine revenue from charges issued during the operation of the program.

It should also be noted that due to the lack of real data, the analysis is based on various assumptions related to projected number of ASE charges (offenses), costs and revenues, which may impact the final numbers. In addition, there may be additional costs, which have not been captured in the above analysis.

Term of Council Priorities:

This report achieves the "Move & Connect" Priority of the Strategic Plan by supporting the "active transportation and cycling strategy" initiative of the plan.

Council Priority – Streets for People

This report incorporates the Vision Zero framework into transportation planning, design and operations to prevent fatal and serious injury from motor vehicle collisions within the City right-of-way.

Conclusion:

When implemented, the ASE program will assist in reaching the City's Vision Zero goal to prevent fatal and serious injury collisions.

In addition, staff will continue to remain current with new techniques and different emerging philosophies (including Vision Zero) to combat speeding throughout the City. The NTMG is currently being updated to ensure staff have the most up-to-date tools at their disposal.

Jasbir Raina, B.Eng, M.Tech, MBA, PMP, MIAM. Commissioner Public Works and Engineering Joseph Pittari, Commissioner, Legislative Services

Attachments:

Appendix A: Provincial Offences Court Shortages of Judicial Resources