

Automated Speed Enforcement Program Update

Presented To:	Operations Committee
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Type:	Managers' Reports
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Recommended by:	General Manager of Growth and Infrastructure

Report Summary

This report provides a recommendation regarding detailed site selection criteria, a list of recommended sites and the number of automated speed enforcement units to be initially deployed for an Automated Speed Enforcement Program.

Resolution

THAT the City of Greater Sudbury adopts the Automated Speed Enforcement warrant as described in the report entitled “Automated Speed Enforcement Program Update”, from the General Manager of Growth and Infrastructure as presented at the Operations Committee Meeting of June 20, 2022.

Relationship to the Strategic Plan, Health Impact Assessment and Community Energy & Emissions Plan (CEEP)

The implementation of the Automated Speed Enforcement program supports the achievement of strategic objectives under the Create a Healthier Community strategic initiative.

The implementation of the Automated Speed Enforcement program will reduce vehicle operating speeds in the community and in turn reduce the total amount of green house gases emitted by vehicles which supports the goals of the Community Energy and Emissions Plan.

Financial Implications

There are no financial implications with this report.

The implementation of an Automated Speed Enforcement program is subject to the approval of a business case being prepared for the 2023 Budget.

Background

At the December 2021 Operations Committee meeting, Transportation and Innovation Support staff brought an update to the ongoing development of the automated speed enforcement (ASE) program within the province and the estimated costs to the deployment of a program within the City of Greater Sudbury.

At the meeting, Resolution OP2021-24 was passed, stating:

That the City of Greater Sudbury directs staff to prepare a report for the Operations Committee in the second quarter of 2022 which provides a detailed site selection criteria, a list of recommended sites and a recommendation on the number of automated speed enforcement units that should be initially deployed based on the available resources in the Provincial Offences Act court system in Greater Sudbury and City of Toronto joint processing center as outlined in the report entitled “Automated Speed Enforcement Program Update”, from the General Manager of Growth and Infrastructure at the Operations Committee Meeting of December 6, 2021.

Analysis

In order to prioritize the site selection process, staff recommend a two stage warrant be used as shown in Figure 1 below. The warrant was developed based on the traffic calming warrant and changes were then incorporated which better defined locations which would have the greatest benefit from implementing ASE. Through discussions with the Greater Sudbury Police Service (GSPS) additional criteria was added which would support their speed enforcement efforts.

The first stage of the warrant is a preliminary screening. The preliminary screening looks at the recorded operating speeds of vehicles on a road and excludes any road from advancing to the second stage if the 85th percentile speed is either at or below the posted speed limit.

Should a road pass the initial screening, the proposed warrant focuses on the following categories:

Roadway Characteristics – Roadway characteristics define the roadway itself and include factors such as traffic volume, adjacent land uses and 85th percentile speeds.

Pedestrian Generators – Pedestrian generators are features either within the roadway or near the roadway which attract people. These generators include off road features such as shopping areas, schools, parks, churches, etc. Also included are features within the road allowance such as sidewalks, cycling routes and transit routes.

Additional Considerations – The additional considerations that form part of the warrant are participation in the City’s Speed Watch Program, which is a roadway safety program in which residents can borrow radar equipment from the City to conduct a speed awareness campaign on their road. It also includes areas within the community which are known to GSPS as an area in which speeding has been an ongoing safety concern or enforcement concern. In these areas undesirable driving behaviours associated with speeding are also typically present. Some of these driving behaviours include passing in turning lanes or no passing zones and failing to comply with school bus stop arms. This can also include areas in which conducting traditional speed enforcement is challenging or areas which would otherwise score lower however have a known speeding concern.

The proposed ASE warrant is presented in Figure 1 below.

Preliminary Screening				Results	
Criteria	Value	Result		Posted Limit	85th %
85th Percentile Speed	>Posted Speed Limit	Pass			
	<Posted Speed Limit	Does not pass			
Evaluation Scoring				Results	
Factor	Description	Rating	Max Score	Value	Score
Traffic Volume (AADT)	0 – 5000 vpd 5001 to 10000 vpd 10001 to 15000 vpd + 15001 vpd	0.5 1 1.5 2	2		
Adjacent Land Uses	Residential/Commercial – 0% Residential/Commercial – 1-24% Residential/Commercial – 25-49% Residential/Commercial – 50-74% Residential/Commercial – 75-	0 0.5 1 1.5 2	2		
85th Percentile Speed (km/h)	Number of km/h over posted limit	0.25 per km/h	-		
Pedestrian Generators (Schools, Parks, Shopping, etc.)	0 1 to 2 3 to 6 + 7	0 0.5 1 2	2		
Sidewalk	Segment has sidewalk Segment does not have sidewalk	0 1	1		
Cycling Route	Does not have cycling route Has cycling route	0 1	1		
Pedestrian/Cyclist Collisions (last 5 years)	Number of collisions	2 per collision	-		
GOVA Routes	Not on GOVA route On GOVA route	0 1	1		
Speed Watch Program Participation	Speed Watch has not been conducted Speed Watch has been	0 0.5	0.5		
Location known to GSPS as area of concern	No Yes	0 1	1		
				Total Score =	

Figure 1: ASE Warrant

Site Selection and Number of ASE Units

Staff applied the proposed ASE warrant to the current highest ranked traffic calming locations as well as locations which have been previously identified as areas where speeding has been a concern. These locations represent a variety of local, collector and arterial roads as well as a variety of residential areas, some of which include posted 40km/h school zones. It is recommended that the list be updated on an ongoing basis to keep the details of each road up to date as well to add new locations into the ranking. New locations are recommended to be added either through resident or councillor request or through request by GSPS. When a new location is requested, staff will proceed with conducting the necessary traffic studies to collect the required data and apply the scoring criteria to the location to determine if it qualifies and where it ranks within the list.

Figure 2 below lists the initial locations ranked and an estimated total number of offences each location would capture in one direction within a four week period. The values presented also assume 90% of

motorists will comply with the posted speed limit.

Street Name	Score	Two Way AADT	One way AADT	90% Comp.	Cumulative Charges (4 Week Period)
1. Walford Road (Regent Street to Paris Street)	11.25	7300	3650	365	10220
2. Loach's Road	10.25	3600	1800	180	5040
3. Howey Drive (Van Horne Street to Bellevue Avenue)	9.5	8200	4100	410	11480
4. Kelly Lake Road (Copper Street to Southview Drive)	9.25	7800	3900	390	10920
5. Long Lake Road (near Kivi Park)	9	2500	1250	125	3500
6. Valleyview Road (M.R. 80 to Belisle Drive)	9	2700	1350	135	3780
7. Bancroft Drive (Kingsway and Bellevue Avenue)	8	6800	3400	340	9520
8. Barry Downe Road (Lasalle Blvd and Lillian Blvd)	8	10100	5050	505	14140
9. Desmarais Road	7.5	1400	700	70	1960
10. Gary Avenue	7	1900	950	95	2660
11. Frood Road (Lasalle Blvd to Dupont Street)	6.75	5700	2850	285	7980
12. Robinson Drive	6.75	2100	1050	105	2940
13. Power Street	6.25	2800	1400	140	3920
14. Balsam Street	6	4000	2000	200	5600
15. Brenda Drive	6	900	450	45	1260
16. Lansing Avenue	6	3100	1550	155	4340
17. Orell Street	6	3400	1700	170	4760
18. Grandview Blvd	5	2400	1200	120	3360
19. Morin Avenue	4.75	2600	1300	130	3640
20. Hawthorne Drive	4.25	1600	800	80	2240
21. Arnold Street	3.25	2100	1050	105	2940

Figure 2: ASE Ranked Locations

Staff held additional discussions with the City of Toronto joint processing centre (JPC) regarding the current capacity of the JPC to process offences. Capacity continues to be limited at the JPC however the City of Toronto is in the process of increasing its capacity over the next year. It is anticipated that there will be sufficient capacity to support an ASE program for Greater Sudbury.

Staff are recommending that two mobile units be initially implemented and these units be redeployed on a three month interval. This limited initial implementation would allow staff to better understand the internal resources required to manage the activities associated with the program (ex. sign installation, site restoration, required documentation, etc.), the site selection process with the vendor as well the impact to the Provincial Offences Act court system.

Next Steps

Staff recommend the adoption of the ASE warrant as described in the report. With approval of the ASE warrant, staff will continue to rank locations where speeding concerns have been raised for the deployment of ASE equipment.

Further, at the December 2021 Operations Committee meeting, staff were directed to bring a business case forward for consideration during the 2023 Budget process to implement an ASE program within the City of Greater Sudbury. If the business case is funded to implement an ASE program, staff will bring forward a report to committee with the updated ranking list prior to the deployment of ASE equipment. In addition, staff will update the ASE ranking list on an annual basis and continue to monitor the operating speeds of the roads on the list.

Resources Cited

City of Greater Sudbury, Automated Speed Enforcement Program Update 2021

Accessed online: <https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=42616>