

Document 4: School Bus Camera Pilot Memo

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INTRODUCTION

The goal of an Automated School Bus Camera (ASBC) System is to improve road safety for school-aged children transported to and from school by bus. In Ottawa, this system allows the Ottawa Police Service (OPS) to increase enforcement of the *Highway Traffic Act (HTA)* by laying charges against motorists who fail to stop for a school bus when the stop arm is activated – a driving act that risks the safety of children who are crossing the roadway to get on or off the bus.

The purpose of the school bus camera pilot project is to assess the feasibility of an automated, camera-based system to capture school bus passing violations and identify the necessary supports to turn the digitally captured violations into enforceable infractions. The pilot project started in September 2019 with six buses equipped with enforcement technology. Due to COVID-19 Pandemic-related school closures in 2020 and 2021, the period of enforcement was reduced which in turn significantly limited the availability of data needed to fully assess the effectiveness of these devices.

BACKGROUND

In early 2014, Safer Roads Ottawa (SRO) identified a successful automated school bus camera project working in the municipality of Surrey, British Columbia, and began evaluating the possibility of launching a similar initiative in Ottawa.

At the Transportation Committee (TRC) meeting held on May 7th, 2014, the SRO program provided a short presentation on the planned initiative and committed to reporting back to TRC on the results and next steps. Later that month, the SRO program, in partnership with the OPS and ML Bradley Limited, a school bus service in Ottawa, launched a trial involving the installation of an automated school bus camera system on a school bus vehicle.

In 2017, the *HTA* was amended to create offences specific to the failure to stop for a school bus that have extended the stop arm. This enables the use of school bus camera systems to detect incidents when vehicles fail to stop as required. As with other forms of automated enforcement, the registered plate holder is charged when an offence takes place.

Following the initial automated school camera trial and changes to the *HTA*, OPS, in partnership with SRO, starting in the 2019-2020 school year, initiated an automated school bus camera pilot on six buses. Each school bus was equipped with five cameras

installed on the exterior of the bus that recorded video footage of motorists illegally passing the bus when stopped with its arm extended. The vendor provided the technology (hardware and software) used in this solution, the City of Ottawa housed the secure servers used to store data, and OPS processed the video evidence and laid the charges.

The six camera systems were fully deployed on the designated school buses in September 2019. While the cameras have been operating on all school days, there have been a number of interruptions in enforcement. Due to the Covid-19 Pandemic, schools were shut down multiple times since the initial deployment. These lockdowns resulted in a total of nine months of lost enforcement or about 40% of the total school months since September 2019.

RESULTS

Since September 2019, 220 charges were laid by the automated camera systems. During the same period, patrol officers issued 26 tickets for motorists passing a school bus. Between September 2019 and July 2021, \$37,285 in revenue was collected in paid tickets. This resulted in an average of \$6,215 per camera. Though enforcement days were limited, the data shows the following:

- One charge per day was laid for all the cameras (average of 0.17 charge per bus per day);
- Over half of the charges came from one location where the bus stopped on a 4-lane undivided roadway;
- 95% of all charges came from drivers who were travelling in the opposite direction from the stopped school bus; and
- 5% of charges were from drivers travelling in the same direction as the bus and going around it while the bus was stopped.

DISCUSSION

The data gathered to date is insufficient to determine whether or not the school bus cameras are effective at reducing illegal school bus passing activity. They do however provide OPS with the ability to increase their level of enforcement of this behaviour which would act as a deterrent to motorists who commit these types of offences.

Traffic Services staff are participants in the Ontario Traffic Council's Automated School Bus Camera working group. The working group was established to coordinate efforts of Ontario municipalities interested in initiating School Bus Camera pilots or programs within their jurisdictions. The working group provides participants with a forum in which to share information related to the various School Bus Camera initiatives being delivered across the province. Sudbury, Peel Region, Niagara Region, and Mattawa, are all currently undertaking pilot projects, following several different delivery methods. The working group is currently developing guidelines for the implementation of sustainable Automated School Bus Camera System programs. These guidelines will help support the effective and long term use of such systems as a road safety tool in Ontario municipalities.

The school bus consortia in Ottawa have indicated a strong desire to implement school bus cameras on all their buses, which total approximately 880 across the city. Many have already been approached by bus camera technology vendors to consider available products. Based on the current School Bus Camera pilot project delivery model in Ottawa which relies on OPS officers to review infraction evidence and to lay respective charges, increasing the number of buses equipped with cameras from 6 to 880 would have a significant impact on resources and the ability to lay charges in a timely manner following the occurrence of an infraction.

In a communique released by the Ministry of Transportation on August 7, 2020, it was stated that "Effective September 1, 2020, as a result of Ontario Regulation 424/20 School Bus Cameras, the school bus stopping law has been expanded so that the extension of the school bus stop arm becomes an element of the offence. This change makes it illegal for drivers to pass a stopped school bus that has a stop arm extended, regardless of whether the bus's overhead red lights are activated. This change makes it easier for provincial offences officers to make certified statements about the camera and for Crown prosecutors to demonstrate that an offence has occurred using camera technology. The prosecution of school bus camera offences will no longer require the introduction of evidence by a supporting witness." This change in regulation could have an impact on the way in which OPS and the city processes school bus camera charges and further work is required to determine the impacts.

CONCLUSION

As a result of schools being periodically closed to in-person learning due to the COVID-19 Pandemic during 2020 and 2021, school bus camera enforcement activities were limited. Currently, information collected during the pilot project is insufficient to fully understand impacts of such camera enforcement on enhancing safety and for staff to make data-driven recommendations to establish a School Bus Camera Program. Staff recommend continuing the pilot project with the relevant stakeholders to establish a stronger data set and to undertake a more comprehensive analysis of the available delivery models to provide more comprehensive and data-based recommendations.