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HAMILTON POLICE SERVICE

In-Car Video Recording Technology Report

NOVEMBER 2023

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Executive Summary:

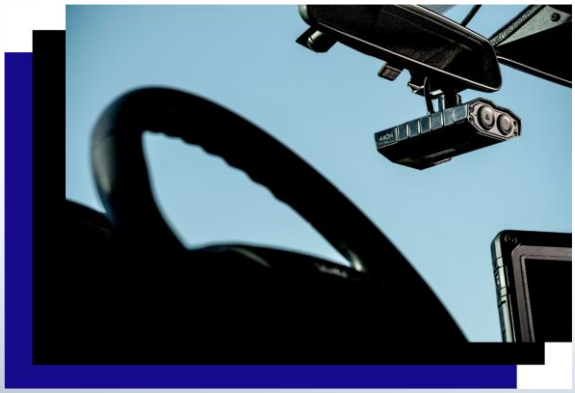
Since 2014, the Hamilton Police Service (HPS) has reviewed the state of body-worn camera technology and its viability of deployment within the Service.

In March 2022, the HPS recommended to the Hamilton Police Service Board (HPSB) that consideration be made regarding possible deployment of in-car camera technology. This was followed in April 2022 with a request for approval for the standardization of the Axon Law Enforcement platform to create seamless connection with the Service's Digital Evidence Management System (DEMS). This was in anticipation of $1.6 million in grant dollars from the Ministry of the Solicitor General for the purchase of In-Car Camera (ICC) and Automated License Plate Reading (ALPR) technology.

In November 2022, the HPS was successful with their grant application, receiving a one-time payment of $1,619,499.00. This grant allowed the HPS to acquire 78 Axon Fleet 3 ICC / ALPR units for deployment to the Service's front-line vehicles.

In April 2023, the Fleet 3 units were installed in 10 vehicles, with 29 officers being trained as early adopters of the technology. This allowed for a review of the impact of the units on HPS staff and infrastructure, prior to full deployment. As of October 20, 2023 installation of the units has been completed and the 78 vehicles are in active use across the City of Hamilton.

Continued review of the technology and its impact on the HPS will occur through the term of the five year contract with Axon, which expires in 2027. This review will look at the viability of continuation of the ICC/ALPR program and whether expansion is warranted, including the adoption of other video-recording technology such as Body-Worn Cameras (BWC).



In-Car Camera Review:

As a result of the received grant money, the HPS was able to enter into a five-year contract with Axon (2023 – 2027) for the acquisition of 78 of their Fleet 3 ICC/ALPR units, as well as licensing and storage.

The Fleet 3 ICC/ALPR unit is made up of two front-facing cameras and a rear-facing prisoner camera. The two front-facing cameras act as a digital video recorder and as an automated licence plate reader. The technology gives the HPS the ability to record officer interaction with the public and while transporting prisoners, as well as a means to be alerted to vehicles of interest that pass their cruiser.

The technology allows the capture of evidence, which is uploaded into the HPS DEMS, which efficiently shares the data with partner agencies and courts. Additionally, the HPS has the ability to live-stream video from active units to Command, for occurrences of significance.

Installation:

In April 2023, Axon installed the Fleet 3 units in 10 cruisers for the HPS as part of the five-year contract.

The installation lasted approximately 10 days and saw two cruisers being deployed within each of the three Uniform Patrol Divisions, and three for the Traffic Safety Unit. The 10th vehicle was retained by the Project Coordinator for training and testing purposes during the initial deployment phase, with the cruiser to be returned for patrol use in November 2023.

During this initial deployment, infrastructure and staffing concerns were identified and addressed. Additionally, work flow and oversight for the captured data was identified, allowing efficient movement of the information to areas such as Courts.

In September 2023, following a successful initial deployment period, installation of the remaining 68 vehicles began, with all 78 vehicles being deployed fully by October 20, 2023.

Usage and Statistics:

Due to the nature of ICC/ALPR technology, there has been an impact on the HPS infrastructure, both to the hardware used to migrate the collected video into DEMS, but also to things such as data and officer efficiencies.

Usage:

Below is a breakdown of videos captured using Axon's Fleet 3 technology from April 17, 2023 to October 13, 2023. These statistics do not reflect full deployment of the technology but capture limited usage to the 29 initial users and limited deployment during the second round of installation.

Total Uploads

Number of Videos	9,257.00
Hours of Video	2,319.44
Size of Video in GB	3,746.35

Average per Day

Number of Videos Uploaded	50.30
Hours of Video Uploaded	12.60
Size of Videos Uploaded in GB	20.36

Enforcement:

The 29 Officers involved in the Initial Deployment of the ICC/ALPR system issued 1,934 offence notices between April 17 and October 13, 2023.

Since the inception of the ICC/ALPR system in April, officers have successfully arrested a number of offenders driving stolen autos, as well as other offences that may have gone unnoticed during regular patrol duties.

Additionally, the ability to create a local Hamilton hotlist allowed our CID investigators to not only locate a vehicle involved in a stranger criminal harassment, but arrest the suspect after actively evading investigators.

It is expected that with increased deployment of the ALPR system, our patrol officers and investigators will benefit greatly and be able to provide enhanced public safety to the community.

Officer Complaints:

At present, due to the limited deployment of ICC technology prior to October, we have only anecdotal statistics on their impact on Public Complaints. At the time of this report, there has been three matters with our Professional Standards Branch where ICC technology has played a role in the investigation.

FOI/Records Impact:

In order to ensure that the HPS is able to meet demand for access to ICC/ALPR data by the public through Freedom of Information (FOI) requests and by the Courts, two full time DEMS Disclosure Clerks (FTE) have been hired. These individuals will assist with ensuring that gathered video is redacted and shared appropriately to the Courts and is able to be accessed for FOI requests.

At the time of this report, there have been no requests from the Courts or through FOI requests. Once requests begin to come through, the HPS will be in a better position to understand the impact of ICC / ALPR on these clerks. It is expected, however, that should the Service expand the ICC / ALPR program in size, or adopt body-worn camera technology (BWC), additional clerks would be necessary.

Deployment and Academic Review:

Deployment Review:

Following the implementation of the ICC/ALPR grant through the Ministry of the Solicitor General, a number of police agencies in Ontario have adopted ICC/ALPR systems in their front-line vehicles.

The HPS currently is sitting on a working group with approximately 17 other provincial policing agencies to develop the ICC/ALPR program in a way that creates standardization and the ability to work together more efficiently.

Of the services in the province currently deploying ICC technology, approximately half have deployed BWC technology as well. This includes the Ontario Provincial Police, who have are currently deploying both ICC/ALPR and BWC systems manufactured by Axon to their members.

Academic Review:

To date, there has been no identified research of significance in comparison to previously reported studies and articles.

The HPS continues to monitor academic papers for updated research regarding the advancement and impact of police video recording technology, such as body-worn cameras (BWC) and ICC / ALPR systems, on the relationship with the community.

Financial Impact:

The current contingent of ICC/ALPR units being used by the HPS are part of a five year contact with Axon. This contract expires in 2027. While the program is currently in its infancy, there is already consideration being made regarding future expansion of police video recording technology systems (PVRT) and the needs of the HPS to do so.

Possible expansion could include adding additional units to completely outfit the Service's patrol and traffic vehicles, as well as the possibility for systems to be installed in prisoner transportation vehicles.

Increased units will mean that planning will also be needed regarding augmentation of support staff to address the increase of video. With the Digital Evidence Management Clerks being a new position, their workload is being reviewed as the ICC system becomes more active. The need for increased staff will become clearer as the ICC/ALPR program matures over the next few years.

Additionally, capital budget enhancements will need to be considered for renewal of the program post contract in 2028.

Body-Worn Camera:

Presently, the HPS is committed to continue to review the investment made with ICC / ALPR technology. It is felt that review of the 78 units currently deployed to the front-line will allow for a better understanding of whether body-worn cameras (BWC) will also provide a useful resource to the Service and the Community.

Moving forward, any consideration of BWC technology will need to address the following issues:

Storage:

While storage of video received using ICC/ALPR systems is included in the costing of the units, BWC technology often does not. Given that BWC will likely be running for longer periods than ICC/ALPR cameras, it goes without saying that there will be substantial amounts of video that will need to be addressed. Contracts from vendors are available that include storage, but at higher initial costs.

Deployment:

When determining BWC technology deployment, a decision needs to be made as to whether to deploy the units as personal issued devices or outfit each division with a set number where officers sign units out at the start of their shifts. Both possibilities have their own issues, with increased costs for large personal issue numbers versus increased costs for repair due to damage with communal issue and use.

Need for Increased Staff:

With lessons learned during the installation and deployment of ICC/ALPR technology in Hamilton and the experiences of other policing agencies, increased video evidence equates to increased demands for handling of the data. This involves addressing things such as redaction for public FOI requests, disclosure to the Courts and external policing agencies.

Handling of video requires adequate staffing levels to ensure accuracy, efficiency and timeliness. Currently the HPS has staffed two positions within the Records Branch to address these needs. This is based off of the 78 ICC/ALPR systems that have been deployed and is in line with ratios of devices to staff observed in other agencies. Should the number of ICC/ALPR systems increase or the Service adopt BWC technology, then these positions will need to increase in order to meet the demands for video.

Body-Worn Camera Budget Estimation:

Based on estimates for hardware, licensing and storage, it is believed that a BWC program of 500 cameras would cost the HPS between $4.5 and $5.5 million over five years. This does not include the need for increased support staff, nor costs attributed to infrastructure upgrades.

There would be slight savings in other areas, such as licensing for digital evidence management (DEMS) and ICC/ALPR, but these would not be substantial, nor offset the cost of the BWC deployment greatly.

Conclusion & Findings:

The Fleet 3 in-car camera and automated license plate reader program is in its infancy with the HPS but has already demonstrated a worthwhile investment for our members and the community. Thanks to a Provincial grant, the Service was able to pay for the program for 5 years, with 78 units being installed to front-line vehicles. Moving forward, there will be needed review of the program for capital budgetary purposes post contract.

Over the next five years, the Service will be able to observe the impact the cameras have on daily operations, as well as our interactions with the public and the impact in court. This analysis will assist in determining the viability of expanding the program to additional units or adopting additional video capturing devices, such as body-worn cameras.

As we are just starting this new phase of technology deployment, it is recommended that the Service continue to annually review the deployment of the 78 ICC/ALPR units, with consideration of the continuation of the program after the initial five-year contract.

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