



**HAMILTON POLICE SERVICE**

# Recorded Video Technology Update

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# Recorded Video Technology Update:

## Executive Summary:

Since 2014, the Hamilton Police Service (HPS) has conducted a series of comprehensive examinations of body-worn camera programs. This inquiry has delved into the efficacy, costs and potential benefits of implementing such technology within the Service, reviewing the experience of policing agencies as well as the academic literature.

Despite significant advancements in body-worn camera (BWC) technology over the past decade, the true impact of these devices remains a topic of debate. The Hamilton Police Service has repeatedly grappled with the decision, weighing the advantages against the substantial financial investment required. While research suggests a correlation between body-worn cameras and reduced use of force incidents and public complaints, the statistical significance of this relationship remains uncertain. Moreover, the associated costs extend beyond the initial purchase of cameras to include data storage, data management, and disclosure costs.

While the HPS has continued to review the impact a BWC program would have on the Service, it has deployed 78 In-Car Camera systems to its fleet. This has allowed the Service to get a better appreciation of how this technology affects service delivery to the public and the impact it has on efficiencies and processes within the Service. An early review of the statistics show that the technology is having a positive impact on transparency and evidence gathering.

At the February 2024 Hamilton Police Service Board meeting, the HPS was requested to provide an updated report on the impact of implementing a body-worn camera program. If the Board decides to move forward with a program, the HPS faces a substantial financial commitment over the next five years and beyond. A quote was received from Axon, the vendor supplying the Service's digital evidence management (DEMS) platform and In-Car Camera (ICC) hardware. With an estimated cost of \$15.5 million for an initial five-year contract, this investment encompasses not only the initial purchase of 650 units of the hardware, but also expenses related to data storage, data management, disclosure, and maintenance.

If the HPS wishes to continue with this program after the initial five-year contract, there will be an ongoing financial impact. The allocation of such a significant budget warrants careful consideration, especially given the evolving landscape of policing and the need for transparency and accountability. While proponents argue that body-worn cameras can enhance officer safety, improve public trust, and provide valuable evidence in investigations, critics emphasize the potential strain on resources and the need for rigorous policies to govern their use, balancing the requirement for transparency with

obligations to protect individual privacy rights of those whose image may be captured through the BWC. Despite the cost, however, the HPS is recommending that the Service Board approve the acquisition of the 650 BWCs from Axon and move forward with the hiring of the necessary support staff as outlined in this report.

### In-Car Camera & Automated License Plate Program Review:

In April 2023, the Hamilton Police Service began deploying Axon's Fleet 3 In-Car Camera (ICC) and Automated License Plate Reader (ALPR) technology. The five-year contract with Axon cost approximately \$1.5 million and was funded through a one-time grant from the Province of Ontario. This contract expires in December 2027, with budgetary resources being identified to fund the program after this.

Due to issues obtaining necessary infrastructure upgrades in 2023, only 10 cruisers were able to be outfitted with the hardware, with two at each patrol division, three for the traffic safety unit and one for training. This issue was rectified and in September, of 2023 an additional 68 cruisers had the Fleet 3 system installed. Deployment of the technology consists of 20 cruisers per patrol division with an additional two for the front-line sergeants in each. The remaining 12 systems have been deployed to the traffic safety unit, placing a total of 78 Fleet 3 systems on the streets of Hamilton.

This section contains an update on the statistics gathered from the ICC/ALPR program as of March 26, 2024, including the 46,193 files created by the Fleet 3 system. The data is meant to provide a snapshot of the program as it approaches the first-year anniversary of its deployment and will assist in bettering the Service's comprehension of the effects a body-worn camera initiative could have.

### Staffing Impact:

To ensure the ICC/ALPR program was able to meet the needs of the Service, a review of the staffing needs was required. At present, only two additional staff were required to be hired, with the remaining roles being absorbed by pre-existing positions.

The two new staff members were assigned to the Records Branch in the Information Management/Freedom of Information Unit as Digital Evidence Management (DEMS) Clerks. These two full-time employees assist front-line officers with disclosure of ICC/ALPR evidence to the Provincial Offences Act (POA) Court, transcription, and redaction requests of this evidence for both the POA and Criminal Court, and Freedom of Information (FOI) requests. The role of the DEMS Clerk is imperative to ensure that the evidence gathered through the ICC/ALPR system can flow to the appropriate areas and people in an efficient manner, with minimal impact on front-line patrol officers.

Additional duties necessitated by the ICC/ALPR program include installation and maintenance of the system, as well as coordinating the program within the Service. Initial installation of the systems was done by Axon. Future installation and decommissioning of the Fleet 3 hardware between cruisers has been absorbed by existing staff within the Fleet Branch, who have been trained by Axon. This ensures that systems can move to cruisers in a timely manner and does not rely on Axon for installation of this system.

Maintenance and troubleshooting of the hardware and software has been absorbed by Information Technology (IT) staff who are responsible for the maintenance of current technology in the cruisers.

Coordination of the program, liaising with Axon and assisting with issues faced by members using the system is handled by the Sergeant in the Strategic Initiatives Unit, in addition to their other duties. In addition to working with the ICC/ALPR program with the HPS, this Sergeant also sits on provincial working groups to assist other policing agencies working on establishing ICC/ALPR programs and to standardize processes across Ontario.

#### Fleet Impact:

Impact on the fleet of cruisers has been minimal within the HPS. To ensure that cruisers were able to accept the technology, the Service has begun installing five-in-one antennae in new cruisers rather than the previously used three-in-one antennae. This ensures that the technology can be moved to different cruisers and eliminated the need to keep inventory of two different types of antennae.

Furthermore, the Service has moved away from Sierra modems in the cruisers to newer Cradlepoint modems, which are necessary to interact with the Fleet 3 system.

#### Professional Standards Impact:

The ICC system provides the HPS a way to record interactions between our members and the public. It offers an unbiased view of the interaction and is beneficial in addressing complaints concerning members' behaviour. As of March 26, 2024, there have been eight incidents where ICC/ALPR footage was used for investigations of member's behaviour, with one resulting in disciplinary action being taken.

It is expected that as the use of the technology increases, the statistics for these matters will increase.

#### Transparency Impact:

In Ontario, the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA) governs the access to information held by public institutions. This act ensures that anyone, regardless of age or location, can request information from certain public-sector institutions in Ontario. It also mandates specific requirements to safeguard the personal information of individuals. The goal is to strike a balance between the public's right to know and an individual's right to privacy.

The process for requesting information from ICC/ALPR with the HPS is no different than requesting copies of reports. Once the request is received, it is reviewed, redactions are applied as necessary in accordance with the Act, and when appropriate, shared with the requestor.

As of March 26, 2024, there has been 10 FOI requests received regarding ICC/ALPR data. Of those requests, three videos of 16 involved were able to be shared. Of note, the review of these requests only considers information that is specifically asked for. If a requester does not ask for ICC/ALPR footage and it is present in the record, it would not be considered in the review. Additionally, matters that are currently before the courts do not appear in these numbers as the record would not have been able to be considered as responsive to the request until after it is dealt with in court.

As with the implementation of the ICC/ALPR technology, a Privacy Impact Assessment (PIA) will be required to document the potential privacy impact to individuals, to identify mitigating strategies and to inform policy and procedure as to the appropriate use of the BWC.

#### Court Impact:

With the City of Hamilton taking over POA matters on October 14, 2023, statistics on disclosure for traffic related matters do not exist prior to that date. Since October 14, 2023, there has been 287

occurrences disclosed to POA court. These numbers continue to rise monthly, as matters make their way through the court process. Despite only 287 occurrences being requested by the POA courts as of March 26, 2024, there have been 10,073 files created for POA matters. These numbers suggest that the video created by ICC/ALPR systems is having a tremendous effect on guilty pleas prior to involving the courts.

In addition to POA matters, ICC/ALPR video is used in criminal code matters as well. Up to March 26, 2024, there has been 3,570 videos created by the Fleet 3 system for criminal court.

While anecdotal at present, it is known that the ICC/ALPR system has made a large impact on the members of the HPS in how they conduct enforcement. The ALPR technology has alerted members to numerous stolen autos, suspended drivers, and other offences, while the ICC system has captured driving evidence, been used at crime scenes and recorded other evidence that has assisted with criminal and POA investigations. As occurrences move through the courts, it is expected that the statistics will reflect this.

#### Data Impact:

Axon's Fleet 3 system offers the HPS a way to capture interactions between their members and the public with the ICC technology, as well as to notify members of vehicles of interest through the ALPR system. As a result of video recorded and ALPR records created, the system has an impact on the Service's data usage which has necessitated changes to its infrastructure.

The initial rollout of the system saw a spike in data usage with the Service's cruisers. This spike was in part due to constraints in how data was transferred from the cars to the HPS DEMS system. As a result of this spike, the Service received permission from the Hamilton Police Service Board to change data providers. This has resulted in a reduction of the impact of data usage within the Service.

In addition, the Service was able to install external wireless access points (WAP) to facilitate uploading of evidence from cruisers without using data. These changes have been beneficial in moving 45,932 pieces of evidence involving Fleet 3 systems and our members.

#### Body-Worn Camera Program Review:

The experience the Hamilton Police Service had deploying the Fleet 3 In-Car Camera (ICC) system, left the Service in a good position to identify priorities for a Body-Worn Camera (BWC) program. As in the case of ICC deployment, strong policy and parameters for use will ensure success of the program (White et al. 2020). Additionally, the Service needs to identify goals of the program as well as limitations in its use, to properly deploy the technology.

It is recognized that the research on body-worn cameras impact on behaviour for both police and the public is incomplete (Ariel 2015, 2016, 2017) and that there are questions on how the technology affects enforcement (Hughes 2020, Lum 2019). Research has shown that in some situations when BWC are present, officers are less likely to use discretion, which may cause the appearance of targeting communities (Hughes 2020). Additionally, video collected in a Canadian context is subject to access and



privacy legislation, which balances the public right to access government records with limited and specific exemptions protecting personal privacy and confidential information.<sup>1</sup>

There is no doubt that the technology provides the ability for police to record interactions between officers and the public, to gather evidence, to provide a level of transparency and to provide an accurate representation during incidents of “cop-baiting” or “sousveillance”<sup>2</sup> (Huey et al., 2024). The technology is also seen as essential in providing an objective source of information regarding police interactions with the public, especially when involved in incidents that are fluid in nature such as those involving mental health. In January 2024, a Coroner’s Inquest into the shooting death of Sammy Yatim recommended all front-line police in Ontario be issued BWC technology for this issue (Ontario.ca 2024).

**Program Costs:**

Hardware / Software .....	\$11,748,451.40
Workstations (x 5).....	\$25,000.00
Computers, Monitors & Telephones (x5) .....	\$16,000.00
Full-time DEMS Clerk (x 5) <sup>3</sup> .....	\$2,261,575.00
Full-time Desktop & Mobile Support Technician.....	\$515,500.00
Technician Equipment .....	\$3,000.00
Program Coordinator (Sergeant) <sup>4</sup> .....	<u>\$858,000.00</u>
<b>Total Over Five (5) Years .....</b>	<b>\$15,427,526.40</b>
<b>Cost Breakdown (Year One).....</b>	<b>\$3,864,466.40</b>
<b>Cost Breakdown (Year Two - Five).....</b>	<b>\$2,890,765.00</b>

**Costing Description:**

In the review of best practice for body-worn camera programs, it has been observed that agencies that deploy the technology as a personal-issued piece of equipment creates better accountability with recordings, and more acceptance and compliance with use (White et al., 2020).

Further consideration was made as to which roles within the Service would be best suited to receive the technology. Given the nature of the technology, it is recommended that a phased deployment should occur to the three front-line patrol divisions, as well as the Traffic Safety Unit, Community Mobilization and Crisis Response Units. In total, 633 positions were identified, with 650 units to be ordered to ensure adequate supply and the ability to provide shared issue of the technology in a limited number.

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<sup>1</sup> See the Municipal Freedom of Information and Protection of Privacy Act.

<sup>2</sup> *Sousveillance* is the recording of an activity by a member of the public, rather than a person or organisation in authority, typically by way of small wearable or portable personal technologies.

<sup>3</sup> Five full-time DEMS Clerks are in addition to two existing positions that address In-Car Camera matters.

<sup>4</sup> Coordinator will also manage Digital Evidence Management, and In-Car Camera / Automated License Plate Reader programs.

When considering the cost for the technology, clarification is needed for the pricing from Axon. The quoted cost includes replacement of the technology at the 30- and 60-month period of the contract. This will ensure that members will have units with no degraded battery issues and that the program can work to its highest ability. Additionally, the cost includes storage of data, which is known to be high, as well as the ability for the units to livestream as is the case with our ICC and have two-way communication for our members while streaming.

Costs in the contract also include licencing for digital evidence management. This is an item that is currently being paid for by the Service in the amount of approximately \$4.5 million over five years through Axon. Moving forward Axon for BWC would see the cancellation of that contract, with it being absorbed into the price of the BWC. It would also see a decline in cost for the Service's ICC contract moving forward, negating the need for external microphones, as the BWC technology works in sync with the ICC and would capture audio for incidents when away from the cruiser.

To address the impact that these cameras will have on the Service, specifically with the handling of evidence, an additional five DEMS Clerks will need to be hired. Furthermore, an additional Tech support member will be needed to provide support for issues. This will ensure that there is minimal impact on our members when handling the collected video and has been shown as best practice by agencies that have deployed the technology.

### Recommendation:

In conclusion, the investment of \$15.5 million in body-worn cameras for the Hamilton Police Service is a move towards increased transparency, but a move with an ongoing impact on the Service's budget. These devices serve as a tool for accountability, transparency, and trust-building between law enforcement and the communities they serve. They provide an unbiased record of interactions, which can protect both the public and officers alike from false accusations. This investment, therefore, is not just a cost, but a significant step towards justice and fairness.

In an era where technology is increasingly integrated into our daily lives, it is only fitting that our law enforcement agencies adapt and evolve. The adoption of body-worn cameras is a testament to the Service's commitment to modernization and continuous improvement. Therefore, the \$15.5 million investment in body-worn cameras is not just a cost, but a clear statement of intent to uphold the principles of transparency, accountability, and justice. It is an investment in the future of policing and public trust.

For these reasons, the HPS is recommending that the Service move forward with the acquisition of 650 body-worn cameras from Axon, as well as hiring the recommended support staff as identified in this report.



## References:

- Ariel, Barak, et al. "The Effect of Police Body-Worn Cameras on Use of Force and Citizens' Complaints Against the Police: A Randomized Controlled Trial." *Journal of Quantitative Criminology*, vol. 31, no. 3, Sept. 2015, pp. 509–35, <https://doi.org/10.1007/s10940-014-9236-3>.
- Ariel, Barak, Alex Sutherland, Darren Henstock, Josh Young, Paul Drover, et al. "Wearing Body Cameras Increases Assaults against Officers and Does Not Reduce Police Use of Force: Results from a Global Multi-Site Experiment." *European Journal of Criminology*, vol. 13, no. 6, Nov. 2016, pp. 744–55, <https://doi.org/10.1177/1477370816643734>.
- Ariel, Barak, Alex Sutherland, Darren Henstock, Josh Young, Jayne Sykes, et al. "'Contagious Accountability': A Global Multisite Randomized Controlled Trial on the Effect of Police Body-Worn Cameras on Citizens' Complaints against the Police." *Criminal Justice and Behavior*, vol. 44, no. 2, Feb. 2017, p. 293, <https://doi.org/10.1177/0093854816668218>.
- Huey, Laura, and Lorna Ferguson. "'No One Wants to End up on YouTube': Sousveillance and 'Cop-Baiting' in Canadian Policing." *Policing and Society*, Mar. 2024, pp. 1–18, <https://doi.org/10.1080/10439463.2024.2329239>.
- Hughes, Thomas W., et al. "The Influence of Body-worn Cameras, Minority Threat, and Place on Police Activity." *Journal of Community Psychology*, vol. 48, no. 1, Jan. 2020, pp. 68–85, <https://doi.org/10.1002/jcop.22299>.
- Lum, Cynthia, et al. "Research on Body-worn Cameras." *Criminology & Public Policy*, vol. 18, no. 1, Feb. 2019, pp. 93–118, <https://doi.org/10.1111/1745-9133.12412>.
- RSO 1990, c F.31 | Freedom of Information and Protection of Privacy Act.  
<https://www.canlii.org/en/on/laws/stat/rso-1990-c-f31/latest/rso-1990-c-f31.html>. Accessed 26 Mar. 2024.
- RSO 1990, c M.56 | Municipal Freedom of Information and Protection of Privacy Act.  
<https://www.canlii.org/en/on/laws/stat/rso-1990-c-m56/latest/rso-1990-c-m56.html>. Accessed 26 Mar. 2024.
- White, Michael D., and Aili Malm. *Cops, Cameras, and Crisis: The Potential and the Perils of Police Body-Worn Cameras*. New York University Press, 2020.
- 2024 Coroner's Inquests' Verdicts and Recommendations | Ontario.Ca.  
<http://www.ontario.ca/page/2024-coroners-inquests-verdicts-and-recommendations>. Accessed 5 Apr. 2024.