



# Seattle Office of Inspector General

## Surveillance Technology Usage Review: Video Recording Systems (2021 and 2022)

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As Required by Seattle Municipal Code 14.18.060

July 3, 2023

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## Foreword from the Inspector General

Enclosed is the first Annual Surveillance Usage Review by OIG on the use of “Video Recording Systems” by the Seattle Police Department (SPD). This review was performed pursuant to Seattle Municipal Code 14.18.060, which requires OIG to conduct annual reviews of SPD’s use of Surveillance Technologies. “Video Recording Systems” comprises three different systems, and collectively are one of sixteen SPD Surveillance Technologies currently approved by City Council.

OIG contracted with a cybersecurity firm, Critical Insight, to conduct this review—they brought valuable expertise and helpful collaboration to our oversight of SPD use of approved Surveillance Technologies. OIG also facilitated stakeholder feedback from SPD and the American Civil Liberties Union. We appreciate the time and effort these stakeholders devoted to this review. These consultations and perspectives helped to ensure the work was thorough and inclusive, and that our conclusions and recommendations were based on the most complete information available.

In performing this review annually, OIG will continue to engage with SPD and other stakeholders to ensure responsiveness to community concerns and seek new ways to evaluate how SPD uses Surveillance Technologies to further public safety while protecting the rights of individuals in our community.



# Critical Insight

## CITY OF SEATTLE SURVEILLANCE TECHNOLOGY REVIEW VIDEO RECORDING SYSTEMS

SOW-2022-347

JULY 3, 2023

### **Notice**

Critical Insight has made every reasonable attempt to ensure that the information contained within this statement of work is correct, current and properly sets forth the requirements as have been determined to date. The parties acknowledge and agree that the other party assumes no responsibility for errors that may be contained in or for misinterpretations that readers may infer from this document.

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## Executive Summary

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This Executive Summary highlights major findings and recommendations pertaining to the six elements of SMC 14.18.060. OIG is required to review. The summary below lists significant audit results.

### Summary of Assessments and Recommendations Related to SMC 14.18.060

14.18.060 Provision	Compliance Determination	Auditor's Findings	Recommendations
A. How surveillance technology has been used, usage frequency, and whether usage patterns have changed.	<b>Yes</b>  	These systems are used in interview rooms at the Seattle Justice Center, in blood-alcohol concentration (BAC) collection rooms, and holding cells at SPD precincts. They are physically fixed, with no view of the outside. Interview and blood collection rooms record only when in use; holding cell cameras record at all times.	
B. How often surveillance technology or its data is shared with other entities, including government agencies.	<b>Yes</b>  	SPD regularly shares interview room, BAC collection room, and holding cell videos with the Seattle City Attorney and King County Prosecutors Office through Evidence.com.	
C. How well data management protocols are safeguarding individual (personal) information.	<b>Needs Work</b>  	In general, these systems follow best practices for data management. However, some of the cameras have reached end-of-life and are no longer receiving software updates.	<b>Recommendation 1:</b> SPD should work with Seattle IT to replace all end-of-life/end-of-support cameras.

14.18.060 Provision	Compliance Determination	Auditor's Findings	Recommendations
<p>D. How deployment of surveillance technologies impacted or could impact civil liberties or have disproportionate effects on disadvantaged populations, and how those impacts are being mitigated.</p>	<p><b>Needs Work</b></p> 	<p>These systems are overt, used only in specific locations. Most locations have prominently posted signs notifying individuals entering the area that they are being recorded. When SPD interviews subjects who are in custody, Washington State law and SPD policy require verbal notice of the video and audio recording.</p> <p>These systems provide an important measure of accountability for SPD personnel conducting interviews and collecting evidence. As a result, they have neutral effects on disadvantaged populations. However, signs indicating recording are only in English.</p>	<p><b>Recommendation 2:</b> SPD should ensure signage advising individuals they are being recording is present in all locations where video recording occurs inside SPD facilities, including interview rooms, and/or modify applicable policies and processes to ensure SPD personnel verbally notify individuals in those locations about video recording at the time recording commences.</p> <p><b>Recommendation 3:</b> SPD should update all signage referring to the use of Video Recording Systems with translations in all Tier 1 languages.</p>
<p>E. A summary of any complaints or concerns about the surveillance technology and results of internal audits or assessments of code compliance.</p>	<p><b>Yes</b></p> 	<p>No complaints or concerns noted for 2021 or 2022.</p>	
<p>F. Total annual costs for use of surveillance technology, including personnel and other ongoing costs.</p>	<p><b>Yes</b></p> 	<p>SPD spent \$193,193.17 on video recording systems in 2021 and \$57,839.37 in 2022. The greater expenses in 2021 reflect the acquisition of the new Axon Interview Room System and includes costs for the contract period of five years.</p>	

## Purpose and Objectives

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This analysis was conducted by Critical Insight consultants at the request of the Seattle Office of the Inspector General for Public Safety (OIG) under City Ordinance 125376, under Chapter 14.18.060, which requires an annual review of actual usage of surveillance technologies by the Seattle Police Department (SPD). Per Ordinance 125376, this review is required to include, but is not limited to, the following:

- A. How surveillance technology has been used, how frequently, and whether usage patterns are changing over time;
- B. How often surveillance technology or its data are being shared with other entities, including other governments;
- C. How well data management protocols are safeguarding individual information;
- D. How deployment of surveillance technologies impacted or could impact civil liberties or have disproportionate effects on disadvantaged populations, and how those impacts are being mitigated, including, for SPD, an examination of whether deployments are pursuant to warrants or not and how SPD's surveillance technology is used to analyze patterns to predict suspect, individual, or group-affiliation behavior;
- E. A summary of any complaints or concerns received by or known by departments about their surveillance technology and results of any internal audits or other assessments of code compliance; and
- F. Total annual costs for use of surveillance technology, including personnel and other ongoing costs.

In the course of this review, consultants reviewed the information disclosed in the SIR, as well as Seattle Police Department policy relating to evidence handling, video surveillance, and bias-free policing.

This report will highlight risks discovered by Critical Insight consultants in the following areas, and give recommendations on how to remediate those risks:

- Is the description of the technology in the SIR complete and accurate?
- Are there clear usage and data management policies in place?



- Does it regulate how and when the surveillance technology will be deployed, and by whom?
- How and where will data gathered by this surveillance technology be stored?
- How long will the data be retained?
  - What process is used to destroy data that is no longer being retained?
- How is access to data secured?
  - How is unauthorized access prevented?
  - What access reviews are performed?
- How are data shared outside of the department, and how is sharing or access to those data monitored and audited?
- Are there any auditability concerns about the technology, cost, or usage?
  - Example: Instances where access authorization cannot be reviewed because log data is not available.
  - Example: Instances of the use of a particular surveillance technology not being tagged properly in case notes.

## Technology Description

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SPD uses Video Recording Systems in specific, secure locations inside of SPD facilities. During the 2021 to 2022 review period, SPD used three Video Recording Systems: 1) the Genetec Video Management System; 2) the Axon Interview Room System; and 3) the Milestone Systems XProtect Video Management System. Each system is composed of a network of cameras that transmit video to either an on-premises digital video recorder (DVR) device or to cloud storage. These systems store the most recent 60 days of recordings. Older data are automatically wiped from the device unless a detective selects and downloads recordings for permanent storage as evidence. SPD stores video evidence from both the Genetec and Milestone systems by recording it onto an evidence-grade DVD. The Axon Interview Room System allows detectives to upload recordings directly to another Axon product: the Evidence.com cloud platform, which is SPD's digital evidence management system.

### Genetec Video Management System

SPD used this system to record audio and video of interviews with crime victims, witnesses, and suspects in seven designated interview rooms located at the SPD headquarters in the Seattle Justice Center. The contract for this system expired in June 2021.

### Axon Interview Room System

Instead of renewing the Genetec contract, SPD replaced the Genetec system with the Axon Interview Room System by Axon Enterprise, Inc. Use of the Axon system commenced in June 2021. Unlike SPD's other Video Recording Systems, this system stores recordings in the Axon private cloud and not in an on-premises storage device. Its integration with Evidence.com allows detectives to select and save specific recordings and connect them to cases. This process eliminates the need to copy recordings to DVDs and enables secure sharing with other law enforcement agencies.

### Milestone Systems XProtect Video Management System

This system records the blood-alcohol concentration (BAC) collection rooms and holding cells at each of SPD's precincts. The Milestone system is fully on-premises with cameras streaming video onto a local DVR device. As stated in the SIR, although this system has the capability to stream audio to the local DVR, SPD does not use this capability. Each precinct has its own DVR system. The cameras in use are a mixture of older Canon VBM40 and newer Axis network cameras; as cameras fail, the Seattle IT Department replaces them. Both camera types are easily visible in the locations where they are used.

## A. Surveillance Technology Usage

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Each Video Recording System discussed in the SIR is permanently installed, non-mobile, and unconcealed. These systems do not have a view of the building exterior – only the interior of rooms in which they are deployed. Prominently posted signs notify individuals entering BAC rooms and holding cells that they are being observed and recorded. No signs are posted within interview rooms notifying individuals of video and audio recording; rather, SPD personnel verbally state that video and audio recording is in progress prior to interviewing subjects.

The Genetec and Axon Interview Room systems record in-person interviews with crime victims, witnesses, and suspects in seven designated interview rooms at the SPD headquarters. These systems create video records of interviews for use in criminal justice proceedings. These systems do not continuously record and must be activated by an officer.

The Milestone Systems XProtect Video Management Software is permanently installed in SPD's BAC collection rooms and precinct holding cells. Cameras continuously record all activity in those locations.

## B. Data Sharing with External Entities

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The SIR states that data from the Video Recording Systems may be shared outside of SPD with the following agencies, entities, or individuals within specific guidelines or as required by law:

- Seattle City Attorney's Office
- King County Prosecuting Attorney's Office
- King County Department of Public Defense
- Private Defense Attorneys
- Seattle Municipal Court
- King County Superior Court
- Similar entities where prosecution is in Federal or other State jurisdictions
- Members of the public pursuant to the Washington Public Records Act, Chapter 42.56 RCW

Within Evidence.com, there is no specific tag for indicating whether a video originates from an interview room, a BAC collection room, or a holding cell, however naming conventions for these videos appear consistent. A keyword search of titles in Evidence.com produced a significant number of relevant videos for this review, though the completeness of this population is likely limited by the absence of Genetec videos<sup>1</sup> and the possibility of unconventionally named Axon or Milestone videos.

Given these conditions, this review found that SPD shared 2,446 videos from Evidence.com related to 1,254 unique cases for the years 2021 and 2022. The table below details which entities received recordings through Evidence.com sharing.

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<sup>1</sup> SPD was unable to reliably quantify the population of Genetec-system videos that SPD retained DVD copies of.

<b>Recordings Shared with External Entities, 2021 – 2022</b>			
<b>Entity</b>	<b>Interview Rooms (Axon)</b>	<b>BAC Collection Rooms (Milestone)</b>	<b>Holding Cells (Milestone)</b>
<b>Seattle City Attorneys' Office</b>	18 recordings shared pertaining to 2 cases	895 recordings shared pertaining to 769 cases	33 recordings shared pertaining to 12 cases
<b>King County Prosecuting Attorneys' Office</b>	452 recordings shared pertaining to 148 cases	4 recordings shared pertaining to 4 cases	1 recording shared pertaining to 1 case

## C. Data Management and Safeguarding of Individual Information

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To assess how SPD and Seattle IT safeguard personally identifiable information and criminal justice information stored within the video recording systems, this review examines: the security of the cameras, DVR devices, and their associated networks; how recordings are stored and shared between systems and entities; and the retention lifespans of recordings, especially those stored as evidence.

According to Seattle IT staff responsible for maintaining these systems, they employ security best practices regarding management of the on-premises cameras and DVR systems. For example, Seattle IT reported they have followed the manufacturers' security hardening guides, changed default passwords, and limited user permissions. While Seattle IT does perform backups of the DVR servers, these backups store configuration data, not video recordings; therefore, it is not possible for recorded video to be improperly disclosed via misuse of backup data. Seattle IT staff also explained the cameras and DVR devices are isolated onto their own dedicated network segments, which limits the ability for threat actors to access each system or use that access to attack other SPD systems. This is a key security control for camera systems, as threat actors frequently use embedded devices such as cameras as staging points to conceal their activities on a network.

One area of concern is the Canon VBM40 cameras used in holding cells and BAC rooms have reached their manufacturer end-of-life/end-of-support and no longer receive software updates with security fixes from the vendor. Seattle IT is replacing them with newer Axis network cameras that are still in their support lifetime; however, Seattle IT reported that budget limitations have prevented them from replacing all the Canon VBM40 cameras. The presence of unpatched, end-of-life/end-of-support devices on a network represents a risk if a threat actor can gain entry to the Video Recording System network. While we believe this risk is minimal due to the network segmentation and remote access controls in place, we still recommend replacing all end-of-life/end-of-support cameras as soon as practical.

- **Recommendation 1: SPD should work with Seattle IT to replace all end-of-life/end-of-support cameras.**

## Data Storage and Retention

No camera in any reviewed system stores video data. The cameras stream recordings to either a DVR (in the case of the Genetec and Milestone Systems XProtect systems) or the Axon Interview Room cloud system. Permanent long-term storage is on either physical evidence-grade DVD (again in the case of the Genetec and Milestone Systems XProtect devices) or on the Axon Evidence.com platform.

In a prior Surveillance Usage Review of a different SPD technology, Critical Insight identified that SPD and Seattle IT were not performing regular access audits of Evidence.com and had no routine procedure to review user accounts for continued authorization.<sup>2</sup> As with that prior review, Critical Insight is not making recommendations, as the relevant systems, policies, and processes are broader than the scope of this technology review. OIG will continue to monitor this concern and explore potential follow-up work to address the systemwide concerns.

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<sup>2</sup> [Surveillance Usage Review: Forward Looking Infrared Real-Time Video \(2021\)](#)

## D. Impact on Civil Liberties and Disproportionate Effects on Disadvantaged Populations

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### Impact on Civil Liberties

Recording of individuals held within SPD facilities does present risk to civil liberties if individuals are not made aware. To mitigate this risk, SPD establishes consent visually (through posted signage and visibly positioned cameras) and/or verbally (by advising individuals they are in a facility with video and audio recording in process). In the case of BAC collection rooms and holding cells, visible cameras and signage notify suspects about video and audio surveillance in progress.<sup>3</sup>

In the interview rooms, consent is established visually and verbally. As outlined in the SIR Section 3.2,

*'Consent is required before these technologies may be used. RCW 9.73.030 Intercepting, recording or divulging private communication – Consent required – Exceptions. Also known as "All party consent". Standard procedure dictates that interview subjects are always advised of the presence of the recording or asked for their permission to record.'*

Further, SPD Policy 7.110 – Recorded Statements provides guidelines for recorded statements of individuals who are not in custody,

*'When taking an audio recorded statement, the officer/detective: [...] Asks the person to respond to the question, "Are you aware you are being recorded?"'*

To assess compliance with the procedures above, we reviewed 104 videos in which an individual was audio and video recorded in an interview room.<sup>4</sup>

- In 91 of the videos SPD personnel were captured advising individuals that they were being recorded as the recording started.
- In 7 videos an individual was left alone in the room without, or prior to, advisement that they were being video and audio recorded.
- In 6 videos there was no indication that SPD advised individuals they were being recorded.

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<sup>3</sup> The SIR documents images of both the cameras and signs.

<sup>4</sup> BAC room and holding cell videos were not selected for testing, as a brief review of these video types found none which included audio.

Notably, the interview room recordings do not capture the entirety of an individual's interaction with SPD, and some recordings start after the individual is already seated in the room. As such, it is not possible to determine if SPD personnel advised individuals they were going to be recorded prior to the start of the recording. While SPD appears to be in significant compliance with the terms of the SIR and SPD policy, additional steps can be taken to ensure that individuals are aware of any recording in-progress.

- **Recommendation 2: SPD should ensure signage advising individuals they are being recording is present in all locations where video recording occurs inside SPD facilities, including interview rooms, and/or modify applicable policies and processes to ensure SPD personnel verbally notify individuals in those locations about video recording at the time recording commences.**

## Disproportionate Effects on Disadvantaged Populations

Video Recording Systems serve as an accountability mechanism ensuring officers follow SPD policy when holding or interviewing suspects and collecting evidence. The risk of misuse or over-surveillance through these technologies is minimal because they are highly visible, and many locations have posted signs notifying individuals that recording is in progress.

Though SPD posts signs alerting individuals in BAC collection rooms and holding cells that audio and video recording is in progress, it appears from the images documented in the SIR that these signs are only in English. SPD Policy 15.250 Section III details the procedures for interviews and interrogations of non-English speakers but does not explicitly address translations of signage.

- **Recommendation 3: SPD should update all signage referring to the use of Video Recording Systems with translations in all Tier 1 languages.**



## E. Complaints, Concerns and Other Assessments

### Office of Police Accountability (OPA) Complaints

No relevant complaints or concerns were submitted to OPA in 2021 or 2022.

### Customer Service Bureau Complaints

No relevant complaints or concerns were submitted to the City of Seattle Customer Service Bureau in 2021 or 2022.

### Internal Audits or Assessments

According to SPD's Audit, Policy, and Research Section, no internal audits or assessments have been conducted on this technology.

## F. Cost Auditing

In total SPD spent \$193,193.17 during the 2021 calendar year on the Genetec (\$0.00), Milestone (\$83,188.94), and Axon (\$110,004.23) video recording systems. This figure includes procurement of a new system (Axon) as well as licensing costs for services paid for in 2021 and used in 2021 and 2022 by both active systems, Milestone and Axon (see below).

In total SPD spent \$57,839.37 during the 2022 calendar year on the Milestone (\$36,444.74) and Axon (\$21,394.63) systems; the Genetec video recording system had no 2022 costs because it was discontinued in June 2021. The figure, \$57,839.37, includes the licensing and maintenance costs for services paid for in 2022 and used in 2022 and 2023 by both active systems.

<b>Costs for Video Recording Systems, 2021 – 2022</b>				
<b>System</b>	<b>2021 Licensing</b>	<b>2021 Maintenance or Procurement</b>	<b>2022 Licensing</b>	<b>2022 Maintenance</b>
<b>Genetec</b>	\$0.00	\$0.00	N/A	N/A
<b>Milestone</b>	\$69,610.00	\$13,578.94	\$18,469.74	\$17,975.00
<b>Axon</b>	\$30,632.00	\$79,372.23		\$21,394.63
<b>TOTAL</b>		<b>\$193,193.17</b>		<b>\$57,839.37</b>



## Surveillance Technology Usage Review

### Video Recording Systems (2021 and 2022)

#### *Recommendations Response*

1. SPD should work with Seattle IT to replace all end-of-life/end-of-support cameras.

#### SPD Management Response

Concur  Do Not Concur

Estimated Date of Implementation: Dependent on budget considerations

Proposed Implementation Plan: SPD will work with Seattle IT to develop a plan to replace all end-of-life/end-of-support cameras.

2. SPD should ensure signage advising individuals they are being recording is present in all locations where video recording occurs inside SPD facilities, including interview rooms, and/or modify applicable policies and processes to ensure SPD personnel verbally notify individuals in those locations about video recording at the time recording commences.

#### SPD Management Response

Concur  Do Not Concur

Estimated Date of Implementation: Q4 2023

Current SPD policy requires notice of video recording by signage in all areas that are being recorded. SPD will confirm that proper signage is in place in all such areas. SPD complies with state law concerning notification of audio recording, but declines to expand policy to requiring verbal notification of video recording alone.



## Surveillance Technology Usage Review

### Video Recording Systems (2021 and 2022)

#### *Recommendations Response*

3. SPD should update all signage referring to the use of Video Recording Systems with translations in all Tier 1 languages.

#### SPD Management Response

Concur  Do Not Concur

Estimated Date of Implementation: Q4 2023

Proposed Implementation Plan: As we are fabricating new signs referenced in answer #2, we will ensure that the signs are translated into Tier 1 languages (Traditional Chinese, Spanish, Vietnamese, Somali, Amharic, Korean, Tagalog)

## NON-AUDIT STATEMENT

This review was not conducted under Generally Accepted Government Auditing Standards. However, OIG has reviewed the work of Critical Insight to provide reasonable assurance that evidence used in this review was sufficient and appropriate.