2023 Annual Surveillance Technology Usage Review

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Report Highlights

Background

On September 16, 2024, the Seattle Information Technology Department (ITD) issued a report that revised the City of Seattle's Master List of Surveillance Technologies. ITD determined that the following technologies did not meet the definition of surveillance technologies:

- Seattle Fire Department (SFD) Computer-Aided Dispatch
- SFD Hazardous Materials and Emergency Scene Cameras
- Seattle City Light (SCL) Current Diversion Technologies that include:
  - Binoculars and Spotting Scopes
  - SensorLink Ampstik
  - SensorLink Transformer Meter System (TMS)

Given ITD's determination, we will no longer report annually on these technologies but will continue to report on the Seattle Department of Transportation's (SDOT) use of Closed-Circuit Television Cameras. We will close the pending recommendations we had from our previous audit reports about the SFD and SCL technologies.

What We Found

We found that SFD, SCL and SDOT complied in 2023 with Seattle Municipal Code 14.18.060.

Department Responses

The departments had no comments on our report.

WHY WE DID THIS AUDIT

Seattle Municipal Code 14.18.060 requires the City Auditor to annually review City Council-approved surveillance technologies used by City of Seattle departments, excluding the Seattle Police Department.

HOW WE DID THIS AUDIT

To accomplish the audit's objectives, we:

- Reviewed usage data for compliance with Seattle Municipal Code 14.18.060
- Reviewed relevant Surveillance Impact Reports
- Interviewed City officials
- Reviewed department responses to our questionnaire
- Reviewed the status of the recommendations from our previous audits

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INTRODUCTION

Background and Overview

Ordinance 125679, codified as Seattle Municipal Code 14.18, was created out of concerns about privacy and lack of a process when the City of Seattle (City) acquires surveillance technologies, which can create risks to civil liberties, such as privacy, freedom of speech, or association. Chapter 14.18.060 of the Seattle Municipal Code (SMC) requires the City Auditor to conduct annual reviews of City departments' use of non-police surveillance technologies to determine the extent to which they complied with the Chapter's requirements and the terms of City Council approved Surveillance Impact Reports (SIRs).

The SMC requires the establishment of a process to determine whether technologies acquired by the City of Seattle qualify as surveillance technologies and are therefore subject to the SMC's requirements. The Seattle Information Technology Department (ITD) developed criteria to classify technologies as either surveillance or non-surveillance. The process is described in the quarterly surveillance technology determination reports that are published four times each calendar year by ITD's Chief Technology Officer (CTO). The departments must create a SIR for each surveillance technology documenting their compliance with the SMC. The Seattle City Council must approve the SIRs before the City's acquisition of any surveillance technology.

The SMC requires[1] the City Auditor to conduct annual reviews of the City's use of surveillance technologies to determine if the departments complied with the approved SIRs, except for technologies used by the Seattle Police Department, which are reviewed by the Seattle Inspector General for Public Safety.

On September 16, 2024, the Seattle Information Technology Department (ITD) issued a report that revised the City of Seattle's Master List of Surveillance Technologies. ITD determined that the technologies used by the Seattle Fire Department and Seattle City Light, which our office had been reporting on, do not meet the definition of surveillance technologies. Therefore, we will no longer provide annual reports on these technologies and will close the pending recommendations we made about these technologies in our previous audit reports. However, we will continue to report annually on the Seattle Department of Transportation's use of Closed-Circuit Television Cameras.

[1] SMC 14.18.060

Audit Objective

The objective of this audit was to determine if the departments complied with their SIRs in calendar year 2023. We determined compliance based on our review of the departments' responses to our questionnaires and in some cases, through our review of supporting documentation. We also looked at updates, if any, that were made by the departments to the SIRs in the year under audit, and if the updates were considered material,[2] we verified the updated SIRs were approved by the Seattle City Council. In this audit, there were no updates made in 2023 to the SIRs.

This 2023 annual surveillance technology usage review covered the following technologies:

- Seattle Department of Transportation (SDOT) Closed Circuit Television (CCTV) Cameras
- Seattle Fire Department (SFD) Computer-Aided Dispatch (CAD)
- Seattle Fire Department (SFD) Hazardous Materials and Emergency Scene Cameras
- Seattle City Light (SCL) Current Diversion Technologies that include:
    - Binoculars and Spotting Scopes
    - SensorLink Ampstik
    - SensorLink Transformer Meter System (TMS)

CONCLUSION

There were no additional findings for any of the departments in 2023.

Appendix A in this report describes in detail each of the technologies covered by this audit.

Appendix B contains a list of pending recommendations from previous audits regarding the Seattle Fire Department and Seattle City Light technologies that we will be closing. We will no longer be monitoring these technologies because of ITD's September 2024 determination that they do not fit the definition of a surveillance technology.

Exhibit 1 below summarizes the results of our review for all three departments for each of the points required to be addressed in the SIRs as outlined in SMC 14.18.060.

We wish to thank the departments for their cooperation during this audit.

[2]The City Privacy Office has developed procedures to determine the materiality of SIR updates.

Exhibit 1: Summary of Department Responses to SMC 14.18.060 Sections A-F

Listed below from SMC subsection 14.18.060 are the points that are required to be addressed in the SIRs.

A. How the surveillance technology has been used, how frequently, and whether usage patterns are changing over time
B. How often the surveillance technology or its data are being shared with other entities, particularly other governments
C. How well data management protocols are safeguarding individual information
D. How deployment of the surveillance technology impacted or could impact civil liberties or have disproportionate effects on disadvantaged populations, and how those impacts are being mitigated
E. A summary of any complaints or concerns received by or known by departments about the surveillance technology and the results of any internal audits or other assessments of code compliance
F. Total annual costs for use of the surveillance technology, including personnel and other ongoing costs

The number "1" in the exhibit below indicates there were no changes for the technologies in 2023 for the points listed above (i.e., A-F) that are required to be addressed in their SIRs.

Department & Technology Name	A	B	C	D	E	F	Findings
SDOT – CCTV	1	1	1	1	1	1	NO
SFD – Hazardous Materials	1	1	1	1	1	1	NO
SFD – CAD	1	1	1	1	1	1	NO
City Light – SensorLink Technical Meter System	1	1	1	1	1	1	NO
City Light – SensorLink Ampstik	1	1	1	1	1	1	NO
City Light – Binoculars / Spotting Scope	1	1	1	1	1	1	NO

Legend for Numerical Responses from the Departments:

1 = No change from previous year
2 = Immaterial Change – No SIR update required
3 = Immaterial Change – SIR update required
4 = Material Change – SIR update and City Council approval required

OBJECTIVES, SCOPE, AND METHODOLOGY

Objectives

Our audit objectives were to review the City's compliance with Seattle Municipal Code (SMC) 14.18.060:

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 in particular.
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.
E. A summary of any complaints or concerns received by or known by departments about their surveillance technology and the results of any internal audits or other assessments of code compliance.
F. Total annual costs for use of the surveillance technology, including personnel and other ongoing costs.

Scope

The scope for this audit included activities in 2023 and covered the following technologies:

- Seattle Department of Transportation Closed Circuit Television Cameras
- Seattle Fire Department Computer-Aided Dispatch
- Seattle Fire Department Hazardous Materials and Emergency Scene Cameras
- Seattle City Light Current Diversion Technologies (Binoculars and Spotting Scopes, SensorLink Ampstik, and SensorLink Transformer Meter System)

Methodology

To accomplish the audit's objectives, we performed the following:

- Reviewed the technology usage for compliance with Seattle Municipal Code 14.18.060.
- Reviewed the relevant Surveillance Impact Reports.
- Interviewed City officials.
- Reviewed 2023 technology cost data.

- Reviewed data from the City's Department of Facilities and Administrative Services Customer Service Bureau database of comments and complaints received in 2023.
- Reviewed the status of the recommendations from our previous audits.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

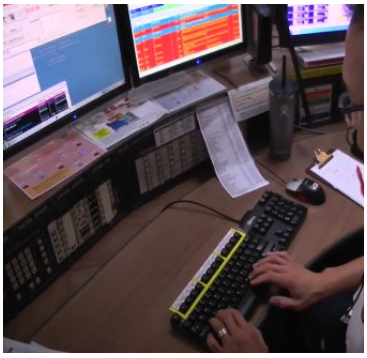
APPENDIX A

Description of Technologies Reviewed

Source: Seattle Department of Transportation Traffic Cameras Fact Sheet

Seattle Department of Transportation Closed Circuit Television Cameras

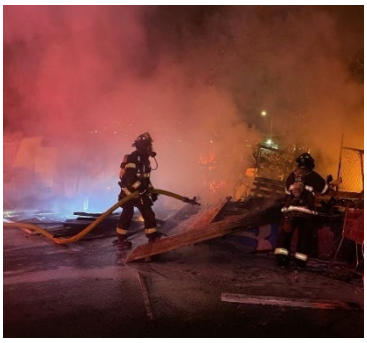
Closed Circuit Television (CCTV) cameras are Seattle Department of Transportation (SDOT) remotely controllable video cameras installed on traffic poles along major roads in Seattle. The SDOT Transit Operations Center uses CCTV cameras to monitor traffic conditions and quickly respond to traffic issues. Other City departments use CCTV cameras to respond to emergencies and to monitor major city-wide events. The cameras provide live video or updated static images 24 hours a day on the Travelers Information Map, a website that displays real-time traffic conditions in Seattle. See our initial CCTV audit for more detailed information on the CCTV system.



Source: Seattle Fire Department

Seattle Fire Department Computer-Aided Dispatch

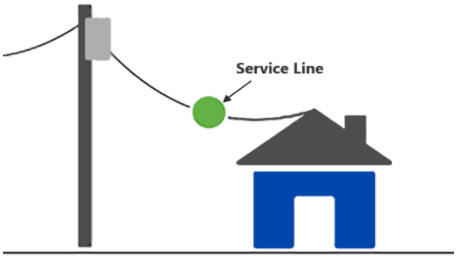
Computer-Aided Dispatch (CAD) is a suite of software packages that provide unit (e.g., fire engines) dispatch recommendations for 911 emergency calls based on the reported problem and location of a caller. CAD also maintains the status of responding units while SFD officers use CAD mobile data terminals in the field. Usually, public participation in CAD is opt-in when individuals make a call for service. However, individuals may call and provide personal information about someone else without that person's knowledge or approval, and dispatchers may enter personally identifying information into CAD about the public without providing notice to those individuals. See our initial CAD audit for more detailed information on the CAD system.



Source: Seattle Fire Department

Seattle Fire Department Hazardous Materials and Emergency Scene Cameras

The Seattle Fire Department (SFD) has two categories of cameras: hazardous materials cameras and emergency scene cameras. The inventory of SFD's hazardous materials cameras consists of four iPads, one iPhone, and two GoPro cameras. SFD's emergency scene cameras consist of different camera models distributed among three units: Seattle Medic One, the Safety Unit, and the Fire Investigation Unit (FIU). Seattle Medic One employees use their department-issued iPhones. The Safety Unit has three Nikon digital cameras. The FIU has five Nikon digital cameras. See our initial audit for more detailed information on the hazardous materials and emergency scene cameras.



Source: Seattle Office of City Auditor adapted from https://www.seattle.gov/city-light/about-us/what-we-do

Seattle City Light Technologies

Seattle City Light uses three technologies during current diversion investigations to inspect and measure the difference in current between the service line at the utility pole and the meter.

The **SensorLink Transformer Meter System (TMS**), also known as a Check Meter Device, is a device that measures the amount of electrical energy flowing through a service line wire over time. The TMS digitally captures energy flow data for later retrieval by City Light's Current Diversion Team via a secure wireless protocol. City Light uses the TMS information in the calculation of diverted energy. The **SensorLink Ampstik**, also known as an Ampfork, is a device used to detect instantaneous current flow in amperage through a service line. It includes an electrical transmitter device mounted on a telescoping pole (up to 40 to 50 feet) that allows the fork-shaped device to be placed around a service line wire near the distribution pole and a handheld receiver that displays instantaneous readings of current flow reported in amps. A meter electrician uses the readings together with meter reads to determine if current is being diverted. A **spotting scope and binoculars** are used interchangeably, depending on City Light staff preference, to examine meters in assessing if current diversion is occurring, when distance is a barrier to close physical inspection. These devices may also be used to determine if potentially dangerous alterations to City Light's electrical infrastructure exist. The binoculars and spotting scope themselves do not collect data and contain no special enhancements requiring power such as night vision or video-recording capabilities. See our initial audit for more detailed information on the current diversion technologies.

APPENDIX B

Pending Recommendations from Previous Audits that We are Closing

Seattle City Light Current Diversion Technologies

Audit Recommendation	Implementation Status
Recommendation 8: City Light should update the Surveillance Impact Reports for its current diversion technologies to explain why it will not perform an equity analysis of past enforcement locations.	**Closed**

Seattle Fire Department Computer-Aided Dispatch

Audit Recommendation	Implementation Status
Recommendation 1: The Seattle Fire Department's (SFD) Fire Alarm Center operating procedures should be updated to include the list of Computer-Aided Dispatch system (CAD) approved and inappropriate uses listed in the CAD Surveillance Impact Report and SFD should develop a plan for communicating this information to its employees and the entities it shares CAD data with.	**Closed**
Recommendation 2: As the Seattle Fire Department renews or creates new contracts or agreements with entities with which it shares Computer-Aided Dispatch (CAD) system data, these documents should include protocols that cover CAD data access, sharing, and retention.	**Closed**
Recommendation 3: The Seattle Fire Department (SFD) should include information about the need for data sharing agreements in SFD's Fire Alarm Center Policies and Operating Guidelines to ensure their placement in future SFD agreements with other entities.	**Closed**
Recommendation 4: The Seattle Fire Department (SFD) should modify the Computer-Aided Dispatch (CAD) Surveillance Impact Report to state that SFD shares CAD data with the federal National Fire Incident Reporting System (NFIRS) and should indicate the frequency with which SFD has shared data with NFIRS.	**Closed**

Audit Recommendation	Implementation Status
Recommendation 5: The Seattle Fire Department (SFD) and the Office of the City Clerk's City Records Management Program should prioritize creating and implementing Computer-Aided Dispatch (CAD) data records retention schedules in compliance with the Revised Code of Washington (RCW) and the Seattle Municipal Code by fourth quarter 2022. SFD and Records Management Program staff should request any needed additional resources to ensure the schedules are completed by the end of 2022 and are incorporated into SFD Fire Alarm Center Policies and Operating Guidelines and any agreements with entities SFD shares CAD data with.	**Closed**
Recommendation 6: The Seattle Fire Department (SFD) should develop and execute agreements with City departments that use SFD Computer-Aided Dispatch data that specify what are the approved uses of the data.	**Closed**
Recommendation 8: The Seattle Fire Department (SFD) should limit access to Computer-Aided Dispatch system premise notes and dispatcher comments to SFD employees who need access to them to perform their jobs.	**Closed**
Recommendation 9: The Seattle Information Technology Department and the Seattle Fire Department (SFD) should work to address data management policy and protocol about safeguarding individual (personal) information contained in the Computer-Aided Dispatch system.	**Closed**
Recommendation 10: The Seattle Fire Department (SFD) Computer-Aided Dispatch (CAD) Surveillance Impact Report should be updated to state that the SFD Public Disclosure Officer safeguards individual (personal) information generated by CAD when the public makes CAD records requests.	**Closed**

Audit Recommendation	Implementation Status
Recommendation 11: The Seattle Fire Department (SFD) should update its Computer-Aided Dispatch Surveillance Impact Report to include the process SFD uses to safeguard individual (personal) information, including information about access controls and other measures it takes to safeguard individual information.	**Closed**
Recommendation 12: The Seattle Fire Department (SFD) should update the Computer-Aided Dispatch (CAD) Surveillance Impact Report to clarify the civil liberty risks associated with CAD data and provide information about the steps SFD is currently taking to mitigate the potential disparate impacts of SFD CAD on the civil rights and liberties on communities of color and other marginalized communities.	**Closed**
Recommendation 13: The Seattle Fire Department (SFD) should analyze the equity metrics identified in their response to the City Council amendment that was part of Ordinance 126295 (Council Bill 120003) and report the results of the analysis to the City Council by December 31, 2022. Should SFD assign this work to the SFD Race and Social Justice Initiative Change Team, it should provide the Change Team with the resources it needs to conduct this analysis.	**Closed**
Recommendation 14: The Seattle Fire Department (SFD) and the Seattle Information Technology Department should provide responses to all unaddressed SFD Computer-Aided Dispatch (CAD) concerns raised during the public engagement process and include their responses in an updated SFD CAD Surveillance Impact Report.	**Closed**
Recommendation 15: The Seattle Fire Department should work with the City Attorney's Office to determine the feasibility of the City of Seattle Office of Intergovernmental Relations lobbying the State legislature to change the Public Records Act (PRA) to guide how to identify PRA requests that involve persons with restraining orders to exempt the records request because of the restraining order.	**Closed**

Audit Recommendation	Implementation Status
Recommendation 16: The Seattle Fire Department should update its Computer-Aided Dispatch (CAD) Surveillance Impact Report (SIR) to reflect the 2021 annual maintenance and licensing costs of $201,675.78 (or the current costs if different from this amount) and should provide an estimate of the total costs associated with SFD CAD as requested in Seattle Municipal Code 14.18.040.B6.	**Closed**
Recommendation 17: The Seattle Fire Department (SFD) and the Seattle Information Technology Department, in consultation with the City Attorney's Office, should decide if any Computer-Aided Dispatch (CAD) data should be exempted from Seattle Municipal Code 14.18 requirements. If they determine that certain CAD data should be exempted, SFD should update the CAD Surveillance Impact Report accordingly.	**Closed**
Recommendation 18: The Seattle Fire Department should update the Computer-Aided Dispatch Surveillance Impact Report (SIR) with the corrected hyperlinks that it provided the City Auditor related to Seattle Municipal Code 14.18.040B2 and in other areas of the SIR where there are minor or inconsequential errors.	**Closed**
Recommendation 19: The Seattle Fire Department should replace the reference to RCW 35A.92.010 in the Computer-Aided Dispatch Surveillance Impact Report with the correct legal citation, RCW 35.103.	**Closed**

Seattle Fire Department Hazardous Materials and Emergency Scene Cameras

Audit Recommendation	Implementation Status
Recommendation 1: The Seattle Fire Department should revise the Hazardous Materials Cameras Surveillance Impact Report to include the GoPro cameras, iPhone, and any other camera technologies used by the Hazardous Materials team.	**Closed**

Audit Recommendation	Implementation Status
Recommendation 2: The Seattle Fire Department should create an acceptable use policy for their hazardous materials cameras. The policy should include the items in Seattle Municipal Code 14.18.040 B3. The Seattle Fire Department should also create a process for tracking annual camera use.	**Closed**
Recommendation 3: The Seattle Fire Department should revise the Emergency Scene Cameras Surveillance Impact Report to include iPhones and any other camera technologies used by the Seattle Medic One team.	**Closed**
Recommendation 4: The Seattle Fire Department should create an acceptable use policy for their emergency scene cameras. The policy should include the items in Seattle Municipal Code 14.18.040 B3. The Seattle Fire Department should also create a process for tracking annual camera use.	**Closed**
Recommendation 5: The Seattle Fire Department should revise the Emergency Scene Cameras Surveillance Impact Report to include the total cost information of their full emergency scene camera inventory, including iPhones, and any related camera equipment.	**Closed**
Recommendation 6: The Seattle Fire Department should revise the Hazardous Materials Cameras Surveillance Impact Report to include the total cost information of their full HazMat camera inventory, including their GoPro cameras and iPhone, and any related camera equipment.	**Closed**

APPENDIX C

Seattle Office of City Auditor Mission, Background, and Quality Assurance

Our Mission:
We conduct independent analyses of City programs and services with an equity and social justice perspective, making recommendations on ways the City can better serve the people of Seattle.

Background:
Seattle voters established our office by a 1991 amendment to the City Charter. The office is an independent department within the legislative branch of City government. The City Auditor reports to the City Council and has a four-year term to ensure their independence in deciding what work the office should perform and reporting the results of this work. The Office of City Auditor conducts performance audits and non-audit projects covering City of Seattle programs, departments, grants, and contracts. The City Auditor's goal is to ensure that the City of Seattle is run as effectively, efficiently, and equitably as possible in compliance with applicable laws and regulations.

How We Ensure Quality:
The office's work is performed in accordance with the Government Auditing Standards issued by the Comptroller General of the United States. These standards provide guidelines for audit planning, fieldwork, quality control systems, staff training, and reporting of results. In addition, the standards require that external auditors periodically review our office's policies, procedures, and activities to ensure that we adhere to these professional standards.

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