

APPENDIX A: SURVEILLANCE TECHNOLOGY IMPACT REPORT

Department or Division:	Fire Department
Compliance Officer (name and position):	Chief Charles Breen / Assistant Chief Christopher Major
Submitted by:	Chief Charles Breen
Date:	1/26/21
Surveillance Technology:	Thermal Imaging Cameras

X	Please identify the purpose(s) of the proposed surveillance technology. Select ALL that apply by entering "X" in the left column.
X	Identifying and preventing threats to persons and property and preventing injury to persons or significant damage to property
	Identifying, apprehending, and prosecuting criminal offenders
	Gathering evidence of violations of any law in criminal, civil, and administrative proceedings
X	Providing information to emergency personnel
	Documenting and improving performance of City employees
	Executing financial transactions between the City and any individual engaged in a financial transaction with the City
	Preventing waste, fraud, and abuse of City resources
	Maintaining the safety and security of City employees, students, customers, and City-owned or controlled buildings and property
	Enforcing obligations to the City
	Operating vehicles for City business
	Analyzing and managing service delivery
	Communicating among City employees, with citizens, or with third parties
	Surveying and gathering feedback from constituents
X	Other (Describe): The search and rescue of occupants or firefighters trapped in a fire. Pinpointing the location of a fire and its extent of spread. Identifying hot spots or lingering embers after a fire has been extinguished. Surveying materials for temperature rise during a hazardous materials incident which would indicate that the product is becoming unstable. Determining how much product remains in a leaking container.

	If the surveillance technology is used for a purpose not listed above, does the purpose comply with the surveillance use policy? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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Complete ALL of the following items related to the proposed surveillance technology. Be as specific as possible. If an item is not applicable, enter "N/A." Do NOT leave fields blank.

1.	Information describing the surveillance technology and how it works:
	The Somerville Fire Department owns and operates thermal imaging cameras. These cameras pick up the heat emitted by an object allowing the fire department to monitor locations when conditions would prevent traditional cameras from gathering good images, providing crucial information to emergency personnel and aiding firefighters in identifying dangers and preventing injury or harm to persons or property.
a.	Authorized use – the uses that are authorized, the rules and processes required before that use, and the uses that are prohibited (10.64.b.2):
	All firefighters are authorized to use this technology when they deem it is necessary to aid them in carrying out their duties. These cameras are used on a near daily basis to assist fire department operations at incidents. The most common usage is to assist in the investigation of burning odors in buildings.
b.	Training – the training, if any, required for any individual authorized to use the surveillance technology or to access information collected by the surveillance technology, including whether there are training materials (10.64.b.9):
	All firefighters receive training in their use. Additionally, all firefighters will receive the training required by the Surveillance Technology Use Policy.
2.	Information on the proposed purpose(s) for the surveillance technology (10.64.b.1):
	The use of thermal imaging cameras has been of great benefit to this Department in protecting life and property. The primary purpose is to aid responding firefighters in carrying out their duties. The cameras aid firefighters in determining the seat and spread of a fire, assessing structural dangers, navigating with limited visibility, locating victims or

lost persons, determining entry and exit points, and assisting in other scenarios as described below.

The Somerville Fire Department's use of thermal imaging cameras is not intended for law enforcement purposes or intelligence gathering. The use of thermal imaging cameras is allowed by the Fire Investigation Unit (FIU) for the investigation and prosecution of arson-related crimes.

3.

Information describing the kind of surveillance the surveillance technology is going to conduct and what surveillance data is going to be gathered (10.64.b.3):

Scenarios that may benefit from the use of thermal imaging cameras are: search and rescue, scene assessment / size up, locating the seat of a fire from either the interior or exterior of a structure, aiding navigation in a zero visibility situation, determining fire spread/extension, locating hot spots/embers, identifying potential flashover situations, determining ventilation points, determining entry and exit points, overhaul, hazardous materials incidents, detection of abnormal conditions such as overheated equipment, searching for lost persons in an open area and searching for an ejected victim of a motor vehicle crash.

The technology provides only live information for the user and does not collect, transmit or store data.

a.

Data access – the individuals who can access or use the collected surveillance data, and the rules and processes required before access or use of the information (10.64.b.4):

No data is collected or stored. It is viewable only to the user at the time of use.

b.

Data protection – the safeguards that protect information from unauthorized access, including, but not limited to, encryption, access-control, and access-oversight mechanisms; (10.64.b.5)

No data is stored.

Each time a firefighter responds to a call, they must file a National Fire Incident Reporting System ("NFIRS") Report, in which they must note any equipment used in response to the call, including whether they used a thermal imaging camera. These reports are kept on file and accessible.

c.	Data retention – the time period, if any, for which information collected by the surveillance technology will be routinely retained, the reason that retention period is appropriate to further the purpose(s), the process by which the information is regularly deleted after that period has elapsed, and the conditions that must be met to retain information beyond that period (10.64.b.6):
	These cameras do not retain data, and the information/images provided by the technology cannot be accessed after the original use.
d.	Public access – if and how collected surveillance data can be accessed by members of the public, including criminal defendants (10.64.b.7):
	No data is collected or stored.
e.	Third-party data-sharing – if and how other city or non-city entities can access or use the surveillance data, including any required justification and legal standard necessary to do so, and any obligation(s) imposed on the recipient of the surveillance data (10.64.b.8):
	No data is stored or transmitted to any other party.
4.	The location(s) it may be deployed and when:
	All fire apparatus, our two command vehicles (C2 - Deputy Chief & C3 - District Chief) as well as the Fire Investigator carry thermal imaging cameras. They may be deployed at any incident where their use is deemed necessary. Any use of the cameras at incidents is recorded by the Officer in charge in their incident report.
5.	A description of the privacy and anonymity rights affected and a mitigation plan describing how the department's use of the equipment will be regulated to protect privacy, anonymity, and limit the risk of potential abuse:
	The technology may identify the location of a victim, but it is only deployed in emergency response situations where it is deemed necessary to protect life or property.

6.	<p>The potential impact(s) on privacy in the city; the potential impact on the civil rights and liberties of any individuals, communities or groups, including, but not limited to, communities of color or other marginalized communities in the city, and a description of whether there is a plan to address the impact(s):</p>
	<p>The cameras are to assist fire department operations and are not for surveillance purposes.</p>
7.	<p>An estimate of the fiscal costs for the surveillance technology, including initial purchase, personnel and other ongoing costs, and any current or potential sources of funding:</p>
	<p>These cameras cost approximately \$3,000 each. They have been funded through a combination of grants and the Fire Department's operating budget. There are no ongoing costs unless the equipment is damaged and needs repair.</p>
8.	<p>An explanation of how the surveillance use policy will apply to this surveillance technology and, if it is not applicable, a technology-specific surveillance use policy:</p>
	<p>The Surveillance Technology Use Policy applies to the use of this technology.</p>
a.	<p>Oversight – the mechanisms to ensure that the surveillance use policy is followed, including, but not limited to, identifying personnel assigned to ensure compliance with the policy, internal record keeping of the use of the technology or access to information collected by the surveillance technology, technical measures to monitor for misuse, any independent person or entity with oversight authority, and the sanctions for violations of the policy (10.64.b.10):</p>
	<p>At this time, the Fire Chief and Assistant Fire Chief would oversee the camera's use. The Surveillance Technology Use Policy and any relevant Department policy would serve as a guideline for use of the cameras. Any use of the cameras at incidents is recorded by the Officer in charge in their incident report.</p>