Surveillance Impact Report

Thermal Imaging Cameras
Fire Department

As required by San Francisco Administrative Code, Section 19B, departments must submit a Surveillance Impact Report for each surveillance technology to the Committee on Information Technology ("COIT") and the Board of Supervisors.

The Surveillance Impact Report details the benefits, costs, and potential impacts associated with the Department's use of Thermal Imaging Cameras (TICs).

DESCRIPTION OF THE TECHNOLOGY

The Department's mission is to protect the lives and property of the people of San Francisco and its visitors from fires, natural disasters, accidents, hazardous materials incidents, and other causes requiring a rapid and skilled response by land or water; serve the needs of its most vulnerable residents through community paramedicine, and save lives and reduce suffering by providing emergency medical services; prevent harm through prevention services and education programs; and to provide a work environment that is free from harassment and discrimination, and values health, wellness, cultural diversity, and equity.

In line with its mission, the Department uses Thermal Imaging Cameras (TICs) to protect lives and property from fires.

The Department shall use Thermal Imaging Cameras (TICs) only for the following authorized purposes:

- Used at a fire scene to view hot spots and heat areas of a fire, looking into walls and other areas that are not readily accessible in fire conditions
- Training for use of this technology

Any use(s) not identified in the Authorized Use(s) above are strictly prohibited.

Department technology is located anywhere in San Francisco.

Surveillance Oversight Review Dates

COIT Review: TBD
Board of Supervisors Review: TBD

Technology Details

The following is a product description of Thermal Imaging Cameras (TICs):

The FLIR K65 is the advanced, feature-rich thermal imaging camera you need when NFPA® compliance is a must. With fully sealed connectors and a secured battery, the K65 is designed to be fully compliant with the NFPA 1801-2021 Standard for Thermal Imagers covering usability, image quality, and durability for firefighting.

A. How It Works

To function, a Thermal Imaging Camera (TIC) detects the surface temperature of the first object in its line of sight; point one at a wall or other solid surface, and it will register the heat being radiated outward by that surface. This is particularly useful at a fire scene, allowing crews to see potential hot spots in walls or other areas of a structure that would not be regularly visible.

Data collected or processed by Thermal Imaging Cameras (TICs) will not be handled or stored by an outside provider or third-party vendor on an ongoing basis. The Department will remain the sole Custodian of Record.

IMPACT ASSESSMENT

The impact assessment addresses the conditions for surveillance technology approval, as outlined by the Standards of Approval in San Francisco Administrative Code, Section 19B:

1. The benefits of the surveillance technology outweigh the costs.
2. The Department's Policy safeguards civil liberties and civil rights.
3. The uses and deployments of the surveillance technology are not based upon discriminatory or viewpoint-based factors and do not have a disparate impact on any community or Protected Class.

The Department's use of the surveillance technology is intended to support and benefit the residents of San Francisco while minimizing and mitigating all costs and potential civil rights and liberties impacts of residents.

A. Benefits

The Department's use of Thermal Imaging Cameras (TICs) has the following benefits for the residents of the City and County of San Francisco:

- Public Safety: Assists crews at a fire to be able to determine when potential hots spots are to limit the damage and spread of a fire

B. Civil Rights Impacts and Safeguards

The Department has considered the potential impacts and has identified the technical, administrative, and physical protections as mitigating measures:

The Department has considered the potential impacts and has identified the technical, administrative, and physical protections as mitigating measures:

- The San Francisco Fire Department strives to mitigate all potential civil rights impacts through responsible technology and associated data use policies and procedures. The Fire Department intends to use body-worn cameras and their associated data exclusively for aforementioned authorized uses cases. All other uses, including surveillance of San Francisco residents or groups, are expressly prohibited.
- To protect camera data from potential breach, misuse or abuse that may result in civil rights impacts, data is maintained on secureservers. Only persons authorized to utilize the raw data may access the information.
- Only data that has been edited to remove PII will be shared and stored on servers, and sharing will only occur with partner CCSF agencies on a case by case basis or as required by law. To mitigate any potential impacts to residents' physical safety or economic loss through property damage.
- Recorded data will not be collected, disseminated or retained solely for the purpose of monitoring activities protected by the U.S. Constitution, such as the First Amendment's protections of religion, speech, press, assembly, and redress of grievances (e.g., protests, demonstrations). Collection, use, dissemination, or retention of recorded data should not be based solely on individual characteristics (e.g., race, ethnicity, national origin, sexual orientation, gender identity, religion, age, or gender), which is a violation of the law.

Administrative Safeguards: Use of the technology is limited in the field, and data is not retained.

Technical Safeguards: Stored securely on the Department apparatus.

C. Fiscal Analysis of Costs and Benefits

The Department's use of Thermal Imaging Cameras (TICs) yields the following business and operations benefits:

- Staff Safety: The TICs allow for increased crew safety at a fire scene. Crews are able to see inside walls and behind objects to see potential fire dangers that are not available immediately to the human eye.
- Time Savings: This allows for time savings at an incident and potential reduction in property and loss, as crews are able to be on top of any hotspots that may develop into full fire outside of the view of the human eye alone.

The fiscal cost, such as initial purchase, personnel and other ongoing costs, include:

- Number of FTE (new & existing): ~200
- The one-time costs are:
    - Total Salary & Fringe: 0
    - Software: 0
    - Hardware/ Equipment: $673,784.41

    - Professional Services: 0
    - Training: 0
    - Other: 0
- The Department funds its use and maintenance of the surveillance technology through Federal grant funds.

COMPARISON TO OTHER JURISDICTIONS

Thermal Imaging Cameras (TICs) are currently utilized by other governmental entities for similar purposes.