



Surveillance Impact Report

People Counting System
Recreation and Parks

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 People Counting System, (hereinafter referred to as "surveillance technology").

DESCRIPTION OF THE TECHNOLOGY

The Department's mission is to provide enriching recreational activities, maintain beautiful parks, and preserve the environment for the well-being of everyone in our diverse community.

In line with its mission, the Department uses the surveillance technology to help the department provide enriching recreational activities by 1) providing estimates of the popularity of drop-in programming and events, for which we do not have registration data; 2) helping calibrate cleaning schedules so our enriching recreational activities may be provided in facilities that are as well-kept as possible; 3) enabling us to provide timely, robust estimates of visitorship to key stakeholders and partners.

The Department shall use the surveillance technology only for the following authorized purposes:

Authorized Use(s):

- Obtain occupancy data on visitors into and out of parks and facilities.

Airport technology may be deployed in the following locations, based on use case:

This surveillance technology is generally located above entrances and exits to facilities.

Technology Details

This is a product description of the technology:

VIDX

The people counting sensor uses 3D advanced stereo vision tracking technology. Machine learning refines the already accurate sensing technology with a deep learning network, making it the most accurate system available. Using PoE, a single cable provides power and network connectivity. Data is processed on the sensor itself, no additional servers are needed, making real-time data available for immediate action and count lines and zones can be drawn on the sensor individually. Veia Analytics completes the solution, providing a cloud-based platform for analyzing and reporting traffic data.

Surveillance Oversight Review Dates

COIT Review: TBD

Board of Supervisors Review: TBD

VID3

The people counting sensor uses 3D advanced stereo vision tracking technology. It monitors multiple people entering and exiting at the same time and accurately distinguishes between children, adults, and other objects. Using PoE, a single cable provides power and network connectivity. The VID3 includes digital I/O support. This enables integration with up to three external pulse/relay devices such as DVR systems, door controllers and electric article surveillance (EAS) systems. Veve Analytics completes the solution, providing a cloud-based platform for analyzing and reporting traffic data.

How It Works

Description of Technology: A sensor mounted above an entry point obtains 3D stereo vision image data of activity within a pre-determined field of vision. A software algorithm analyzes this field of vision and when an image meets the algorithm's definition of a human shape, it is tracked. If the shape traverses a plane within the sensor's field of vision pre-defined as an entry or exit point, a data point is recorded as an 'In' or 'Out'. This data is then transmitted via XML to a cloud-based database. This count data is accessible to end users via API and a web-based content management system.

All data collected or processed by the surveillance technology will be handled or stored by an outside provider or third-party vendor on an ongoing basis. Specifically, data will be handled by SensusSource and Amazon Web Services to ensure the Department may continue to use the technology.

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 the surveillance technology has the following benefits for the residents of the City and County of San Francisco:

	Benefit	Description
<input type="checkbox"/>	Education	
<input type="checkbox"/>	Community Development	
<input checked="" type="checkbox"/>	Health	Recreational programs and activities benefit residents' health by providing readily available, low to no-cost opportunities to keep

active. By using data to inform our service offerings we are able to incentivize residents to participate in healthy activities by offering programs and activities they will enjoy at locations that are convenient to them

Environment

Criminal Justice

Jobs

Housing

X Other: Recreation These technologies help the department improve its recreational offerings by allowing us to estimate attendance at unstructured, drop-in events, programs, and activities. With occupancy data we are better able to advocate for funding of recreational programs and activities.

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 San Francisco Recreation and Parks Department strives to mitigate all potential civil rights impacts through responsible technology and associated data use policies and procedures. The Department intends to use occupancy sensors and sensor data exclusively for authorized use cases. All other uses, including surveillance of San Francisco residents or groups, are expressly prohibited.

The administrative safeguards are that no employees of the department have access to PII viewable by these devices.

The technical safeguards are simply the fact that users only have access to--and may only access--visits data generated by the sensors, which do not contain PII. No other use-case is requested or authorized.

The physical safeguards are that count data is securely stored in the cloud.

C. Fiscal Analysis of Costs and Benefits

The Department's use of the surveillance technology yields the following business and operations benefits:

	Benefit	Description
X	Financial Savings	Occupancy sensors are less costly than full-time employee equivalents for counting visitors into and out of facilities, thus providing the department financial savings.
X	Time Savings	Data collected by occupancy sensors are automatically uploaded to a database and rendered into pre-formatted reports, saving the

department considerable time from having to perform data entry and report generation manually.

<input type="checkbox"/>	Staff Safety	
<input checked="" type="checkbox"/>	Data Quality	Occupancy sensors provide robust, reliable data on occupancy and are less prone to error and mismeasurement than in-person surveys, thus improving data quality.
<input type="checkbox"/>	Other	

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

Number of Budgeted FTE (new & existing)	2	
Classification	<ul style="list-style-type: none"> • 0.1 - 1823 Senior Administrative Analyst • 0.05 - 1824 Principal Administrative Analyst 	
	Annual Cost	One-Time Cost
Total Salary & Fringe	0	\$447
Software	\$1000	0
Hardware/Equipment	0	\$8500 (\$1,700 per sensor, 5 sensors total currently deployed)
Professional Services	\$500	\$400
Training	0	0
Other	0	0
Total Cost	\$1000	\$9347

The Department funds its use and maintenance of the surveillance technology through operating funds.

COMPARISON TO OTHER JURISDICTIONS

The surveillance technology is currently utilized by other governmental entities for similar purposes.

Other government entities have used the surveillance technology in the following way: to count visitors entering and exiting their facilities.

The effectiveness of the surveillance technology while used by government entities is determined to be the following: The department has no information regarding the efficacy of this technology in fulfilling other government entities' objectives.

There have not been adverse effects of the surveillance technology while it has been used by other government entities.