

Recreation and Parks
Unmanned Aircraft Systems (Drones)

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 Unmanned aerial vehicles or Drone 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 our diverse community.

In line with its mission, the Department uses Unmanned aerial vehicles Drone technology to:

- 1. In times of disaster preparedness or post-disaster mitigation, drones will provide critical emergency response functions such as logistical support for emergency routing, life safety, and cleanup efforts, not only assisting in protecting physical assets and public spaces but human life as well
- 2. Drones may support the maintenance and construction efforts by providing detailed photographic data of City-owned assets managed by RPD:
 - 4,113 acres of recreational and open space,
 - 3,400 acres within San Francisco,
 - 671 marina slips,
 - 220 neighborhood parks,
 - 179 playgrounds and play areas,
 - 82 recreation centers and clubhouses,
 - 72 basketball courts and 151 tennis courts,
 - 59 soccer/playfields (and growing),
 - 1 Family Camp.

Recreation and Parks shall use Unmanned aerial vehicles or Drone technology only for the following authorized purposes:

- 1. Disaster preparedness and response
- 2. Environmental monitoring and documentation
- 3. Inspect/Survey properties & assets
- 4. Project inspection and documentation
- 5. Surveying/Mapping data collection

Prohibited use cases include any use case not mentioned in the Authorized Uses section above.

The following use cases are expressly prohibited:

Surveillance Oversight Review Dates

COIT Review: July 17, 2020

Board of Supervisors Review: TBD

• Use of drone technology to intentionally capture images of a personal nature will always be prohibited. No PII (Personnel Identifiable Information) will be captured.

Department technology is located at RPD capital project sites, RPD buildings, parks, playgrounds, open space areas, recreation sites (e.g. courts). Use of drone technology to intentionally capture images of a personal nature will always be prohibited.

TECHNOLOGY DETAILS

The department has decided to contract out our UAV services so the equipment will vary from vendor to vendor. To date, we have not had any drone flights. Upcoming flights may include the Margaret Hayward Playground Improvement project, and the Garfield Pool Renovation project.

A. How It Works

To function, Unmanned aerial vehicles or Drone technology incorporates unmanned, remotely operated aircraft with onboard visual recording equipment, for the purpose of capturing images from an aerial perspective.

All data collected or processed by Unmanned aerial vehicles or Drone technology will be handled or stored by an outside provider or third-party vendor on an ongoing basis. Specifically, data will be handled by:

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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:

- The benefits of the surveillance technology outweigh the costs.
- The Department's Policy safeguards civil liberties and civil rights.
- 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 Drones has the following benefits for the residents of the City and County of San Francisco:

- Education
- Community Development

- Health
- X Environment To inspect trees and other park features for project and/ or maintenance related work.
 Criminal Justice
 Jobs
 Housing
 X Other To inspect trees and other park features to ensure public safety

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:

Drone operators/pilots are not authorized to intentionally capture data than can identify individuals. Auto license plate information shall also not be deliberately captured. To mitigate the risk of potential embarrassment, emotional distress, self-censorship or diminished civic engagement by SF residents whose personal information may be unintentionally captured, the department requires the "scrubbing" or otherwise obscuring/blurring (through use of image editing software) any collected data of facial images, license plates or other personally identifiable information unintentionally captured by aerial drones.

All collected data, irrespective of the location of data capture or the identifying characteristics of captured persons, is subject to the same scrubbing processes and procedures. The image software scrubbing process obscures and blurs all data using either built-in Al recognition settings or through manual efforts by software operator.

All recorded video will be stored on secured servers in the DT data center at 200 Paul Street data and data systems are physically protected, such as security systems, video surveillance, door and window locks, secured server and computer locations, and policies about mobile devices and removing hardware/software from certain locations.

To protect drone data from potential breach, misuse or abuse that may result in civil rights impacts, data is maintained on secure, department-owned servers. Only persons authorized to utilize the raw data may access the information and are required to maintain records of access using a drone data access log. Only data that has been edited to remove PII will be shared and stored on servers. Additionally, all contractors will be required to have a valid FAA-issued Unmanned Aerial Vehicle license.

C. Fiscal Analysis of Costs and Benefits

The Department's use of Drones or Unmanned Aerial Vehicles yields the following business and operations benefits:

Benefit		Description		
X	Financial Savings	Mitigating the need for traffic control, expensive scaffolding/swing stage or other equipment, and can provide more detailed photographs/videos of the assets or areas in need of maintenance or repairs than can be done manually, minimizing labor costs.		
Х	Time Savings	Deploying a drone can provide time savings over setting up and employing equipment such as scaffolds/swing stages/scissor-lift vehicles, etc.		
X	Staff Safety	Drones can be deployed to dangerous locations instead of personnel, such as rooftops, at the sides of building/bridges, along cliff areas or areas prone to erosion.		
X	Data Quality	Locations which are difficult to access by personnel may be more easily photographed using drone technology, thereby achieving better data.		

Number of FTE (new & existing)	1			
Classification	1090 and 5500 series			
	Annual Cost	Years	One-Time Cost	
Total Salary & Fringe	\$5,000			
Software				
Hardware/Equipment				
Professional Services			\$20,000	
Training				
Other				
Total Cost	\$25,000			

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

- Capital funds will be utilized for Capital projects; Operational funds for operational activities.

COMPARISON TO OTHER JURISDICTIONS

Drones or Unmanned Aerial Vehicles are currently utilized by other governmental entities for similar purposes.