



Surveillance Impact Report: Department of Technology's Use of Drone Technology

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 of Technology's (DT's) use of Unmanned Aerial Vehicle (UAV) or Drone Technology.

The Department's Mission is to provide innovative, reliable, and secure business solutions that support and empower CCSF agencies and departments in their delivery of high-quality government services for the public. Consistent with its mission, the Department plans to use drone technology to provide high quality video programming about government operations and civic life to the public. DT operates the City's video channel SFGovTV which presents video programming to the public through cable channels and web streaming. Specifically, drone technology will allow the station to capture of video and still photographs as elements of the City video productions program.

DT shall only use drone technology for the following authorized use: capture of video and still photographs as elements of the City video productions.

DT shall not use drone technology to intentionally capture images of a personal nature.

The following is a product description of Drone Technology from DJI, the manufacturer DT intends to purchase from: Mavic 2 Pro with Hasselblad Camera Made in Sweden, Hasselblad cameras are renowned for their iconic ergonomic design, uncompromising image quality, and Swedish craftsmanship. Since 1941, Hasselblad cameras have captured some of the world's most iconic images – including the first moon landing. Co-engineered in partnership with Hasselblad after two years of tireless research, the Mavic 2 Pro comes equipped with the all-new Hasselblad L1D-20c camera. The L1D-20c possesses Hasselblad's unique Hasselblad Natural Colour Solution (HNCS) technology, helping users to capture gorgeous 20-megapixel aerial shots in stunning color detail.

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

Data collected or processed by DT's drones 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:

- A. The benefits of the surveillance technology outweigh the costs.
- B. The Department's Policy safeguards civil liberties and civil rights.
- C. 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 primary benefit to San Francisco residents will be improved civic engagement. SFGovTV's use of drone technology will allow residents to have an improved view of City operations and civic life.

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:

DT strives to mitigate all potential civil rights impacts through responsible technology and associated data use policies and procedures, and intends to use drones and their associated data exclusively for aforementioned authorized uses cases. All other uses, including surveillance of San Francisco residents or groups, are expressly prohibited. Department policy stipulates that drone operators/pilots are not authorized to intentionally capture data that 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, DT will require 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 AI recognition settings or through manual efforts by software operator. 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 by completing the drone data access log. Only data that has been edited to remove PII will be used in SFGovTV programming. To further protect data and any personal resident information captured by a drone, all raw data will be permanently erased after it has been processed and edited to blur or obscure human features and license plate information. To mitigate any potential impacts to residents' physical safety or economic loss through property damage, all DT drone operators receive pilot training and are required to sign the Department's Drone Use Policy.

C. Fiscal Analysis of Costs and Benefits

The Department’s use of Drone Technology yields the following business and operations benefits:

Financial savings

Drones will be far more cost effective than alternative methods of original aerial photography. by mitigating the need for traffic control, expensive scaffolding/swing stage or other equipment, and than can be done manually, minimizing labor costs.

Time savings

Drones do not require as much time for set-up as other aerial alternatives.

Staff safety

Drones expose staff to much less risk than alternatives such as constructing and climbing scaffolding or manned aircraft.

The total fiscal cost, including initial purchase, personnel and other ongoing costs is:

Number of FTE	0.25 FTE
Classification	Media Production Specialist (1767)
Total Salary & Fringe	\$33,850
Software	\$0
Hardware/Equipment	\$2,500
Professional Services	\$0
Training	\$1,800
Other	\$0
Total Cost:	\$36,350

The Department funds its use and maintenance of the surveillance technology through Staff time devoted to video programming produced using drones will be charged to departments/agencies for which programming is being produced.

COMPARISON TO OTHER JURISDICTIONS

Unmanned Aerial Vehicle (UAV) or Drone Technology are currently utilized by other governmental entities for similar purposes.

APPENDIX A: Surveillance Impact Report Requirements

The following section shows all Surveillance Impact Report requirements in order as defined by the San Francisco Administrative Code, Section 19B.

1. Information describing the Surveillance Technology and how it works, including product descriptions from manufacturers.

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

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2. Information on the proposed purpose(s) for the Surveillance Technology.

The Department plans to use drone technology to provide high quality video programming about government operations and civic life to the public. DT operates the City's video channel SFGovTV which presents video programming to the public through cable channels and web streaming. Specifically, drone technology will allow the station to capture video and still photographs as elements of the City video productions program.

3. If applicable, the general location(s) it may be deployed and crime statistics for any location(s).

Wherever outdoor footage may provide public with added understanding of City operations, such as parks, plazas and other facilities.

4. An assessment identifying any potential impact on civil liberties and civil rights and discussing any plans to safeguard the rights of the public.

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5. The fiscal costs for the Surveillance Technology, including initial purchase, personnel and other ongoing costs, and any current or potential sources of funding.

The total fiscal cost, including initial purchase, personnel and other ongoing costs is:

Number of FTE	0.25 FTE
Classification	Media Production Specialist (1767)
Total Salary & Fringe	\$33,850
Software	\$0
Hardware/Equipment	\$2,500
Professional Services	\$0
Training	\$1,800
Other	\$0
Total Cost:	\$36,350

The Department funds its use and maintenance of the surveillance technology through Staff time devoted to video programming produced using drones will be charged to departments/agencies for which programming is being produced.

6. Whether use or maintenance of the technology will require data gathered by the technology to be handled or stored by a third-party vendor on an ongoing basis.

The data gathered by the technology will not be handled or stored by a third party vendor on an ongoing basis.

7. A summary of the experience, if any, other governmental entities have had with the proposed technology, including information about its effectiveness and any known adverse information about the technology such as anticipated costs, failures, or civil rights and civil liberties abuses.

Many government entities, including government access channels such as SFGovTV, have used drone technology. It is highly effective and efficient way to obtain original aerial photography. We have not identified any civil rights or civil liberties abuses from this technology.

APPENDIX B: Mapped Crime Statistics

The technology may be used throughout the City, rather than any particular location so mapped crime statistics are not relevant.