



2023 ANNUAL SURVEILLANCE TECHNOLOGY REPORT

Dayton Police Department

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TO THE CITY COMMISSION AND COMMUNITY

Purpose

Technology has proven to be a force multiplier for police departments in many ways. Firstly, it allows for collecting and analyzing large amounts of data, which can help identify patterns and trends in criminal activity. This can lead to more targeted and effective policing efforts. Additionally, surveillance cameras, license plate readers, and data analytics can help identify suspects. Communication technology, such as radios and mobile devices, can also improve response times and coordination between officers. Overall, the use of technology can enhance the effectiveness and efficiency of police departments in preventing and solving crime.

To ensure transparency and oversight to protect civil rights and liberties, the Dayton City Commission passed the Surveillance Technology Ordinance, which requires an Annual Surveillance Technology Report to be provided to the Commission to inform the public about the use of such technologies.

Report Elements

- A general description of how the Surveillance Technology was used, including general locations and neighborhoods where technology or equipment was deployed.
- A general description of whether and how often data acquired using the Surveillance Technology was shared with outside entities, the type(s) of data, and general justification for the disclosure(s).
- A summary of community complaints about the Surveillance Technology item.
- The results of any internal audits required by the Surveillance Use Policy and information about violations of the Use Policy.
- Information including crime statistics, where applicable, that help the Commission assess whether the Surveillance Technology has been effective at achieving its identified purposes.
- An analysis of any discriminatory or other adverse impacts the use of the surveillance technology may have had on the public's civil rights and civil liberties.

- Total costs, to the extent possible, including personnel, maintenance, and other ongoing expenses for the Surveillance Technology and anticipated funding for the technology as needed.
- Any requested modifications to the Surveillance Technology Use Policy applicable to the item.
- Aggregate information concerning technology or tools exempted.

Definitions

Familiarization with the following terms will assist the reader in comprehending the discussion of the deployed technologies.

- *Downtown Dayton Cameras*: Fixed video cameras with pan, tilt, and zoom capabilities located throughout the Central Business District provide a live feed and record (based on motion). These assets are focused on public right of ways.
- *Body Worn Cameras (BWC)*: Audio/video recording devices worn by Dayton Police Officers while performing various duties and interacting with the public.
- *Mobile Vehicle Recorders (MVR)*: Audio/video recording devices equipped in marked police cruisers capturing audio/visual activity internally and externally within proximity of the police cruisers.
- *Automatic License Plate Readers (ALPR)*: Devices that capture license plate numbers from motor vehicles and provide alerts to officers if the registration is tied with a crime, i.e., stolen vehicle or used in a violent offense.
 - *Mobile ALPR (New Axon System)*: Devices are internal to the MVR (in-car camera) and are part of the MVR upgrade in 2022 as part of the contractual hardware update of the Axon MVR system.
 - *Fixed Site ALPR (Flock)*: Devices that function like the Mobile LPRs but are located at fixed sites.
- *Unmanned Aerial Surveillance (UAS)*: Airborne devices that may be utilized in a limited capacity to provide video feedback to operational units in critical incidents. Possible uses include accident scene reconstruction, severe weather damage assessments, and missing persons cases.

- *FUSUS Technology*: A real-time, online intelligence platform that unifies public and private surveillance camera systems.

Technology	Vendor
Downtown Dayton Cameras	Axis Communications (Lund, Sweden)
Body Worn Cameras	Axon Enterprise (Scottsdale, AZ)
Mobile Vehicle Recorders	Axon Enterprise (Scottsdale, AZ)
Automatic License Plate Readers	Flock Safety (Atlanta, GA) Axon Enterprise (Scottsdale, AZ)
UAS	DJI (Shenzhen, China)
FUSUS	FUSUS (Peachtree Corners, GA)

Deployed Technologies

The following is the surveillance technology deployed during 2023, as well as the details of their use.

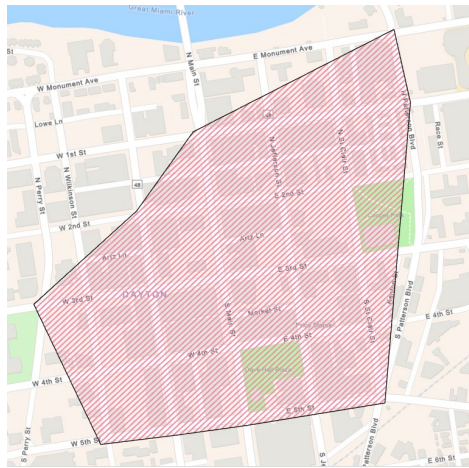
1) Downtown Dayton Cameras

Purpose

The purpose of the cameras is to help contribute to the safety of residents and visitors in the downtown area by recording events on public sidewalks and streets. The footage recorded will aid in identifying and prosecuting individuals who chose to commit crimes downtown.

General Description

In 2013, the Police Department was given 25 Axis security cameras from the University of Dayton Research Institute at no cost. These cameras are placed throughout the downtown area. Officers in the Central Patrol Division can view the footage from the cameras on a monitor in their roll call room. Members of the Strategic Planning Bureau can also log in to the cameras to be monitored during incidents of interest. In conjunction with Facilities, the cameras will be upgraded and be made part of a larger citywide infrastructure project.



Data Sharing

Only members of the Strategic Planning Bureau have access to recorded footage from the Downtown Dayton Cameras. Data retention is managed pursuant to public records law. When requested, the footage is shared with other agencies for law enforcement purposes.

Citizen Complaints

The Police Department is unaware of any concerns or complaints about the Downtown Dayton Cameras.

Internal Audits

An internal audit found no violations of the Public Camera Surveillance Systems. The audit included the review of the Standard Operating Procedure regarding training, data collection, data access, data protection, data retention, or public access to the system. The audit does recommend that malfunctioning or end-of-life equipment be replaced.

Impact on Crime

The most vital deployments of this camera system were during a large controversial event in 2019 and during the civil unrest that occurred on May 30, 2020. The cameras are used as needed during protests and at the request of other law enforcement personnel to find footage of specific criminal incidents or described suspects in specific criminal incidents. More recently, on January 18, 2022, Strategic Planning Bureau personnel used the cameras to locate the suspects involved in a triple shooting at the RTA Hub at 4 North Main Street. The cameras were beneficial to investigators following up on the Fire Blocks shooting and the Grand Illumination incident, where a juvenile

attempted to shoot another juvenile during the parade. The cameras were used several times in 2023 when the Bicycle Response Team (BRT) was deployed to combat ongoing criminal issues in the area of East Fourth Street and South Jefferson Street.

Analysis of Discriminatory or Adverse Impact

There is no evidence to suggest this system has any discriminatory impact on any group.

Total Cost

The Police Department paid \$2500 to Milestone Systems to cover software maintenance costs for 2021 - 2023.

2020 Cost	2021 Cost	2022 Cost	2023 Cost
\$0	\$2500	\$0	\$1872.79

During 2023, a total of \$1872.79 was expended on an invoice for the acquisition of additional Axis cameras, which are scheduled to be fully paid for and installed in 2024.

Assessment

Overall, the Police Department is pleased with the performance of the technology. However, the system is becoming obsolete, and replacement parts for some of the hardware are no longer being manufactured. The Police Department will be upgrading portions of the equipment that are at the end of life in 2024.

Requested Modifications

There are no requested modifications to the Surveillance Technology Use Policy applicable to the Downtown Dayton Cameras.

Standard Operating Procedure

<https://public.powerdms.com/DAYTONOH/tree/documents/960027>

2) Body Worn Cameras

Purpose

The Body Worn Cameras serve three primary purposes:

- 1) Accurate documentation of police-public contacts, arrests, and critical incidents
- 2) Enhancing the accuracy of officer reports and testimony for court proceedings
- 3) Assisting with documentation of crime and accident scenes or other events that include the confiscation and documentation of evidence or contraband.

The cameras will provide vital evidence in investigations of police interaction with citizens and provide transparency to the public about police actions.

General Description

The Dayton Police Department purchased Body Worn Cameras from Axon Enterprise and deployed them in March 2021. These cameras are designed to be worn by Police personnel to record interactions with citizens. The recordings are then uploaded to the Evidence.com server, where they can be viewed by supervisors, investigators, and court personnel. Footage from Body Worn Cameras, which operates in tandem with Axon's Mobile Video Recording system, was used in administrative investigations, officer-involved shootings, and criminal investigations. As of January 22, 2024, the Dayton Police Department has 464 total body worn cameras both issued to officers and in reserve inventory.

Data Sharing

The footage is shared with the Montgomery County Prosecutor's Office and the City of Dayton Prosecutor's Office for prosecution, the Public Defender's Office upon request, and the public, pursuant to public records requests on a regular basis.

Citizen Complaints

The Police Department is unaware of any specific complaints or concerns about the Body Worn Cameras. However, some privacy advocates have expressed concern that the cameras record sensitive information or footage that could be released to the public upon request, against the wishes of the subject(s) being recorded.

Internal Audits

An internal audit found investigations where officers did not have cameras activated as directed by policy but no violations regarding training, data collection, data access, data protection, data retention, or public access to the system. There were fourteen (14) Training Memorandums and one (1) Written Reprimand issued to officers in 2023 related to incidents where body-worn cameras were not properly activated.

Impact on Crime

Data gathered from the use of body-worn cameras is used for criminal prosecution.

Analysis of Discriminatory or Adverse Impact

One of the driving factors behind purchasing Body Worn Cameras is to help provide transparency in police/community interactions. The use of this technology will help provide clarity into allegations about police conduct, as well as discriminatory behavior.

Total Cost

As the hardware for the Body Worn Cameras was purchased in 2021, the Police Department incurred several one-time costs. In 2023, the total cost for the hardware and software licenses was \$301,524.

2020 Cost	2021 Cost	2022 Cost	2023 Cost
N/A	\$362,000	\$287,706	\$301,524

Ongoing costs include time spent reviewing body-worn camera footage by officers, supervisors, redaction personnel (\$142,848), and prosecutors.

Assessment

The quality of the audio and video provided by the cameras is excellent, and it is an effective tool in providing transparency to the public.

Requested Modifications

The use policy for body-worn cameras will be modified to allow officers to use the camera unattached from their uniform to document crime scenes.

Policy

<https://public.powerdms.com/DAYTONOH/tree/documents/959269>

3) Mobile Vehicle Recorders

Purpose

The Mobile Vehicle Recorders aim to accurately document police-public contacts, traffic offenses, and subject transports.

General Description

The Police Department has Axon Enterprise Fleet 3 Mobile Vehicle Recorders (MVRs) in all marked vehicles. The system has a camera that faces ahead of the cruiser to record officer interactions with drivers on traffic stops and a camera in the cruiser's backseat to record footage of subjects being transported by officers. These recordings are uploaded to the Evidence.com server, where they can be viewed by supervisors, investigators, and court personnel. Footage from the MVRs, which operates in tandem with the Body 3 Body Worn Camera system, was used in administrative investigations, officer-involved shootings, and criminal investigations.

Data Sharing

The footage is shared with the Montgomery County Prosecutor's Office, the City of Dayton Prosecutor's Office for prosecution, the Public Defender's Office upon request, and the public pursuant to public records requests on a regular basis.

Citizen Complaints

The Police Department is unaware of any complaints or concerns about the Mobile Vehicle Recorders.

Internal Audits

An internal audit found investigations where officers did not have cameras activated as directed by policy but no violations regarding training, data collection, data access, data protection, data retention, or public access to the system.

Impact on Crime

Data gathered from Mobile Vehicle Recorders is used for criminal prosecution.

Analysis of Discriminatory or Adverse Impact

There is no evidence to suggest this technology has any discriminatory impact on any group. Its primary purpose is to provide transparency in police/community interactions.

Total Cost

The cost for the Fleet 3 system in 2023 was \$281,100.

2019 Cost	2020 Cost	2021 Cost	2022 Cost	2023 Cost
\$287,700	\$287,700	\$281,100	\$281,100	\$281,100

Assessment

The audio and video quality provided by the MVRs is generally excellent.

Requested Modifications

There are no requested modifications to the Surveillance Technology Use Policy applicable to the Mobile Vehicle Recorders.

Policy

<https://public.powerdms.com/DAYTONOH/tree/documents/908376>

4) Automatic License Plate Readers

Purpose

The purpose of Automatic License Plate readers is to:

- 1) Provide personnel with an automated method of identifying vehicles and license plates connected to criminal activity.
- 2) Notify personnel of the location of vehicles wanted for time-sensitive investigations such as Amber Alerts or Silver Alerts.

General Description

The Automatic License Plate Readers (ALPR) are attached to the Axon in-car camera in Dayton Police Department cruisers and at fixed Flock camera sites. The cameras scan the license plates of motor vehicles as they pass and then notifies personnel that the plates are entered into the ALPR database as being wanted in connection with a crime. The license plates are saved in a database that can be searched later if a user is looking for a specific vehicle.

Data Sharing

The data from the mobile and fixed ALPRs is not shared externally unless it becomes evidence in a criminal case.

Citizen Complaints

The Police Department is aware of concerns in the community that Automatic License Plate Reader technology can be used for immigration enforcement or racial profiling. The technology does not utilize facial recognition technology, nor does it record any data pertaining to the ethnic or immigration status of a vehicle's occupants. The devices are meant only to take pictures of the license plates of passing vehicles. Another concern held by some community members is that the cameras present a privacy concern by tracking the travel history of vehicles in areas the vehicles travel. There were also concerns that this data would be public information.

Internal Audits

An internal audit found no violations of the Automatic License Plate Reader policy regarding training, data collection, data access, data protection, data retention, or public access to the system.

Impact on Crime

Automatic License Plate Reader technology went online in April 2022. Since then, officers and detectives have utilized the ALPR system in hundreds of documented instances. The ALPRs have been used to recover stolen vehicles, document investigations related to stolen vehicles, identify locations where stolen vehicles have traveled, and apprehend violent offenders. Similar to the Law Enforcement Automated Data System (LEADS), the Ohio Law Enforcement Gateway (OHLEG), and other databases, ALPR data is used daily by officers and detectives to solve crimes ranging from theft offenses to homicides. Utilizing ALPR systems has become integral to investigation and patrol operations.

Analysis of Discriminatory or Adverse Impact

ALPR systems record only the license plates of motor vehicles. They do not record demographic information about vehicle occupants, and no information is shared with Federal agencies. Any future deployments of fixed ALPR systems would include a demographic analysis of the area where the cameras would be installed. Once the demographic analysis is complete, outreach to relevant groups in that neighborhood would be conducted to gauge support for installing the cameras.

In the process of sharing information with the community about fixed ALPR systems, Police personnel attended several events, including:

- 1) The Hispanic Heritage Festival - We had a table and passed out information about LPR technology in English and Spanish.
- 2) On September 30, 2021, a joint session was held for parishioners of St. Mary, Immaculate Conception, and St. Helen Catholic churches to discuss LPRs. The session was held in Spanish. Some Hispanic event attendees from the Twin Towers neighborhood, including two who identified as undocumented, stated they wanted the fixed LPR system to return, as they felt the cameras made the community safer.
- 3) Additional meetings were held at the Southeast Public Library, Christ Lutheran Church, Dakota Center, Northwest Public Library, Wayne Avenue Twin Towers Business Association, Downtown Dayton Partnership, Huffman Historic District, and the Belmont Neighborhood Business Association. Concerns expressed from these meetings include that they were infringements on privacy, could be used for racial profiling and immigration enforcement, and information would be shared with Federal law enforcement. It was explained to the groups that data from the ALPRs would be tightly restricted and only available to outside agencies with our permission. The fixed ALPRs would be placed in neighborhoods where they respond most effectively to crime patterns.

There was positive feedback from the community about the department's restrictions on data sharing and use of the system. Several event attendees stated they couldn't see why the department would not use LPRs, and they saw their benefits. In 2023, links to the Axon and Flock transparency reports were activated on the City of Dayton's Police Transparency Portal.

Total Cost

The ALPR system is paid through federal grants, special revenue funds from photo enforcement, and the police department's general fund budget. The fixed-site ALPRs were deployed in the first quarter of 2023, utilizing \$98,975 in federal grant funds.

Assessment

The technology itself is effective. In 2023, links to both the Axon and Flock transparency reports were activated on the City of Dayton's Police Transparency Portal. ALPR data has been utilized on numerous occasions and has been a significant factor in solving

crimes related to: Homicide, Felonious Assault, Rape, Kidnapping, Aggravated Robbery, Domestic Violence, and Stolen Vehicles.

Requested Modifications

There are no requested modifications to the Surveillance Technology Use Policy applicable to the Automatic License Plate Readers.

Policy

<https://public.powerdms.com/DAYTONOH/tree/documents/908377>

5) Unmanned Aerial Surveillance (UAS)

Purpose

The UAS program aims to gain real-time information for specific incidents such as bomb threats, SWAT deployments, missing person searches, civil disorders, and crime scene reconstructions.

General Description

The Bomb Squad, HNT, SWAT Team, TSU, and Patrol Operations are the only units in the Police Department possessing UAS devices. The devices are only to be deployed at the scene of specific incidents, e.g., an active shooter scene, missing persons, vehicle crashes, documenting crime scenes, etc. The Bomb Squad may use the devices to identify potential explosive devices and hazards and ensure the evacuation of a disposal area. For purposes of the SWAT team, the UASs may be used to provide intelligence for making tactical decisions during volatile situations while maintaining a safe distance from the threat. This reduces the likelihood of a violent outcome by allowing officers to de-escalate the situation from a safe distance. In 2018, the Police Department purchased several UASs and began creating policies, procedures, and training around their potential use.

Data Sharing

The Police Department does not have data-sharing agreements with other jurisdictions.

Citizen Complaints

The Police Department is unaware of any formal complaints or concerns about the UAS program in Dayton. Nationwide, concerns exist about potential privacy concerns involving police use of UAS units.

Internal Audits

An internal audit found no UAS Standard Operating Procedure violations regarding training, data collection, data access, data protection, data retention, or public access to the system. The audit does recommend that the department implement a training program for the UAS.

Impact on Crime

Patrol Operations pilots utilized UAS technology on 11 occasions in 2023, most of which involved assisting Patrol officers who were actively searching for fleeing suspects. UAS technology was used at least twice in an attempt to locate missing children. From April 30, 2023, to May 1, 2023, Patrol Operations pilots and the Bomb Squad completed over 44 flight missions in an effort to locate a missing child near the Huffman Dam. TSU, SWAT, and HNT did not operationally deploy UASs in 2023.

Analysis of Discriminatory or Adverse Impact

There is no evidence to suggest this technology has any discriminatory impact on any group.

Total Cost

The Department currently possesses ten (10) UASs. 2023 maintenance, repair, and replacement costs for UASs totaled \$5,775.41.

Assessment

In an era of technological advancement, policing methods have also evolved, and the addition of the UAS program has benefited officers responding to certain incidents. The UAS program will continue to play a vital role in gathering information to document evidence at crime scenes, assisting officers in responding to critical incidents or ending dangerous situations peacefully.

Requested Modifications

There are no requested modifications to the Surveillance Technology Use Policy applicable to the UAS program.

Standard Operating Procedure

<https://public.powerdms.com/DAYTONOH/tree/documents/960025>

6) FUSUS Technology

Purpose

Fusus technology keeps Law Enforcement Officers, Security Personnel, and the Communities they protect safer. It enables public safety personnel to function more efficiently and with improved operational intelligence by creating a common operating picture emphasizing officer, citizen, and community safety.

General Description

Fusus extracts and unifies live video, data, and sensor feeds from virtually any source, enhancing the situational awareness and investigative capabilities of law enforcement officers and other first responders responding during critical incidents. Fusus can extract a live video feed and send it to an emergency operations center and officers in the field. Fusus creates a public safety ecosystem that combines video with other utilities like computer-aided-dispatch (CAD) data, gunfire detectors, real-time officer geolocator feeds, a registry map of all the public and private cameras in the region, a multi-media tips line for the public, and a digital evidence vault for investigators. Fusus is an entirely voluntary program that enables law enforcement and public safety agencies to operate more efficiently with improved operational intelligence and a proactive emphasis on officer, citizen, and community safety.

Data Sharing

The Police Department does not have data-sharing agreements with other jurisdictions. Other local jurisdictions that utilize Fusus include the Montgomery County Sheriff's Office, West Carrollton Police Department, Miamisburg Police Department, and

Trotwood Police Department. If given permission, these agencies may allow Dayton PD access to their library of cameras.

Citizen Complaints

The Police Department is unaware of any formal complaints or concerns about Fusus in Dayton.

Internal Audits

An internal audit found no violations of the Fusus policy regarding training, data collection, data access, data protection, data retention, or public access to the system.

Impact on Crime

Investigative personnel have utilized Fusus on several occasions in 2023 to follow up on complaints, particularly incidents involving crime in Downtown Dayton. Among those incidents were a stabbing at the McDonald's restaurant located at 410 S. Main St., a homicide near the Reibold Building, and a drive-by shooting at E. 4th St. and S. Jefferson St.

Analysis of Discriminatory or Adverse Impact

There is no evidence to suggest this technology has any discriminatory impact on any group.

Total Cost

Implementation of the Fusus program in Dayton was completed at no cost to the City. Hardware and web-based software are provided by Fusus and fully funded through the Ohio Attorney General's Office.

Assessment

The Fusus program will continue to see widespread use throughout the country and will play a vital role in helping Dayton Officers respond to crimes in progress, especially during critical incidents.

Requested Modifications

There are no requested modifications to the Surveillance Technology Use Policy applicable to the Fusus program.

Standard Operating Procedure

<https://public.powerdms.com/DAYTONOH/tree/documents/1193778>

Aggregate Information Concerning Exempted Technology

The Police Department has deployed exempted technology on several occasions throughout 2023. The Bomb Squad, SWAT, HNT, and Special Investigations Bureau utilized exempted technology 17 times in 2023.