



Office of the City Manager

ACTION CALENDAR  
November 12, 2024

To: Honorable Mayor and Members of the City Council

From: Paul Buddenhagen, City Manager

Submitted by: Jennifer Louis, Chief of Police  
Terrance Davis, Director of Public Works

Subject: Pursuant to Chapter 2.99 of the Berkeley Municipal Code Annual Surveillance Technology Report for Body Worn Cameras, GPS Trackers, Fixed Surveillance Video Cameras, Automatic License Plate Readers, the Street Level Imagery Project, and Unmanned Aerial Systems (UAS)

RECOMMENDATION

Pursuant to Chapter 2.99 of the Berkeley Municipal Code, adopt a resolution accepting the Surveillance Technology Report for Body Worn Cameras, GPS Trackers, Fixed Surveillance Video Cameras, Automatic License Plate Readers, the Street Level Imagery Project, and Unmanned Aerial Systems (UAS).

FISCAL IMPACTS OF RECOMMENDATION

These technologies have existing budget approval and there are no new fiscal impacts associated with adopting the attached resolution.

CURRENT SITUATION AND ITS EFFECTS

On March 27, 2018, the City Council adopted Ordinance 7,592-N.S., adding Chapter 2.99 to the Berkeley Municipal Code, which is also known as the Surveillance Technology Use and Community Safety Ordinance. Section 2.99.070 of the Ordinance requires that the City Manager must submit to the City Council a Surveillance Technology Report as defined by Section 2.99.020(2) of the Ordinance annually, at the first regular City Council meeting in November.

The purpose of the Ordinance is to provide transparency surrounding the use of surveillance technology, as defined by Section 2.99.020 in the Ordinance, and to ensure that decisions surrounding the acquisition and use of surveillance technology consider the impacts that such technology may have on civil rights and civil liberties. Further, the Ordinance requires that the City evaluate all costs associated with the acquisition of surveillance technology and regularly report on their use.

The Ordinance imposes various reporting requirements on the City Manager and staff. The purpose of this staff report and attached resolution is to satisfy the annual reporting requirement as outlined in Section 2.99.070.

One of the reporting categories of the surveillance technology use is whether complaints have been received by the community about the various technologies. To date Berkeley Police Department Internal Affairs Bureau (IAB) has not received any external personnel complaints surrounding these technologies. External complaints from community members can be made in writing, via email, in person or via telephone. Complaints can be received with direct communication to Internal Affairs from the complainant and/or be received by any member of the Department and then forwarded through the chain of command. If a community member initiates a complaint against a subject employee and during the investigation it is determined the subject employee violated policy regarding the misuse of technology, an additional complaint is initiated by the Chief of Police.

Community members also have the right to initiate complaints against employees of BPD by reporting directly to the Office of the Director of Police Accountability (ODPA). The Director of Police Accountability notifies the Chief of Police when an investigation into a complaint is initiated by the PAB, which would prompt a parallel IAB investigation.

Attached to this staff report are Surveillance Technology Reports for Body Worn Cameras, GPS Trackers, Fixed Surveillance Video Cameras, Automatic License Plate Readers, the Street Level Imagery Project, and Unmanned Aerial Systems (UAS).

During this reporting period, the Berkeley Police Department, in collaboration with the Public Works Department, has made significant progress in the implementation of fixed surveillance cameras. The contract with Edgeworth has been finalized, and funding has been allocated to cover the installation of approximately 12 of the 15 Council-approved cameras.

Based on this information, it is anticipated that the installation of the fixed cameras will begin in late October or early November. These cameras are part of our ongoing efforts to enhance public safety and support criminal investigations. Currently, fixed surveillance cameras are operational at San Pablo Park, the Berkeley Marina, and at the intersection of University Avenue and Sixth Street. The upcoming installations will include seven cameras located on City of Berkeley right-of-way, expected to be installed by the end of the year. City staff are also submitting applications for permits for the cameras that will be installed on Caltrans right-of-way.

Also during this reporting period the City Council approved the installation of 52 Automated License Plate Reader (ALPR) cameras at strategic locations throughout Berkeley to enhance public safety and aid in criminal investigations. Of these, 32 cameras located on City of Berkeley right-of-way have already been installed. Applications for permits are underway for the remaining 20 cameras situated on Caltrans right-of-way along Ashby and San Pablo Avenues. On October 1st, BPD

initiated an introductory period involving key personnel—such as experienced officers, supervisors, and detectives—to test the ALPR system's deployment. This phase focuses on initial training, developing operational protocols, and preparing for full departmental implementation. The introductory period is expected to conclude by mid-November, after which the ALPR technology will become fully operational. All personnel who will be using or supervising ALPR technology are required to complete mandatory training covering policy updates and operational procedures to ensure the technology is used effectively and responsibly, in alignment with our community's values and legal standards.

As the upcoming reporting period will be the first in which we have utilized this technology, we will submit an additional memo regarding the fixed ALPRs in next year's report.

For each of the six technologies, the Surveillance Technology Reports were prepared to satisfy the specific, section-by-section requirements of the Ordinance, and are attached to this report.

#### ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

There are no identifiable environmental effects or opportunities associated with the content of this report.

#### RATIONALE FOR RECOMMENDATION

City Council is being requested to adopt the attached resolution for the City to be in compliance with the Ordinance.

#### ALTERNATIVE ACTIONS CONSIDERED

City Council could decide not to adopt the resolution.

#### CONTACT PERSON

Jennifer Louis, Chief of Police, (510) 981-5700

Arlo Malmberg, Strategic Planning and Accountability Manager, (510) 981-5747

#### ATTACHMENTS

1. Surveillance Technology Report: Body Worn Cameras
2. Surveillance Technology Report: Global Positioning System (GPS) Tracking Devices
3. Surveillance Technology Report: Fixed Surveillance Video Cameras
4. Surveillance Technology Report: Automated License Plate Readers
5. Surveillance Technology Report: Street Level Imagery Project
6. Surveillance Technology Report: Unmanned Aerial Systems (UAS)
7. Resolution

## Surveillance Technology Report: Body Worn Cameras

**October 1, 2023 – Sept. 30, 2024**

Description	<p>A description of all non-privileged and non-confidential information about use of the Surveillance Technology, including but not limited to the quantity of data gathered and sharing of data, if any, with outside entities. If sharing has occurred, the report shall include general, non-privileged and non-confidential information about recipient entities, including the names of the entities and purposes for such sharing.</p> <p>Body Worn Cameras are used to capture video recordings of contacts between department personnel and the public, to provide an objective record of these events. These recordings are used in support of criminal prosecutions, to limit civil liability, increase transparency and enhance professionalism and accountability in the delivery of police services to the community. Body Worn Camera (BWC) files are shared with the Alameda County District Attorney's office in support of prosecution for crime and may be shared with other law enforcement agencies to support criminal investigations.</p> <p><b>Policy regarding activation of the Body Worn Camera BPD Policy 425.7</b></p> <p>Members shall activate the BWC as required by this policy in (a)-(f) below and may activate the BWC at any time the member believes it would be appropriate or valuable to record an incident within the limits of privacy described herein.</p> <p>The BWC shall be activated in any of the following situations:</p> <p>(a) All in-person enforcement and investigative contacts including pedestrian stops and field interview (FI) situations.</p> <p>(b) Traffic stops including, but not limited to, traffic violations, stranded motorist assistance and all crime interdiction stops.</p> <p>(c) Self-initiated field contacts in which a member would normally notify the Communications Center.</p> <p>(d) Any search activity, including the service of search or arrest warrants; probation, parole, or consent searches where the member is seeking evidence of an offense, or conducting a safety sweep or community caretaking sweep of the premises. Once a location has been secured and the member is not interacting with detainees or arrestees, the member may mute their BWC when conducting a search for evidence.</p> <p>(e) Any other contact that the member determines has become adversarial after the initial contact in a situation where the member would not otherwise activate BWC recording.</p> <p>(f) Transporting any detained or arrested person and where a member facilitates entry into or out of a vehicle, or any time the member expects to have physical contact with that person.</p> <p><b>What data is captured by this technology:</b></p> <p>BWC use is limited to enforcement and investigative activities involving members of the public. The BWC recordings will capture video and audio evidence for use in criminal investigations, administrative reviews, training, civil litigation, and other proceedings protected by confidentiality laws and department policy. Improper use or release of BWC recordings may compromise ongoing criminal and administrative investigations or violate the privacy rights of those recorded and is prohibited.</p>
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**How the data is stored:**

BWC videos are stored on a secure server. All BWC data will be uploaded and stored on Axon Cloud Services, Evidence.com. Axon complies with the EU-U.S. Privacy Shield Framework and the Swiss-U.S. Privacy Shield Framework as set forth by the U.S. Department of Commerce regarding the collection, use, and retention of personal information transferred from the European Union and Switzerland to the United States (collectively, "Privacy Shield"). Axon has certified to the U.S. Department of Commerce that it adheres to the Privacy Shield Principles.

**Retention duration of digital data:**

All BWC videos and digital evidence are assigned a category. The categories are used to organize data. Each category also defines the retention duration. The category definitions and retention durations are as follows:

Category	Retention Duration
Uncategorized	Until manually deleted
187 / Felony Sex Assault	Until manually deleted
Civil / City / Non-Evidence	1 year
Collision	2 years
Consent / Aid	108 weeks
Detention / Warrant Only	108 weeks
Felony Evidence	5 years
Litigation	Until manually deleted
Misdemeanor Evidence	2 years
Officer Injury	Until manually deleted
OIS / Critical Incident	Until manually deleted
Pending Review	Until manually deleted
Personnel / VSA	3 years
Personnel Complaint	Until manually deleted
Traffic Stop	108 weeks
Training	60 days
Use of Force	108 weeks

**Summary of Body Worn Camera Videos Uploaded Oct. 1, 2023 to Sept. 30, 2024:**

Metric	Value
Number of BWC Videos	66,590
Hours of Videos	17,662.5
GB of Videos	30,686.6

	<p><b>Summary of all active digital evidence uploaded, Oct. 1, 2023 to Sept. 30, 2024:</b></p> <table border="1" data-bbox="391 247 854 562"> <thead> <tr> <th>Type</th> <th>File Count</th> </tr> </thead> <tbody> <tr> <td>Audio</td> <td>1,587</td> </tr> <tr> <td>Document</td> <td>2,233</td> </tr> <tr> <td>Image</td> <td>76,367</td> </tr> <tr> <td>Other</td> <td>487</td> </tr> <tr> <td>BWC Video</td> <td>66,334</td> </tr> <tr> <td>Other Video*</td> <td>9,443</td> </tr> <tr> <td>Total</td> <td>156,451</td> </tr> </tbody> </table> <p>* Includes all uploaded non-BWC videos and other videos booked into the evidence management system. Other videos include iPhone videos, security camera video, and copies of BWC videos (for redaction, etc.).</p>	Type	File Count	Audio	1,587	Document	2,233	Image	76,367	Other	487	BWC Video	66,334	Other Video*	9,443	Total	156,451
Type	File Count																
Audio	1,587																
Document	2,233																
Image	76,367																
Other	487																
BWC Video	66,334																
Other Video*	9,443																
Total	156,451																
<p><b>Geographic Deployment</b></p>	<p>Where applicable, non-privileged and non-confidential information about where the surveillance technology was deployed geographically.</p> <p>Body Worn Cameras are worn by all BPD uniformed officers city-wide at all times; BWC's are not deployed based on geographic considerations.</p>																
<p><b>Complaints</b></p>	<p>A summary of each complaint, if any, received by the City about the Surveillance Technology.</p> <p>There have been no complaints about the deployment and use of Body Worn Cameras.</p>																
<p><b>Audits and Violations</b></p>	<p>The results of any non-privileged internal audits, any information about violations or potential violations of the Surveillance Use Policy, and any actions taken in response.</p> <p>File meta-data are routinely reviewed by our BWC manager, to ensure required metadata fields are completed. There have been no complaints with regards to violations of the Surveillance Use Policy.</p>																
<p><b>Data Breaches</b></p>	<p>Non-privileged and non-confidential information about any data breaches or other unauthorized access to the data collected by the surveillance technology, including information about the scope of the breach and the actions taken in response.</p> <p>There have been no known data breaches or other unauthorized access to BWC data.</p>																
<p><b>Effectiveness</b></p>	<p>Information that helps the community assess whether the Surveillance Technology has been effective in achieving its identified outcomes.</p> <p>Body Worn Cameras have proven effective in supporting criminal prosecutions, as video footage is available for all criminal prosecutions. Body Worn Cameras have been effective for training purposes, as footage can be reviewed in incident de-briefs. Body Worn Cameras have been extremely effective in support of Internal Affairs investigations and Use of Force Review.</p>																
<p><b>Costs</b></p>	<p>Total annual costs for the Surveillance Technology, including personnel and other ongoing costs.</p> <p>The annual cost for the Body Worn Cameras, including cameras, replacement cameras, software, and Axon's secure digital evidence management system is \$222,442 per year over a five-year, \$1,112,213 contract. The contracted started in 2022 and will expire in August, 2026. There is one full-time employee assigned to the BWC program, an Applications Programmer Analyst II, at a cost of \$168,940 per year, including benefits.</p>																

## Surveillance Technology Report: Global Positioning System Tracking Devices

**October 1, 2023 – Sept. 30, 2024**

Description	<p>A description of all non-privileged and non-confidential information about use of the Surveillance Technology, including but not limited to the quantity of data gathered and sharing of data, if any, with outside entities. If sharing has occurred, the report shall include general, non-privileged and non-confidential information about recipient entities, including the names of the entities and purposes for such sharing.</p> <p>Global Positioning System Trackers are used to track the movements of vehicles, bicycles, other items, and/or individuals.</p> <p><b>What data is captured by this technology:</b></p> <p>A GPS Tracker data record consists of date, time, latitude, longitude, map address, and tracker identification label. The data does not contain any images, names of subjects, vehicle information or other identifying information on individuals.</p> <p><b>How the data is stored:</b></p> <p>The data from the GPS tracker is encrypted by the vendor. The data is only accessible through a secure website to BPD personnel who have been granted security access.</p> <p><b>Retention period of data:</b></p> <p>Tracker data received from the vendor shall be kept in accordance with applicable laws, BPD policies that do not conflict with applicable law or court order, and/or as specified in a search warrant.</p> <p>The Global Positioning System “Electronic Stake Out” (ESO) devices were not deployed during this reporting period.</p> <p>COVERTRACK Stealth V GPS devices were used in two separate investigations during this reporting period:</p> <ul style="list-style-type: none"> <li>• An investigation into a wanted homicide suspect. The case investigation resulted in the arrests of two individuals and the recovery of three firearms.</li> <li>• An investigation into a wanted felony assault/shooting suspect. The case investigation resulted in the arrest of one individual and the recovery of one firearm.</li> </ul> <p>Data may be shared with the District Attorney’s Office for use as evidence to aid in prosecution, in accordance with laws governing evidence; other law enforcement personnel as a part of an active criminal investigation; and other third parties, pursuant to a court order.</p>
Geographic Deployment	<p>Where applicable, non-privileged and non-confidential information about where the surveillance technology was deployed geographically.</p> <p>COVERTRACK Stealth V GPS devices are deployed with judicial pre-approval, based on suspect location, rather than geographical consideration.</p>
Complaints	<p>A summary of each complaint, if any, received by the City about the Surveillance Technology.</p> <p>There were no complaints made regarding GPS Trackers.</p>
Audits and Violations	<p>The results of any non-privileged internal audits, any information about violations or potential violations of the Surveillance Use Policy, and any actions taken in response.</p> <p>There were no known violations relating to GPS Trackers.</p>

<p><b>Data Breaches</b></p>	<p>Non-privileged and non-confidential information about any data breaches or other unauthorized access to the data collected by the surveillance technology, including information about the scope of the breach and the actions taken in response.</p> <p>There were no known data breaches relating to GPS Trackers.</p>
<p><b>Effectiveness</b></p>	<p>Information that helps the community assess whether the Surveillance Technology has been effective in achieving its identified outcomes.</p> <p>The GPS ESO trackers were not used during this time period. The program was suspended in mid-March 2020 due to the COVID-19 pandemic and has not been reimplemented. Our subscription was renewed and we upgraded our equipment, however, we have not used the trackers during this reporting period.</p> <p>COVERTTRACK Stealth V GPS trackers are effective in that they provide invaluable information on suspect vehicle locations. During complex investigations, many suspects are moving throughout the Bay area and beyond. These devices assist investigators with developing information regarding suspect locations that may never have been discovered without GPS assistance.</p> <p>GPS trackers greatly reduce costs associated with surveillance operations. Surveillance operations generally involve three or more officers for the entire duration of an operation. A moving surveillance is extremely resource-intensive, requiring multiple officers in multiple vehicles for extended periods of time.</p> <p>Evidence can be fleeting, and GPS trackers allow officers to investigate in a timely manner. GPS trackers have assisted officers with recovering evidence that may have been removed or discarded if officers were unable to quickly develop a location for a suspect.</p>
<p><b>Costs</b></p>	<p>Total annual costs for the Surveillance Technology, including personnel and other ongoing costs.</p> <p>The annual cost for the COVERTTRACK Stealth V GPS data service is \$1,834.53.</p> <p>There was no cost for the GPS “Electronic Stake Out” (ESO) this year. In April of 2022, the police department paid \$2,364.88 to upgrade the devices and for three years of tracking service.</p> <p>There are staff time costs associated with preparing and placing COVERTTRACK GPS trackers. The investigator must prepare a search warrant and obtain a judge’s approval, and a small number of officers must place the tracker on the suspect’s car. The total number of hours is a fraction of the time it would take to do a full surveillance operation involving numerous officers.</p> <p>There are staff time costs associated with preparing ESO trackers and placing ESO tracker-equipped bikes for bait bike operations. The time associated to prepare an ESO GPS equipped surveillance is approximately two-four hours. The total number of hours is extremely small, given the large number of operations, and resulting arrests from prior cases.</p>

**Surveillance Technology Report: External Fixed Surveillance Video Cameras**

**October 1, 2023 – Sept. 30, 2024**

Description	<p>A description of all non-privileged and non-confidential information about use of the Surveillance Technology, including but not limited to the quantity of data gathered and sharing of data, if any, with outside entities. If sharing has occurred, the report shall include general, non-privileged and non-confidential information about recipient entities, including the names of the entities and purposes for such sharing.</p> <p>During this reporting period, the Berkeley Police Department, in collaboration with the Public Works Department and General Services, has made significant progress in the implementation of fixed surveillance cameras. The contract with Edgeworth has been finalized, and funding has been allocated to cover the installation of approximately 12 of the 15 Council-approved cameras. Public Works is working with General Services to expedite the contract execution.</p> <p>Based on this information, it is anticipated that the installation of the fixed cameras will begin in late October or early November. These cameras are part of our ongoing efforts to enhance public safety and support criminal investigations. Currently, fixed surveillance cameras are operational at San Pablo Park, the Berkeley Marina, and at the intersection of University Avenue and Sixth Street. The upcoming installations will include seven cameras located on City of Berkeley right-of-way, expected to be installed by the end of the year. City staff are also submitting applications for permits for the cameras that will be installed on Caltrans right-of-way.</p> <p>Internally, we are refining our software solutions to track access to these cameras for comprehensive auditing and detailed reporting. Officers will be informed that completing a Survey 123 is required to access these cameras, ensuring compliance with our Surveillance Technology Ordinance and maintaining transparency in our operations.</p> <p>As we move forward with the deployment of these surveillance technologies, we remain committed to ethical and responsible use, aligning with our community's values and legal standards. All personnel will be required to complete mandatory training covering operational procedures and privacy protections before accessing the system. This approach ensures that the new capabilities enhance public safety while maintaining our community's trust and support.</p> <p><b>What data is captured by this technology:</b></p> <p>The external fixed surveillance cameras record and capture non-audio activity (data) for the following purposes:</p> <ol style="list-style-type: none"> <li>i. To address identified areas of criminal activity.</li> <li>ii. To respond to critical incidents.</li> <li>iii. To assist in identifying, apprehending and prosecuting offenders.</li> <li>iv. To document officer and offender conduct during interactions to safeguard the rights of the public and officers.</li> <li>v. To monitor pedestrian and vehicle traffic activity in order to assist with traffic related investigations.</li> <li>vi. To document employee, employer, and/or customer conduct during interactions to safeguard the employee, employer, and customer from misconduct.</li> </ol>
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**How the data is stored:**

The data on the external fixed video surveillance cameras is stored in secure servers that are managed by the City of Berkeley Radio Shop. Each camera system (San Pablo Park, Berkeley Marina, University Avenue and Sixth Street) has its own respective server for data storage.

**Retention period of data:**

Video surveillance recordings are not government records pursuant to California Government Code 34090 in and of themselves. Except as otherwise permitted in this section, video surveillance recordings shall be purged within one hundred and eighty (180) days of recording.

The external fixed video surveillance cameras at University Avenue and Sixth Street were accessed eight times during this reporting period.

- A homicide detective accessed the cameras while investigating a shooting that occurred near the intersection.
- A robbery detective accessed the cameras while investigating a robbery that occurred near the intersection.
- A homicide detective accessed the cameras twice while investigating an auto burglary that occurred near the intersection. The video aided in locating the suspect vehicle.
- A homicide detective accessed the cameras while investigating a shooting that occurred near the intersection. The cameras provided images of possible suspect vehicles.
- A patrol sergeant accessed the cameras while investigating a felony hit and run that occurred near the intersection. The video showed the facts of how the collision occurred and showed distinctive markings and damage on the suspect vehicle to help identify it.
- A patrol sergeant accessed the cameras while investigating an auto burglary that occurred near the intersection. The cameras provided images of possible suspect vehicles.
- A robbery detective accessed the cameras while investigating a robbery that occurred near the intersection.

The external fixed video surveillance cameras at San Pablo Park were accessed 1 time during this reporting period.

- A homicide detective assisted CHP with a homicide case where involved parties were at San Pablo Park prior to shooting.

The external fixed video surveillance cameras at the Berkeley Marina were accessed eighteen times during this reporting period.

- Property crimes detectives accessed the cameras thirteen times while investigating auto burglaries that occurred at the Marina. The cameras consistently captured footage of the thefts and suspect vehicles, which was instrumental in identifying suspects and advancing the investigations.
- Property crimes detectives accessed the cameras four times while investigating vehicle thefts at the Marina. In three instances, the cameras recorded the

	<p>suspects driving the stolen vehicles and the victim vehicles, providing critical evidence that was helpful to the investigations. In one case, no useful evidence was obtained.</p> <ul style="list-style-type: none"> <li>• A property crimes detective accessed the cameras once while investigating a grand theft at the Marina. The theft and the suspect vehicle were captured on video, assisting in the case.</li> </ul> <p>The Avigilon platform was accessed four times for administrative reasons during this reporting period.</p> <ul style="list-style-type: none"> <li>• Two administrative accesses were used to create new accounts.</li> <li>• Two administrative accesses were used to reset passwords after expiration.</li> </ul> <p>Data may be shared with the District Attorney's Office for use as evidence to aid in prosecution, in accordance with laws governing evidence; other law enforcement personnel as a part of an active criminal investigation; and other third parties, pursuant to a court order.</p>
<b>Geographic Deployment</b>	<p>Where applicable, non-privileged and non-confidential information about where the surveillance technology was deployed geographically.</p> <p>The external fixed video surveillance cameras are geographically deployed at San Pablo Park, the Berkeley Marina, and at the intersection of University Avenue and Sixth Street.</p>
<b>Complaints</b>	<p>A summary of each complaint, if any, received by the City about the Surveillance Technology.</p> <p>There were no known complaints associated with the external fixed video surveillance cameras.</p>
<b>Audits and Violations</b>	<p>The results of any non-privileged internal audits, any information about violations or potential violations of the Surveillance Use Policy, and any actions taken in response.</p> <p>There were no known violations relating to the external fixed video surveillance cameras.</p>
<b>Data Breaches</b>	<p>Non-privileged and non-confidential information about any data breaches or other unauthorized access to the data collected by the surveillance technology, including information about the scope of the breach and the actions taken in response.</p> <p>There were no known data breaches related to the external fixed video surveillance cameras.</p>
<b>Effectiveness</b>	<p>Information that helps the community assess whether the Surveillance Technology has been effective in achieving its identified outcomes.</p> <p>External fixed video surveillance cameras monitor pedestrian and vehicle activity and can assist investigators with criminal and traffic related investigations. The cameras are also meant to prevent and deter criminal activity and augment police resources in a cost-effective manner.</p>
<b>Costs</b>	<p>Total annual costs for the Surveillance Technology, including personnel and other ongoing costs.</p> <p>The initial cost of the San Pablo Park Cameras was \$64,829.46</p> <p>The initial cost of the Marina cameras was \$106,620.14</p> <p>The annual cost for maintenance and other ongoing costs, including compliance and other reporting and oversight requirements is \$13,443.20.</p> <p>The authorized budget for the Edgeworth contract is \$850,000.</p>

## Surveillance Technology Report: Automated License Plate Readers

October 1, 2023 – Sept. 30, 2024

Description	<p>A description of all non-privileged and non-confidential information about use of the Surveillance Technology, including but not limited to the quantity of data gathered and sharing of data, if any, with outside entities. If sharing has occurred, the report shall include general, non-privileged and non-confidential information about recipient entities, including the names of the entities and purposes for such sharing.</p> <p>Automated License Plate Readers (ALPRs) are used by Parking Enforcement Bureau vehicles for time zone parking. The City's Transportation Division uses anonymized information for purposes of supporting the City's Go Berkeley parking management program. ALPR use replaced the practice of physically "chalking" tires, which a more effective means of identifying violators.</p> <p><b>What data is captured by this technology:</b></p> <p>ALPR technology functions by automatically capturing an image of a vehicle's license plate, transforming that image into alphanumeric characters using optical character recognition software, and storing that information, along with relevant metadata (e.g. geo-location and temporal information, as well as data about the ALPR).</p> <p><b>How the data is stored:</b></p> <p>The data is stored on a secure server by the vendor.</p> <p><b>Retention period of data:</b></p> <p>During this reporting period collected images and metadata of hits were stored no more than 365 days. Metadata of reads were not stored more than 14 days in accordance with policy 1302. Current use policy adopted September 13, 2022 sets new retention periods that are now in effect.</p> <p><b>Summary of ALPR Time Zone Enforcement Data</b></p> <p>Genetec is the vendor for the ALPR Time Zone enforcement system. A "read" indicates the ALPR system successfully read a license plate. The information that is generated when a plate is viewed by the ALPR camera is the license plate number, state and geographical (GPS) location it was viewed.</p> <p>Due to an error in our data retention mechanism, we are unable to provide a total count of reads for this reporting period. However, in recent years, the number of reads has been approximately 3,000,000.</p> <p>A "hit" indicates the ALPR system detected a possible violation, which prompts the Parking Enforcement Officer to further assess the vehicle. A hit is when the read information is recognized as a license plate that matches, or does not match an entry in a list such as permit list or the stolen vehicle "hot list". In many cases, hits are "rejected" or "not enforced", meaning no enforcement action is taken, because the Parking Enforcement Officer determines the vehicle has an appropriate placard or permit, or there is other information or assignment which precludes citation.</p> <p>The following are key enforcement statistics for this reporting period:</p> <ul style="list-style-type: none"> <li>• 97,718 hits</li> <li>• 36,428 enforced hits resulted in citation issuance.</li> </ul>
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	<ul style="list-style-type: none"> <li>• 1,530 not-enforced hits due to either, 1) ALPR experiencing technical issues and officer unable to validate the hit in the system, which only gives option to not enforce, or 2) Officer error in accepting the hit initially.</li> <li>• 59,760 hits were not acted upon for a variety of reasons including but not limited to: <ul style="list-style-type: none"> <li>○ Customer comes out to move a vehicle. PEO's are directed not to issue that citation.</li> <li>○ Officer gets to the dashboard and sees a permit not visible from a previous location.</li> <li>○ Officer does a vehicle evaluation and confirms that the vehicle moved from the hit location (e.g. across the street within GPS range).</li> <li>○ Stolen car.</li> <li>○ Similar plates.</li> <li>○ 600-700 GIG cars- 100 revel scooters.</li> <li>○ Officers mistakenly leave their ALPR on collecting data, but leave the area being enforced to drive to another location on another assignment, such as a traffic post at a collision scene.</li> </ul> </li> </ul> <p>All BPD ALPR data may only be shared with other law enforcement or prosecutorial agencies for official law enforcement purposes, or as otherwise permitted by department policy and law. All ALPR data is subject to the provisions of BPD Policy 415 - Immigration Law, and therefore may not be shared with federal immigration enforcement officials.</p> <p>During this reporting period there were no law enforcement investigative vehicle inquiries.</p>
Geographic Deployment	<p>Where applicable, non-privileged and non-confidential information about where the surveillance technology was deployed geographically.</p> <p>Only Parking Enforcement Vehicles are equipped with ALPRs. ALPRs are deployed based on areas where there are parking time restrictions. ALPRs are not deployed based on geographic considerations not related to parking enforcement.</p>
Complaints	<p>A summary of each complaint, if any, received by the City about the Surveillance Technology.</p> <p>There have been no complaints about the deployment and use of Automated License Plate Readers.</p>
Audits and Violations	<p>The results of any non-privileged internal audits, any information about violations or potential violations of the Surveillance Use Policy, and any actions taken in response.</p> <p>There were no known violations relating to ALPRs.</p>
Data Breaches	<p>Non-privileged and non-confidential information about any data breaches or other unauthorized access to the data collected by the surveillance technology, including information about the scope of the breach and the actions taken in response.</p> <p>There have been no known data breaches or other unauthorized access to Automated License Plate Reader data.</p>
Effectiveness	<p>Information that helps the community assess whether the Surveillance Technology has been effective in achieving its identified outcomes.</p> <p>ALPRs have proven effective in parking enforcement for time zone enforcement.</p> <p>The ALPRs' ability to read and check license plates while being driven greatly increases efficiency, allowing an operator to cover larger areas more quickly without having to stop except to confirm a hit.</p>

	<p>An additional benefit of the Parking Enforcement ALPR system is that sometimes hits indicate a possible stolen vehicle. These hits allow for the timelier recovery of stolen vehicles in the City of Berkeley.</p>
Costs	<p>Total annual costs for the Surveillance Technology, including personnel and other ongoing costs.</p> <p>The annual system maintenance cost for Genetec is \$51,720. This cost is borne by the Transportation Division, which covers warranties, support, and cellular connection costs.</p> <p>Genetec ALPR units are installed on 22 Parking Enforcement vehicles. Parking Enforcement personnel perform a variety of parking enforcement activities and are not limited solely to time zone enforcement. Therefore, personnel costs specifically attributable to time zone enforcement are not tracked.</p>



# Berkeley Police Department Memorandum



To: Chief Louis  
From: Arlo Malmberg, Strategic Planning and Accountability Manager  
Date: September 13, 2024  
**RE: Genetec Automated License Plate Reader Audit**

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## **OVERVIEW**

The Berkeley Police Department's Strategic Planning and Accountability Manager conducted an audit of the Genetec ALPR system to assess compliance with Policy 1302, Surveillance Use Policy – Automated License Plate Reader (ALPR). The audit scope included access records for the Genetec ALPR system between January 1, 2024 and June 30, 2024. The audit methodology involved analyzing these access records for unauthorized access, data breaches, and prohibited uses.

The audit found full compliance with Policy 1302, with no instances of unauthorized access, data breaches, data errors, or prohibited uses detected. All system access was made by authorized personnel as stipulated in the policy.

## **BACKGROUND**

Policy 1302 outlines the requirements for use and access to the Genetec ALPR systems by Parking Enforcement Officers. The policy mandates biannual audits of the ALPR system to ensure compliance and detect any unauthorized access or data breaches.

## **PRIOR AUDITS**

The last audit was conducted in January 2024. No findings were recorded. The next audit will be conducted in January 2025.

## **SCOPE AND METHODOLOGY**

The scope of this audit included all access records for the Genetec ALPR system between January 1, 2024 and June 30, 2024.

The audit methodology involved:

1. Retrieving Genetec ALPR system access records for the specified timeframe from the Parking Enforcement Manager.
2. Analyzing the records for any instances of unauthorized access, data breaches, or prohibited uses.
3. Verifying that all system access was made by authorized personnel as stipulated in Policy 1302.



# Berkeley Police Department Memorandum



## SUMMARY OF FINDINGS

Objective #	Audit Objectives	# Meeting Standards	% Meeting Standards
1	Authorized access to ALPR system	191 Admin actions, 2580 PEO logins/logoffs / 191 Admin actions, 2580 PEO logins/logoffs	100%
2	No data breaches	191 Admin actions, 2580 PEO logins/logoffs / 191 Admin actions, 2580 PEO logins/logoffs	100%
3	No prohibited uses	191 Admin actions, 2580 PEO logins/logoffs / 191 Admin actions, 2580 PEO logins/logoffs	100%

## DETAILED FINDINGS

### **Objective 1: Authorized access to ALPR system**

#### **Criteria:**

1302.5 DATA ACCESS (a): " Only properly trained Parking Enforcement Officers, Sworn Officers as selected by the Investigation's Division Captain, and Information Technology personnel are allowed access to the Genetec ALPR system or to collect ALPR information."

#### **Inspection Procedure:**

- Review all access records for the Genetec ALPR system during the audit period.
- Verify that all access was made by authorized personnel.

#### **Findings:**

- All access to the Genetec ALPR system was made by authorized personnel
- System maintenance access by Genetec personnel and City of Berkeley IT was also noted and deemed appropriate.

#### **Recommendations:**

- None. The 100% compliance rate meets department standards.

### **Objective 2: No data breaches**

#### **Criteria:**

1302.11 AUDITING AND OVERSIGHT (1): "Any unauthorized access or data breach shall be reported immediately to the City Manager..."



# Berkeley Police Department Memorandum



## Inspection Procedure:

- Analyze access records for any signs of data breaches.
- Confirm with the Parking Enforcement Manager that no data breaches were reported during the audit period.

## Findings:

- No data breaches were detected or reported during the audit period.

## Recommendations:

- None. The 100% compliance rate meets department standards.

## Objective 3: No prohibited uses

### Criteria:

1302.11 AUDITING AND OVERSIGHT (1): "...BPD will enforce against prohibited uses of the Genetec ALPR system, associated ALPR Read and Hit metadata, and lists and databases pursuant to Policy P-26, or other applicable law or policy."

### Inspection Procedure:

- Review access records for any indication of prohibited uses of the ALPR system or data.

### Findings:

- No prohibited uses of the ALPR system or associated data were detected during the audit period.
- The majority of system accesses were by Genetec personnel for IT support and user management. The remaining accesses were primarily by the Parking Enforcement Manager and Parking Enforcement Officer Supervisors for reviewing system configurations and usage.

### Recommendations:

- None. The 100% compliance rate meets department standards.

## MANAGEMENT'S RESPONSE

The Parking Enforcement Manager has reviewed the report and concurs with the findings presented herein.

## Surveillance Technology Report: Street Level Imagery Project

**October 1, 2023 – Sept. 30, 2024**

Description	<p>A description of all non-privileged and non-confidential information about the use of the Surveillance Technology, including but not limited to the quantity of data gathered and sharing of data, if any, with outside entities. If sharing has occurred, the report will include general, non-privileged and non-confidential information about recipient entities, including the names of the entities and purposes for such sharing.</p> <p>Street level imagery is utilized exclusively by authorized City staff for infrastructure asset management and planning activities. The street level imagery of City infrastructure assets in the Public Right of Way that is provided to the City will not consist of information that is capable of being associated with any individual or group.</p>
Geographic Deployment	<p>Where applicable, non-privileged and non-confidential information about where the surveillance technology was deployed geographically.</p> <p>Street level imagery was collected by driving through the entire community over a three week period in December of 2020. It is accessible to the City through a proprietary third-party application, Street SmartTM.</p>
Complaints	<p>A summary of each complaint, if any, received by the City about the Surveillance Technology.</p> <p>There have been no complaints about the use of Street Smart TM.</p>
Audits and Violations	<p>The results of any non-privileged internal audits, any information about violations or potential violations of the Surveillance Use Policy, and any actions taken in response.</p> <p>There have been no complaints with regards to the Street Level Imagery Project.</p>
Data Breaches	<p>Non-privileged and non-confidential information about any data breaches or other unauthorized access to the data collected by the surveillance technology, including information about the scope of the breach and the actions taken in response.</p> <p>There have been no known data breaches or other unauthorized access to Cyclomedia Street Level Imagery data.</p>
Effectiveness	<p>Information that helps the community assess whether the Surveillance Technology has been effective in achieving its identified outcomes.</p> <p>Staff considered hiring contractors to use GPS in the field to create and update the infrastructure asset GIS data. This method is costly and time consuming. Cyclomedia’s unique and patented processing techniques allow positionally-accurate GIS data to be collected in a cost-effective way and over a shorter period of time than a “boots on the ground” GPS field survey.</p> <p>The Imagery extracted the following Citywide Infrastructure assets to create accurate and current Geographic Information Systems (GIS) data inventories:</p> <ul style="list-style-type: none"> <li>• Bus pads / stops</li> <li>• Maintenance Access Holes</li> <li>• Pavement Striping</li> <li>• Curb paint color</li> <li>• Parking meters</li> <li>• Pedestrian Signal</li> <li>• Pavement marking</li> <li>• Storm drains</li> <li>• Signs</li> <li>• Street trees</li> <li>• Traffic lights</li> </ul> <p>The street level imagery captured was used to:</p> <p>Create a street sign GIS layer with condition assessment to support compliance with the Manual on Uniform Traffic Control Devices Code and provide an accurate inventory of</p>

	<p>City signs. The prior sign inventory is contained in a spreadsheet that does not have accurate location data.</p> <p>Created a curb color layer with condition assessment to indicate where there are red, yellow, blue, white and green colors. This is critical to support Public Safety.</p> <p>Created pavement striping and paint symbol layers to support Transportation Planning and Vision Zero.</p> <p><b>Benefits:</b></p> <p>The data from the street level imagery was integrated into the City’s work order and asset management system for planning activities and to document repair and maintenance.</p> <p>Planners can use the street level imagery provided to the City to take measurements remotely, such as sidewalk width and public right of way impacts at proposed development locations.</p> <p>The data provides a comprehensive snapshot of the City that would be helpful for cost recovery in the event of a major disaster.</p> <p>City staff can use the street level imagery to plan the location of road markings for pedestrian crossings, bike lanes or other striping.</p> <p>City staff can remotely take accurate measurements of infrastructure assets to adequately plan for repair and replacement.</p> <p>City staff can use street level imagery to enhance community engagement. The street level imagery can be used to identify and depict the impact of development such as an intersection restriping plan in order to article before and after conditions.</p>																								
Costs	<p>Total annual costs for the Surveillance Technology, including personnel and other ongoing costs.</p> <p>The total cost of the system is \$232,611 and is itemized below.</p> <table border="1" data-bbox="391 1230 1414 1726"> <thead> <tr> <th>Year No.</th> <th>Description</th> <th>Cost</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Licenses</td> <td>\$48,000</td> <td>Resolution No: 69,482-N.S. 30JUN20</td> </tr> <tr> <td>1</td> <td>Professional Services for asset extraction</td> <td>\$139,401</td> <td>Resolution No: 69,482-N.S. 30JUN20</td> </tr> <tr> <td>2</td> <td>Licenses and Support – One-Time</td> <td>\$41,100</td> <td>Resolution No: 70,487-N.S. 26JUL22</td> </tr> <tr> <td>3</td> <td>License and Support – Ongoing Annual Costs</td> <td>\$4,110</td> <td>Resolution No: 70,487-N.S. 26JUL22</td> </tr> <tr> <td>4</td> <td>License and Support – Ongoing Annual Costs</td> <td>\$4,110</td> <td>Resolution No: 70,487-N.S. 26JUL22</td> </tr> </tbody> </table>	Year No.	Description	Cost	Notes	1	Licenses	\$48,000	Resolution No: 69,482-N.S. 30JUN20	1	Professional Services for asset extraction	\$139,401	Resolution No: 69,482-N.S. 30JUN20	2	Licenses and Support – One-Time	\$41,100	Resolution No: 70,487-N.S. 26JUL22	3	License and Support – Ongoing Annual Costs	\$4,110	Resolution No: 70,487-N.S. 26JUL22	4	License and Support – Ongoing Annual Costs	\$4,110	Resolution No: 70,487-N.S. 26JUL22
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## Surveillance Technology Report: Unmanned Aerial Systems

**October 1, 2023 – Sept. 30, 2024**

Description	<p>A description of all non-privileged and non-confidential information about use of the Surveillance Technology, including but not limited to the quantity of data gathered and sharing of data, if any, with outside entities. If sharing has occurred, the report shall include general, non-privileged and non-confidential information about recipient entities, including the names of the entities and purposes for such sharing.</p> <p>Unmanned Aerial Systems (UAS) also commonly referred to as a drone are requested pursuant to our Mutual Assistance protocols. If a situation arises wherein the safety to the community, officers, or the offender can be increased through the means of de-escalation (adding time and distance to the situation) a supervisor can make the request. During this period, on five occasions the Police Department sought mutual assistance for drones.</p> <p><b>What data is captured by this technology:</b></p> <p>Unmanned Aerial Systems are owned and operated by the respective agency. While each piece of equipment is unique, generally UAS can both record video and audio, while transmitting the data to the operator, thereby qualifying as a piece of Surveillance Technology pursuant to BMC 2.99.020.</p> <p><b>How the data is stored:</b></p> <p>During this reporting period Concord Police Department (CPD), Oakland Police Department (OPD), and Danville Police Department (DPD) assisted the Berkeley Police Department by providing drones. Per their policy, those agencies retain images captured during a UAS mission if there is reasonable suspicion of criminal activity. BPD personnel would request that evidence from those agencies if it was needed in support of criminal activity. During this reporting period no data was stored by BPD.</p> <p><b>Retention period of data:</b></p> <p>Policy 1303.7: If available, any data collected by the use of a UAS should be purged by BPD within 60 days if it doesn't contain any data of evidentiary value. If the data has evidentiary value, it should be uploaded into BPD's evidence database and kept pursuant to the established retention guidelines set forth in policy 804-Records Maintenance and Release.</p> <p><b>Summary of Uses of UAS</b></p> <p><b>BPD Case 24-00005280</b></p> <p>On 02/05/24, the Berkeley Police Department Special Response Team responded to Concord to serve a high-risk warrant for a city employee who had threatened to kill others and himself. Due to the potential for violence, a drone provided by Concord PD was utilized to surveil the property from overhead, enhancing officer safety by providing real-time intelligence on the suspect's location and activities. By deploying the UAS before officers entered, the risk of a lethal confrontation was significantly reduced.</p> <p><b>BPD Case 24-00019770</b></p> <p>On 05/01/24, an armed robbery (PC 211) occurred in Berkeley where suspects pistol-whipped a victim who was holding their 2-year-old child and pointed a gun at the child. Berkeley Police Officers pursued the suspect vehicle to Oakland, where it was involved in a collision. Three suspects fled on foot; two were apprehended immediately. The third</p>
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	<p>suspect was captured after an extensive block search aided by an Oakland Police Department drone. The UAS provided aerial surveillance, assisting officers in locating the suspect while minimizing risks to the public and officers.</p> <p><b>BPD Case 23-00054017</b></p> <p>On 06/11/24 at 12:30 hours, the Berkeley Police Department Special Response Team served a high-risk warrant in Oakland related to an ongoing homicide investigation by the Detective Division. Prior to entry, a UAS provided by Oakland PD was deployed to surveil the property, providing officers with real-time intelligence on the suspects' locations and any potential threats. The use of the UAS aimed to reduce the risk of injury to both officers and suspects.</p> <p><b>BPD Case 24-00027774</b></p> <p>On 06/20/24, the Berkeley Police Department Special Response Team served a high-risk warrant in Berkeley for shooting suspects at the request of the Detective Division Homicide Unit. During the operation, drone support was provided by the Oakland Police Department, utilizing both overhead and interior UAS to surveil the property and enhance officer safety. The use of drones allowed officers to gain real-time intelligence on the suspects' movements within the property. One suspect was taken into custody, and a 7.62 rifle was recovered.</p> <p><b>BPD Case 24-00032696</b></p> <p>On 07/19/24, Berkeley Police Officers responded to an attempted catalytic converter theft. When neighbors intervened, the suspect produced a handgun, threatening the residents. Officers located the suspect vehicle and initiated a pursuit. The suspects abandoned the vehicle and fled on foot. One suspect was apprehended immediately, while another fled into the wooded area of Wildcat Canyon. A drone provided by Danville PD was deployed to search the difficult terrain. The UAS provided aerial surveillance, assisting in locating the suspect while minimizing risk to officers and the public.</p>
Geographic Deployment	<p>Where applicable, non-privileged and non-confidential information about where the surveillance technology was deployed geographically.</p> <p>A UAS was used five times during this reporting period; once in Berkeley, once in Concord, twice in Oakland, and once in East Bay Regional Parks District.</p>
Complaints	<p>A summary of each complaint, if any, received by the City about the Surveillance Technology.</p> <p>During this reporting period the City received no complaints about the deployment of UAS.</p>
Audits and Violations	<p>The results of any non-privileged internal audits, any information about violations or potential violations of the Surveillance Use Policy, and any actions taken in response.</p> <p>There were no known violations relating to the UAS Surveillance Use Policy.</p>
Data Breaches	<p>Non-privileged and non-confidential information about any data breaches or other unauthorized access to the data collected by the surveillance technology, including information about the scope of the breach and the actions taken in response.</p> <p>There have been no known data breaches or other unauthorized access to any of the data from UAS.</p>
Effectiveness	<p>Information that helps the community assess whether the Surveillance Technology has been effective in achieving its identified outcomes.</p>

	<p>UAS are often used to search properties before officers. This allows officers to see video from the UAS and confirm a suspect is not waiting inside with a weapon. By sending the UAS in before officers, the risk of a confrontation that could result in death or serious injury to the suspect, others inside the house and officers, is significantly reduced.</p>
Costs	<p>Total annual costs for the Surveillance Technology, including personnel and other ongoing costs.</p> <p>The annual cost for UAS is zero as the uses were covered by the responding agencies under the Mutual Assistance agreement. The only costs associated is staff time at each respective incident, however no costs for the use of the technology were incurred.</p>

RESOLUTION NO. XX,XXX-N.S.

A RESOLUTION ACCEPTING THE SURVEILLANCE TECHNOLOGY REPORT FOR BODY WORN CAMERAS, GPS TRACKERS, FIXED SURVEILLANCE VIDEO CAMERAS, AUTOMATIC LICENSE PLATE READERS, THE STREET LEVEL IMAGERY PROJECT, AND UNMANNED AERIAL SYSTEMS (UAS)

WHEREAS, on March 27, 2018, the City Council adopted Ordinance 7,592-N.S., which is known as the Surveillance Technology Use and Community Safety Ordinance (“Ordinance”); and

WHEREAS, Section 2.99.070 of the Ordinance requires that the City Manager must submit to the City Council a Surveillance Technology Report as defined by Section 2.99.020(2) of the Ordinance at the first regular City Council meeting in November; and

WHEREAS, the Surveillance Technology Reports satisfy the requirements of the Ordinance.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Berkeley that the Council hereby accepts the Surveillance Technology Reports for Body Worn Cameras, GPS Trackers, Fixed Surveillance Video Cameras, Automatic License Plate Readers, the Street Level Imagery Project, and Unmanned Aerial Systems (UAS).